

SUBMIT IN TRIPLICATE

UNI  
DEPARTMENT  
BUREAU OF

OPER. OGRID NO. 22351  
PROPERTY NO. 10935  
POOL CODE 41540  
EFF. DATE 8/30/95  
API NO. 30-D25-33081

FORM APPROVED  
Budget Bureau No. 1004-0136  
Expires: December 31, 1991

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. Type of Work DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/>		1b. Type of Well OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>	
2. Name of Operator TEXACO EXPLORATION & PRODUCTION INC.					
3. Address and Telephone No. P.O. Box 3109, Midland Texas 79702 688-4606					
4. Location of Well (Report location clearly and in accordance with any State requirements.) At Surface Unit Letter B : 330 Feet From The NORTH Line and 1980 Feet From The EAST Line At proposed prod. zone SAME					
14. Distance In Miles and Direction from Nearest Town or Post Office* 15 MILES SOUTH OF MALJAMAR, NEW MEXICO					
15. Distance From Proposed* Location to Nearest Property or Lease Line, Ft. (also to nearest drlg. unit line, if any) 330'			16. No. of Acres in Lease 281		17. No. of Acres Assigned To This Well 40
18. Distance From Proposed Location* to Nearest Well, Drilling, Completed or Applied For, On This Lease, Ft. 1363'			19. Proposed Depth 7200'		20. Rotary or Cable Tools ROTARY
21. Elevations (Show whether DF, RT, GR, etc.) GR-3538'					22. Approx. Date Work Will Start* 8/1/95

23. PROPOSED CASING AND CEMENT PROGRAM				
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
14 3/4	WC40, 11 3/4	42#	850'	470 SACKS - CIRCULATE
11	WC50, 8 5/8	32#	4100'	1650 SACKS - CIRCULATE
7 7/8	WC50, LS65, 5	15.5#	7200'	1115 SACKS - CIRCULATE (TIE BACK)

CEMENTING PROGRAM:

SURFACE CASING - 300 SACKS CLASS C w/ 4% GEL, 2% CACL2 (13.5 PPG, 1.74 CF/S, 9.1 GW/S). F/B 170 SACKS CLASS C w/ 2% CACL2 (14.8 PPG, 1.34 CF/S, 6.3 GW/S).

INTERMEDIATE CASING - 450 SACKS 35/65 POZ CLASS H w/ 6% GEL, 5% SALT, 1/4# FLOCELE (12.8 PPG, 1.94 CF/S, 10.1 GW/S). F/B 200 SACKS CLASS H w/ 1% CACL2 (15.6 PPG, 1.18 CF/S, 5.2 GW/S).

DV TOOL @ 2800' - 2nd STAGE: 900 SACKS 35/65 POZ CLASS H w/ 6% GEL, 5% SALT, 1/4# FLOCELE (12.8 PPG, 1.94 CF/S, 10.1 GW/S). F/B 100 SACKS CLASS H w/ 2% CACL2 (15.6 PPG, 1.19 CF/S, 5.2 GW/S).

PRODUCTION CASING - 950 SACKS 35/65 POZ CLASS H w/ 6% GEL, 5% SALT, 1/4# FLOCELE (12.8 PPG, 1.94 CF/S, 10.1 GW/S). F/B 165 SACKS 50/50 POZ CLASS H w/ 2% GEL, 5% SALT, 1/4# FLOCELE (14.2 PPG, 1.35 CF/S, 6.3 GW/S).

THERE ARE NO OTHER OPERATORS IN THIS QUARTER QUARTER SECTION.

PLEASE NOTE: THE FLOWLINE ON EXHIBIT 'A' WAS MOVED AFTER THE 'NOTICE OF STAKING' WAS FILED 6/22/95 BECAUSE OF ARCHEOLOGICAL SITES FOUND BY PECOS ARCHEOLOGICAL CONSULTANTS.

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED

In Above Space Describe Proposed Program: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured true verticle depths. Give blowout preventer program, if any.

24. I hereby certify that the foregoing is true and correct

SIGNATURE C. Wade Howard TITLE Eng. Assistant DATE 6/29/95  
TYPE OR PRINT NAME C. Wade Howard

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

APPROVED BY Gilbert J. Lucero TITLE Acting State Director DATE 8-22-95  
CONDITIONS OF APPROVAL, IF ANY:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

DISTRICT I  
P. O. Box 1980, Hobbs, NM 88240

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

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

PO Box 2088  
Santa Fe, NM 87504-2088

Form C-102  
Revised February 10, 1994

Instructions on back

Submit to Appropriate District Office

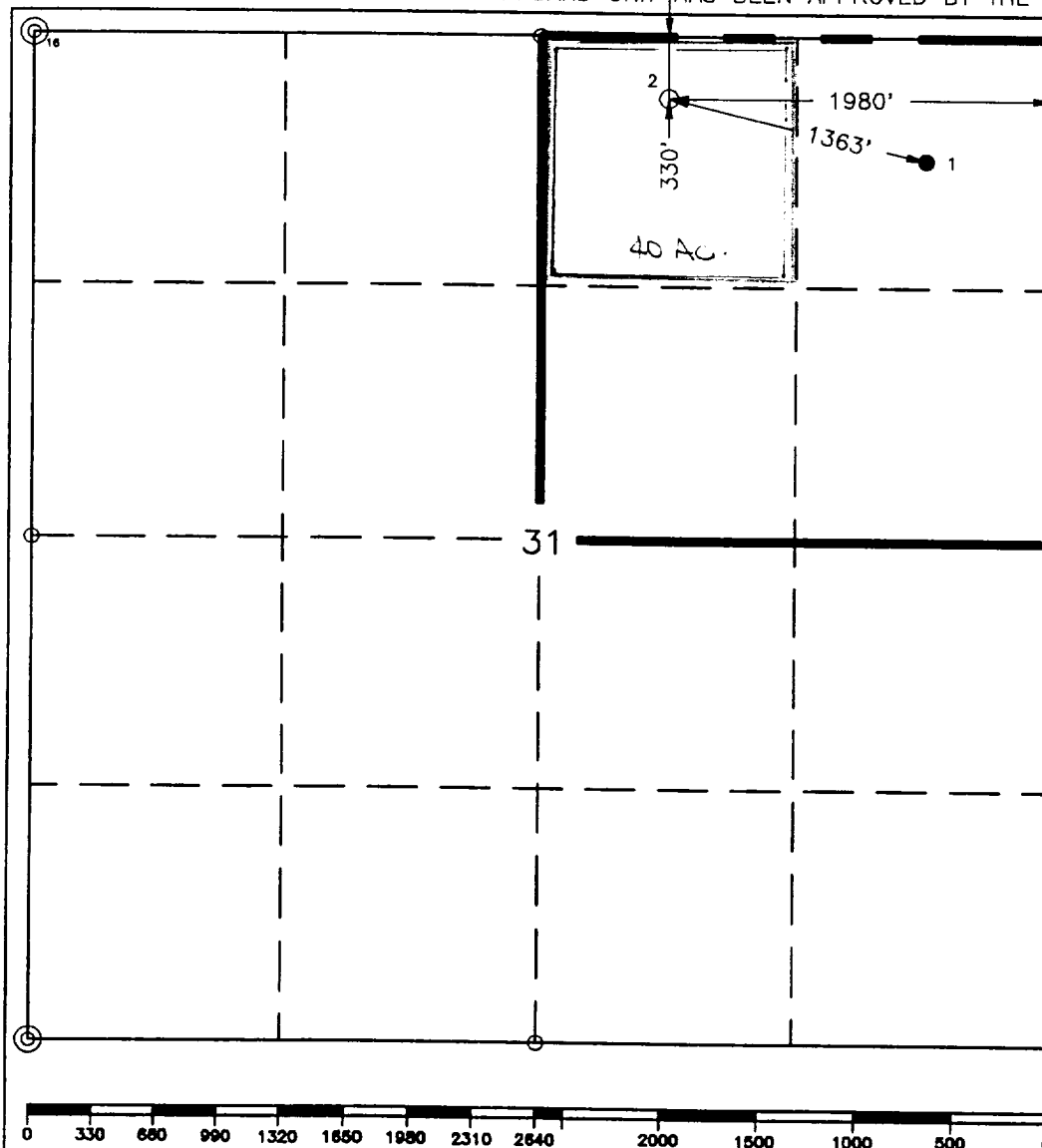
State Lease-4 copies  
Fee Lease-3 copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

<sup>1</sup> API Number 30-025-33081		<sup>2</sup> Pool Code 41540		<sup>3</sup> Pool Name Lusk Delaware, West					
<sup>4</sup> Property Code 10935		<sup>5</sup> Property Name Federal USA "r"				<sup>6</sup> Well Number 2			
<sup>7</sup> OGRID No. 22351		<sup>8</sup> Operator Name TEXACO EXPLORATION & PRODUCTION, INC.				<sup>9</sup> Elevation 3538'			
<sup>10</sup> Surface Location									
UL or lot no. B	Section 31	Township 19-S	Range 32-E	Lot Idn	Feet from the 330'	North/South line North	Feet from the 1980'	East/West line East	<sup>7</sup> County Lea
<sup>11</sup> Bottom Hole Location If Different From Surface									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	<sup>7</sup> County
<sup>12</sup> Dedicated Acres 40		<sup>13</sup> Joint or Infill		<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 <i>C. Wade Howard</i>	
Printed Name C. Wade Howard	
Position Engineer's Assistant	
Company Texaco Expl. & Prod. Inc.	
Date June 19, 1995	
<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 June 13, 1995	
Signature & Seal of Professional Surveyor <i>John S. Piper</i>	
Certificate No. 7254 John S. Piper	
Sheet 8 of 8	

## DRILLING PROGRAM

### FEDERAL (USA) "I" WELL NO. 2

#### **SURFACE DESCRIPTION:**

This well is in an area known as the Querecho Plains. The Querecho Plains occurs in a region which is typified by undulating landforms which possesses both stabilized and unstabilized sand dunes, mesquite anchored-hummocks and hills. Vegetation consists mainly of shin oak, mesquite, sand sage, broom-snake weed, and range grasses.

**FORMATION TOPS:** Estimated KB Elevation: 3548'

<u>Formation</u>	<u>Depth</u>	<u>Lithology</u>	<u>Fluid Content</u>
Rustler	835'	Anhydrite, Salt	----
Tansill	2520'	Dolomite	----
Yates	2585'	Sand, Dolomite	Oil/Gas
Capitan Reef	2825'	Limestone, Dolo	----
Delaware (Cherry Canyon)	4395'	Sandstone, Shale	Oil/Gas
Brushy Canyon- Pay	6690'	Sandstone, Shale	Oil/Gas
Bone Spring	7148'	Limestone	----

The base of the salt section is found around 2520'. No abnormal pressures or temperatures are anticipated to be encountered in this well. H<sub>2</sub>S is possible in this well. H<sub>2</sub>S RADIUS OF EXPOSURE: 100ppm = 19 feet, 500ppm = 9 feet, based on 400ppm and 180 mcf. (See attached H<sub>2</sub>S Drilling Operations Plan. H<sub>2</sub>S equipment to be operational prior to drilling out Surface Casing Shoe.)

#### **PRESSURE CONTROL EQUIPMENT:**

A 3000 psi Dual Ram type preventer with rotating head will be used. (See Exhibit C). We do not plan to have an annular preventer. We will be able to achieve full closure of the well with the double ram preventer. It will be installed after surface casing is set. BOP will be tested each time it is installed on a casing string and at least every 29 days, and operated at least once each 24-hour period during drilling.

BOP's on this well will not be tested by an independent service company since it will be drilled immediately following the Federal (USA) "J" Well No. 4. We will test the BOP and all components of the well control system with the rig pump.

A PVT system will not be installed. We will be drilling thru the reserve pit and will circulate the steel pits one hour each tour to check for gains and losses and will be noted on the driller's log, which is Texaco's policy.

We do not plan to run an automatic remote-controlled choke. We will have installed and tested two manual, H<sub>2</sub>S trimmed, chokes.

**CASING AND CEMENT PROGRAM:**

The casing and cementing programs are detailed on Form 3160-3. All casing will be new.

**Centralizer Program:**

Surface Casing - Centralize the bottom 3 joints and every 4th to surface.

Intermediate Casing - Centralize the bottom 3 joints and above and below the DV tool.

Production Casing - Centralize bottom 600' every 3 joints.

**MUD PROGRAM:**

<u>Depth</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>
0'-850'	Fresh Water	8.4	28
850'-4100'	Brine Water	10.0	29
4100'-6900'	Fresh Water	8.4	28
6900'-7200'	FW/Starch	8.4-8.6	29-33

Bottom Hole Pressure at T. D. estimated to be 8.4 PPG EMW.

**LOGGING, TESTING:**

GR-CAL-DSN-SDL and GR-CAL-DLL-MSFL surveys will be run.

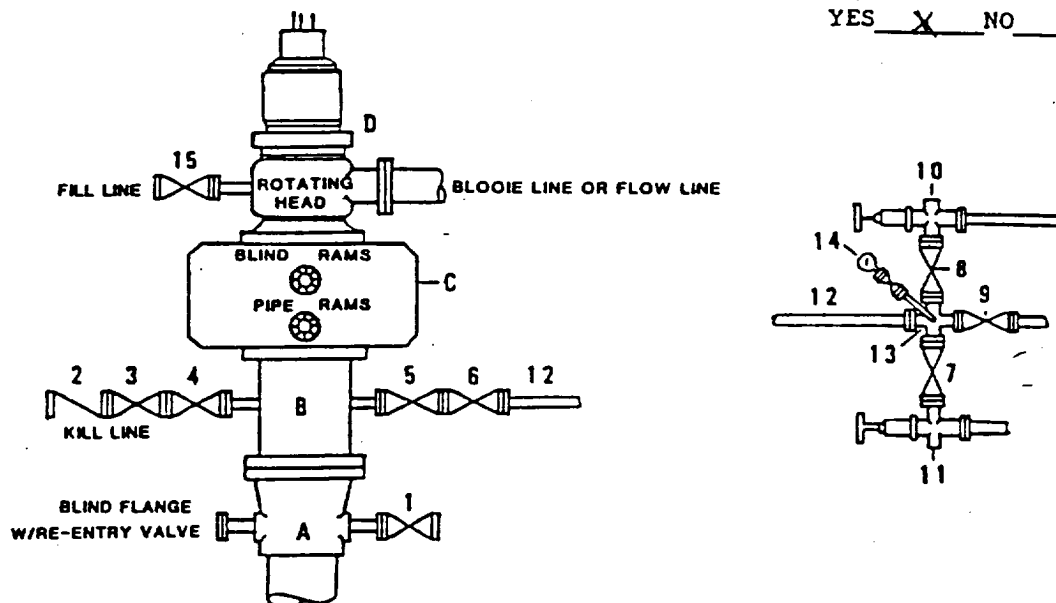
A two-man Mud Logging Unit will be used from 4100' to 7200'.

No drill stem tests will be conducted.

No cores will be taken.

**DRILLING CONTROL  
CONDITION II-B 3000 WP  
FOR AIR DRILLING OR  
WHERE NITROGEN OR AIR BLOWS ARE EXPECTED**

H<sub>2</sub>S TRIM REQUIRED  
YES X NO   



DRILLING CONTROL

MATERIAL LIST - CONDITION II - B

- A            Texaco Wellhead
- B            3000# W.P. drilling spool with a 2" minimum flanged outlet for kill line and 3" minimum flanged outlet for choke line.
- C            3000# W.P. Dual ram type preventer, hydraulic operated with 1" steel, 3000# W.P. control lines (where sub-structure height is adequate, 2 - 3000# W.P. single ram type preventers may be utilized).
- D            Rotating Head with fill up outlet and extended Blooie Line.
- 1,3,4,       2" minimum 3000# W.P. flanged full opening steel gate valve, or Halliburton Lo Torc Plug valve.
- 7,8,        2" minimum 3000# W.P. back pressure valve.
- 2            3" minimum 3000# W.P. flanged full opening steel gate valve, or Halliburton Lo Torc Plug valve.
- 5,6,9       3" minimum schedule 80, Grade "B", seamless line pipe.
- 12          2" minimum x 3" minimum 3000# W.P. flanged cross.
- 13          2" minimum 3000# W.P. adjustable choke bodies.
- 10,11       Cameron Mud Gauge or equivalent ( location optional in choke line).
- 14          2" minimum 3000# W.P. flanged or threaded full opening steel gate valve, or Halliburton Lo Torc Plug valve.
- 15          2" minimum 3000# W.P. flanged or threaded full opening steel gate valve, or Halliburton Lo Torc Plug valve.



TEXACO, INC.  
MIDLAND DIVISION  
MIDLAND, TEXAS



SCALE	DATE	EST. NO.	DRG. NO.
DRAWN BY			
CHECKED BY			
APPROVED BY			

EXHIBIT C