

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. NM-59045
b. 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"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
2. NAME OF OPERATOR TEXACO EXPLORATION AND PRODUCTION INC.		7. UNIT AGREEMENT NAME
3. ADDRESS OF OPERATOR P. O. Box 3109, Midland, Texas 79702		8. FARM OR LEASE NAME FEDERAL (USA) 'J'
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface 660' FSL & 385' FEL, UNIT LETTER: P At proposed prod. zone SAME		9. WELL NO. 2
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 15 MILES SOUTH OF MALJAMAR, NEW MEXICO		10. FIELD AND POOL, OR WILDCAT LUSK DELAWARE, WEST
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 385'		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA SEC. 30, T-19-S, R-32-E
16. NO. OF ACRES IN LEASE 160		12. COUNTY OR PARISH LEA
17. NO. OF ACRES ASSIGNED TO THIS WELL 40		13. STATE NM
18. DISTANCE FROM PROPOSED* LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 430'		20. ROTARY OR CABLE TOOLS ROTARY
21. ELEVATIONS (Show Whether DF, RT, GR, ETC.) GR-3538'		22. APPROX. DATE WORK WILL START* MAY 15, 1993

23. PROPOSED CASING AND CEMENTING PROGRAM

HOLE SIZE	CASING SIZE	WEIGHT/FOOT	GRADE	THREAD TYPE	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2	18	65#	H-40	PE	40'	REDIMIX
14 3/4	11 3/4	42#	WC-40	ST&C	850'	CIRCULATE 560 SACKS
11	8 5/8	32#	WC-50	LT&C	4100' (tie back)	1780 SACKS
7 7/8	5 1/2	15.5# & 17#	WC-50 & WC70	LT&C	7200' (tie back)	900 SACKS

CEMENTING PROGRAM: CONDUCTOR - REDIMIX.

SURFACE CASING - 360 SACKS CLASS C w/ 4% GEL, 2% CaCl<sub>2</sub> (13.5ppg, 1.74f3/s, 9.1gw/s). F/B 200 SACKS

CLASS C w/ 2% CaCl<sub>2</sub> (14.8ppg, 1.34f3/s, 6.3gw/s).

INTERMEDIATE CASING - 650 SACKS 35/65 POZ CLASS H w/ 6% GEL, 5% SALT & 1/4# FLOCELE (12.8ppg, 1.94f3/s, 10.1gw/s). F/B 200 SACKS CLASS H w/ 2% CaCl<sub>2</sub> (15.6ppg, 1.19f3/s, 5.2gw/s).

DV TOOL @ 2500' - 2nd STAGE: 830 SACKS 35/65 POZ CLASS H w/ 6% GEL, 5% SALT, 1/4# FLOCELE (12.8ppg, 1.94f3/s, 10.1gw/s). F/B 100 SACKS CLASS H w/ 2% CaCl<sub>2</sub> (15.6ppg, 1.19f3/s, 5.2gw/s).

PRODUCTION CASING - 750 SACKS 35/65 POZ CLASS H w/ 6% GEL, 5% SALT & 1/4# FLOCELE (12.8ppg, 1.94f3/s, 10.1gw/s). F/B 150 SACKS 50/50 POZ CLASS H w/ 2% GEL, 5% SALT, 1/4# FLOCELE (14.2ppg, 1.35f3/s, 6.3gw/s).

THERE ARE NO OTHER OPERATORS IN THIS QUARTER QUARTER SECTION.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, 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 and true vertical depths. Give blowout prevention program, if any.

24.

SIGNED C.P. Basham / cwh TITLE DRILLING OPERATIONS MANAGER DATE 04-19-93

(This space for Federal or State office use)

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

APPROVED BY (ORIG. SGD.) RICHARD L. MANUS TITLE AREA MANAGER DATE JUN 21 1993

APPROVAL SUBJECT TO CONDITIONS OF APPROVAL IF ANY:

GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS

ATTACHED

\*See Instructions On Reverse Side

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.

Submit to Appropriate  
District Office  
State Lease - 4 copies  
Fee Lease - 3 copies

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised 1-1-89

OIL CONSERVATION DIVISION

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

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

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

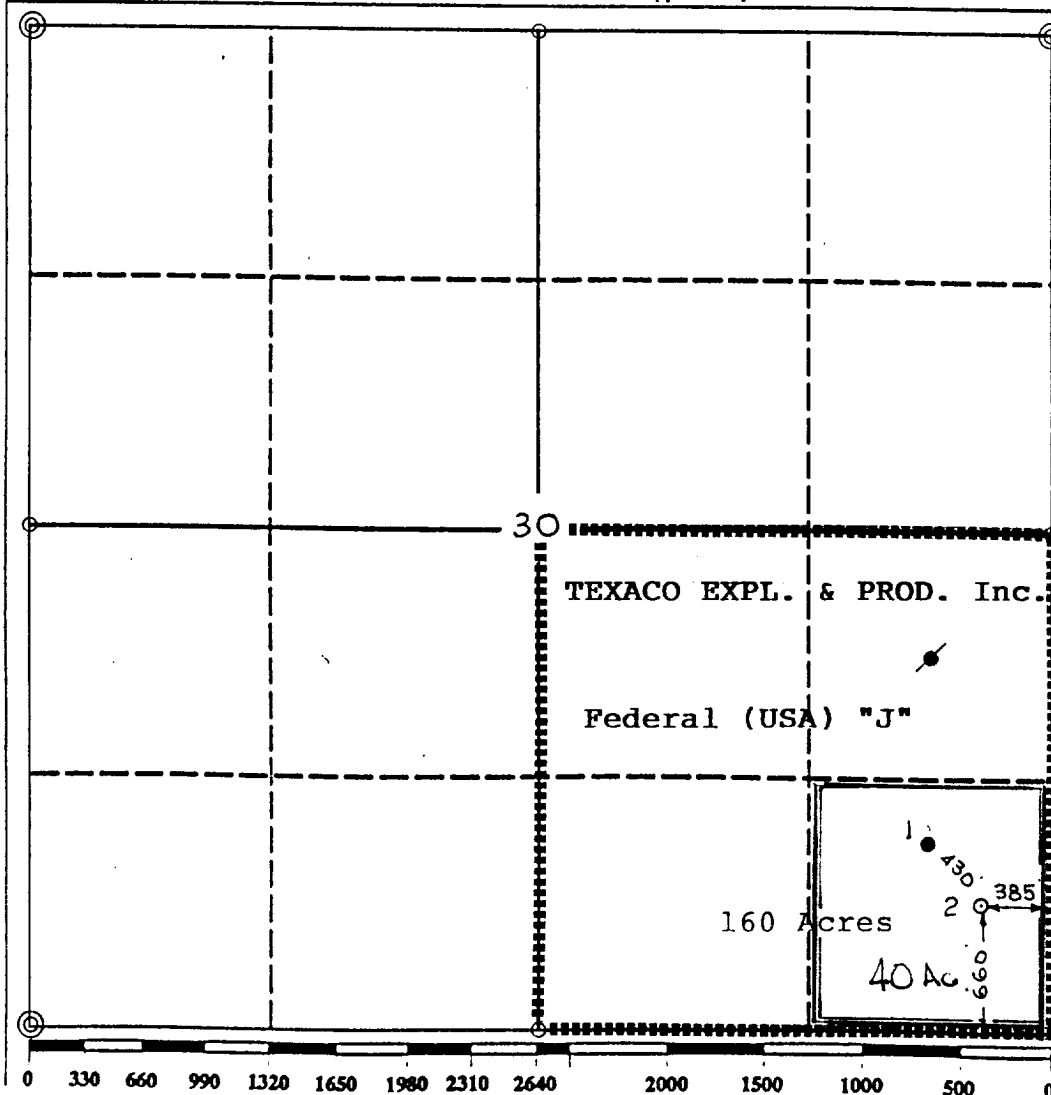
DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator Texaco Exploration and Production			Lease Federal (USA) "J"		Well No. 2
Unit Letter P	Section 30	Township 19-South	Range 32-East	County Lea	
Actual Footage Location of Well: 660 feet from the South line and 385 feet from the East line					
Ground level Elev. 3538	Producing Formation Delaware/Brushy Canyon		Pool Lusk Delaware, West		Dedicated Acreage: 40 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?  
☐ Yes ☐ No If answer is "yes" type of consolidation \_\_\_\_\_  
If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_  
No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



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. Mariott*  
Printed Name  
Royce D. Mariott  
Position  
Division Surveyor  
Company  
Texaco Expl. & Prod.  
Date  
April 12, 1993

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  
April 9, 1993  
Signature & Seal of  
Professional Surveyor  
*John S. Piper*  
Certificate No.  
7254 John S. Piper  
Lea FB 7 Pg. 69

## DRILLING PROGRAM

FEDERAL (USA) "J" 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	850'	Anhydrite, Salt	----
Tansill	2430'	Dolomite	----
Yates	2595'	Sand, Dolomite	Oil/Gas
Capitan Reef	2865'	Limestone, Dolo	----
Delaware (Cherry Canyon)	4600'	Sandstone, Shale	Oil/Gas
Brushy Canyon- Pay	6975'	Sandstone, Shale	Oil/Gas
Bone Spring	7150'	Limestone	----

The base of the salt section is found around 2430'. No abnormal pressures, temperatures, or hazardous gases are anticipated to be encountered in this well.

### **PRESSURE CONTROL EQUIPMENT:**

A 3000 psi Dual Ram type preventer with rotating head will be used. (See Exhibit C). 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.

### **CASING AND CEMENT PROGRAM:**

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

Centralizer Program:

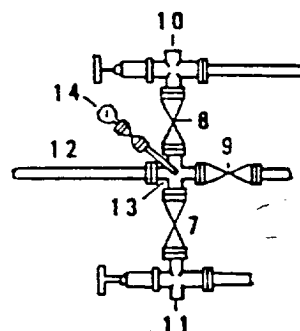
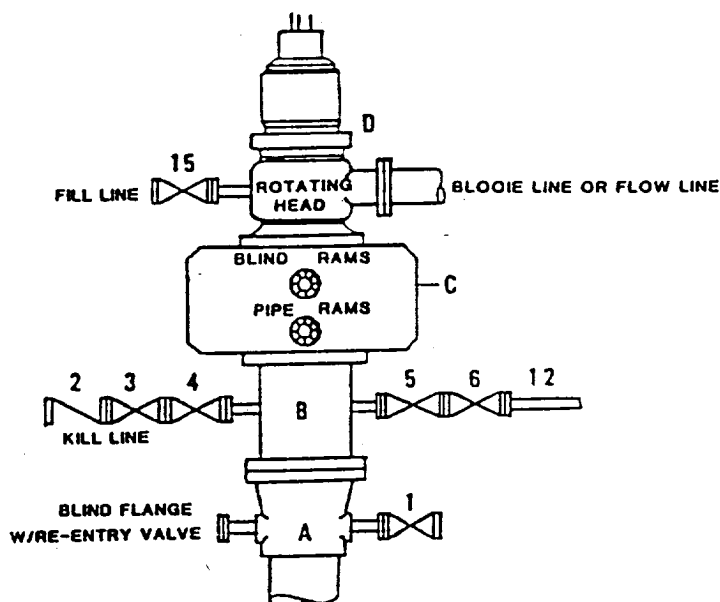
Surface Casing - Centralize the bottom 3 joints and every 4th to surface.

Intermediate Casing - Centralize the bottom 3 joints.

Production Casing - Centralize every other joint on bottom 360'.

**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 \_\_\_\_\_ NO X



**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,<br>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.  
MIDLAND DIVISION  
MIDLAND, TEXAS



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

EXHIBIT C