NM OIL CONS. COMI
DRAWER DD
ARTESIA, NM 8821[illegible]

OPER. OGRID NO. 22351
PROPERTY NO. 11072
POOL CODE 53817
EFF. DATE 10-25-94
API NO. 30-025-32711

Form 3160-3
(December 1990)

SUBMIT IN TRIPLICATE

DEPARTMENT
BUREAU OF LA

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

5. Lease Designation and Serial No.
NM 18848

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

6. If Indian, Alottee or Tribe Name

1a. Type of Wor DRILL ☒ DEEPEN ☐
1b. Type of Well
OIL WELL ☒ GAS WELL ☐ OTHER
SINGLE ZONE ☒
MULTIPLE ZONE ☐

7. If Unit or CA, Agreement Designation

8. Well Name and Number
SDE ~~FEDERAL~~ 18' Federal
not
3

2. Name of Operator
TEXACO EXPLORATION & PRODUCTION INC.

3. Address and Telephone No.
P.O. Box 3109, Midland Texas 79702 688-4606

9. API Well No.

4. Location of Well (Report location clearly and in accordance with any State requirements.)
At Surface
Unit Letter L : 1780 Feet From The SOUTH Line and 810 Feet From The WEST Line
At proposed prod. zone
SAME

RECEIVED
OCT 19 '94
O. C. D.
ARTESIA, OFFICE

10. Field and Pool, Exploaratory Area
SAND DUNES EAST Delaware

11. SEC., T., R., M., or BLK. and Survey or Area
Sec. 18, Township 23-S, Range 32-E

14. Distance In Miles and Direction from Nearest Town or Post Office*
21 MILES EAST OF LOVING, NM.

12. County or Parish
LEA

13. State
NM

15. Distance From Proposed* Location to Nearest Property or Lease Line, Ft. (also to nearest drlg. unit line, if any) 810'

16. No. of Acres in Lease
1994.13

17. No. of Acres Assigned To This Well
46.09

18. Distance fFrom Proposed Location* to Nearest Well, Drilling, Completed or Applied For, On This Lease, Ft. 1121'

19. Proposed Depth
8700'

20. Rotary or Cable Tools
R

21. Elevations (Show whether DF,RT, GR, etc.)
GR-3564'

Carlsbad Controlled Water Basin

22. Approx. Date Work Will Start*
10/15/94

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#	945'	550 SACKS - CIRCULATE
11	WC50, 8 5/8	32#	4550'	1450 SACKS - CIRCULATE
7 7/8	J-55, 5 1/2	15.5# & 17	8700'	1600 SACKS - CIRCULATE

CEMENTING PROGRAM:

SURFACE CASING - 350 SACKS CLASS C W/ 4% GEL, 2% CACL2 (13.5 PPG, 1.74 CF/S, 9.11 GW/S). F/B 200 SACKS CLASS C W/ 2% CACL2 (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/cwh TITLE Drilling Operations Mgr. DATE 9/7/94

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

APPROVED BY /s/ Gary Gourley TITLE for AREA MANAGER DATE 10-13-94

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.

DeSoto/Nichols 12-93 ver 1.0

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-025-32711	53817	SAND DUNES EAST Delaware

[4] Property Code	[5] Property Name	[6] Well Number
11072	SDE FEDERAL "18"	3

[7] OGRID No.	[8] Operator Name	[9] Elevation
022351	TEXACO EXPLORATION & PRODUCTION, INC.	3564'

[10] Surface Location

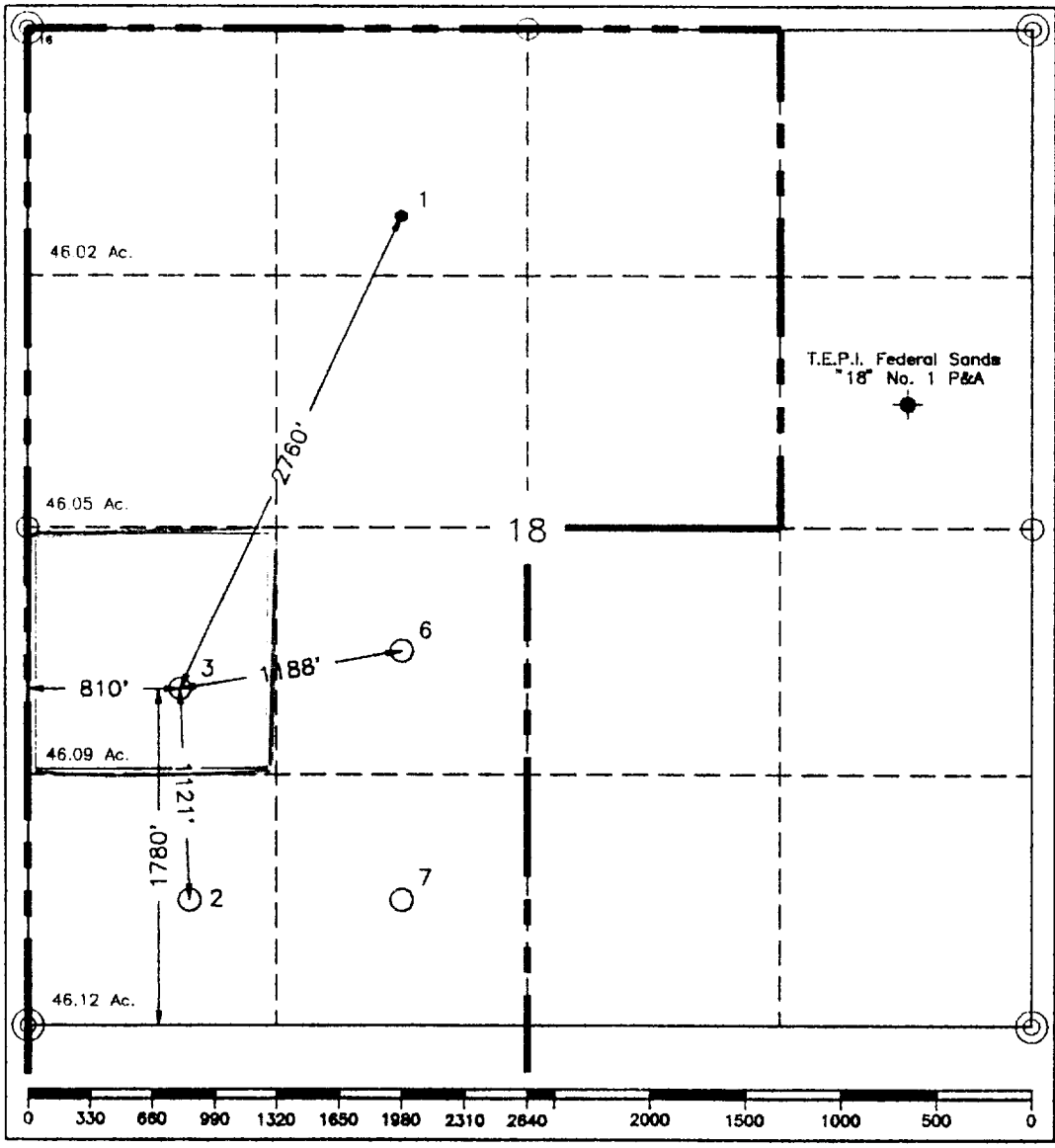
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	[7] County
L	18	23-S	32-E		1780'	South	810'	West	Lea

[11] 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	[7] County

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
46.09			

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.



[17] 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 /cwh

Printed Name: Royce D. Mariott

Position: Division Surveyor

Company: Texaco Expl. & Prod. Inc.

Date: August 29, 1994

[18] 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 25, 1994

Signature & Seal of Professional Surveyor

Certificate No. 7254 John S. Piper

Sheet 8 of 8

○ = Staked Location ● = Producing Well = Injection Well ⊙ = Water Supply Well ✦ = Plugged & Abandon Well

◎ = Found Section Corner, 2 or 3" Iron Pipe & GLO B.C. ○ = Found /4 Section Corner, 1" Iron Pipe & GLO B.C.

DRILLING PROGRAM

SDE FEDERAL `18' WELL NO. 3

SURFACE DESCRIPTION:

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

FORMATION TOPS: Estimated KB Elevation: 3574'

Formation	Depth	Lithology	Fluid Content
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. H2S is possible in this well. H2S RADIUS OF EXPOSURE: 100ppm = 23 feet, 500ppm = 11 feet, based on 800ppm and 115 mcf. (See attached H2S Drilling Operations Plan. H2S equipment to be operational prior to drilling out Surface Casing Shoe.)

PRESSURE CONTROL EQUIPMENT:

A 3000 psi Dual Ram typy 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 is is installed on a casing string and at least every 29 days, and operated at least once each 24-hour perion 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, H2S 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:

Depth	Type	Weight	Viscosity
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'.

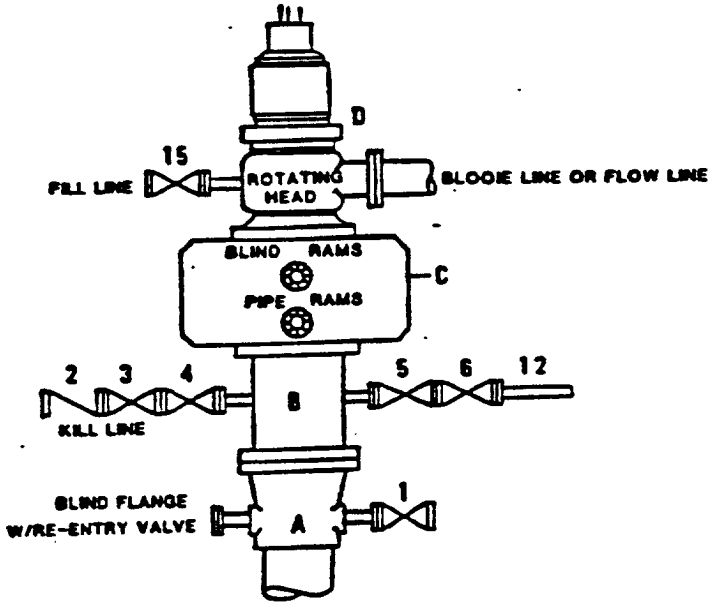
No drill stem tests will be conducted.

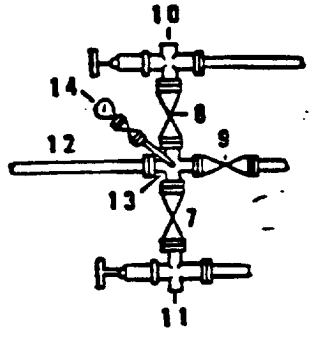
No cores will be taken.

DRILLING CONTROL
CONDITION II-B 3000 WP

FOR AIR DRILLING OR
WHERE NITROGEN OR AIR BLOWS ARE EXPECTED

H_2S 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, 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