

## DISTRICT I

P.O. Box 1980, Hobbs, NM 88241-1980

## DISTRICT II

P.O. Box Drawer DD, Artesia, NM 88211-0719

## DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

## DISTRICT IV

P.O. Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals and Natural Resources Department

## OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

Form C-101

Revised February 10, 1994

Instructions on back

Submit to Appropriate District Office

State Lease - 6 Copies

Fee Lease - 5 Copies

☐ AMENDED REPORT

## APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

|                                                                                                                  |                                                          |                                       |
|------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|---------------------------------------|
| <sup>1</sup> Operator Name and Address<br>TEXACO EXPLORATION & PRODUCTION INC.<br>205 E. Bender, HOBBS, NM 88240 |                                                          | <sup>2</sup> OGRID Number<br>022351   |
| <sup>4</sup> Property Code<br>011123                                                                             | <sup>5</sup> Property Name<br>NORTH VACUUM ABO WEST UNIT | <sup>3</sup> API Number<br>3002523916 |
|                                                                                                                  |                                                          | <sup>6</sup> Well No.<br>22           |

| <sup>7</sup> Surface Location |         |          |       |         |               |                  |               |                |        |
|-------------------------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| UI or lot no.                 | Section | Township | Range | Lot.Idn | Feet From The | North/South Line | Feet From The | East/West Line | County |
| N                             | 27      | 17S      | 34E   |         | 760           | SOUTH            | 1980          | WEST           | LEA    |

| <sup>8</sup> Proposed Bottom Hole Location If Different From Surface |         |          |       |         |                               |                  |               |                |        |
|----------------------------------------------------------------------|---------|----------|-------|---------|-------------------------------|------------------|---------------|----------------|--------|
| UI or lot no.                                                        | Section | Township | Range | Lot.Idn | Feet From The                 | North/South Line | Feet From The | East/West Line | County |
| D                                                                    | 34      | 17S      | 34E   |         | 800                           | NORTH            | 528           | WEST           | LEA    |
| <sup>9</sup> Proposed Pool 1<br>VACUUM ABO, NORTH                    |         |          |       |         | <sup>10</sup> Proposed Pool 2 |                  |               |                |        |

|                                   |                                         |                                        |                                    |                                                   |
|-----------------------------------|-----------------------------------------|----------------------------------------|------------------------------------|---------------------------------------------------|
| <sup>11</sup> Work Type Code<br>E | <sup>12</sup> WellType Code<br>O        | <sup>13</sup> Rotary or C.T.<br>ROTARY | <sup>14</sup> Lease Type Code<br>S | <sup>15</sup> Ground Level Elevation<br>4055' RKB |
| <sup>16</sup> Multiple<br>No      | <sup>17</sup> Proposed Depth<br>10,799' | <sup>18</sup> Formation<br>ABO         | <sup>19</sup> Contractor<br>DAWSON | <sup>20</sup> Spud Date<br>6/1/98                 |

| <sup>21</sup> Proposed Casing and Cement Program |                |                 |               |                 |          |
|--------------------------------------------------|----------------|-----------------|---------------|-----------------|----------|
| SIZE OF HOLE                                     | SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | SACKS OF CEMENT | EST. TOP |
|                                                  |                |                 |               |                 |          |
|                                                  |                |                 |               |                 |          |
|                                                  |                |                 |               |                 |          |
|                                                  |                |                 |               |                 |          |
|                                                  |                |                 |               |                 |          |

<sup>22</sup> Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

SEE ATTACHED PROCEDURES

Permit Expires 1 Year From Approval  
Date Unless Drilling Underway  
Horizontal

<sup>23</sup> I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature *J. Denise Leake*

Printed Name J. Denise Leake

Title Engineering Assistant

Date 5/6/98

Telephone 397-0405

## OIL CONSERVATION DIVISION

Approved By: *CAROL ANN SIGNED BY GARY WINK*  
Title: *FIELD REP. #*Approval Date: **MAY 19 1998**

Expiration Date:

Conditions of Approval:  
Attached ☐

## OVERVIEW

The North Vacuum Abo West Unit # 22 well was drilled by Texaco in early 1972 as a conventional test of the Abo formation. The well was completed in the Abo formation and potentialled for 161 BOPD, 8 BLWPD and 125 MCFD from perforations 8654', 8663', 8665', 8682', 8687', 8691', 8695', 8703', 8712', 8718', 8721', 8730', 8734' and 8739'. Successful horizontal laterals have been drilled in the NVAWU #15, #20, # 26, #27, #28, # 30 and # 31 wells. It is proposed to employ this technology on the subject well and drill a +/- 2150 foot horizontal lateral (southwest) in the Abo formation. The basic well plan is as follows:

- a) MIRUSU. Kill well (injection). TOOH with 2-3/8" tubing and packer.
- b) TIH and set a CIBP at +/- 8529'. TIH with a 3 degree bottom set whipstock (top of window +/- 8519', bottom of window +/- 8526').
- c) Drill a short radius curve using a 4-3/4" bit to a measured depth of +/- 8699' (TVD +/- 8654'). The final angle will be 73 degrees from vertical.
- d) Drill +/- 2150' horizontal section (southwest).
- e) Acid frac the horizontal lateral in the well. Place well on pump/injection.

**LOST IN HOLE INSURANCE FOR THE DOWNHOLE MOTOR AND MWD IS INCLUDED WITH THE DAILY RATE FROM DIAMONDBACK DRILLING.**

## PROPOSED WORK

### PRODUCTION HOLE:

1. Kill well. TOO H with 2-3/8" tubing and packer. TIH with a CIBP and set at +/- 8529' (5-8' above a casing collar). TOO H. TIH with a 3" bottom set retrievable whipstock, starting mill, orientation sub, drill collars and drill pipe. Stop at a point 5-10' above the CIBP and rig up a wireline to run the gyro. Take a gyro reading and determine the direction of the whipstock face. Rotate the pipe as needed to achieve the required direction. Lower the pipe to within one foot of the CIBP and take another gyro reading. Rotate pipe again if needed to achieve the required direction (223 degrees). This step may need to be repeated several times until confident the whipstock is oriented in the correct direction.
2. Lower the drill pipe to set the whipstock. The weight indicator will jump indicating the lower plunger shear pin is sheared and the whipstock is set. Continue setting down to shear the starting mill bolt. The weight indicator will jump again indicating the bolt is sheared. Milling operations may now commence.
3. Pick up the power swivel and begin circulating. Pick up the drill pipe until the starting mill has cleared the whipstock and start rotation. Lower the drill pipe slowly until the torque gauge suggest the starting mill is contacting the casing. Adjust weight and speed until satisfied with the penetration rate. Mill to a predetermined depth that will assure the setting lug is completely removed and a cutout in the casing has been initiated. TOO H.
4. TIH with the metal muncher window mill, string mill and the watermelon mill. Resume milling operations and mill until the complete assembly has cleared the casing. Pick up and lower the string several times without rotation to assure a good clean window has been obtained. Circulate the hole clean. TOO H.
5. Inspect the mill on the surface. If extreme wear is evident, consideration should be given to repeating the above step.

## HORIZONTAL PRODUCTION HOLE:

1. Rig up Diamondback Drilling Company. Adjust plan to target as necessary. Trip in the hole with Diamondback Drilling's curve building assembly. This will be a 4-3/4" insert, 3-3/4" PDM, float sub/orientation combo, 2-flexible monel collars, 2-7/8" 8.7 #/ft P-110 (PH-6) tubing in the horizontal hole and 2-7/8" AOH drill pipe in the vertical hole).
2. Build curve to estimated target depths and angles as follows:

|                           |                 |
|---------------------------|-----------------|
| True Vertical Depth ..... | 8654'           |
| Measured Depth .....      | 8699'           |
| Final Angle .....         | 73 degrees      |
| Target Azimuth .....      | 223.49 degrees  |
| Build Rate .....          | 45 degrees/100' |

Drill the curve sliding as necessary to stay on target. It is recommended that after each slide, the bit be pulled back and washed through the slide. Once the curve is built, rotate through the curve section noting tight spots and fill. Make at least one short trip prior to tripping out of the hole.
3. Trip in the hole with Diamondback Drilling's lateral assembly. This will be a 4-3/4" insert or PDC bit, 3-3/4" articulated motor, float sub/orientation combo, 2 - flexible monel collars, 2-7/8" 8.7 #/ft P-110 (PH-6) tubing in the horizontal hole and 2-7/8" AOH drill pipe in the vertical hole.
4. Drill +/- 2150' of horizontal hole per the attached Diamondback well plan. **It is highly recommended that a Texaco engineer (Mark Wakefield) be present on location during the drilling of the horizontal section.**
5. Continue drilling the horizontal section per the Texaco Engineer recommendations.
6. Trip out of the hole with the drilling assembly. Set a wireline set, tubing retrievable bridge plug for 5-1/2", 17 #/ft casing at +/- 8000'. Test plug to 500 psi.
7. Lay down the drill pipe.
8. Nipple down the BOP stack. Install a manual 3000 psig BOP equipped with blind rams and 2-7/8" pipe rams. Release the rig. Rig down and move out rotary tools.

### **COMPLETION PROCEDURE:**

1. Back drag the location and set pulling unit anchors.
2. Move in and rig up a pulling unit.
3. Trip in the hole with a retrieving head on 2-7/8" tubing. Retrieve the plug. Trip out of the hole and lay down the plug. TTH with tubing and ported subs to within 400 foot of the end of the lateral. Use a bent joint to orient into the laterals.
4. Rig up Dowell. Acid frac the horizontal lateral with 120,000 gallons of 15% HCL and gelled water spacers. The acid frac will be done down tubing using ported subs.
5. Flow back immediately. Flow/swab test.
6. Place on pump/injection.



**Job Number:**

**Company:** TEXACO E&P

**Lease/Well:** NVAWU #22

**Location:** LEA COUNTY

**Rig Name:** YALE E KEY #119

**RKB:** 4055

**G.L. or M.S.L.:**

**State/Country:** NEW MEXICO

**Declination:**

**Grid:**

**File name:** D:\DATA\TEXACO~1\NVAWU\NVAWU22\NVAWU22.SVY

**Date/Time:** 06-Apr-98 / 10:30

**Curve Name:** PROPOSAL (REV.0)

**DIAMONDBACK DIRECTIONAL  
A BWWC COMPANY**

**WINSERVE SURVEY CALCULATIONS**

*Minimum Curvature Method*

*Vertical Section Plane 223.49*

*Vertical Section Referenced to Wellhead*

*Rectangular Coordinates Referenced to Wellhead*

| Measured<br>Depth<br>FT            | Incl<br>Angle<br>Deg | Drift<br>Direction<br>Deg | True<br>Vertical<br>Depth | N-S<br>FT | E-W<br>FT | Vertical<br>Section<br>FT | CLOSURE<br>Distance<br>FT | Direction<br>Deg | WALK<br>RATE<br>Deg/100 | BUILD<br>RATE<br>Deg/100 | Dogleg<br>Severity<br>Deg/100 |
|------------------------------------|----------------------|---------------------------|---------------------------|-----------|-----------|---------------------------|---------------------------|------------------|-------------------------|--------------------------|-------------------------------|
| KOP @ 8530' TVD, BEGIN 45°/100' BR |                      |                           |                           |           |           |                           |                           |                  |                         |                          |                               |
| 8530.00                            | .00                  | 223.49                    | 8530.00                   | .00       | .00       | .00                       | .00                       | .00              | .00                     | .00                      | .00                           |
| 8540.00                            | 4.50                 | 223.49                    | 8539.99                   | -28       | -27       | .39                       | .39                       | 223.49           | .00                     | 45.00                    | 45.00                         |
| 8550.00                            | 9.00                 | 223.49                    | 8549.92                   | -1.14     | -1.08     | 1.57                      | 1.57                      | 223.49           | .00                     | 45.00                    | 45.00                         |
| 8560.00                            | 13.50                | 223.49                    | 8559.72                   | -2.55     | -2.42     | 3.52                      | 3.52                      | 223.49           | .00                     | 45.00                    | 45.00                         |
| 8570.00                            | 18.00                | 223.49                    | 8569.35                   | -4.52     | -4.29     | 6.23                      | 6.23                      | 223.49           | .00                     | 45.00                    | 45.00                         |
| 8580.00                            | 22.50                | 223.49                    | 8578.72                   | -7.03     | -6.67     | 9.69                      | 9.69                      | 223.49           | .00                     | 45.00                    | 45.00                         |
| 8590.00                            | 27.00                | 223.49                    | 8587.80                   | -10.07    | -9.55     | 13.88                     | 13.88                     | 223.49           | .00                     | 45.00                    | 45.00                         |
| 8600.00                            | 31.50                | 223.49                    | 8596.53                   | -13.61    | -12.91    | 18.76                     | 18.76                     | 223.49           | .00                     | 45.00                    | 45.00                         |
| 8610.00                            | 36.00                | 223.49                    | 8604.84                   | -17.64    | -16.74    | 24.32                     | 24.32                     | 223.49           | .00                     | 45.00                    | 45.00                         |

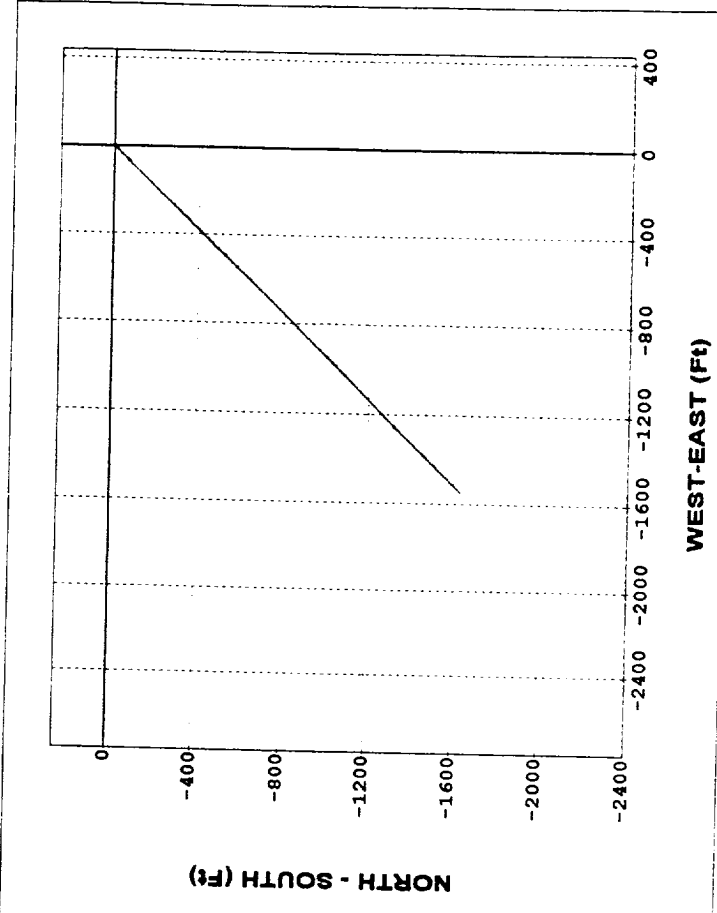
| Measured<br>Depth<br>FT                           | Incl<br>Angle<br>Deg | Drift<br>Direction<br>Deg | True<br>Vertical<br>Depth | N-S<br>FT | E-W<br>FT | Vertical<br>Section<br>FT | CLOSURE<br>Distance<br>FT | CLOSURE<br>Direction<br>Deg | WALK<br>RATE<br>Deg/100 | BUILD<br>RATE<br>Deg/100 | Dogleg<br>Severity<br>Deg/100 |
|---------------------------------------------------|----------------------|---------------------------|---------------------------|-----------|-----------|---------------------------|---------------------------|-----------------------------|-------------------------|--------------------------|-------------------------------|
| 8620.00                                           | 40.50                | 223.49                    | 8612.69                   | -22.13    | -21.00    | 30.51                     | 30.51                     | 223.49                      | .00                     | 45.00                    | 45.00                         |
| 8630.00                                           | 45.00                | 223.49                    | 8620.03                   | -27.06    | -25.67    | 37.29                     | 37.29                     | 223.49                      | .00                     | 45.00                    | 45.00                         |
| 8640.00                                           | 49.50                | 223.49                    | 8626.82                   | -32.38    | -30.72    | 44.63                     | 44.63                     | 223.49                      | .00                     | 45.00                    | 45.00                         |
| 8650.00                                           | 54.00                | 223.49                    | 8633.01                   | -38.08    | -36.12    | 52.48                     | 52.48                     | 223.49                      | .00                     | 45.00                    | 45.00                         |
| 8660.00                                           | 58.50                | 223.49                    | 8638.56                   | -44.11    | -41.84    | 60.80                     | 60.80                     | 223.49                      | .00                     | 45.00                    | 45.00                         |
| 8670.00                                           | 63.00                | 223.49                    | 8643.45                   | -50.44    | -47.85    | 69.52                     | 69.52                     | 223.49                      | .00                     | 45.00                    | 45.00                         |
| 8680.00                                           | 67.50                | 223.49                    | 8647.63                   | -57.02    | -54.09    | 78.60                     | 78.60                     | 223.49                      | .00                     | 45.00                    | 45.00                         |
| 8690.00                                           | 72.00                | 223.49                    | 8651.09                   | -63.83    | -60.55    | 87.98                     | 87.98                     | 223.49                      | .00                     | 45.00                    | 45.00                         |
| <b>EOC @ 8699' MD, 8654' TVD, 73° INC, 97' VS</b> |                      |                           |                           |           |           |                           |                           |                             |                         |                          |                               |
| 8698.96                                           | 76.03                | 223.49                    | 8653.56                   | -70.07    | -66.47    | 96.59                     | 96.59                     | 223.49                      | .00                     | 45.00                    | 45.00                         |
| 8798.96                                           | 76.03                | 223.49                    | 8677.70                   | -140.48   | -133.26   | 193.63                    | 193.63                    | 223.49                      | .00                     | .00                      | .00                           |
| 8898.96                                           | 76.03                | 223.49                    | 8701.84                   | -210.88   | -200.05   | 290.67                    | 290.67                    | 223.49                      | .00                     | .00                      | .00                           |
| 8998.96                                           | 76.03                | 223.49                    | 8725.98                   | -281.28   | -266.84   | 387.71                    | 387.71                    | 223.49                      | .00                     | .00                      | .00                           |
| 9098.96                                           | 76.03                | 223.49                    | 8750.12                   | -351.69   | -333.62   | 484.76                    | 484.76                    | 223.49                      | .00                     | .00                      | .00                           |
| 9198.96                                           | 76.03                | 223.49                    | 8774.26                   | -422.09   | -400.41   | 581.80                    | 581.80                    | 223.49                      | .00                     | .00                      | .00                           |
| 9246.35                                           | 76.03                | 223.49                    | 8785.70                   | -455.46   | -432.06   | 627.79                    | 627.79                    | 223.49                      | .00                     | .00                      | .00                           |
| 9256.35                                           | 77.53                | 223.49                    | 8787.99                   | -462.52   | -438.76   | 637.52                    | 637.52                    | 223.49                      | .00                     | 15.00                    | 15.00                         |
| 9266.35                                           | 79.03                | 223.49                    | 8790.02                   | -469.62   | -445.50   | 647.32                    | 647.32                    | 223.49                      | .00                     | 15.00                    | 15.00                         |
| 9276.35                                           | 80.53                | 223.49                    | 8791.79                   | -476.76   | -452.27   | 657.16                    | 657.16                    | 223.49                      | .00                     | 15.00                    | 15.00                         |
| 9286.35                                           | 82.03                | 223.49                    | 8793.31                   | -483.93   | -459.08   | 667.04                    | 667.04                    | 223.49                      | .00                     | 15.00                    | 15.00                         |
| 9296.35                                           | 83.53                | 223.49                    | 8794.57                   | -491.13   | -465.90   | 676.96                    | 676.96                    | 223.49                      | .00                     | 15.00                    | 15.00                         |
| 9306.35                                           | 85.03                | 223.49                    | 8795.56                   | -498.35   | -472.75   | 686.91                    | 686.91                    | 223.49                      | .00                     | 15.00                    | 15.00                         |
| 9316.35                                           | 86.53                | 223.49                    | 8796.30                   | -505.58   | -479.61   | 696.88                    | 696.88                    | 223.49                      | .00                     | 15.00                    | 15.00                         |
| 9326.35                                           | 88.03                | 223.49                    | 8796.77                   | -512.83   | -486.49   | 706.87                    | 706.87                    | 223.49                      | .00                     | 15.00                    | 15.00                         |
| 9336.35                                           | 89.53                | 223.49                    | 8796.99                   | -520.08   | -493.37   | 716.87                    | 716.87                    | 223.49                      | .00                     | 15.00                    | 15.00                         |
| <b>INTERSECT 1ST TARGET @ 8797' TVD, 720' VS</b>  |                      |                           |                           |           |           |                           |                           |                             |                         |                          |                               |
| 9339.48                                           | 90.00                | 223.49                    | 8797.00                   | -522.36   | -495.52   | 720.00                    | 720.00                    | 223.49                      | .00                     | 15.00                    | 15.00                         |
| 9369.48                                           | 94.50                | 223.49                    | 8795.82                   | -544.10   | -516.15   | 749.97                    | 749.97                    | 223.49                      | .00                     | 15.00                    | 15.00                         |
| 9399.48                                           | 99.00                | 223.49                    | 8792.30                   | -565.71   | -536.65   | 779.75                    | 779.75                    | 223.49                      | .00                     | 15.00                    | 15.00                         |
| 9414.96                                           | 101.32               | 223.49                    | 8789.57                   | -576.76   | -547.14   | 794.99                    | 794.99                    | 223.49                      | .00                     | 15.00                    | 15.00                         |
| 9514.96                                           | 101.32               | 223.49                    | 8769.93                   | -647.90   | -614.62   | 893.05                    | 893.05                    | 223.49                      | .00                     | .00                      | .00                           |

| Measured<br>Depth<br>FT                               | Incl<br>Angle<br>Deg | Drift<br>Direction<br>Deg | True<br>Vertical<br>Depth | N-S<br>FT | E-W<br>FT | Vertical<br>Section<br>FT | CLOSURE<br>Distance<br>FT | Direction<br>Deg | WALK<br>RATE<br>Deg/100 | BUILD<br>RATE<br>Deg/100 | Dogleg<br>Severity<br>Deg/100 |
|-------------------------------------------------------|----------------------|---------------------------|---------------------------|-----------|-----------|---------------------------|---------------------------|------------------|-------------------------|--------------------------|-------------------------------|
| 9614.96                                               | 101.32               | 223.49                    | 8750.30                   | -719.04   | -682.10   | 991.10                    | 991.10                    | 223.49           | .00                     | .00                      | .00                           |
| 9714.96                                               | 101.32               | 223.49                    | 8730.67                   | -790.17   | -749.59   | 1089.15                   | 1089.15                   | 223.49           | .00                     | .00                      | .00                           |
| 9814.96                                               | 101.32               | 223.49                    | 8711.03                   | -861.31   | -817.07   | 1187.21                   | 1187.21                   | 223.49           | .00                     | .00                      | .00                           |
| 9914.96                                               | 101.32               | 223.49                    | 8691.40                   | -932.45   | -884.55   | 1285.26                   | 1285.26                   | 223.49           | .00                     | .00                      | .00                           |
| 9996.29                                               | 101.32               | 223.49                    | 8675.43                   | -990.31   | -939.44   | 1365.01                   | 1365.01                   | 223.49           | .00                     | .00                      | .00                           |
| 9996.49                                               | 101.29               | 223.49                    | 8675.39                   | -990.45   | -939.57   | 1365.20                   | 1365.20                   | 223.49           | .00                     | -15.00                   | 15.00                         |
| 10011.77                                              | 99.00                | 223.49                    | 8672.70                   | -1001.36  | -949.92   | 1380.25                   | 1380.25                   | 223.49           | .00                     | -15.00                   | 15.00                         |
| 10041.77                                              | 94.50                | 223.49                    | 8669.18                   | -1022.97  | -970.42   | 1410.03                   | 1410.03                   | 223.49           | .00                     | -15.00                   | 15.00                         |
| <b>INTERSECT 2ND TARGET @ 8668' TVD, 1440' VS</b>     |                      |                           |                           |           |           |                           |                           |                  |                         |                          |                               |
| 10071.77                                              | 90.00                | 223.49                    | 8668.00                   | -1044.71  | -991.05   | 1440.00                   | 1440.00                   | 223.49           | .00                     | -15.00                   | 15.00                         |
| 10101.77                                              | 85.50                | 223.49                    | 8669.18                   | -1066.45  | -1011.67  | 1469.97                   | 1469.97                   | 223.49           | .00                     | -15.00                   | 15.00                         |
| 10131.77                                              | 81.00                | 223.49                    | 8672.70                   | -1088.06  | -1032.17  | 1499.75                   | 1499.75                   | 223.49           | .00                     | -15.00                   | 15.00                         |
| 10157.35                                              | 77.16                | 223.49                    | 8677.55                   | -1106.28  | -1049.46  | 1524.87                   | 1524.87                   | 223.49           | .00                     | -15.00                   | 15.00                         |
| 10257.35                                              | 77.16                | 223.49                    | 8699.77                   | -1177.02  | -1116.56  | 1622.37                   | 1622.37                   | 223.49           | .00                     | .00                      | .00                           |
| 10357.35                                              | 77.16                | 223.49                    | 8721.98                   | -1247.75  | -1183.66  | 1719.87                   | 1719.87                   | 223.49           | .00                     | .00                      | .00                           |
| 10457.35                                              | 77.16                | 223.49                    | 8744.20                   | -1318.49  | -1250.76  | 1817.37                   | 1817.37                   | 223.49           | .00                     | .00                      | .00                           |
| 10557.35                                              | 77.16                | 223.49                    | 8766.42                   | -1389.23  | -1317.87  | 1914.87                   | 1914.87                   | 223.49           | .00                     | .00                      | .00                           |
| 10657.35                                              | 77.16                | 223.49                    | 8788.64                   | -1459.96  | -1384.97  | 2012.37                   | 2012.37                   | 223.49           | .00                     | .00                      | .00                           |
| 10757.35                                              | 77.16                | 223.49                    | 8810.86                   | -1530.70  | -1452.07  | 2109.87                   | 2109.87                   | 223.49           | .00                     | .00                      | .00                           |
| <b>TD @ 10799' MD, 8820' TVD, 77.2° INC, 2150' VS</b> |                      |                           |                           |           |           |                           |                           |                  |                         |                          |                               |
| 10798.51                                              | 77.16                | 223.49                    | 8820.00                   | -1559.81  | -1479.69  | 2150.00                   | 2150.00                   | 223.49           | .00                     | .00                      | .00                           |

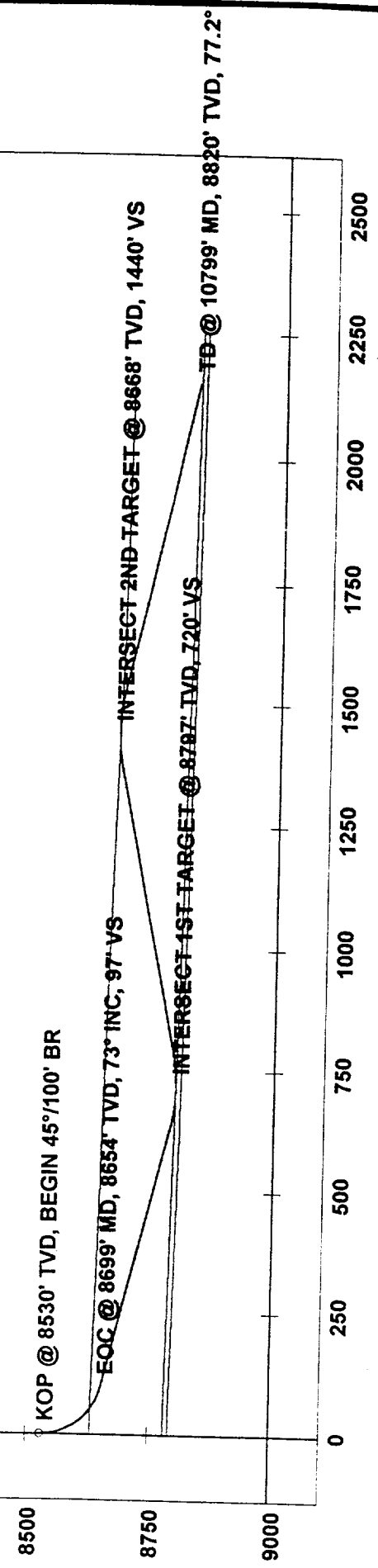
Grid:  
 File name: D:\DATA\TEXACO~1\INVAWU\INVAWU22\INVAWU22.SV  
 Date/Time: Monday, April 06, 1998

Company: LEA COUNTY  
 Lease/Well: NVAWU #22  
 Location: LEA COUNTY  
 Rig Name: YALE E KEY #119  
 State/Country: NEW MEXICO  
 Declination:

| CRITICAL POINTS              |                                    |        |         |          |
|------------------------------|------------------------------------|--------|---------|----------|
| MD                           | INC                                | ALM    | N-S     | E-W      |
| KOP @ 8530'                  | TVD, BEGIN 45°/100' BR             |        |         |          |
| 8530.00                      | .00                                | 223.49 | 8530.00 | .00      |
| EOC @ 8699'                  | MD, 8654' TVD, 73° INC, 97' VS     |        | .00     |          |
| 8698.96                      | 76.03                              | 223.49 | 8653.56 | -66.47   |
| INTERSECT 1ST TARGET @ 8797' | TVD, 720' VS                       |        | -70.07  |          |
| 9339.48                      | 90.00                              | 223.49 | 8797.00 | -495.52  |
| INTERSECT 2ND TARGET @ 8668' | TVD, 1440' VS                      |        | -522.36 |          |
| 10071.77                     | 90.00                              | 223.49 | 8668.00 | -1044.71 |
| TD @ 10799'                  | MD, 8820' TVD, 77.2° INC, 2150' VS |        | -991.05 |          |
| 10798.51                     | 77.16                              | 223.49 | 8820.00 | -1479.69 |



TRUE VERTICAL DEPTH (Ft)



° -- PROPOSAL (REV.0)

VERTICAL SECTION (Ft) @ 223.49°

## DISTRICT I

P.O. Box 1980, Hobbs, NM 88241-1980

## DISTRICT II

P.O. Box Drawer DD, Artesia, NM 88211-0719

## DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

## DISTRICT IV

P.O. Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals and Natural Resources Department

## OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

Form C-102

Revised February 10, 1994

Instructions on back

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

|                                       |                                                                    |                                             |
|---------------------------------------|--------------------------------------------------------------------|---------------------------------------------|
| <sup>1</sup> API Number<br>3002523916 | <sup>2</sup> Pool Code<br>61760                                    | <sup>3</sup> Pool Name<br>VACUUM ABO, NORTH |
| <sup>4</sup> Property Code<br>011123  | <sup>5</sup> Property Name<br>NORTH VACUUM ABO WEST UNIT           | <sup>6</sup> Well No.<br>22                 |
| <sup>7</sup> OGRID Number<br>022351   | <sup>8</sup> Operator Name<br>TEXACO EXPLORATION & PRODUCTION INC. | <sup>9</sup> Elevation<br>4055'             |

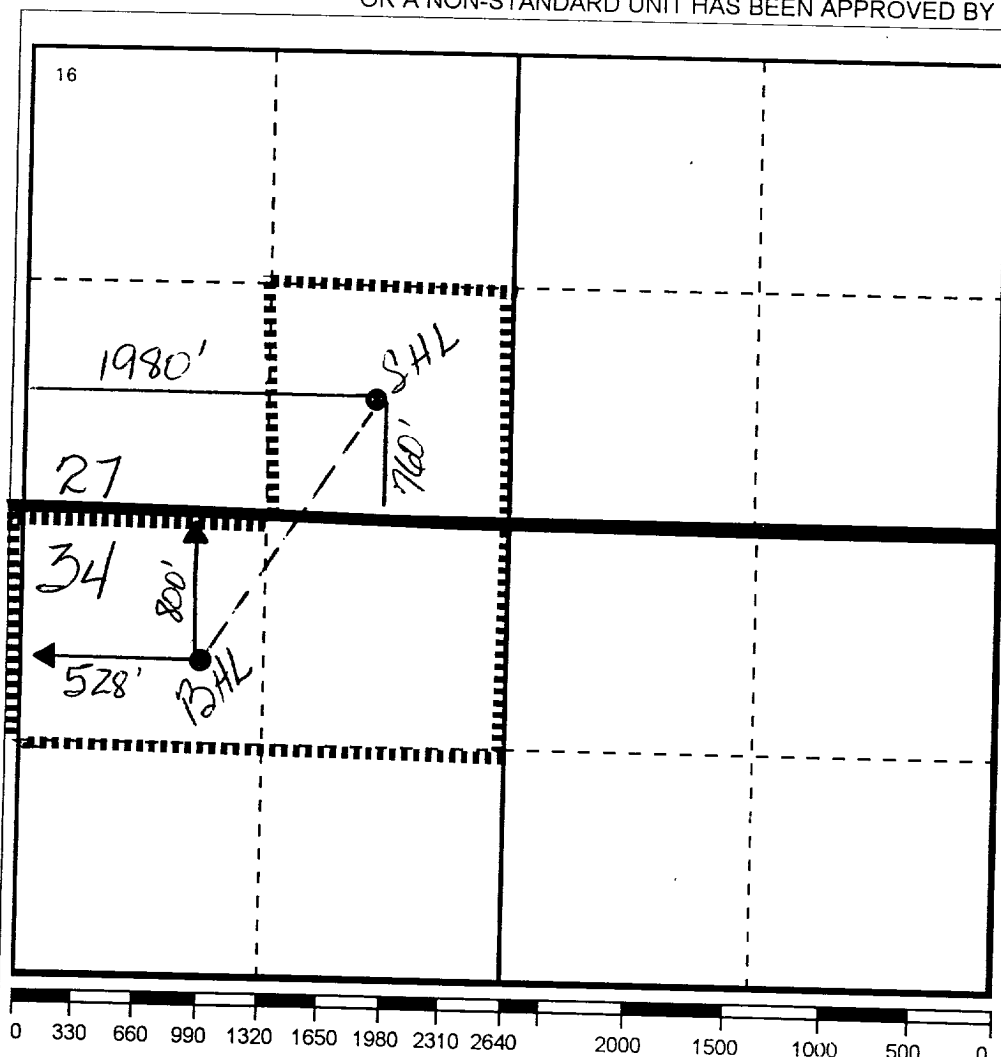
<sup>10</sup> Surface Location

|                    |               |                 |              |         |                      |                           |                       |                        |               |
|--------------------|---------------|-----------------|--------------|---------|----------------------|---------------------------|-----------------------|------------------------|---------------|
| Ul or lot no.<br>N | Section<br>27 | Township<br>17S | Range<br>34E | Lot.Idn | Feet From The<br>760 | North/South Line<br>SOUTH | Feet From The<br>1980 | East/West Line<br>WEST | County<br>LEA |
|--------------------|---------------|-----------------|--------------|---------|----------------------|---------------------------|-----------------------|------------------------|---------------|

<sup>11</sup> Bottom Hole Location If Different From Surface

|                                      |                                     |                                  |                         |         |                      |                           |                      |                        |               |
|--------------------------------------|-------------------------------------|----------------------------------|-------------------------|---------|----------------------|---------------------------|----------------------|------------------------|---------------|
| Ul or lot no.<br>D                   | Section<br>34                       | Township<br>17S                  | Range<br>34E            | Lot.Idn | Feet From The<br>800 | North/South Line<br>NORTH | Feet From The<br>528 | East/West Line<br>WEST | County<br>LEA |
| <sup>12</sup> Dedicated Acres<br>120 | <sup>13</sup> Joint or Infill<br>No | <sup>14</sup> Consolidation Code | <sup>15</sup> 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

<sup>17</sup> OPERATOR CERTIFICATION

I hereby certify that the information  
contained herein is true and complete to the  
best of my knowledge and belief

Signature

J. Denise Leake

Printed Name

J. Denise Leake

Position

Engineering Assistant

Date

5/6/98

<sup>18</sup> SURVEYOR CERTIFICATION

I hereby certify that the well location shown  
on this plat was plotted from field notes of  
actual surveys 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

Signature & Seal of  
Professional Surveyor

Certificate No.

# NORTH VACUUM ABO WEST UNIT

T-17-S

R-34-E

MOBIL OIL

North Vacuum  
Abo Unit

Yates-1

299

228

270

202

16

"Conoco" State

"Conoco" State

"NV"

"CQ"

"Conoco" State

"D" NCT-1

"V"

25 ("V"-10)

P/B

1 mile

"I" 1

"LL" 1

"GS 16" - 1

21

"Rites"

"LEA" State

"B" 8097

"NV"

"AF" - 1

"T" NCT-3

State 2-B

"O" NCT-2

"P" 1

"T" NCT-4

WVU-1

WVU-3

WVU-4

WVU-5

Amerada-1

21

24

23

25 ("V"-10)

P/B

James Anderson 5/7/98

164

269

15

298

130

163

174

296

295

144

203

293

22

292

208

"J"-2

209

291

290

220

143

277

27

289

49

157

149

181

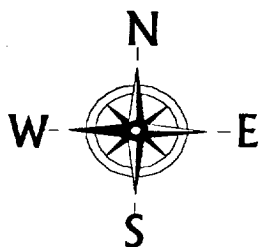
276

42

288

145

44



- Oil Producer
- ▲ Water Injection
- ⊙ P & A
- TA, Inactive
- Location
- △ Offset Wells

