

**DISTRICT I**

P.O. Box 1980, Hobbs, NM 88241-1980

**DISTRICT II**

P.O. Box Drawer DD, Artesia, NM 88211-0719

**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**

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

Form C-101

Revised February 10, 1994

Instructions on back

Submit to Appropriate District Office

State Lease - 6 Copies

Fee Lease - 5 Copies

☐ AMENDED REPORT**APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE**

<sup>1</sup> Operator Name and Address TEXACO EXPLORATION & PRODUCTION INC. P.O. Box 3109, Midland Texas 79702		<sup>2</sup> OGRID Number 022351
		<sup>3</sup> API Number 30-025-34098
<sup>4</sup> Property Code 11093	<sup>5</sup> Property Name STATE 'AN'	<sup>6</sup> Well No. 12

**<sup>7</sup> Surface Location**

UI or lot no.	Section	Township	Range	Lot.Idn	Feet From The	North/South Line	Feet From The	East/West Line	County
I	7	18-S	35-E		1950	SOUTH	450	EAST	LEA

**<sup>8</sup> Proposed Bottom Hole Location If Different From Surface**

UI or lot no.	Section	Township	Range	Lot.Idn	Feet From The	North/South Line	Feet From The	East/West Line	County
I	7	18-S	35-E		2400	SOUTH	824	EAST	LEA

<sup>9</sup> Proposed Pool 1 VACUUM; DEVONIAN, MID	<sup>10</sup> Proposed Pool 2
---	-------------------------------

<sup>11</sup> Work Type Code N	<sup>12</sup> Well Type Code O	<sup>13</sup> Rotary or C.T. ROTARY	<sup>14</sup> Lease Type Code S	<sup>15</sup> Ground Level Elevation 3959'
<sup>16</sup> Multiple No	<sup>17</sup> Proposed Depth 12128'	<sup>18</sup> Formation DEVONIAN	<sup>19</sup> Contractor NABORS	<sup>20</sup> Spud Date 10/1/97

**<sup>21</sup> Proposed Casing and Cement Program**

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
14 3/4	11 3/4	42#	600'	450 SACKS	SURFACE
11	8 5/8	24#	3500'	1000 SACKS	SURFACE
7 7/8	5 1/2	17#	11500'	2100 SACKS	3400'

<sup>22</sup> Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

**CEMENTING PROGRAM:**

SURFACE CASING: 250 SACKS CLASS C w/ 4% GEL, 2% CC (13.5 PPG, 1.74 CF/S, 9.1 GW/S). F/B 200 SACKS CLASS C w/ 2% CC (14.8 PPG, 1.34 CF/S, 6.3 GW/S)

INTERMEDIATE CASING: 800 SACKS 35/65 POZ H w/ 6% GEL, 5% SALT, 1/4# FC (12.4 PPG, 2.14 CF/S, 11.9 GW/S). F/B 200 SACKS CLASS H (15.6 PPG, 1.19 CF/S, 5.2 GW/S).

PRODUCTION CASING: 1st STG - 1300 SACKS 50/50 POZ H w/ 2% GEL, 5% SALT, 1/4# FC (14.2 PPG, 1.35 CF/S, 6.3 GW/S).

DV TOOL @ 6900': 2nd STG - 600 SACKS 35/65 POZ H w/ 6% GEL, 5% SALT, 1/4# FC (12.4 PPG, 2.14 CF/S, 11.9 GW/S). F/B 200 SACKS 50/50 POZ H w/ 2% GEL, 5% SALT, 1/4# FC (14.2 PPG, 1.35 CF/S, 6.3 GW/S).

HORIZONTAL WELL: PENETRATION POINT SAME AS SURFACE. APPLICATION TO DRILL A HORIZONTAL WELL HAS BEEN FILED. (COPY ATTACHED)

<sup>23</sup> I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature

*C. Wade Howard*

Printed Name

C. Wade Howard

Title Eng. Assistant

Date 7/14/97

Telephone 688-4606

**OIL CONSERVATION DIVISION**ORIGINAL SIGNED BY CHRIS WILLIAMS  
DISTRICT I SUPERVISOR

Approved By:

Title:

Approval Date: AUG 14 1997

Expiration Date:

Conditions of Approval:

Attached ☐

Permit Expires 1 Year From Approval  
Date Unless Drilling Underway

7/14

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

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised February 10, 1994

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

OIL CONSERVATION DIVISION

PO Box 2088  
Santa Fe, NM 87504-2088

Submit to Appropriate District Office

State Lease-4 copies

Fee Lease-3 copies

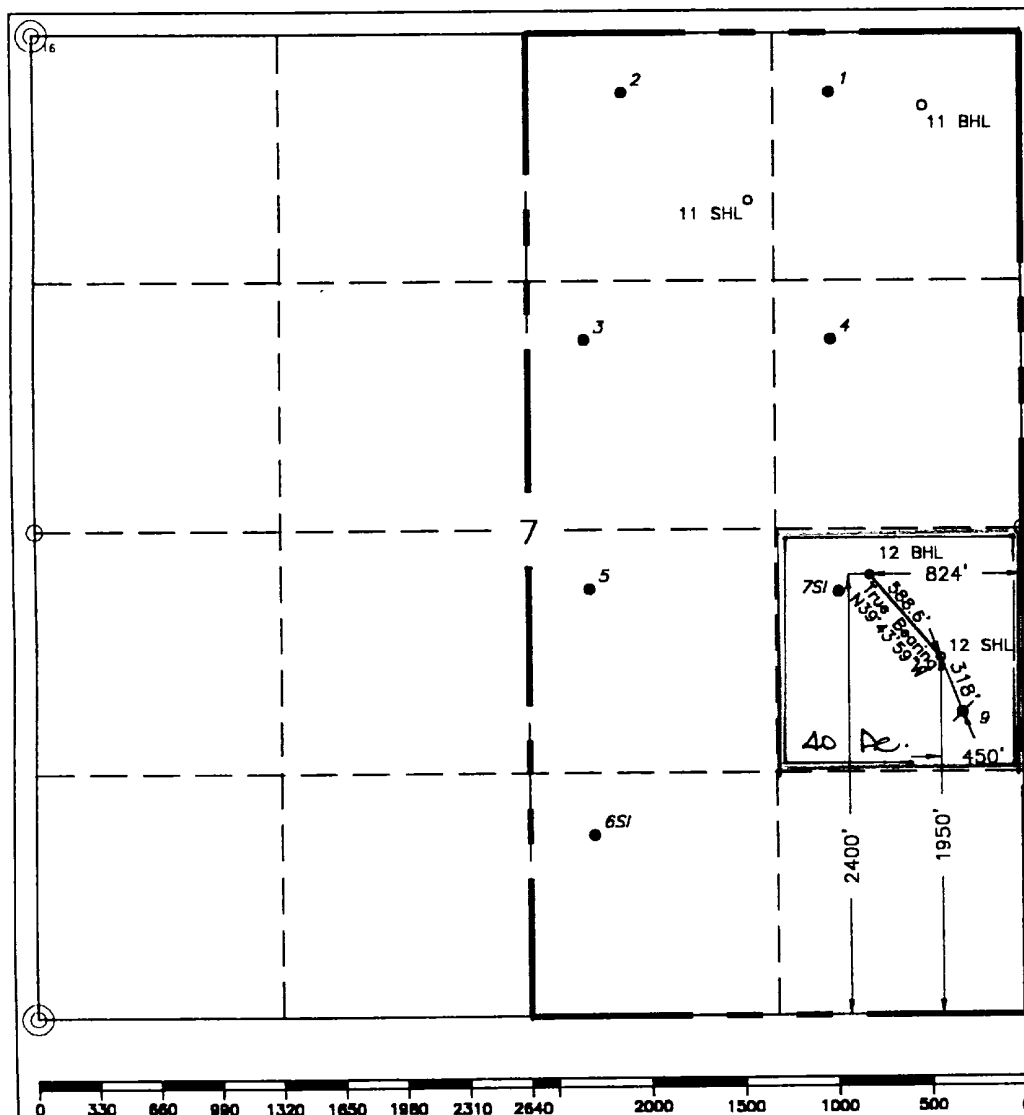
Instructions on back

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number <b>30-025-34098</b>		<sup>2</sup> Pool Code <b>62000</b>		<sup>3</sup> Pool Name <b>Vacuum; Devonian, Mid</b>					
<sup>4</sup> Property Code <b>11093</b>		<sup>5</sup> Property Name <b>State "AN"</b>						<sup>6</sup> Well Number <b>12</b>	
<sup>7</sup> GRID No. <b>22351</b>		<sup>8</sup> Operator Name <b>TEXACO EXPLORATION &amp; PRODUCTION, INC.</b>						<sup>9</sup> Elevation <b>3959'</b>	
<sup>10</sup> Surface Location									
UL or lot no. <b>1</b>	Section <b>7</b>	Township <b>18-S</b>	Range <b>35-E</b>	Lot Idn	Feet from the <b>1950'</b>	North/South line <b>South</b>	Feet from the <b>450'</b>	East/West line <b>East</b>	<sup>7</sup> County <b>Lea</b>
<sup>11</sup> Bottom Hole Location If Different From Surface									
UL or lot no. <b>1</b>	Section <b>7</b>	Township <b>18-S</b>	Range <b>35-E</b>	Lot Idn	Feet from the <b>2400'</b>	North/South line <b>South</b>	Feet from the <b>824'</b>	East/West line <b>East</b>	<sup>7</sup> County <b>Lea</b>
<sup>12</sup> Dedicated Acres <b>40</b>		<sup>13</sup> Joint or Infill		<sup>14</sup> Consolidation Code		<sup>15</sup> Order No.			

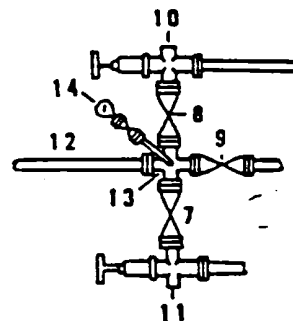
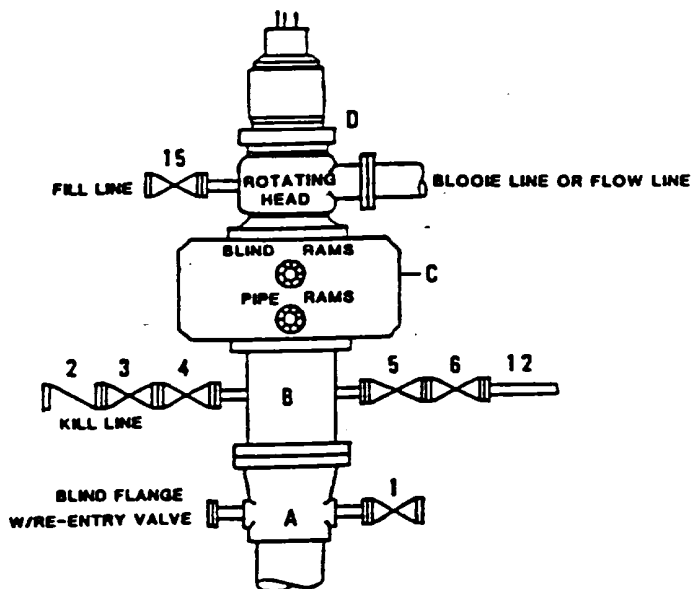
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION.

	<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 <b>C. Wade Howard</b>
	Position <b>Engineer's Assistant</b>
	Company <b>Texaco Expl. &amp; Prod. Inc.</b>
Date <b>June 12, 1997</b>	
<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 <b>June 4, 1997</b>	
Signature & Seal of Professional Surveyor <i>John S. Piper</i>	
Certificate No. <b>7254 John S. Piper</b>	
Sheet	

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

**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 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.	DRG. NO.
DRAWN BY			
CHECKED BY			
APPROVED BY			

EXHIBIT C



Texaco Exploration  
and Production Inc

500 North Lamar  
Midland TX 79701

P O Box 8104  
Midland TX 79702

June 19, 1997

GOV - STATE AND LOCAL GOVERNMENTS  
Directional Drilling - Horizontal  
State "AN" Well No. 12  
Vacuum Devonian, Mid Field  
Lea County, New Mexico

State of New Mexico  
Energy and Minerals Department  
Oil Conservation Division  
2040 South Pacheco  
Santa Fe, New Mexico 87505

Attention: Mr. Michael E. Stogner

Gentlemen:

Administrative approval, Rule 111 D, is requested to directionally drill a horizontal well to an orthodox bottomhole location in the Devonian formation.

This well is a candidate for horizontal drilling due to the fractured nature of the Devonian. The Devonian exhibits a strong water drive. By horizontal drilling, the effects of water coning should be minimized resulting in a more economical recovery of reserves. Attached for your information is a copy of our directional plans, a type log section, and Form C-102.

The "affected" offset operators to this well have been notified of this request (see attached offset operator's list and certified mail receipts).

Any questions concerning this request should be directed to me at (915) 688-4606.

Yours very truly,

C. W. Howard  
Engineer's Assistant

CWH:

CC: NMOCD, P. O. Box 1980, Hobbs, NM 88240

Attachments

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		<sup>2</sup> Pool Code 62000	<sup>3</sup> Pool Name Vacuum; Devonian, Mid	
<sup>4</sup> Property Code 11093		<sup>5</sup> Property Name State "AN"		<sup>6</sup> Well Number 12
<sup>7</sup> GRID No. 22351		<sup>8</sup> Operator Name TEXACO EXPLORATION & PRODUCTION, INC.		<sup>9</sup> Elevation 3959'

<sup>10</sup> Surface Location

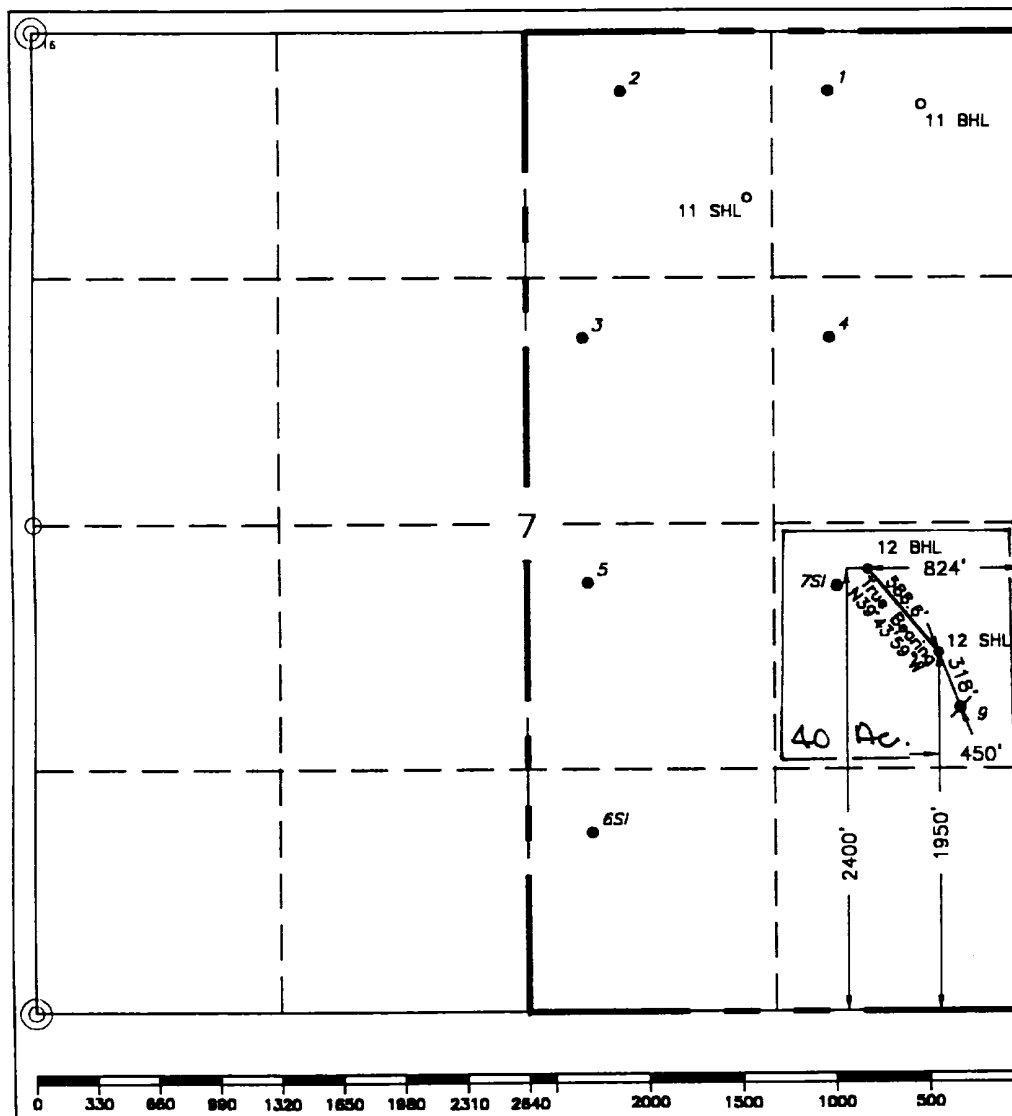
UL or lot no. 1	Section 7	Township 18-S	Range 35-E	Lot Idn	Feet from the 1950'	North/South line South	Feet from the 450'	East/West line East	<sup>7</sup> County Lea
--------------------	--------------	------------------	---------------	---------	------------------------	---------------------------	-----------------------	------------------------	----------------------------

<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no. 1	Section 7	Township 18-S	Range 35-E	Lot Idn	Feet from the 2400'	North/South line South	Feet from the 824'	East/West line East	<sup>7</sup> County Lea
--------------------	--------------	------------------	---------------	---------	------------------------	---------------------------	-----------------------	------------------------	----------------------------

<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>1</sup> OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature

C. Wade Howard

Printed Name

C. Wade Howard

Position

Engineer's Assistant

Company

Texaco Expl. & Prod. Inc.

Date

June 12, 1997

<sup>1A</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

June 4, 1997

Signature & Seal of  
Professional Surveyor

Certificate No.

7254 John S. Piper

Sheet

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



Texaco Exploration  
and Production Inc

500 North Loring  
Midland TX 79701

P.O. Box 3109  
Midland TX 79702

June 19, 1997

GOV - STATE AND LOCAL GOVERNMENTS

Directional Drilling  
State "AN" Well No. 12  
Sec. 7, T-18-S, R-35-E  
Lea County, New Mexico

TO THE OFFSET OPERATORS

Gentlemen:

As an offset operator to the captioned lease, you are being furnished with a copy of our Application to directionally drill the captioned well. If you have no objection, please sign the waiver at the bottom of this letter and return in the enclosed envelope.

Any questions concerning this request should be directed to me at (915) 688-4606.

Yours very truly,

C. W. Howard  
Engineer Assistant

CWH:cwh

File

**WAIVER APPROVED:**

**COMPANY:** \_\_\_\_\_

**BY:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**OFFSET OPERATOR'S LIST**  
**State "AN" Well No. 12**  
**LEA COUNTY, NEW MEXICO**

**Texaco Exploration and Production Inc.**  
**P. O. Box 3109**  
**Midland, Texas 79702**

**Penroc Oil Corporation**  
**P. O. Box 5970**  
**Hobbs, NM 88241**

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Penroc Oil Corporation  
P. O. Box 5970  
Hobbs, New Mexico 88241

4a. Article Number

P 497 394 202

4b. Service Type

- ☐ Registered ☒ Certified  
☐ Express Mail ☐ Insured  
☒ Return Receipt for Merchandise ☐ COD

7. Date of Delivery

5. Received By: (Print Name)

6. Signature: (Addressee or Agent)

 12/21/97

8. Addressee's Address (Only if requested and fee is paid)

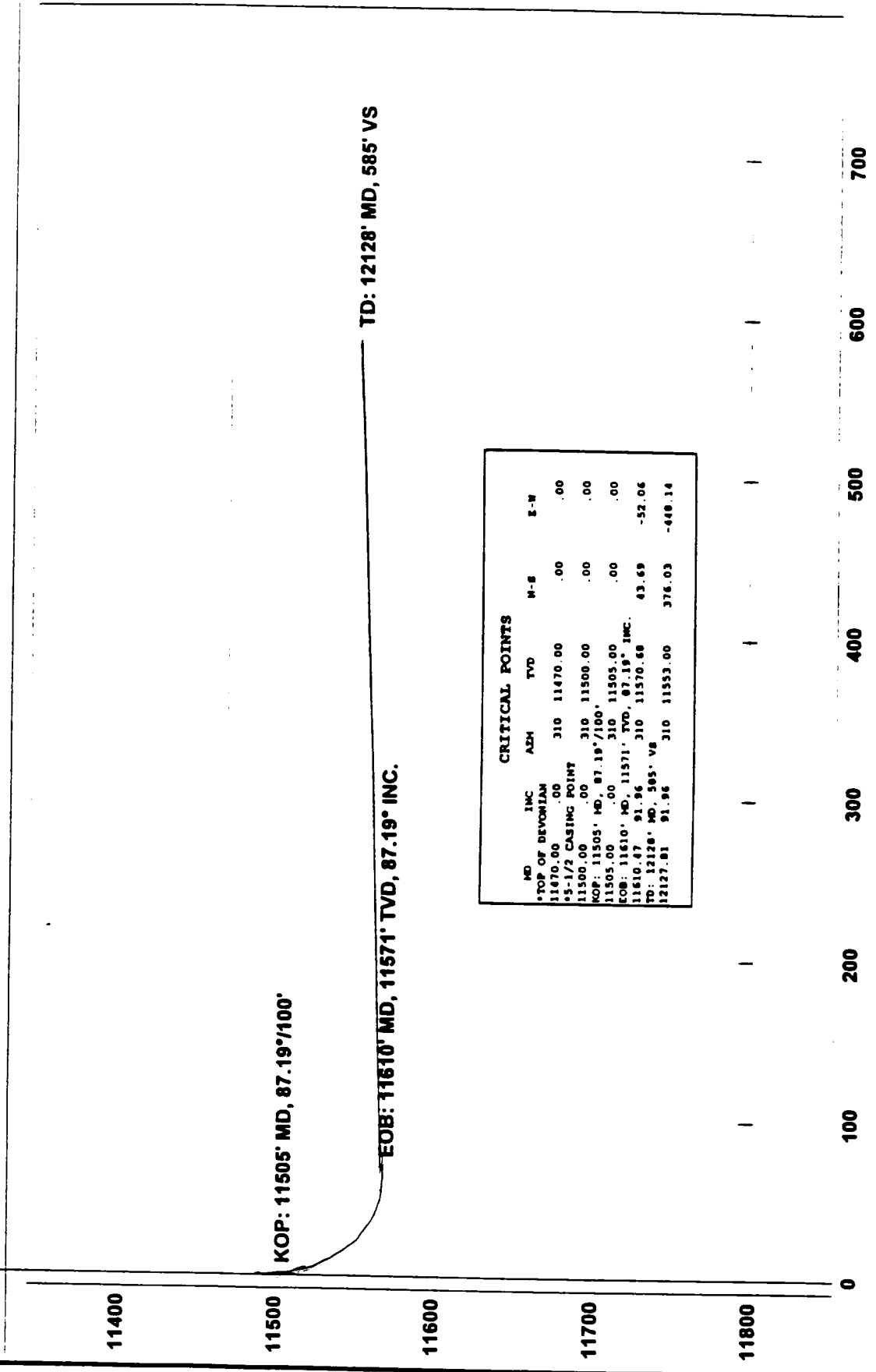
PS Form 3811, December 1994

Domestic Return Receipt

Thank you for using Return Receipt Service.



Job Number: P97-255N  
 Company: TEXACO E & P, INC.  
 Lease/Well: NEW MEXICO STATE AN #12  
 Location: LEA CO, NEW MEXICO  
 File name: C:\WIN\SERVER\NMSAN12.SVY  
 Date/Time: Wednesday, June 04, 1997



CRITICAL POINTS				
MD	INC	AZH	TVD	E-N
*TOP OF DEVONIAN	.00	310	11470.00	.00
*5-1/2 CASING POINT	.00	310	11500.00	.00
KOP: 11505' MD, 87.19°/100'	.00	310	11505.00	.00
EOB: 11610' MD, 11571' TVD, 87.19° INC.	.00	310	11570.58	43.69
TD: 12128' MD, 585' VS	91.96	310	11553.00	376.03
12127.91	91.96	310	11553.00	-448.14

-- PRELIMINARY WELL PLAN --  
 VERTICAL SECTION (Ft) @ 310.00°



Job Number: P97-255N

State/Country:

Company: TEXACO E & P, INC.

Declination:

Lease/Well: NEW MEXICO STATE AN #108rid:

Location: LEA CO., NEW MEXICO

File name: C:\WINSERVE\NMSAN12.SVY

Rig Name:

Date/Time: 04-Jun-97 / 13:41

RKB:

Curve Name: PRELIMINARY WELL PLAN

G.L. or M.S.L.:

PHOENIX DRILLING SERVICES, INC.

WINSERVE SURVEY CALCULATIONS

Minimum Curvature Method

Vertical Section Plane 310.00

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	Direction Deg	Dogleg Severity Deg/100
<b>TOP OF DEVONIAN</b>									
11470.00	.00	310.00	11470.00	.00	.00	.00	.00	.00	.00
<b>5-1/2 CASING POINT</b>									
11500.00	.00	310.00	11500.00	.00	.00	.00	.00	.00	.00
<b>KOP: 11505' MD, 87.19°/100'</b>									
11505.00	.00	310.00	11505.00	.00	.00	.00	.00	.00	.00
11515.00	8.72	310.00	11514.96	.49	-.58	.76	.76	310.00	87.19
11525.00	17.44	310.00	11524.69	1.94	-2.31	3.02	3.02	310.00	87.19
11535.00	26.16	310.00	11533.97	4.33	-5.16	6.73	6.73	310.00	87.19
11545.00	34.88	310.00	11542.58	7.59	-9.04	11.80	11.80	310.00	87.19
11555.00	43.59	310.00	11550.31	11.65	-13.88	18.12	18.12	310.00	87.19
11565.00	52.31	310.00	11557.00	16.42	-19.56	25.54	25.54	310.00	87.19
11575.00	61.03	310.00	11562.49	21.78	-25.96	33.89	33.89	310.00	87.19
11585.00	69.75	310.00	11566.65	27.62	-32.92	42.97	42.97	310.00	87.19
11595.00	78.47	310.00	11569.39	33.80	-40.28	52.58	52.58	310.00	87.19
11605.00	87.19	310.00	11570.64	40.17	-47.87	62.49	62.49	310.00	87.19
<b>EOB: 11610' MD, 11571' TVD, 87.19° INC.</b>									
11610.47	91.96	310.00	11570.68	43.69	-52.06	67.96	67.96	310.00	87.13
11710.47	91.96	310.00	11567.26	107.93	-128.62	167.91	167.91	310.00	.00
11810.47	91.96	310.00	11563.84	172.17	-205.18	267.85	267.85	310.00	.00
11910.47	91.96	310.00	11560.43	236.41	-281.74	367.79	367.79	310.00	.00
12010.47	91.96	310.00	11557.01	300.65	-358.30	467.73	467.73	310.00	.00
12110.47	91.96	310.00	11553.59	364.89	-434.86	567.67	567.67	310.00	.00
<b>TD: 12128' MD, 585' VS</b>									
12127.81	91.96	310.00	11553.00	376.03	-448.14	585.00	585.00	310.00	.00

# DRILLING CURVE

## State "AN" # 12 Vertical Hole

