

SUBMIT IN TRIPLICATE

**NM OIL CONSERVATION**  
**DRAWER D**  
**ARTESIA, NM**  
UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
OPER. OGRID NO. 22351  
PROPERTY NO. 4072  
POOL CODE 53817  
EFF. DATE 10-25-94  
API NO. 30-025-32713

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

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. Type of Work <b>DRILL</b> <input checked="" type="checkbox"/> <b>DEEPEN</b> <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 N : 660 Feet From The SOUTH Line and 1980 Feet From The WEST Line At proposed prod. zone SAME					
14. Distance In Miles and Direction from Nearest Town or Post Office* 21 MILES EAST OF LOVING, NM.					
15. Distance From Proposed* Location to Nearest Property or Lease Line, Ft. (also to nearest drlg. unit line, if any) 660'			16. No. of Acres in Lease 1994.13		
18. Distance From Proposed Location* to Nearest Well, Drilling, Completed or Applied For, On This Lease, Ft. 1120'			19. Proposed Depth 8700'		20. Rotary or Cable Tools R
21. Elevations (Show whether DF, RT, GR, etc.) GR-3588'				22. Approx. Date Work Will Start* 11/1/94	
23. PROPOSED CASING AND CEMENT PROGRAM					

CEMENTING PROGRAM:

SURFACE CASING - 350 SACKS CLASS C W/ 4% GEL, 2% CACL<sub>2</sub> (13.5 PPG, 1.74 CF/S, 9.11 GW/S). F/B 200 SACKS CLASS C W/ 2% CACL<sub>2</sub> (14.8 PPG, 1.34 CF/S, 6.3 GW/S).

INTERMEDIATE CASING - 1300 SACKS 35/65 POZ CLASS H W/ 6% GEL, 5% SALT, 1/4# FLOCELE (12.8 PPG, 1.94 CF/S, 10.4 GW/S). F/B 150 SACKS CLASS H (15.6 PPG, 1.18 CF/S, 5.2 GW/S).

PRODUCTION CASING - 1ST STAGE - 750 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). DV TOOL @ 6300'. 2ND STAGE - 750 SACKS 35/65 POZ CLASS H W/ 6% GEL, 5% SALT, 1/4# FLOCELE (12.8 PPG, 1.94 CF/S, 10.4 GW/S). F/B 100 SACKS CLASS H (15.6 PPG, 1.18 CF/S, 5.2 GW/S).

THERE ARE NO OTHER OPERATORS IN THIS QUARTER QUARTER SECTION.

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. P. Basham / cwp TITLE Drilling Operations Mgr. DATE 9/8/94  
TYPE OR PRINT NAME C. P. Basham

(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 the rights in the subject lease which would entitle the applicant to conduct operations thereon.

APPROVED BY Timothy P. O'Brien AREA MANAGER DATE 10-14-94  
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

Form C-102  
Revised February 10, 1994

Instructions on back

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

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 30-025-32713		<sup>2</sup> Pool Code 53817		<sup>3</sup> Pool Name SAND DUNES EAST Delaware					
<sup>4</sup> Property Code 11072		<sup>5</sup> Property Name SDE FEDERAL "18"				<sup>6</sup> Well Number 7			
<sup>7</sup> OGRID No. 022351		<sup>8</sup> Operator Name TEXACO EXPLORATION & PRODUCTION, INC.				<sup>9</sup> Elevation 3588'			
<sup>10</sup> Surface Location									
UL or lot no. N	Section 18	Township 23-S	Range 32-E	Lot Idn	Feet from the 660'	North/South line South	Feet from the 1980'	East/West line West	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	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.

<p>46.02 Ac.</p> <p>46.05 Ac.</p> <p>46.09 Ac.</p> <p>46.12 Ac.</p> <p>1</p> <p>2</p> <p>3</p> <p>6</p> <p>7</p> <p>1120'</p> <p>1980'</p> <p>660'</p> <p>18</p> <p>T.E.P.I. Federal Sands "18" No. 1 P&amp;A</p>	<sup>16</sup> OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.	
	Signature Royce D. Marriott / cwh	
	Printed Name Royce D. Marriott	
	Position Division Surveyor	
	Company Texaco Expl. & Prod. Inc.	
	Date August 29, 1994	
	<sup>17</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 August 15, 1994	
	Signature & Seal of Professional Surveyor 	
	Certificate No. 7254 John S. Piper	

○ = Staked Location ● = Producing Well ⚡ = Injection Well ◇ = Water Supply Well ⊕ = Plugged & Abandon Well  
⊙ = Found Section Corner, 2 or 3" Iron Pipe & GLO B.C. ○ = Found 1/4 Section Corner, 1" Iron Pipe & GLO B.C.

## DRILLING PROGRAM

SDE FEDERAL '18' WELL NO. 7

### **SURFACE DESCRIPTION:**

The land surface in this area is relatively level with moderate sand dunes. Regionally, the land slopes to the West. Vegetation consists mainly of scrub oak, mesquite, and range grasses.

**FORMATION TOPS:** Estimated KB Elevation: 3598'

<u>Formation</u>	<u>Depth</u>	<u>Lithology</u>	<u>Fluid Content</u>
Rustler	930'	Anhydrite, Salt	----
Salado	1245'	Salt	----
Delaware Mtn Group	4640'	Sandstone, Shale	Oil/Gas
Cherry Canyon	5550'	Sandstone, Shale	Oil/Gas
Brushy Canyon- Pay	7200'	Sandstone, Shale	Oil/Gas
Lower Brushy Canyon- Pay	8240'	Sandstone, Shale	Oil/Gas
Bone Spring	8580'	Limestone	----

The base of the salt section is found around 4390'. 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 = 23 feet, 500ppm = 11 feet, based on 800ppm and 115 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.

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.

Production Casing - Centralize bottom 500' every other cplg. and above and below the DV tool.

### MUD PROGRAM:

<u>Depth</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>
0'-945'	Fresh Water	8.4	28
945'-4550'	Brine Water	10.0	29
4550'-6500'	Fresh Water	8.4	28
6500'-8700'	FW/Starch	8.4-8.7	29-33

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

### LOGGING, TESTING:

GR-CAL-DSN-SDL and GR-CAL-DISFL surveys will be run.

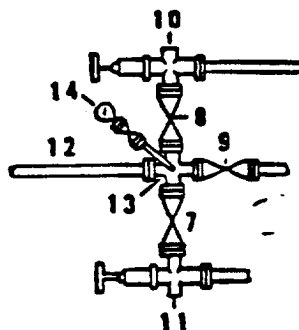
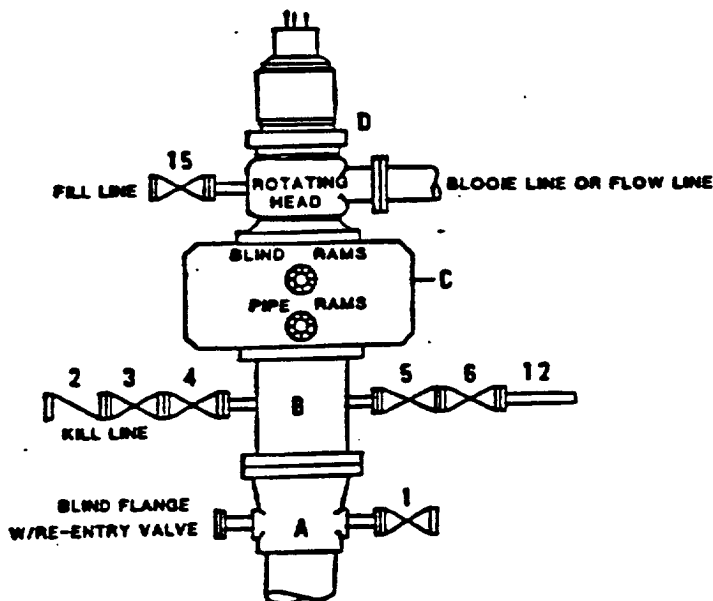
A two-man Mud Logging Unit will be used from 4400' to 8700'.

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 Blooe Line.  |
| 1,3,4,7,8, | 2" minimum 3000# W.P. flanged full opening steel gate valve, or Halliburton Lo Torc Plug valve.   |
| 2          | 2" minimum 3000# W.P. back pressure valve.  |
| 5,6,9      | 3" minimum 3000# W.P. flanged full opening steel gate valve, or Halliburton Lo Torc Plug valve.   |
| 12         | 3" minimum schedule 80, Grade "B", seamless line pipe.  |
| 13         | 2" minimum x 3" minimum 3000# W.P. flanged cross.   |
| 10,11      | 2" minimum 3000# W.P. adjustable choke bodies.  |
| 14         | Cameron Mud Gauge or equivalent ( location optional in choke line).   |
| 15         | 2" minimum 3000# W.P. flanged or threaded full opening steel gate valve, or Halliburton Lo Torc Plug valve.   |



**TEXACO, INC.**  
WILKINS DIVISION  
WILKINS, TEXAS



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

**EXHIBIT C**