

OPER. OGRID NO. 22351  
PROPERTY NO. 158-7  
POOL CODE 53805  
EFF. DATE 3/31/95  
API NO. 30-025-32909

NEW MEXICO 00000

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

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

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

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 **K** : **2180** Feet From The **SOUTH** Line and **2310** Feet From The **WEST** Line

At proposed prod. zone

**SAME**

14. Distance In Miles and Direction from Nearest Town or Post Office\*  
**23 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) **330'**

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  
**9200'**

17. No. of Acres Assigned To This Well  
**40**

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

**GR-3614'**

22. Approx. Date Work Will Start\*  
**5/17/95**

23. PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
11	WC50, 8 5/8	24#	950'	325 SACKS - CIRCULATE
7 7/8	J55/L80, 5 1/2	17#	9200'	1600 SACKS - CIRCULATE

CEMENTING PROGRAM:

SURFACE CASING - 175 SACKS CLASS C W/ 4% GEL, 2% CACL2 (13.5 PPG, 1.74 CF/S, 9.11 GW/S). F/B 150 SACKS CLASS C W/ 2% CACL2 (14.8 PPG, 1.34 CF/S, 6.3 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 @ 5300'. 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.

ESTIMATED DRILLING DAYS TO T.D.: 20 DAYS.

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 **2/23/95**

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 RONALD E. MATHIAS TITLE **MANAGER** DATE **2/23/95**

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

☐ AMENDED REPORT

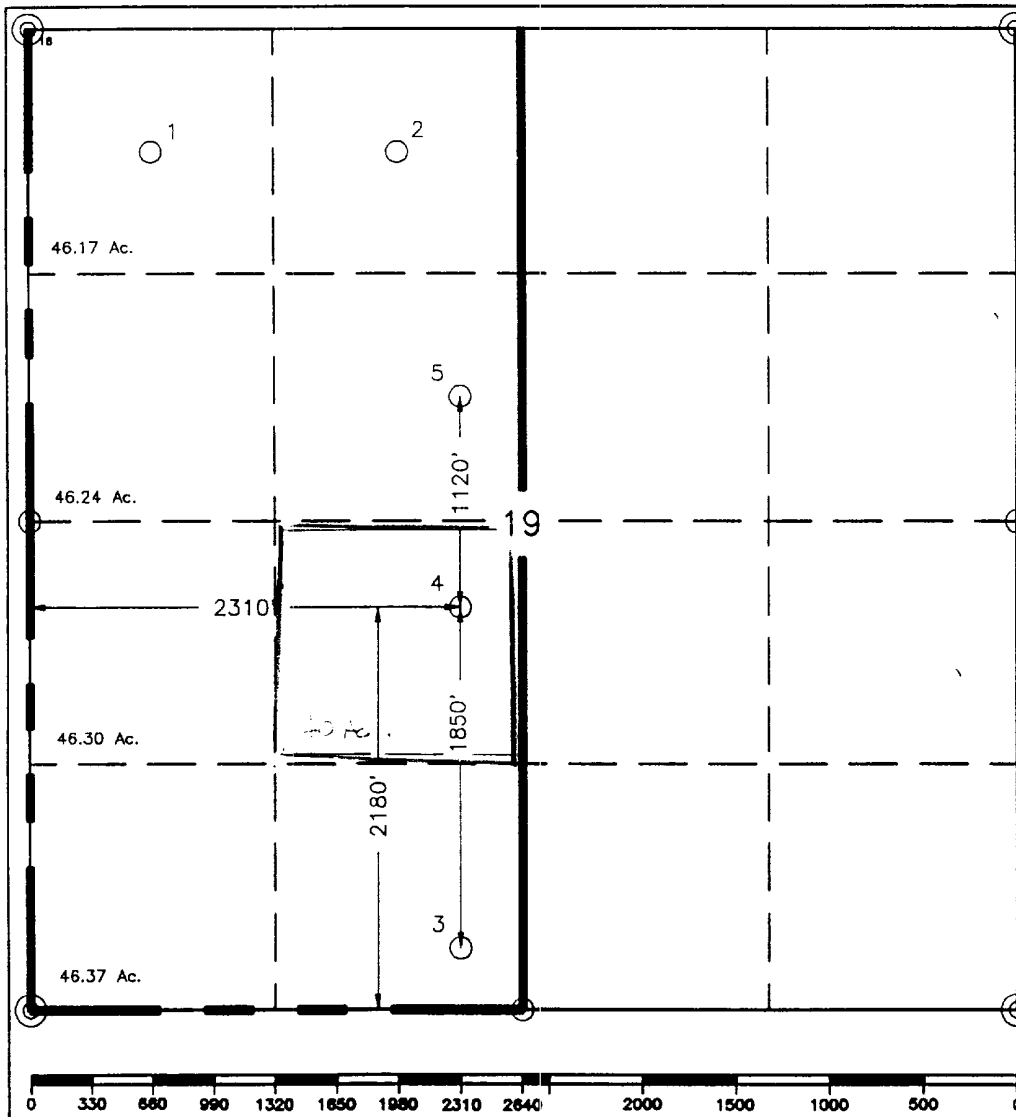
WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-025-32909		<sup>2</sup> Pool Code 53805		<sup>3</sup> Pool Name Triste Draw; Sand Dunes South Bone Springs	
<sup>4</sup> Property Code 15867		<sup>5</sup> Property Name SDE "19" FEDERAL			<sup>6</sup> Well Number 4
<sup>7</sup> GRID No. 22351		<sup>8</sup> Operator Name TEXACO EXPLORATION & PRODUCTION, INC.			<sup>9</sup> Elevation 3614'

<sup>10</sup> Surface Location									
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
K	19	23-S	32-E		2180'	South	2310'	West	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>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 <i>C. Wade Howard</i>	
Printed Name C. Wade Howard	
Position Engineering Assistant	
Company Texaco Expl. & Prod. Inc.	
Date February 17, 1995	
<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 February 13, 1995	
Signature & Seal of Professional Surveyor <i>John S. Piper</i>	
Certificate No. 7254 John S. Piper	
Sheet 8 of 8	

○ = Staked Location    ● = Producing Well    ■ = Injection Well    x = Water Supply Well    \* = Plugged & Abandon Well

## DRILLING PROGRAM

SDE '19' FEDERAL WELL NO. 4

### **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: 3624'

<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	5560'	Sandstone, Shale	Oil/Gas
Brushy Canyon- Pay	7125'	Sandstone, Shale	Oil/Gas
Lower Brushy Canyon- Pay	8130'	Sandstone, Shale	Oil/Gas
Bone Spring- Pay	8560'	Limestone	Oil/Gas

The base of the salt section is found around 4390'. No abnormal pressures, temperatures, or hazardous gases are anticipated to be encountered in this well. Texaco recently drilled wells in this area and no H2S was encountered.

### **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, 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.

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'-950'	Fresh Water	8.4	28
950'-7000'	Brine Water	10.0	29
7000'-9200'	Fresh Water Gel	8.4-8.8	45

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.

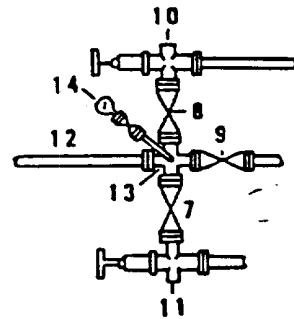
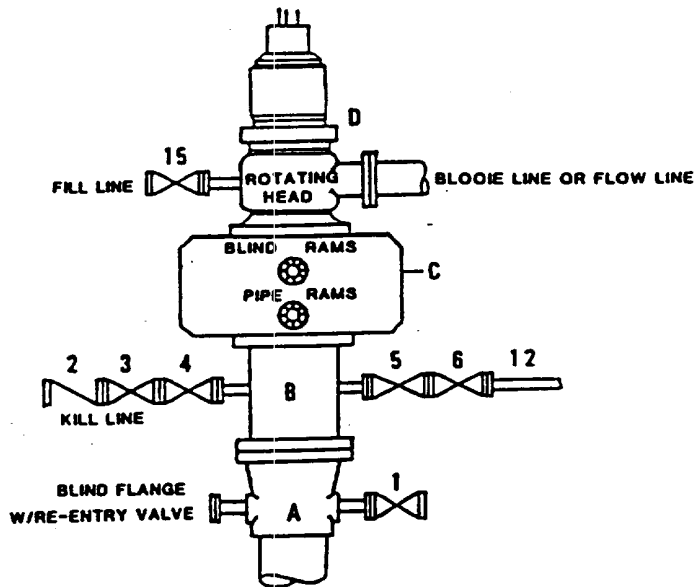
A two-man Mud Logging Unit will be used from 4400' to 9200'.

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 \_\_\_\_\_ 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

**SURFACE USE AND OPERATIONS PLAN**  
**FOR**  
**TEXACO EXPLORATION AND PRODUCTION, INC.**

SDE "19" FEDERAL No. 4  
2180' FSL & 2310' FWL SECTION 19,  
TWP. 23 SOUTH, RANGE 32 EAST, N.M.P.M.,  
LEA COUNTY, NEW MEXICO

LOCATED: 21 miles Easterly of Loving, New Mexico and 33 miles  
Northwesterly of Jal, New Mexico

FEDERAL LEASE NUMBER: NM 18848

LEASE ISSUED: August 1, 1973

ACRES IN LEASE: 1994.13

RECORD LESSEE: TEXACO EXPLORATION AND PRODUCTION, Inc.

SURFACE OWNERSHIP: USA

GRAZING PERMITTEE: Mr. Bill Brinninstool  
P. O. Drawer A  
Jal, New Mexico 88252

POOL: Triste Draw; Sand Dunes South Bone Springs

POOL RULES: Field Rules are for no wells to be located closer  
than 330' to any quarter-quarter section and to be 330' from the  
lease line.

EXHIBITS: A. Access Road and Facilities Map

B. Drilling Rig Layout Diagram

C. Well Location and Acreage Dedication Plat

### 1. EXISTING ACCESS ROADS

A. Exhibit "A" is an enlarged portion of a 7.5 minute U.S.G.S. topographic map showing the proposed well site and the existing roads in the area. Point "A" is at the intersection of an existing resource road and the Lea and Eddy County Line at a cattleguard in a North-South fence. Said point is 1.0 miles Easterly of its junction with Eddy County Road No. 798, being 3.6 miles North from its intersection with State Highway 128. Said intersection is approximately 35 miles West of Jal and 24 miles East of Loving, New Mexico along the major established Public Road System. From Point "A", on an existing resource road, go 0.1 miles Easterly, then 0.70 miles Southerly on a resource road to be constructed for the SDE "18" 2, 3, 6, and 7, and the SDE "19" 1 and 2 to Point "B", as shown on Exhibit "A".

### 2. PLANNED RESOURCE ROAD

A. Length and Width: From Point "B" as shown on Exhibit "A", a new 14 foot wide Resource Road will be constructed approximately 2450 feet South and 1250 feet East (Shown in red on Exhibit "A") with access at the Southwest corner of the proposed well pad, as shown on Exhibits "A" and "B".

B. Surfacing Material: Caliche material will be used to surface the proposed road. It will be watered, compacted, and graded.

C. Maximum Grade: An approximate grade of one percent will be encountered ascending from Point "B" to the proposed well pad.

D. Turnouts: Turnouts will not be required.

E. Drainage Design: The new road will be crowned at the center to direct drainage to ditches on both sides of the roadway with turnout ditches to be constructed as required.

F. Culverts: None required.

G. Cuts and Fills: A slight amount of leveling will be required as the road crosses intermediate size sand dunes to the proposed well pad.

H. Gates and Cattle Guards: None will be required.

### 3. LOCATION OF EXISTING WELLS

A. Existing wells on the lease and in the immediate area are shown on Exhibit "A".

#### 4. LOCATION OF EXISTING AND PROPOSED FACILITIES

A. The oil, gas, and/or water that this well produces will be transported by a 2 7/8" steel surface flowline (Shown in Green) to the proposed SDE "18" & "19" Federal Central tank battery to be constructed on the proposed tank battery site as shown on Exhibit "A".

B. An electric line will be built to service this well as shown in Orange on Exhibit "A". Note that other existing and proposed electric lines are also shown on Exhibit "A" for reference. It will be a 12,470 phase to phase, 7200 volts to ground three phase. It will be operator owned.

#### 5. LOCATION AND TYPE OF WATER SUPPLY

A. It is not contemplated that a water well would be drilled. Water necessary for drilling operations will be purchased and trucked to the well site or will be transported to the well site by a temporary pipeline laid on the ground along side existing and proposed roads.

#### 6. SOURCE OF CONSTRUCTION MATERIALS

A. Caliche needed for the road and well pad will be taken from the proposed borrow pit located within the 400 x 400' archaeologically cleared tract at the proposed well site (See Exhibit "B" for location). If insufficient quality or quantity of caliche is not available, it will be transported to the proposed road and well site from the existing pit in the NW/4 of the NW/4 of Section 1, T23S, R31E, by Eddy County Road 798 and the existing resource roads.

#### 7. METHOD OF HANDLING WASTE DISPOSAL

A. Drill cuttings will be disposed of in the drilling pits.

B. Drilling fluids will be allowed to evaporate in the drilling pits until the pits are dry.

C. Water produced during tests will be disposed of at commercial or company facilities.

D. Oil produced during tests will be stored in test tanks until sold.

E. Trash, waste paper, garbage and junk will be placed in a trash bin located on the drill site pad. It will be transported to an approved landfill for disposal within 30 days after completion of drilling and/or completion of operations. All waste material will be contained to prevent scattering by the wind.



#### 8. ANCILLARY FACILITIES

A. None required.

#### 9. WELL SITE LAYOUT

A. Exhibit "B" shows the relative location and dimensions of the well pad, mud pits, borrow pit, and the location of the major rig components.

B. Cut and Fill requirements will be minor, but clearing and leveling of the well site will be necessary.

#### 10. PLANS FOR RECLAMATION OF THE SURFACE

A. After completion of drilling and/or completion of operations, all equipment and other material not needed for operations will be removed. Pits will be filled and the location will be cleaned of all trash and junk to leave the well site in an as aesthetically pleasing condition as possible.

B. Any unguarded pits containing fluids will be fenced until the pits are dry.

C. After abandonment, all equipment, trash and junk will be removed and the well site will be cleaned. Any special reclamation and/or special revegetation requirements of the Surface Management Agency will be complied with and will be accomplished as rapidly as possible.

#### 11. OTHER INFORMATION

A. Topography: The land surface in the area of the well is relatively level with moderate sand dunes. Regionally, the land slopes to the West with average slopes of one to two percent.

B. Soil: Top soil at the well site is a deep sandy loam.

C. Flora and Fauna: The vegetation cover is moderate. It includes range grasses, weeds, scrub oak bushes, and mesquite bushes. Wildlife in the area is that typical of a semi-arid desert land and includes coyotes, rabbits, rodents, reptiles, hawks, dove, quail and other small birds.

D. Ponds and Streams: There are no rivers, lakes, ponds, or streams in the area.

E. Residences and Other Structures: There are no occupied dwellings or other structures within 3/4 mile of the well site.

F. Archaeological, Historical, or other Cultural Sites: None were observed in the area.

G. Land Use: Grazing, oil and gas production, and wildlife habitat.

H. Surface Ownership: Federal

12. OPERATOR'S REPRESENTATIVE

C. Wade Howard  
Engineer's Assistant  
Texaco Exploration and Production, Inc.  
P. O. Box 3109  
Midland, Texas 79702  
Office Phone: (915) 688-4606

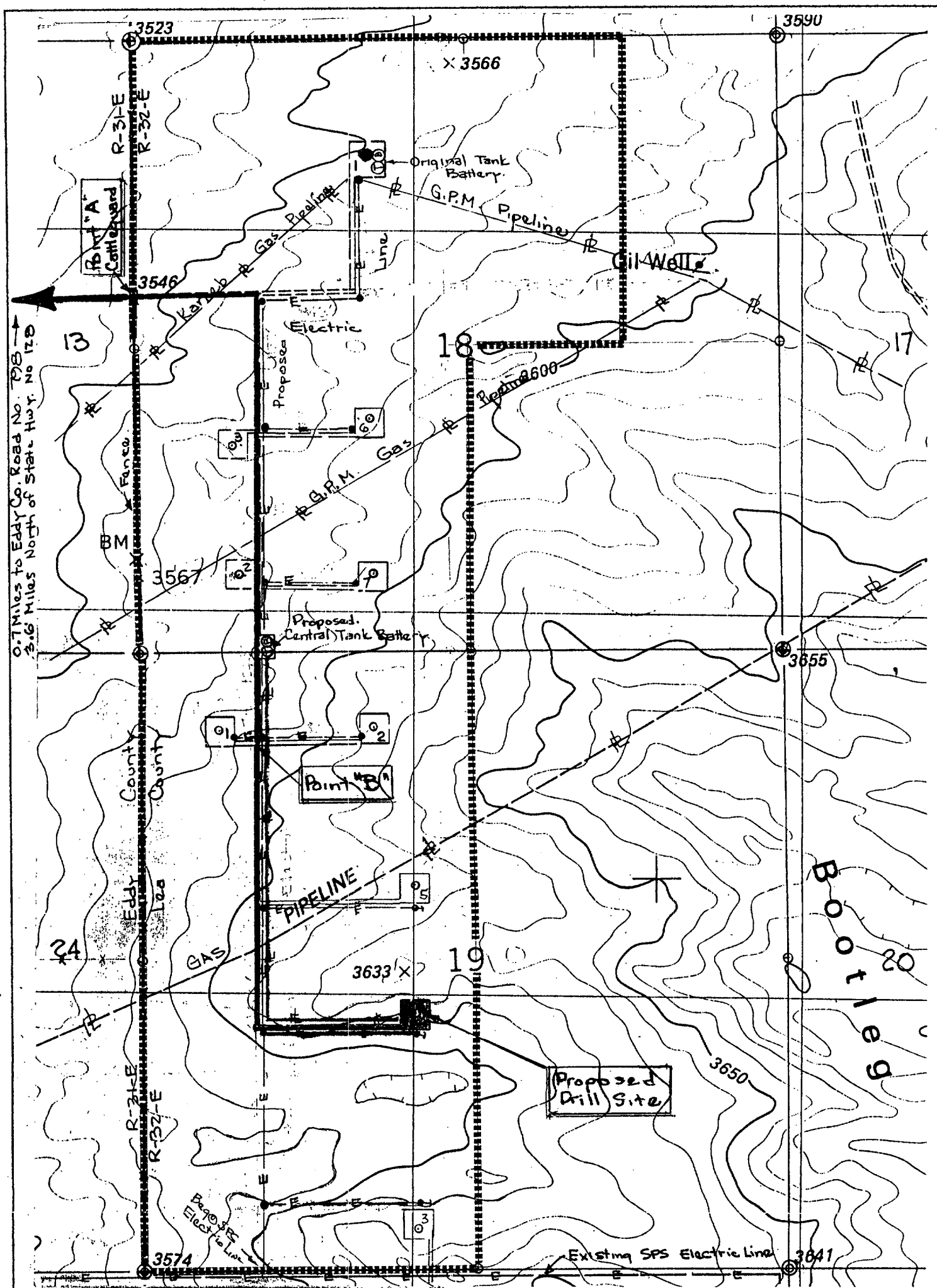
CERTIFICATION

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Texaco Exploration and Production, Inc. and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U. S. C. 1001 for the filing of a false statement.

2/23/95  
Date

C. Wade Howard  
C. Wade Howard  
Engineer's Assistant  
Midland, Texas

Enclosures  
jsp



#### LEGEND OF SYMBOLS

- = Access Road (Yellow)  
 = Resource Road Federal Land (Pink)  
 = Resource Road on Lease (Brown)  
 = Proposed Resource Road (Red)  
 = Proposed Electric Line (Orange)  
 = Proposed Production Flowline (Green)  
 = Staked Well Location  
 = Producing Well Location  
 = Water Injection Well  
 = Found 1" Iron Pipe With Brass Cap  
 = Found 2" Iron Pipe With Brass Cap  
 = Unit or Lease Boundary

#### EXHIBIT "A" ACCESS ROAD AND FACILITIES MAP

TEXACO EXPLORATION AND PRODUCTION Inc.

SDE "19" FEDERAL No. 4  
2180 FSL & 2310 FWL Section 19,  
T-23-S, R-32-E, Lea County, NM

Drawn by: J. S. Piper

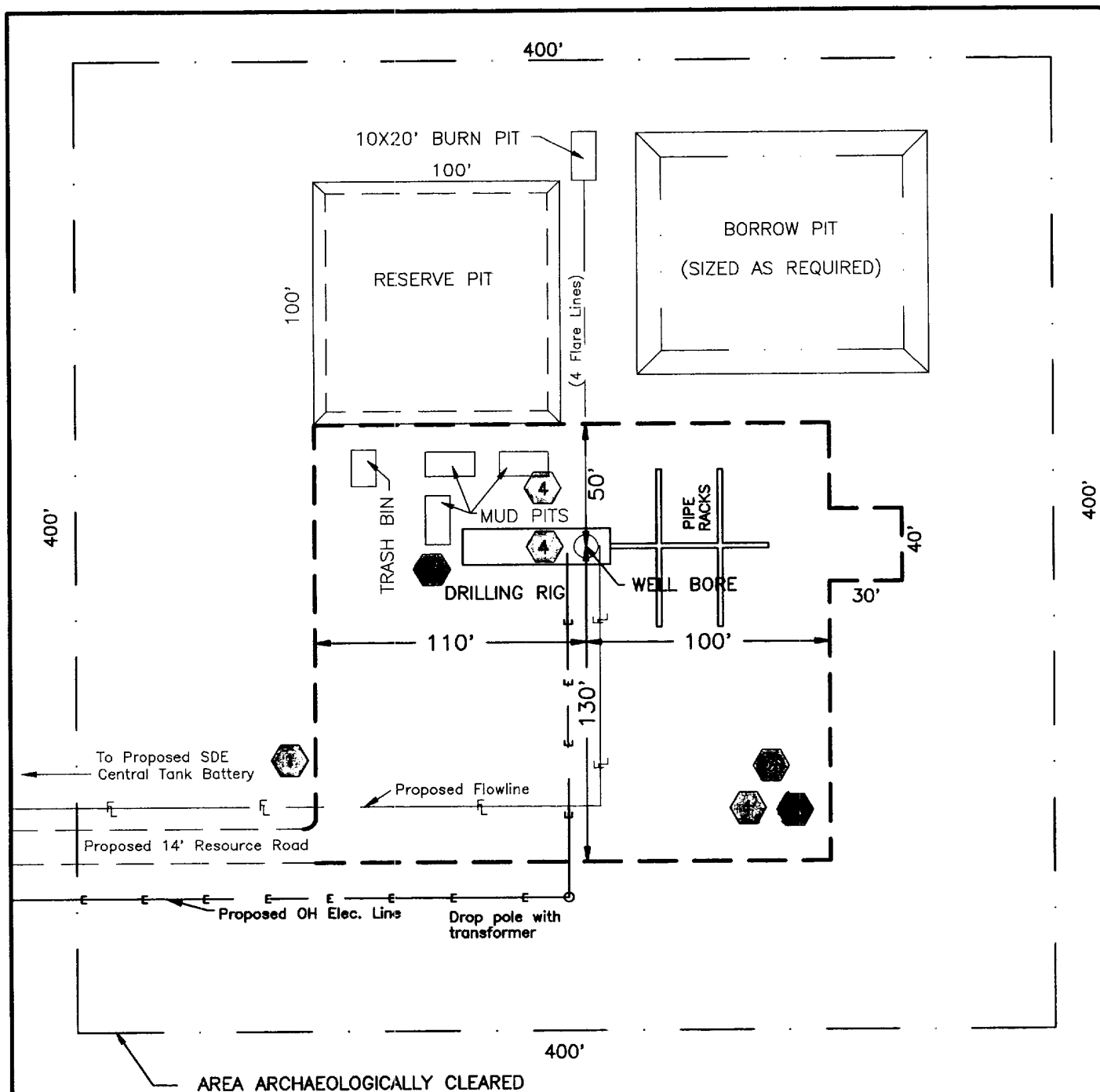
Scale: 1" = 1000 Feet

Date: February 21, 1995

Supervisor: C. Wade Howard

Checked by: D. Ballew

Sheet 6 of 8



# H<sub>2</sub>S DRILLING OPERATION PLAN



Briefing Station



H<sub>2</sub>S Safety Trailer



Windsocks



H<sub>2</sub>S Detectors, Shale Shaker, Rotating Head, Rig Floor

Prevailing Wind from the South

## EXHIBIT "B" DRILLING RIG LAYOUT

### TEXACO EXPLORATION AND PRODUCTION INC.

SDE "19" Federal No. 4  
Located 2180' FSL & 2310' FWL, Section 19,  
T-23-S, R-32-E, NMPM, Lea County, NM

Drawn by: D. M. Ballew

Scale: 1" = 60'

Date: February 16, 1995

C. WADE HOWARD

Checked by: J. S. Piper

Sheet 7 of 8

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

DISTRICT II  
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DISTRICT III  
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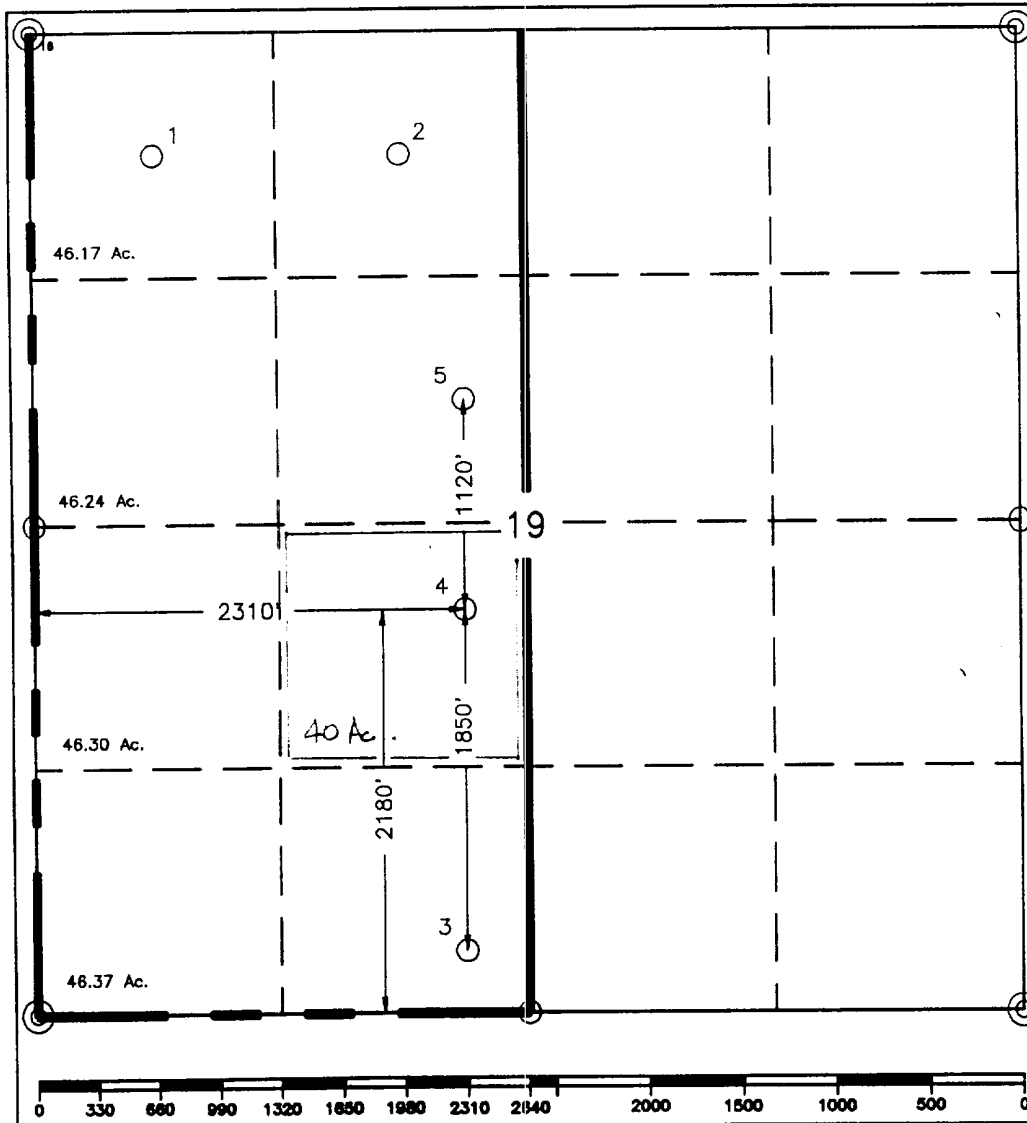
WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number		<sup>2</sup> Pool Code		<sup>3</sup> Pool Name WEST Triste Draw; Sand Dunes South Bone Springs	
<sup>4</sup> Property Code 15867		<sup>5</sup> Property Name SDE "19" FEDERAL			<sup>6</sup> Well Number 4
<sup>7</sup> OGRID No. 22351		<sup>8</sup> Operator Name TEXACO EXPLORATION & PRODUCTION, INC.			<sup>9</sup> Elevation 3614'

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<sup>11</sup> Bottom Hole Location If Different From Surface									
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Printed Name C. Wade Howard	
Position Engineering Assistant	
Company Texaco Expl. & Prod. Inc.	
Date February 17, 1995	
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Date Surveyed February 13, 1995	
Signature & Seal of Professional Surveyor <i>John S. Piper</i>	
Certificate No. 7254 John S. Piper	
Sheet 8 of 8	

○ = Staked Location    ● = Producing Well    ■ = Injection Well    ∞ = Water Supply Well    ▲ = Plugged & Abandon Well