

Form 3160-3
(July 1989)
(formerly 9-331C)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

CONTACT RECORDING
OFFICE FOR NE
OF COPIES REQUIRED
(Other instructions on
reverse side)

BLM Roswell District
Modified Form No.
NM060-3160-2

50-015-26979

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

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.

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
1651' FSL & 330' FWL, UNIT LETTER: L
At proposed prod. zone
SAME

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
30 MILES EAST OF CARLSBAD, NEW MEXICO

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
1120

17. NO. OF ACRES ASSIGNED TO THIS WELL
40

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
1322'

19. PROPOSED DEPTH
8500'

20. ROTARY OR CABLE TOOLS
ROTARY

21. ELEVATIONS (Show Whether DF, RT, GR, ETC.)
GR-3557'

22. APPROX. DATE WORK WILL START*
FEBRUARY 18, 1992

5. LEASE DESIGNATION AND SERIAL NO.
NM-29233

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
NEFF '13' FEDERAL

9. WELL NO.
8

10. FIELD AND POOL, OR WILDCAT
LIVINGSTON RIDGE DELAWARE

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
SEC. 13, T-22-S, R-31-E

12. COUNTY OR PARISH
EDDY

13. STATE
NM

23. PROPOSED CASING AND CEMENTING PROGRAM

HOLE SIZE	CASING SIZE	WEIGHT/FOOT	GRADE	THREAD TYPE	SETTING DEPTH	QUANTITY OF CEMENT
20	16	65#	H-40	PE	40'	REDIMIX
14 3/4	11 3/4	42#	H-40	ST&C	880'	CIRCULATE 725 SACKS
11	8 5/8	32#	K-55 & S-80	LT&C	4400'	CIRCULATE 1600 SACKS
7 7/8	5 1/2	15.5# & 17#	J-55	LT&C	8500' (see slips)	1725 SACKS

CEMENTING PROGRAM: CONDUCTOR - REDIMIX.

SURFACE CASING - 725 SACKS CLASS H w/ 2% CaCl₂ (15.6ppg, 1.19f3/s, 5.2gw/s).

INTERMEDIATE CASING - 1350 SACKS 35/65 POZ CLASS H w/ 6% GEL, 5% SALT & 1/4# FLOCELE (12.8ppg, 1.87f3/s, 9.9gw/s). F/B 250 SACKS CLASS H w/ 1% CaCl₂ (15.6ppg, 1.19f3/s, 5.2gw/s).

PRODUCTION CASING - 1st STAGE: 725 SACKS 50/50 POZ CLASS H w/ 2% GEL, 5% SALT & 1/4# FLOCELE (14.2ppg, 1.28f3/s, 5.75gw/s). DV TOOL @ 6000'. 2nd STAGE: 900 SACKS 35/65 POZ CLASS H w/ 6% GEL, 5% SALT & 1/4# FLOCELE (12.8ppg, 1.87f3/s, 9.9gw/s). F/B 100 SACKS CLASS H (15.6ppg, 1.18f3/s, 5.2gw/s).

THERE ARE NO OTHER OPERATORS IN THIS QUARTER QUARTER SECTION.

TEXACO REQUESTS A VARIANCE FROM ORDER No. 2 REQUIRING A REMOTE CONTROL UNIT FOR A 3M BOP, WE REQUEST SUBSTITUTING A ROTATING HEAD FOR THE ANNULAR PREVENTER. WE WILL INSTALL TWO OUTSIDE CHOKE LINES TO A MUD/GAS SEPARATOR IN LIEU OF RUNNING THE LINES TO A PIT AND THE INSIDE BLEED LINE WILL TERMINATE AT THE MUD/GAS SEPARATOR IN LIEU OF RUNNING TO THE PIT.

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 C.P. Basham/cwt TITLE DRILLING OPERATIONS MANAGER DATE 01-02-92

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE 4-6-92

APPROVAL SUBJECT TO 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 & PRODUCTION Inc.			Lease FEDERAL NEFF "13" (Beta Unit)		Well No. 8
Unit Letter L	Section 13	Township T-22-S	Range R-31-E	County NMPM Eddy	
Actual Footage Location of Well: 1651 feet from the South line and 330 feet from the West line					
Ground level Elev. 3557	Producing Formation Brushy Canyon		Pool Livingston Ridge		Dedicated Acreage: 40 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure 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.?

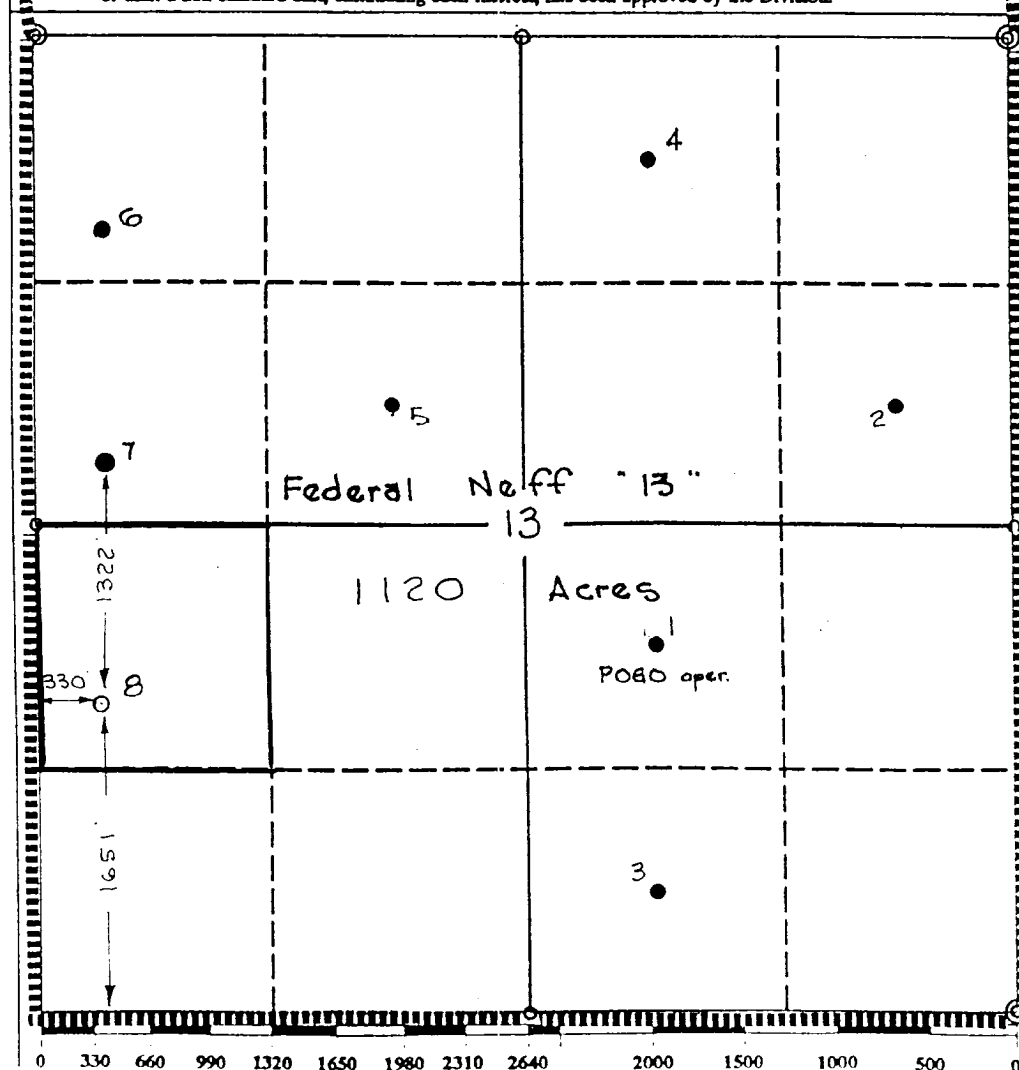
☐ Yes

☐ 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. Inc.

Date

Dec. 18, 1991

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

Dec. 17, 1991

Signature & Seal of
Professional Surveyor

John S. Piper

Certificate No.

7254 John S. Piper

Sheet of

ANTICIPATED WATER, OIL, GAS AND MINERAL
BEARING FORMATIONS

Lease: Neff "13" Federal Well No: 8
Location: 1651' FSL, 330' FWL, Sec. 13, T-22-S, R-31-E
County: Eddy State: New Mexico Elevation: GR-3557'
Proposed TD: 8500'

Formation Tops

<u>Depth</u>	<u>Formation</u>	<u>Oil</u>	<u>Gas</u>	<u>Water</u>	<u>Lithology</u>
180'	Santa Rosa			X	Ss, Redbeds
772'	Rustler				Anhy, Salt
1170'	Salado				Salt
4442'	Lamar				Limestone
4502'	Bell Canyon				Sandstone
5542'	Cherry Canyon				Sandstone
6987'	Brushy Canyon	X			Sandstone
7012'	Brushy Canyon Pay	X			Sandstone
7850'	Lower Brushy Can.	X			Sandstone
8342'	Bone Spring				Limestone

Geologic Description

The surface geology of this area is Quaternary age alluvium. Occasional outliers of Triassic Santa Rosa Sandstone are found in some areas. Vegetation consists mainly of scrub oak, mesquite and desert grasses.

The base of the salt section is found around 4350'.

No drill stem tests will be conducted. No cores will be taken.

A water flow of 480 BPH with 800 PPM H₂S was encountered in the Neff "13" Federal Well No. 5 at 3340'. If a water flow is encountered, a DV Tool will be placed at approximately 3000' on the Intermediate Casing and cemented as follows: 1st Stage - 600 sacks class H w/ 1% CaCl₂ mixed at 15.6 PPG. 2nd Stage - 800 sacks 35/65 Poz class H w/ 6% Gel, 5% Salt & 1/4# flocculent mixed at 12.8 ppg, F/B 700 sacks class H w/ 1% CaCl₂ mixed at 15.6 PPG.

GR-CAL-CNL-LDT, GR-SP-DIL-SFL and Dielectric surveys will be run.

Neff "13" Federal Well No. 8

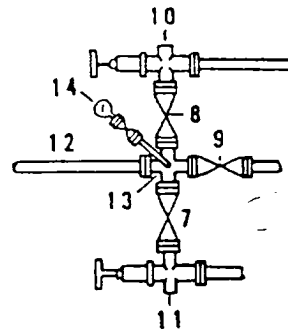
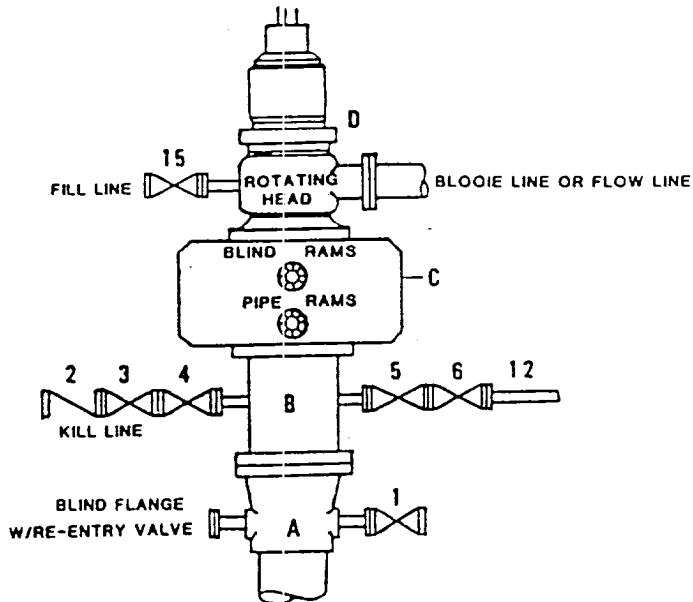
Mud Program

<u>Depth</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>
0'-880'	Fresh Water	8.4	28
880'-4400'	Brine Water	10.0	29
4400'-6900'	Fresh Water	8.4	28
6900'-8500'	Starch	8.6	33-36

Blowout preventer will be installed after surface casing is set. BOP will be tested each time it is installed on a casing string and operated at least once each 24-hour period during drilling.

**DRILLING CONTROL
CONDITION II-B 3000 WP
FOR AIR DRILLING OR
WHERE NITROGEN OR AIR BLOWS ARE EXPECTED**

H₂S TRIM REQUIRED
YES _____ 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.
MIDLAND DIVISION
MIDLAND, TEXAS



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

EXHIBIT C

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

FEDERAL NEFF "13" #8,
1651 FSL & 330 FWL SECTION 13,
TWP. 22 SOUTH, RANGE 31 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO

LOCATED: 30 miles East of Carlsbad, New Mexico

FEDERAL LEASE NUMBER: NM 29233

LEASE ISSUED: February 1, 1977, Lease is in producing status

ACRES IN LEASE: 1120 Acres

RECORD LESSEE: TEXACO EXPLORATION AND PRODUCTION, Inc.

SURFACE OWNERSHIP: USA

GRAZING PERMITTEE: Kenneth Smith
P.O. Box 764
Carlsbad, New Mexico 88220

POOL: Brushy Canyon

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

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" in a 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 the junction of the existing resource road with Lea County Road No. C-29, being 11.3 miles Southeasterly, Southerly and Southwesterly, from its intersection with U.S. Highway 62 & 180. Said intersection is approximately 32 miles Northeasterly of Carlsbad and 40 miles Southwesterly of Hobbs, New Mexico along the major established Public Road System. Point "A" is also approximately 8.9 miles Northerly on Eddy County Road No. 798 and 1.1 mile Northeasterly on Lea Co. Road C-29 from Eddy County Road 798 intersection with State Highway 128, which is approximately 34 miles Westerly of Jal, New Mexico.

The local existing resource road travels Westerly 0.54 miles to Point "B", the turning point in the existing resource to the North. A resource road is planned for construction, during the drilling of Well #7 of this lease, 300 feet Southerly to Point "C". (Shown in Yellow on Exhibit "A") From this point a new resource road will be constructed as described below.

2. PLANNED RESOURCE ROAD

A. Length and Width: From Point "C" as shown on Exhibit "A", a new 14 foot wide Resource Road will be constructed 1200 feet Southerly (Shown in Blue on Exhibit "A") with access at the Northeast corner of the proposed well pad, as shown on Exhibits "A" and "B". (Note that this proposed resource road will be 110 feet Easterly of the nearest nest as described in Item 11.C below.

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 descending from Point "B" to the proposed well pad.

D. Turnouts: Turnouts will be constructed as 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 several small sand dunes to the proposed well pad.

H. Gates and Cattle Guards: None 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 will produce will be transported by a 2 or 2 1/2" steel surface flowline (shown in Green on Exhibit "A") laying along the side of the proposed road, crossing Lea County Road C-29 at Point "A", and continuing across country to Texaco's existing Federal Neff "13" Battery located on the East side of the existing well No. 2 pad as shown on Exhibit "A".

B. An electric power line will be built to service this well as shown in orange on exhibit "A".

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 alongside existing and proposed roads.

6. SOURCE OF CONSTRUCTION MATERIALS

A. Caliche needed for the road and well pad will be taken from an existing pit in the NE/4 of the SW/4 of Section 12, T22S, R31E, Eddy County, New Mexico. It will be transported to the proposed road and well site by Lea County Road C-29 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 in the drilling pits.

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 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, and trash 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 small and moderate sand dunes. Regionally, the land slopes to the Southwest with average slopes of less than one or 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. Two nests were found 348 feet and 362 feet Northerly and Northwesterly respectively of the staked location.

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. P. Basham
Drilling Superintendent
Texaco Exploration and Production, Inc.
P. O. Box 3109
Midland, Texas 79701
Office Phone: (915) 688-4620


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.

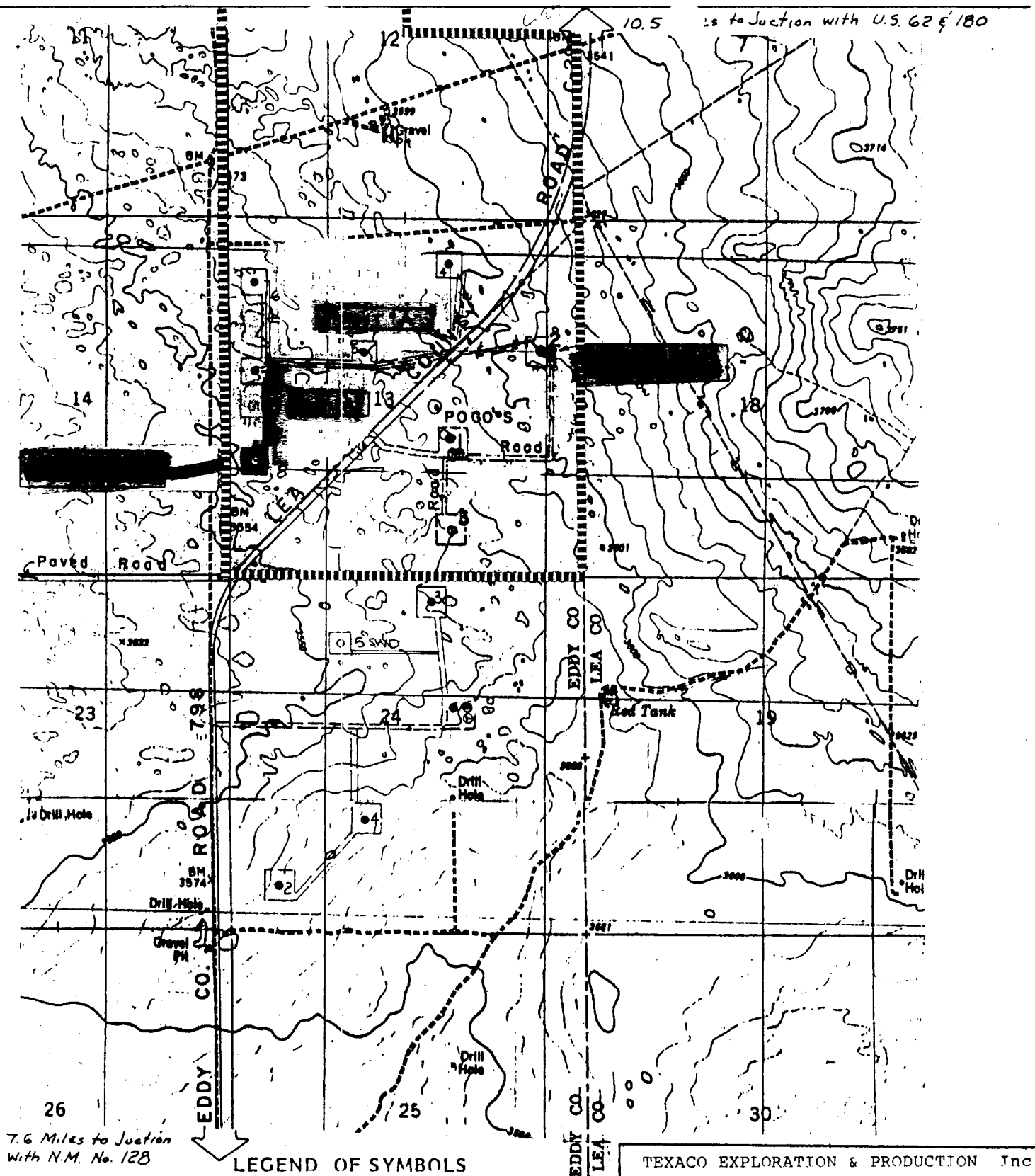
1-2-92

Date

Enclosures
jap



C. P. Basham
Drilling Superintendent
Midland, Texas



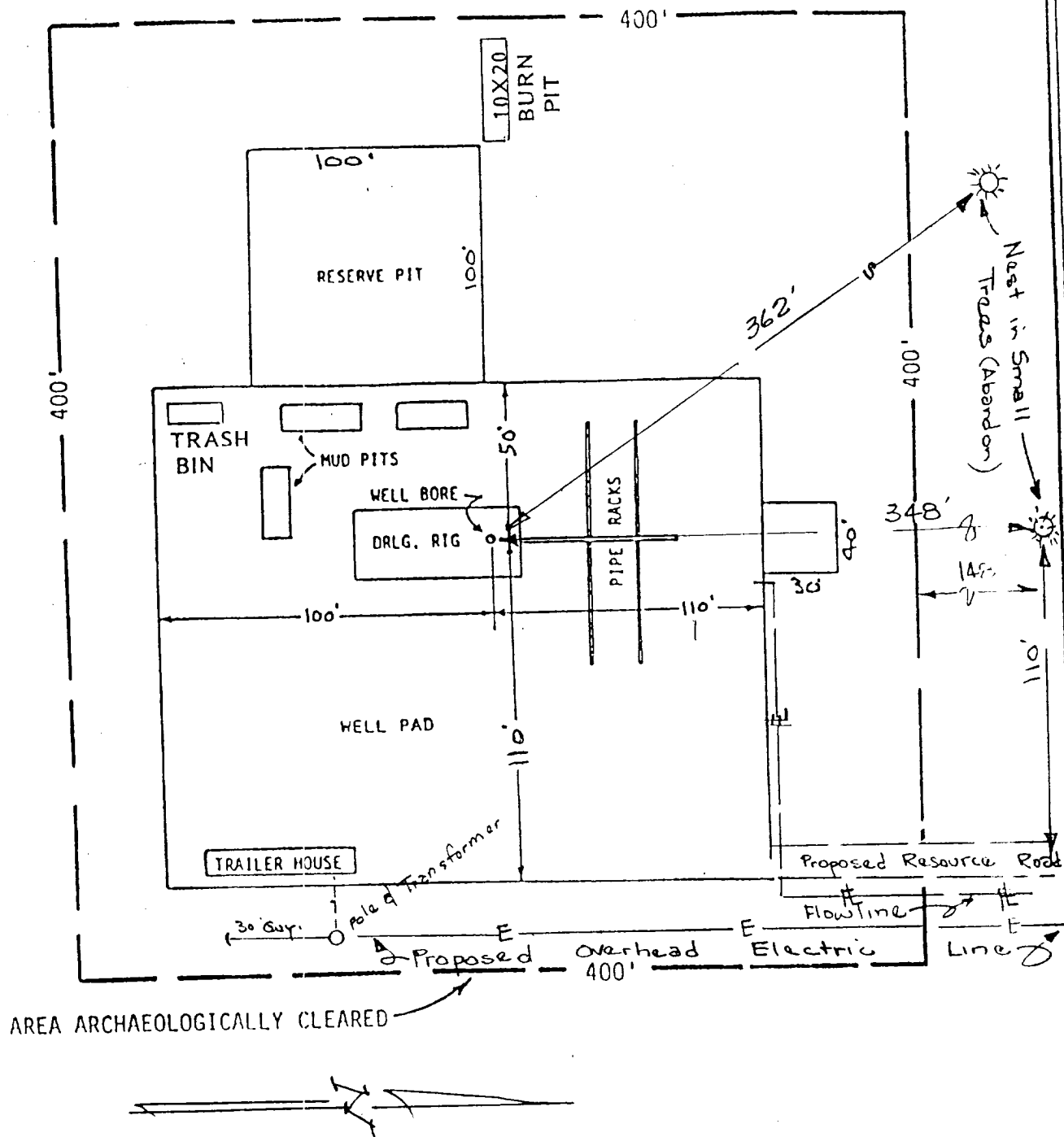


EXHIBIT "B"
 DRILLING RIG LAYOUT
 TEXACO EXPLORATION AND PRODUCTION INC.
 FEDERAL NEFF "13" No. 8
 1651 FSL & 330 FWL SECTION 13, T22S,
 R31E, NMPM, EDDY COUNTY, NEW MEXICO

Scale: None

Sheet 7 of 8

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 & PRODUCTION Inc.			Lease FEDERAL NEEF "13" (Beta Unit)		Well No. 8
Unit Letter L	Section 13	Township T-22-S	Range R-31-E	County NMPM	Eddy
Actual Footage Location of Well: 1651 feet from the South line and 330 feet from the West line					
Ground level Elev. 3557	Producing Formation Brushy Canyon	Pool Livingston Ridge		Dedicated Acreage: 40 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.

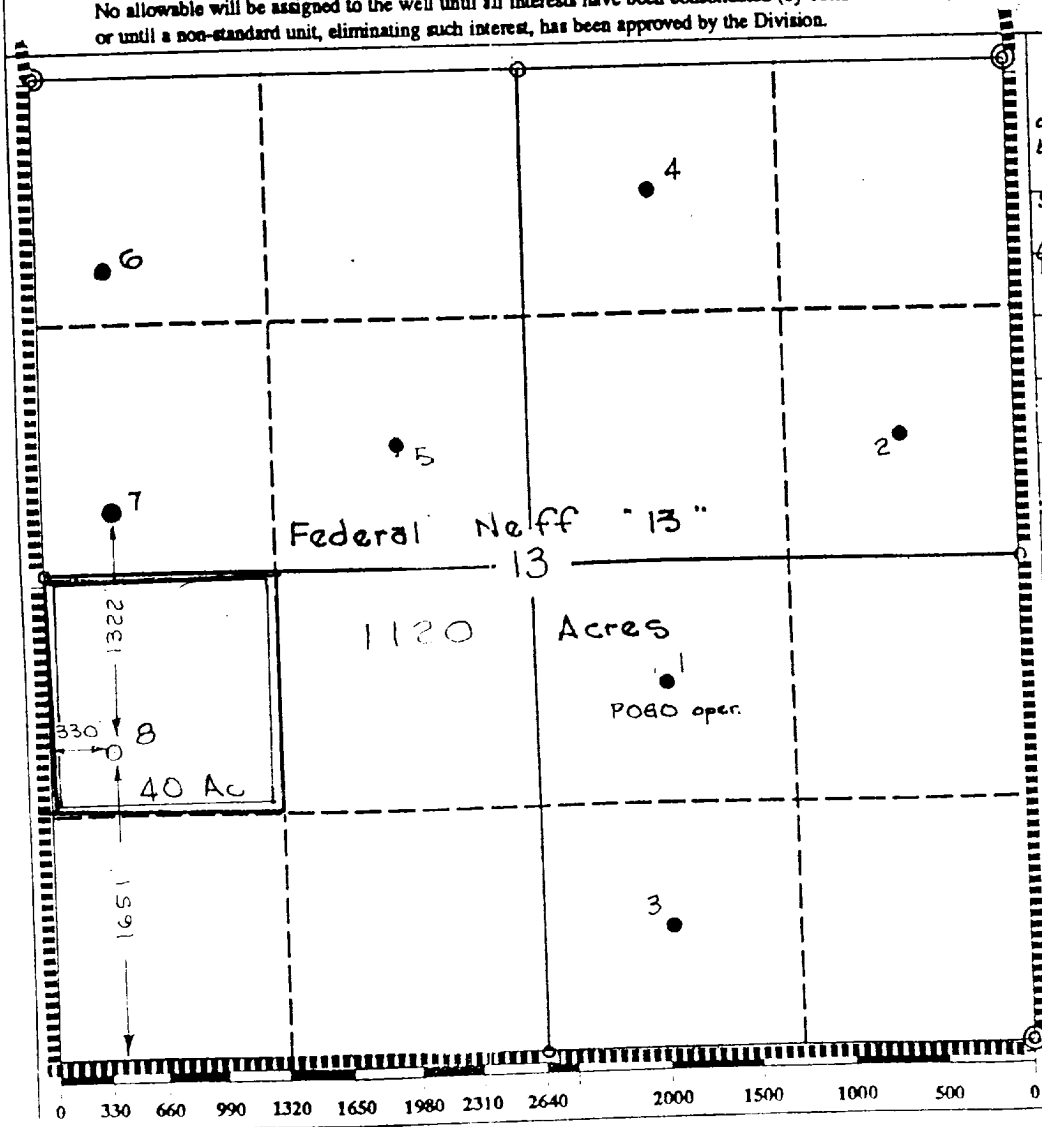
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3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?

☐ 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. Inc.

Date

Dec. 18, 1991

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

Dec. 17, 1991

Signature & Seal of
Professional Surveyor

John S. Piper

Certificate No.

7254 John S. Piper

Sheet 8 of 8