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& SHERIDAN, P.A.  
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December 23, 1997

**VIA HAND DELIVERY**

William J. LeMay, Director  
Oil Conservation Division  
New Mexico Department of Energy,  
Minerals and Natural Resources  
2040 Pacheco Street  
Santa Fe, New Mexico 87505

Attention: Michael E. Stogner

Re: *Application for Amendment of Division Administrative  
Order DD-172(H) for Directional Drilling-Horizontal  
North Vacuum Abo West Unit Well No. 30  
North Vacuum-Abo Pool  
Lea County, New Mexico*

Gentlemen:

Texaco Exploration and Production Inc. hereby requests amendment of Division Administrative Order DD-172(H) which was entered on May 15, 1997. This Order authorized the initiation of a high angle/horizontal directional drilling project within a non-standard 160-acre oil spacing and proration unit comprising the SW/4 of Section 15, Township 17 South, Range 34 East, NMPM, North Vacuum-Abo Pool, North Vacuum Abo West Unit, of the North Vacuum Abo West Unit, North Vacuum Abo West Unit Waterflood Project Area, Lea County, New Mexico, by the drilling of the North Vacuum Abo West Unit Well No. 30 at a standard North Vacuum-Abo Pool surface oil well location 1880 feet from the South line and 1980 feet from the West line (Unit K) of said Section 15, drill vertically to an approximate depth of 8,600 feet, kick-off in a southwesterly direction with a short radius wellbore (57.3 degree/100 feet), and drill in a somewhat horizontal fashion a lateral distance of approximately 2,000 feet through the Abo formation.



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Although the Special Pool Rules for the North Vacuum-Abo Pool provide for wells within 200 feet of the center of a governmental quarter-quarter section (460 foot set backs), Texaco requested and Order DD-172(H) provides for a "producing area" for this horizontal wellbore that shall include that area within the SW/4 of said Section 15 that is no closer than 560 feet from the outer boundary of said quarter section. (Order paragraph 4). While drilling the horizontal portion of this wellbore, the quality of the Abo reservoir improved as Texaco approached the 560 foot set back authorized by Order DD-172(H). Due to the improvement in the geologic characteristics of the reservoir which were discovered after the commencement of the project, Texaco continued drilling to a point 51.6 feet from the South line and 492 feet from the West line of said Section 15. Although this point is within the project area at a point where a vertical wellbore can be drilled and produced in conformity with the setback requirements from the outer boundary of a standard spacing and proration unit of the Special Pool Rules and Regulations for the North Vacuum-Abo Pool (Order No. R-2421), it extends beyond the boundary of the "producing area" approved by Order DD-172 (H).

Texaco therefore makes application for amendment of Order Paragraph 4 of Order DD-172(H) to provide for a producing area that is no closer than 460 feet from the outer boundary of said quarter section.

In support of this application Texaco states:

- A. The surface location of the North Vacuum Abo West Unit Well No. 30 is within the boundaries of the project area which consists of two drilling units, substantially in the form of a square, being a legal subdivision of the U. S. Public Land Survey.
- B. The producing interval in this well will be totally confined to the amended producing area with the measured distance from the North, South, East and West boundaries of the project area inside of which a vertical wellbore can be drilled and produced in conformity with the setback requirements from the outer boundary of a standard spacing and proration unit for the North Vacuum-Abo Pool.



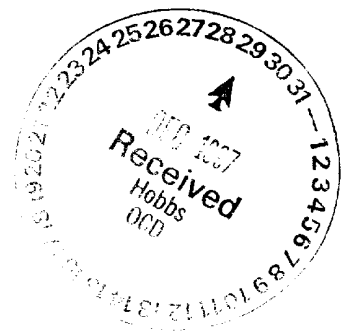
- C. The project area includes multiple contiguous drilling units.
- D. The subject well includes a single lateral which will conform to the requirements of this order as amended.

The North Vacuum-Abo West Unit is a candidate for horizontal drilling due to the heterogeneous nature of the reservoir where vertical segregation is common and horizontal wells can drain laterally discontinuous lenses that would not otherwise be exploited without dense vertical well spacing. The Unit was designated a "Project Area" for horizontal drilling in 1996 [see Administrative Orders DD-153(H) and DD-154(H)] and the type log for the pool was presented at that time. Texaco has successfully completed other horizontal wells in this pool.

Attached hereto as Exhibit A is a plat indicating the Section, Township and Range in which this well is located which shows the well's project area (SW/4 of Section 15), the well's surface location, the horizontal plan view for the well, and the producing area for the project well (460 foot set back from the outer boundary of the project area).

Exhibit B to this administrative application is a plat showing existing wells in the North Vacuum-Abo Pool in the project area, all offset drilling units in the North Vacuum-Abo Pool, the Abo wells located on these offsetting units and the operators thereof. Exhibit C is a vertical plan view for the well (cross-sectional view) which shows all information required by Division Rule 111.D. (2) (c) and (d).

Attached as Exhibit D is a list of all offsetting operators of spacing units in the West Vacuum-Abo Pool. On or before the date this application was submitted to the Division, each of these operators was notified of this application to amend Order DD-172 (H) by submitting a copy of this application to each of them by Certified Mail, Return Receipt Requested. Each was advised that if they have an objection to this application it must be filed with the Division's Santa Fe Office in writing within twenty days of the date of the Certified Letter.



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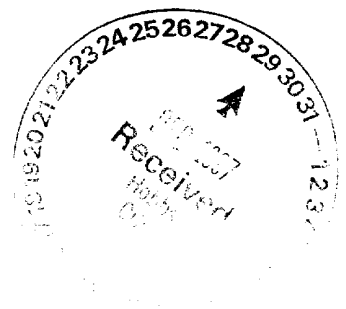
Your attention to this application is appreciated.

Very truly yours,

A handwritten signature in black ink, appearing to read "William F. Carr", with a long, sweeping horizontal line extending to the right.

WILLIAM F. CARR

WFC:mlh  
Enclosures



DISTRICT I  
P. O. Box 1000, Hobbs, NM 88240

DISTRICT II  
P. O. Drawer 50, Artesia, NM 88210

DISTRICT III  
1000 Rio Arriba Rd., Artesia, NM 87010

DISTRICT IV  
P. O. Box 2000, Santa Fe, NM 87504-2000

State of New Mexico  
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

Form C-102  
Revised February 10, 1984

Instructions on back

Submit to Appropriate District Office

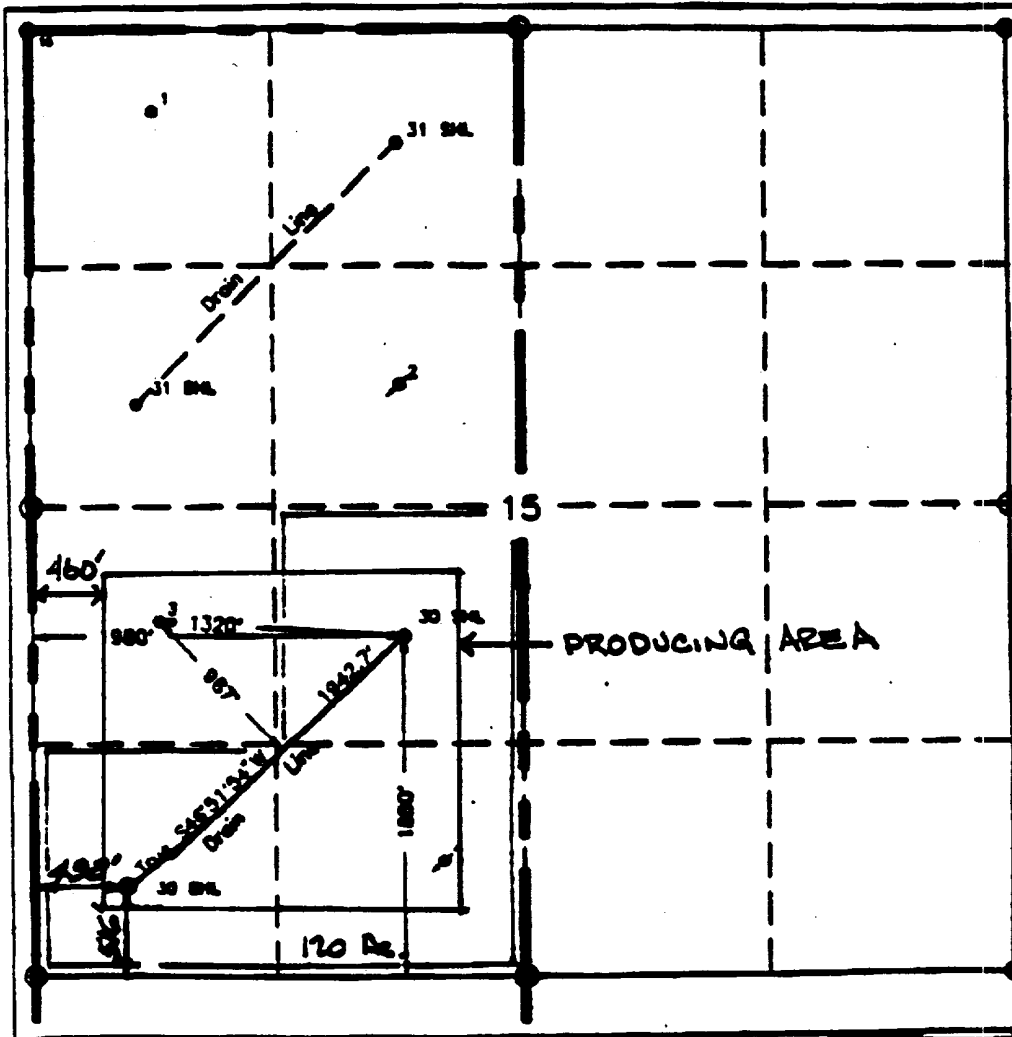
State Lease-4 copies  
Fee Lease-3 copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

APN Number <b>30-025-33987</b>		Well Code <b>61760</b>		Well Name <b>Vacuun Abn, North</b>	
Property Code <b>11123</b>		Property Name <b>North Vacuun Abn West Unit</b>			Well Number <b>30</b>
Cadastral No. <b>22351</b>		Operator Name <b>TEXACO EXPLORATION &amp; PRODUCTION, INC.</b>			Location <b>4047</b>
Surface Location					
UL or SL No. <b>K</b>	Section <b>15</b>	Township <b>17-S</b>	Range <b>34-E</b>	Lot No. <b>1880</b>	Foot from the <b>1880</b>
				North/South line <b>South</b>	Foot from the <b>1880</b>
				East/West line <b>West</b>	County <b>Lee</b>
Bottom Hole Location if Different From Surface					
UL or SL No. <b>M</b>	Section <b>15</b>	Township <b>17-S</b>	Range <b>34-E</b>	Lot No. <b>516</b>	Foot from the <b>432</b>
				North/South line <b>South</b>	Foot from the <b>432</b>
				East/West line <b>West</b>	County <b>Lee</b>
Cadastral Acres <b>120</b>		Section or well		Consolidation Case	
Order No.					

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION.



OPERATOR CERTIFICATION

I hereby certify that the information furnished herein is true and accurate to the best of my knowledge and belief.

Signature  
*R. Phil Ryan*  
Printed Name  
**R. Phil Ryan**  
Position  
**Commission Coordinator**  
Company  
**Texaco Expl. & Prod. Inc.**

Date  
**Nov 22, 1997**

SURVEYOR CERTIFICATION

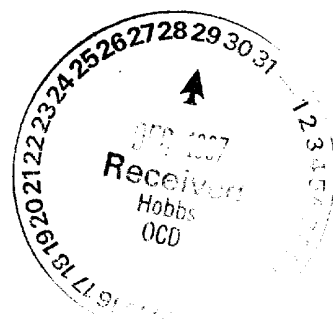
I hereby certify that the well location shown on this plat and plat was from a true and correct survey made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

**April 2, 1997**

Signature & Seal of  
Professional Surveyor

Signature  
*John S. Piper*  
Cadastral No.  
**7234 John S. Piper**



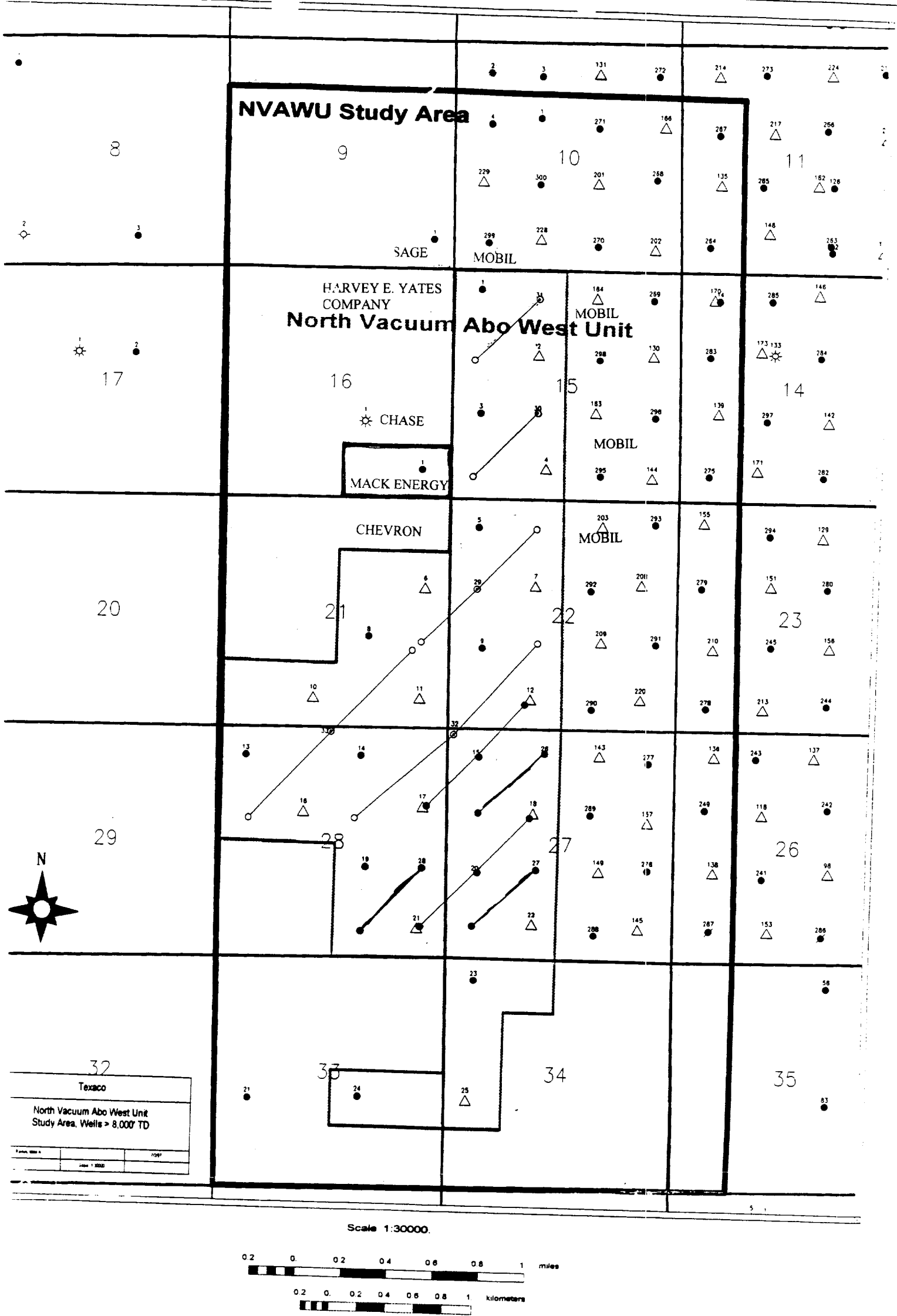
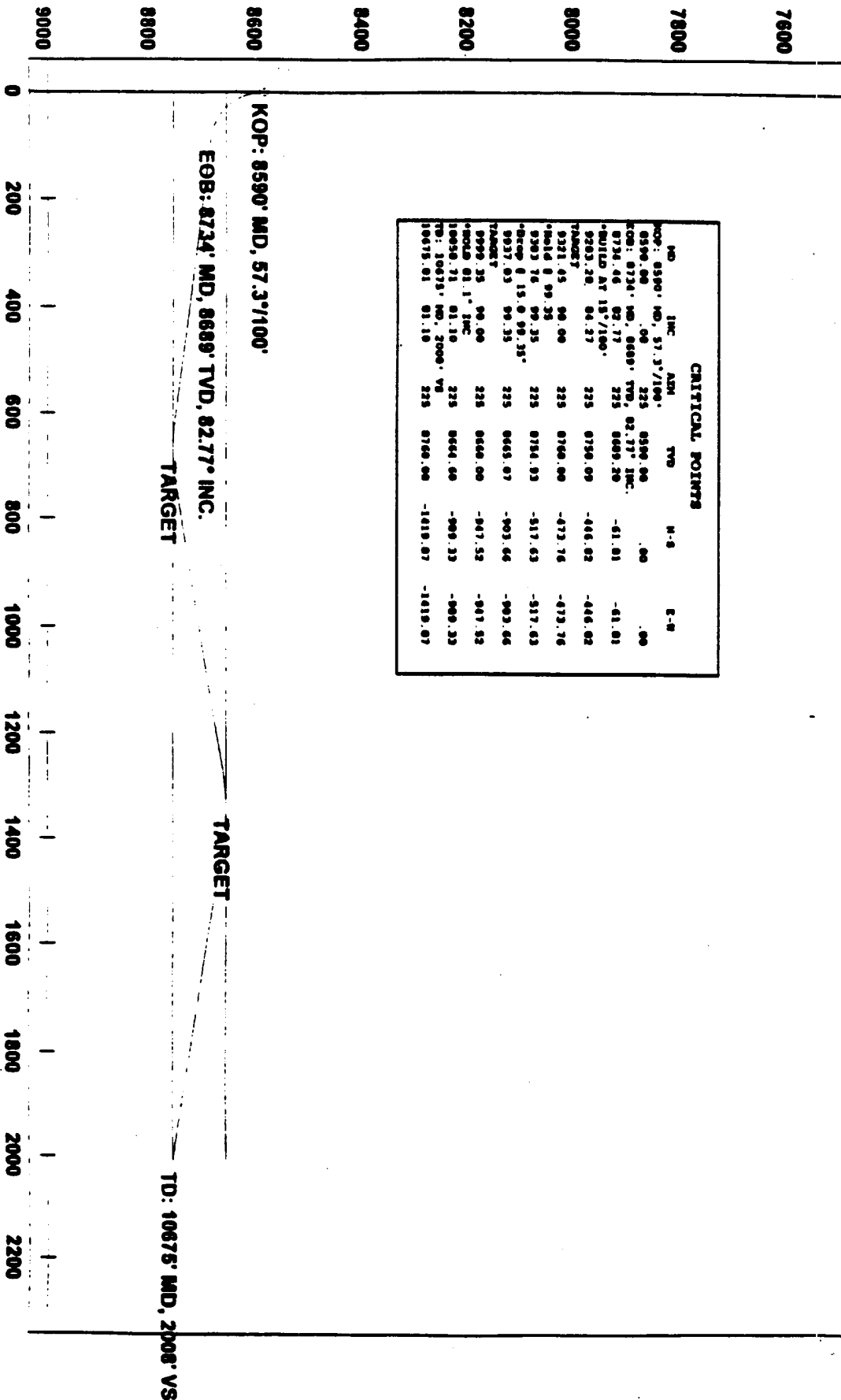


EXHIBIT B



Company: TEXACO E & P, INC.  
Lease/Well: NVAWU #30  
Location: LEA CO., NEW MEXICO  
Declination:  
File name: C:\WINSERVER\NVAWU30.SVY  
Date/Time: 15-Apr-97 / 16:59

[illegible]



OFFSET OPERATOR'S LIST  
North Vacuum Abo West Unit Well No. 30  
LEA COUNTY, NEW MEXICO

Mobil Exploration and Producing US Inc.  
Post Office Box 633  
Midland, TX 79702

Mack Energy Corporation  
Post Office Box 1767  
Artesia, NM 88211

Chevron USA Inc.  
Post Office Box 1150  
Midland, TX 79702

Mack C. Chase &  
Chase Oil Corporation  
Post Office Box 1767  
Artesia, NM 88211

Harvey E. Yates Company  
Post Office Box 1933  
Roswell, NM 88202

