Form 3160-3 (December 1990)

SUBMIT IN TRIPLICATE

# UNITED DEPARTMENT ( **BUREAU OF LAN**

OF ETH COSTILL AS	XX35
PROPERTY AL	15704
POOL GODE	538005
	3 10 10

FORM APPROVED Budget Bureau No. 1004-0136

EFF. DATE 3/2/95

Expires: December 31, 1991

		API NO. 30	2025-32866	5, Lease Designation and Sec	riel No. IM 18848
A	PPLICATION FOR F	 PERMIT TO DRILL	OR DEEPEN	6. If Indian, Alottee or Tribe N	
1b. Type of Well	DRILL	EPEN 🗆	SINGLE ZONE	7. If Unit or CA, Agreement D 8. Well Name and Number SDE '31' FEDERAL	esignation
2. Name of Operator	TEXACO EXPLOR	ATION & PRODUCTIO	ON INC.	7	
3. Address and Telephone	P.O. Box 3109, Mi	dland Texas 79702	688-4606	9. API Well No.	
4. Location of Well (Report At Surface Unit Letter L: 198 At proposed prod. zone	nt location clearly and in acco	rdance with any State requ JTH Line and 660 SAME	rements.")  Feet From The WEST Line	10. Field and Pool, Explorton TRISTE DRAW WEST & SA 11. SEC., T., R., M., or BLK. Sec. 31, Township	ND DUNES SOUTH: BON 202 and Survey or Area
14. Distance In Miles and I	Direction from Nearest Town	or Post Office*		12. County or Parish	13. State
	23 MILES EA: ed* Location to Nearest Prop- arest drig. unit line, if any)	ST OF LOVING, NM erty or 660'	16. No. of Acres in Lease 1994.13	LEA 17. No. of Acres Assigned To 46.	
18. Distance From Propos Completed or Applied For	ed Location* to Nearest Well, On This Lease, Ft.	Drilling, 1319	19. Proposed Depth 9200'	20. Rotary or Cable Tools ROTARY	
21.Elevations (Show whether		6R-3548′	ernhan Controlled United	22. Approx	x. Date Work Will Start* 2/15/95
23.		PROPOSED CAS	ING AND CEMENT PROGR	RAM	
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY	OF CEMENT
14 3/4	WC40, 11 3/4	428	945'	550 SACKS - CIRCULATE	
11	WC50, 8 5/8	32#	4550'	1450 SACKS - CIRCULAT	E
PPG, 1.34 CF/S, 6.3 GI	50 SACKS CLASS C W/ 4 W/S).	POZ CLASS H W/ 6% G	9200' 3.5 PPG, 1.74 CF/S, 9.11 GW/S SEL, 5% SALT, 1/4# FLOCELE (		
TOOL @ 6300'. 2ND S	G - 1ST STAGE - 750 SA( STAGE - 750 SACKS 35/6 SPPG, 1.18 CF/S, 5.2 GW	5 POZ CLASS H W/ 6%	H W/ 2% GEL, 5% SALT, 1/4# GEL, 5% SALT, 1/4# FLOCELE	FLOCELE (14.2 PPG, 1.35 E (12.8 PPG, 1.94 CF/S, 10	CF/S, 6.3 GW/S). DV .4 GW/S). F/B 225
THERE ARE NO OTHE	ER OPERATORS IN THIS	QUARTER QUARTER	R SECTION.		
in Above Space Describe deepen directionally, give	Proposed Program: If propose pertinent data on subsurface	sal is to deepen, give data o locations and measured t	on present productive zone and prop rue verticle depths. Give blowout pro	osed new productive zone. If p wenter program, if any.	roposal is to drill or
24. I hereby certify that the foregoing SIGNATURE	ng is true and correct Wale Howard	TITLE E	Eng. Assistant	DATE	E 1/20/95
TYPE OR PRINT NAME	C. Wade	e Howard			
(This space for Federal or State of	lice use)				·
PERMIT NOApplication approval does not APPROVED BY	t/warrant or certify that the applica		APPROVAL DATE to those rights in the subject lease which AREA MANAG		ouct operations thereon.
CONDITIONS OF APPR		11.0			
Title 18 U.S.C. Section 1001 representations as to any me		knowingly and willfully to make	to any department or agency of the Unite	d States any false, fictitious or fraud	Julent statements or

PAT MIA 2000) 181431, 1010 1000 - 1 62049

Form 3160 5 (June 1990)

APPROVED BY 5/41/ANDA CONDITIONS OF APPROVAL, IF ANY:

**UNITED STATES** DEPARTMENT OF THE INTERIOR

FORM APPROVED

BUREAU OF	FLAND MANAGEMENT	Budget Bureau No. 1004-0135 Expires: March 31, 1993
	S AND REPORTS ON WELLS of drill or to deepen or reentry to a different reservoir.	5. Lease Designation and Serial No. NM 18848
	FOR PERMIT for such proposals	6. If Indian, Alottee or Tribe Name
SUBN	IIT IN TRIPLICATE	7. If Unit or CA, Agreement Designation
1. Type of Well: GAS WELL GAS	OTHER	8. Well Name and Number
2. Name of Operator		SDE '31' FEDERAL
3. Address and Telephone No.	ATION & PRODUCTION INC.	7
	enver Colorado 80201-6510 (303)621-485	9. API Well No.
4. Location of Well (Footage, Sec., T., R., M., or Survey	Description)	10. Field and Pool, Exploratory Area
Unit Letter L: 1980 Feet From Ti	ne SOUTH Line and 660 Feet From The	TRISTE DRAW WEST & SAND DUNES SOUTHE BON
WEST Line Section 31	Township 23-S Range 32-E	11. County or Parish, State  LEA , NM
12. Check Appropriate	Box(s) To Indicate Nature of Notice, Re	eport, or Other Data
TYPE OF SUBMISSION		PE OF ACTION
Notice of Intent Subsequent Report Final Abandonment Notice	Abandonment Recompletion Plugging Back Casing Repair Altering Casing	Change of Plans  New Construction  Non-Routine Fracturing  Water Shut-Off  Conversion to Injection
	OTHER:	(Note: Report risults of multiple completion on Well Completion or Recompletion Report and Log Form.)
13. Describe Proposed or Completed Operations (Clean directionally drilled, give subsurface locations and many proposed or Complete Comple	ty state all pertinent details, and give pertinent dates, including leasured and true vertical depths for all markers and zones pert	actimated data of stadios and stadios and stadios
We request approval to amend the APD as follow		Jinefit to this work.)".
Casing Program:	•	
Surface Csg: 950' 8-5/8", 24# WC-50.	11 11 HALF *	
Production Csg: 9200' 5-1/2": 0 - 7500' 15.5#, 7500' - 8700' 17#, J-55, LTC 8700' - 9200', 17#, L-80, LTC DV tool @ 5300'	1-55, LTC in 778" HOLE.*	E) (1) (2) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4
Cement Program: Surface Csg: 175 sxs Class C w/ 4% gel, 2% Ca GW/sx). w', \\ C i R C v LA TE	ICI2 (13.5 ppg, 1.74 cf/sx, 9.11 GW/sx). F/B 150 sxs Cla CENENT TO THE SURFACE,	ass C w/ 2% CaCl2 (14.8 ppg, 1.34 c#sx, 6.3
Production Csg: 1st Stg: 750 sxs 50/50 poz "H" w/ 2% gel, 5% sal	t, 1/4# /sxs flocele (14.2 ppg, 1.35 cf/sx, 6.3 GW/sx).	<u>ئى</u> :
CHAN, S.Z GANISK). MILL CIRCL	T, 1/4# /sxs flocele (12.8 ppg, 1.94 cf/sx, 10.4 GW/sx). FULATE CEMENT TO THE SEEL KEBERT W/TEXACO ON	SURFACE *
14. I hereby centry that you tayoging in pay and correct SIGNATURE		DATE 2/2/95
TYPE OR PRINT NAME C. P. Ba	sham	

PART TO STATE OF THE STATE OF T

ÜISTRICT 1 P. O. Box 1980, Hobbs, NM 88240

DISTRICT II
P 0. 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

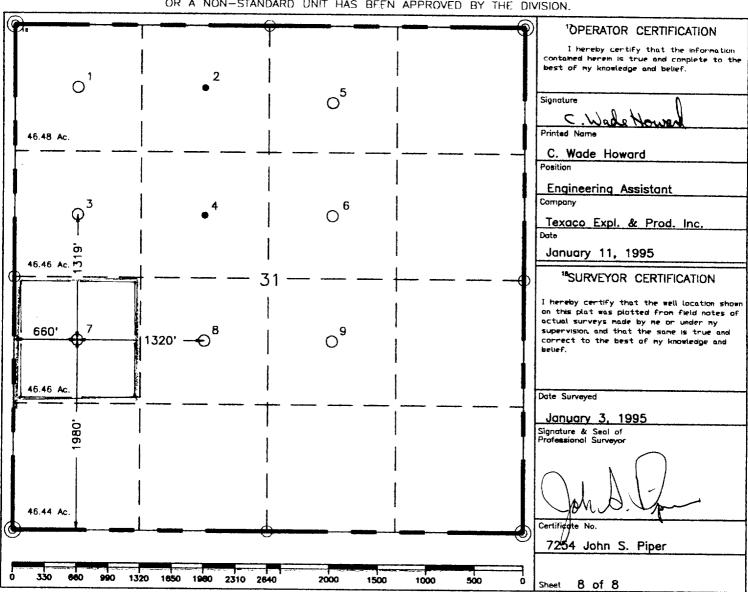
AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

30-025-328	166 5380 TRISTE DRAW WEST SAND DUNES SOUTH	BONE SPRINGS
Property Code	SDE FEDERAL "31"	Well Number
OGRID No.	TEXACO EXPLORATION & PRODUCTION, INC.	<sup>9</sup> Elevation 3548'

UL or lot no.	Section 31	Township 23-S	Range 32-E	Lot Idn	Feet from the 1980'	North/South line  South	Feet from the	East/West line <b>Wes</b> t	County Lea
UL or lot no.	Section	Township	11 B Range	ottom Hol Lot Idn	e Location If Feet from the	Different From North/South line	Surface Feet from the	East/West line	<sup>7</sup> County
12Dedicated Acres 46.46	13 <sub>Joi</sub>	nt or Infill	Consolic	ation Code	<sup>15</sup> Order No.	1	i		

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.



O = Staked Location • = Producing Well = Injection Well • = Water Supply Well • = Plugged & Abandon Well

= Found /4 Section Corner 1" Iron Pine & CIO DC

(O) = Found Section Corner, 2 or 3" Iron Pipe & GLO B.C.

#### DRILLING PROGRAM

SDE '31' FEDERAL WELL NO. 7

#### 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: 3558'

<u>Formation</u>	Depth	Lithology	Fluid Content
Rustler	930'	Anhydrite, Salt	
Salado	1245'	Salt	
Delaware Mtn Group	4620'	Sandstone, Shale	Oil/Gas
Cherry Canyon	5550 <b>'</b>	Sandstone, Shale	Oil/Gas
Brushy Canyon- Pay	7100'	Sandstone, Shale	Oil/Gas
Lower Brushy Canyon- Pay	8150'	Sandstone, Shale	Oil/Gas
Bone Spring- Pay	8570 <b>'</b>	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 four wells in this area (2 in this section) 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.

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	<u>Viscosity</u>
0'-945'	Fresh Water	8.4	28
945'-4550'	Brine Water	10.0	29
4550'-6500'	Fresh Water	8.4	28
6500'-9200'	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 9200'.

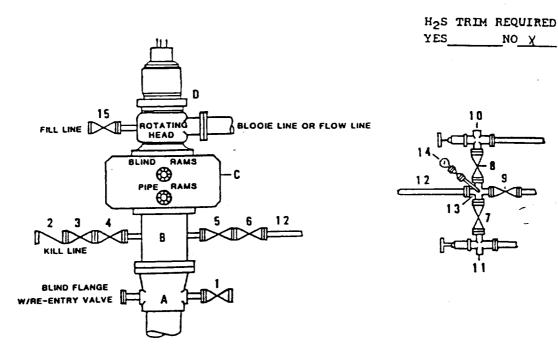
No drill stem tests will be conducted.

No cores will be taken.

# OFFICE SE

# DRILLING CONTROL CONDITION II-B 3000 WP

# FOR AIR DRILLING OR WHERE NITROGEN OR AIR BLOWS ARE EXPECTED



# DRILLING CONTROL

# MATERIAL LIST - CONDITION II - B

<b>A</b>	Texaco Wellhead
В .	3000# W.P. drilling spool with a 2" minimum flanged outlet for kill line and 3" minimum flanged outlet for choke line.
С	3000# W.P. Dual ram type preventer, hydraulic operated with 1" steel, 3000# W.P. control lines (where substructure 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	]" minimum $\tt 3000f$ 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 3000f 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.



SCALE DATE EST NO DRO NO.
DRAWN BY
CHECKED BY

APPROVED BY

EXHIBIT C