

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

30-025-32383

BLM Reswell District  
Modified Form No.  
NMO60-3160-2

LEASE DESIGNATION AND SERIAL NO.

NM-14352

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

BILBREY -33- FEDERAL

9. WELL NO.

2

10. FIELD AND POOL, OR WILDCAT

BILBREY, ATOKA/MORROW

11. SEC., T., R., M., OR BLK.  
AND SURVEY OR AREA

SEC. 33, T-21-S, R-32-E

12. COUNTY OR PARISH

LEA

13. STATE

NM

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

PLUG BACK ☐

b. TYPE OF WELL

OIL WELL ☐

GAS WELL ☒

OTHER

SINGLE ZONE ☒

MULTIPLE ZONE ☐

2. NAME OF OPERATOR

TEXACO EXPLORATION AND PRODUCTION INC. (022351)

3a. AREA CODE & PHONE NO.

(915) 688-4620

3. ADDRESS OF OPERATOR

P. O. Box 3109, Midland, Texas 79702

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)

At surface

\*1980' FSL & 2310' FWL, UNIT LETTER: K

At proposed prod. zone

SAME

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE

30.4 MILES WEST OF EUNICE, NEW MEXICO

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT.

2310'

(Also to nearest drg. unit line, if any)

16. NO. OF ACRES IN LEASE

799.29

17. NO. OF ACRES ASSIGNED TO THIS WELL

320

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.

2661'

19. PROPOSED DEPTH

14950'

20. ROTARY OR CABLE TOOLS

ROTARY

21. ELEVATIONS (Show Whether DF, RT, GR, ETC.)

GR-3746'

22. APPROX. DATE WORK WILL START \*

NOVEMBER 20, 1993

23. PROPOSED CASING AND CEMENTING PROGRAM

Secretary's Potash

HOLE SIZE	CASING SIZE	WEIGHT/FOOT	GRADE	THREAD TYPE	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2	13 3/8	54.5#	K-55	STC	825' CIRCULATE	760 SACKS
12 1/4	9 5/8	40# & 36#	L-80, K-55, S80	LT&C	4740' CIRCULATE	1800 SACKS
8 3/4	7	26#	P-110	LT&C	12300'	1900 SACKS
6 1/8	5 LINER	18#	S-95	FL4	14950'	525 SACKS

CEMENTING PROGRAM: CONDUCTOR - SET 20 inch, 94# @ 40' - REDIMIX.

SURFACE CASING - 600 SACKS CLASS C w/ 4% GEL & 2% Cacl2 (13.5ppg, 1.74f3/s, 9.1gw/s). F/B 160 SACKS CLASS C w/ 2% Cacl2 (14.8ppg, 1.34f3/s, 6.3gw/s).

1st INTERMEDIATE - 1500 SACKS 35/65 POZ CLASS H w/ 6% GEL, 5% SALT & 1/4# FLOCELE (12.8ppg, 1.94f3/s, 10.4gw/s). F/B 300 SACKS CLASS H (15.6ppg, 1.18f3/s, 5.2gw/s).

2nd INTERMEDIATE - 1st STAGE: 500 SACKS 35/65 POZ CLASS H w/ 6% GEL, 5% SALT & 1/4# FLOCELE (12.8ppg, 1.94f3/s, 10.4gw/s) F/B 150 SACKS CLASS H w/ .1% D800 RETARDER (15.6ppg, 1.18f3/s, 5.2gw/s).

DV TOOL @ 8500. 2nd STAGE: 1150 SACKS 35/65 POZ CLASS H w/ 6% GEL, 5% SALT & 1/4# FLOCELE (12.8ppg, 1.94f3/s, 10.4gw/s). F/B 100 SACKS CLASS H (15.6ppg, 1.18f3/s, 5.2gw/s).

LINER - 265 SACKS CLASS H w/ 5% SALT, .3% FLUID LOSS, .1% RETARDER (15.6ppg, 1.20f3/s, 5.2gw/s).

LINER TOP @ 11800' - 260 SACKS CLASS H w/ 5% SALT, .3% FLUID LOSS, .1% RETARDER (15.6ppg, 1.20f3/s, 5.2gw/s).

THERE ARE NO OTHER OPERATORS IN THIS QUARTER QUARTER SECTION.

\*LOCATION WAS MOVED FROM THE 'NOTICE OF STAKING' LOCATION BECAUSE OF A PIPELINE.

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 preventer program, if any.

24.

SIGNED S. R. Basham/c.w.h. TITLE DRILLING OPERATIONS MANAGER DATE 10-29-93

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

Kathy Eaton

TITLE

Acting State Director

DATE

12-27-93

APPROVAL OF THIS APPLICATION 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.

APPROVAL SUBJECT TO 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., Artesia, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the section

Operator <b>TEXACO EXPLORATION AND PRODUCTION Inc.</b>		Lease <b>BILBREY '33' FEDERAL</b>		Well No. <b>2</b>
Unit Letter <b>K</b>	Section <b>33</b>	Township <b>21-South</b>	Range <b>32-East</b>	County <b>Lea</b>
Actual Footage Location of Well:				
1980 feet from the <b>South</b> line and 2310 feet from the <b>West</b> line				
Ground level Elev. <b>3746</b>	Producing Formation <b>Atoka/Morrow</b>	Pool <b>Bilbrey, Atoka/Bilbrey, Morrow</b>	Dedicated Acreage: <b>320 Acres</b>	
<p>1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.</p> <p>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).</p> <p>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? <input type="checkbox"/> Yes <input type="checkbox"/> 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.</p>				
			<b>OPERATOR CERTIFICATION</b>  I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.	
			Signature <i>Royce D. Mariott</i> Printed Name <b>Royce D. Mariott</b> Position <b>Division Surveyor</b> Company <b>Texaco Expl. &amp; Prod. Inc.</b> Date <b>October 29, 1993</b>	
			<b>SURVEYOR CERTIFICATION</b>  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 <b>October 26, 1993</b> Signature & Seal of Professional Surveyor <i>John S. Piper</i> Certificate No. <b>7254 John S. Piper</b>	
Sheet 8 of 8				

## DRILLING PROGRAM

BILBREY "33" FEDERAL WELL No. 2

### **SURFACE DESCRIPTION:**

The land surface in the area is relatively level with small and moderate sand dunes. Regionally, the land slopes to the Northeast with average slopes of less than two percent. The top soil is a deep sandy loam. Vegetation consists mainly of scrub oak, mesquite, and range grasses.

**FORMATION TOPS:** Estimated KB Elevation: 3760'

<u>Formation</u>	<u>Depth</u>	<u>Lithology</u>	<u>Fluid Content</u>
Rustler	740'	Anhy, Salt	----
Base of Salt	4315'	Salt	----
Lamar	4740'	Shale, Ls	----
Delaware	4890'	Sandstone	Oil
Bone Spring	8740'	Sandstone, Ls	Oil
Wolfcamp	11915'	Limestone, Shale	Gas
Strawn	13195'	Limestone	Gas
Atoka	13340'	Sandstone, Shale	Gas
Morrow	13855'	Sandstone	Gas

The base of the salt section at 4315'. Pressures are normal for the area which means a +/- 8.4 PPG EMW pore pressure down to the top of the Strawn then increasing to a +/- 12.0 PPG EMW pore pressure in the Strawn, Atoka, and Morrow. No abnormal temperatures or hazardous gases are anticipated.

### **PRESSURE CONTROL EQUIPMENT:**

A 3000 psi (or 5000 psi/10000 psi at drilling contractor's option) Dual Ram BOP with rotating head and annular preventer (See Exhibit E) will be installed after surface casing is set. A 5000 psi (or 10000 psi at drilling contractor's option) Dual Ram BOP with rotating head and annular preventer will be used. (See Exhibit F-1). It will be installed after the first intermediate casing is set. A 10000 psi Dual Ram BOP with rotating head and annular preventer (See exhibit G-1) will be installed after the second intermediate 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.

Bilbrey "33" FEDERAL WELL No. 2

**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.

First Intermediate Casing - Centralize the bottom 3 joints.

Second Intermediate Casing - Centralize the bottom 5 joints and above and below the DV tool at 8500'.

Production Liner - None Required.

**MUD PROGRAM:**

<u>Depth</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>
0'-825'	Fresh Water	8.4	28
825'-4740'	Brine	10.0	29
4740'-12300'	Fresh Water	8.4	28
12300'-13000'	Fresh Water	8.4	28
13000'-14950'	FW Polymer	11.0	40

**LOGGING, TESTING:**

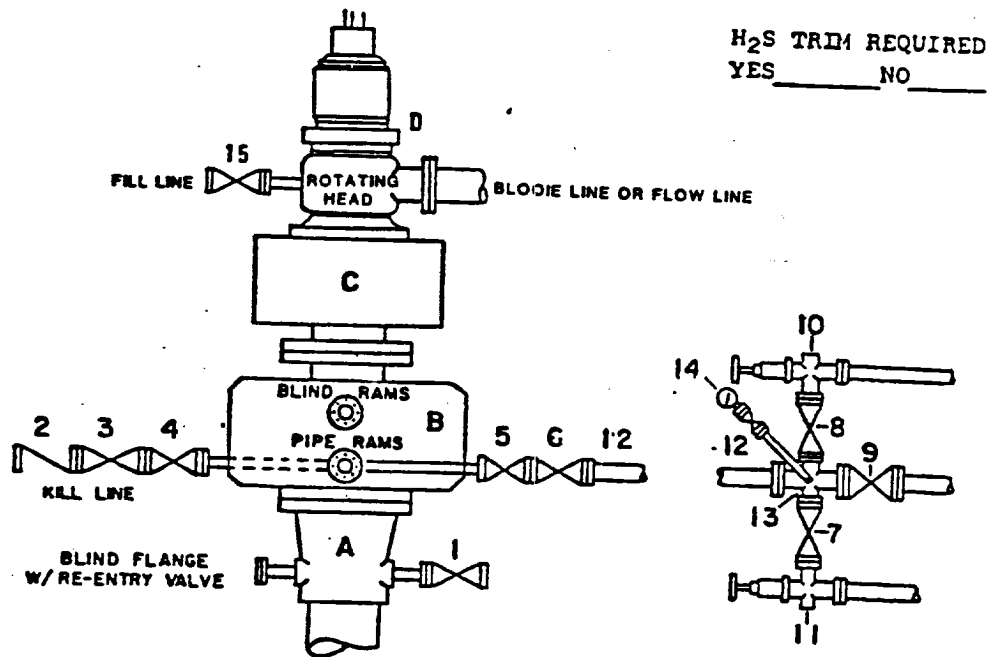
GR-DSN-CDL, GR-DIL-SFL, and GR-FWS surveys will be run.

A two-man Mud Logging Unit will be used from 4740' to 14950'.

No drill stem tests are planned.

No cores will be taken.

# **DRILLING CONTROL** **CONDITION III-B 3000 PSI WP**



H<sub>2</sub>S TRIM REQUIRED  
 YES \_\_\_\_\_ NO \_\_\_\_\_

## DRILLING CONTROL

### MATERIAL LIST - CONDITION III - B

- |            |   |
|------------|---|
| A          | Texaco Wellhead   |
| B          | 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 preventers may be utilized with 3000# W.P. drilling spool with 2" minimum flanged outlet for kill line and 3" minimum flanged outlet for choke line. The drilling spool is to be installed below the single ram type preventers). |
| C          | 3000# W.P. Annular Preventer with 1" steel, 3000# W.P. control lines.   |
| D          | Rotating Head with fill up outlet and extended Bloeie 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.   |

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



**TEXACO, INC.**  
 MIDLAND DIVISION  
 MIDLAND, TEXAS



**EXHIBIT E**

1  
1  
1