



STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION  
2040 S. PACHECO  
SANTA FE, NEW MEXICO 87505  
(505) 827-7131

August 26, 1997

Texaco Exploration & Production Inc.  
P. O. Box 3109  
Midland, Texas 79702  
Attention: C. Wade Howard

*Administrative Order DD-197(H:w/NSDW)*  
High Angle/Horizontal

Dear Mr. Howard:

Reference is made to your application dated June 19, 1997 for authorization to initiate a high angle/horizontal directionally drilling project within the NE/4 SE/4 of Section 7, Township 18 South, Range 35 East, NMPM, Mid Vacuum-Devonian Pool, Lea County, New Mexico.

**The Division Director Finds That:**

- (1) The application has been duly filed under the provisions of:
  - (a) Rule 111(D) and (E) of the General Rules and Regulations of the New Mexico Oil Conservation Division ("Division"), revised by Division Order No. R-10388, issued by the Oil Conservation Commission in Case 11274 on June 13, 1995; and,
  - (b) Rule 104.F of said Division general rules;
- (2) The Mid Vacuum-Devonian Pool currently comprises the SE/4 of Section 7, the SW/4 of Section 8, the W/2 of Section 16, and the N/2 of Section 17, all in Township 18 South, Range 35 East, NMPM, Lea County, New Mexico;
- (3) The Mid Vacuum-Devonian Pool is subject to the statewide rules and regulations, as promulgated by Rule 104.C(1)(a), which provides for 40-acre oil spacing and proration units, or drilling units, and requires that wells be located no closer than 330 feet to the outer boundary of a single 40-acre oil spacing and proration unit;
- (4) The "project area" proposed by Texaco Exploration & Production Inc. ("Texaco") would consist of a single standard 40-acre oil spacing and proration unit comprising the NE/4 SE/4 of said Section 7;
- (5) Division records and the application indicate that the State "AN" lease (New Mexico State lease No. E-07653) comprises an area that includes the E/2 of said Section 7 and is operated by Texaco; therefore, there are no affected offsetting operators other than Texaco to the north of the proposed project area;
- (6) There are currently no producing Mid Vacuum-Devonian wells within the proposed project area, however from 1963 to 1968 the Getty Oil Company's State "AN" Well No. 9, located 1650 feet

from the South line and 330 feet from the East line of said Section 7 produced approximately 72,000 barrels of oil from the Devonian formation;

- (7) Texaco is seeking to initiate a high angle/horizontal directional drilling project within this portion of the Mid Vacuum-Devonian Pool, which is a strong water drive reservoir and by applying horizontal drainhole technology to the Devonian formation will serve to minimize water coning;
- (8) It is Texaco's intent to drill its State "AN" Well No. 12 (API No. 30-025-34098) at a standard surface oil well location 1950 feet from the South line and 450 feet from the East line (Unit I) of said Section 7, drill vertically to an approximate depth of 11,500 feet, kick-off in a northwesterly direction with a short radius wellbore (87 degrees/100 feet), and drill horizontally a lateral distance of approximately 600 feet through the Devonian formation;
- (9) The applicable drilling window or "producing area" for said wellbore as requested by Texaco should include that unorthodox area within the subject 40-acre standard oil spacing and proration unit comprising the NE/ SE/4 of said Section 7 that is:
  - (a) no closer than 330 feet to the east, south, and west boundaries of said quarter-quarter section; and,
  - (b) is no closer than 240 feet to the northern boundary of said quarter-quarter section;
- (10) It appearing the applicant has satisfied all of the appropriate requirements prescribed in said Rule 111.D and E and 104.F(2), the subject application should be approved and the well should be governed by the provisions contained within this order and all other applicable provisions of Division General Rule 111; and,

**IT IS THEREFORE ORDERED THAT:**

(1) Texaco Exploration and Production, Inc. ("Texaco") is hereby authorized to initiate a high angle/horizontal directional drilling project within a standard 40-acre oil spacing and proration unit comprising the NE/4 SE/4 of Section 7, Township 18 South, Range 35 East, NMPM, Mid Vacuum-Devonian Pool, Lea County, New Mexico, by drilling its State "AN" Well No. 12 (API No. 30-025-34098) at a standard oil well location 1950 feet from the South line and 450 feet from the East line (Unit I) of said Section 7, drill vertically to an approximate depth of 11,500 feet, kick-off in a northwesterly direction with a short radius wellbore (87 degrees/100 feet), and drill horizontally a lateral distance of approximately 600 feet through the Devonian formation;

**PROVIDED HOWEVER THAT** prior to commencing directional drilling operations in said wellbore, the applicant shall establish the location of the kick-off point by means of a directional survey acceptable to the Division.

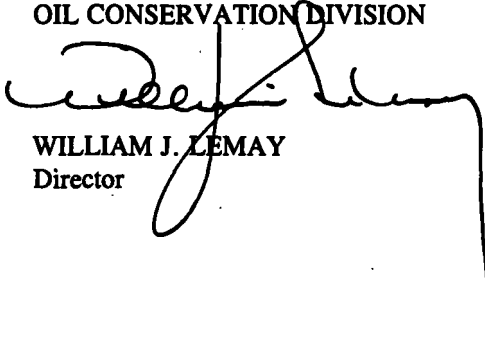
**PROVIDED FURTHER THAT** during or upon completion of said directional drilling operations, the applicant shall conduct an accurate wellbore survey from the kick-off point to total depth in order that the subsurface bottomhole location, as well as the wellbore's true depth and course, may be determined.

(2) The applicant shall notify the supervisor of the Hobbs District office of the Division of the date and time said wellbore surveys are to be conducted so that they may be witnessed. The applicant shall further provide a copy of said wellbore surveys to the Santa Fe and Hobbs offices of the Division upon completion.

- (3) The "project area" for said horizontal well shall consist of a standard 40-acre oil spacing and proration unit for said pool comprising the NE/4 SE/4 of said Section 7.
- (4) The applicable drilling window or "producing area" for said wellbore as requested by Texaco shall include that unorthodox area within the subject 40-acre standard oil spacing and proration unit comprising the NE/ SE/4 of said Section 7 that is:
- (a) no closer than 330 feet to the east, south, and west boundaries of said quarter-quarter section; and,
  - (b) is no closer than 240 feet to the northern boundary of said quarter-quarter section;
- (5) The operator shall comply with all requirements and conditions set forth in Division General Rule 111.E(2) and any applicable requirements in 111.D and F.
- (6) Form C-105 shall be filed in accordance with Division Rule 1105 and the operator shall indicate thereon true vertical depth (TVD) in addition to measured vertical depth (MVD).
- (7) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

  
WILLIAM J. LEMAY  
Director

SEAL

cc: Oil Conservation Division - Hobbs  
New Mexico State Land Office - Santa Fe

DD-TEX: H11

Rec: 6-26-97

Susp: 7-16-97

August 26, 1997

Released: 8-26-97

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

**Attention: C. Wade Howard**

197

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DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

WILLIAM J. LEMAY  
Director

S E A L

cc: Oil Conservation Division - Hobbs  
New Mexico State Land Office - Santa Fe



DD

7/16/97

Texaco Exploration  
and Production Inc

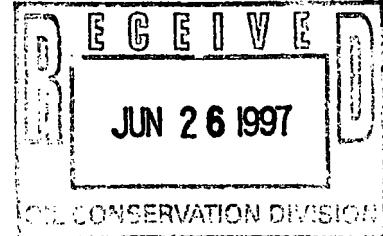
500 North Loraine  
Midland TX 79701

P O Box 3109  
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: NMOCDD, 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

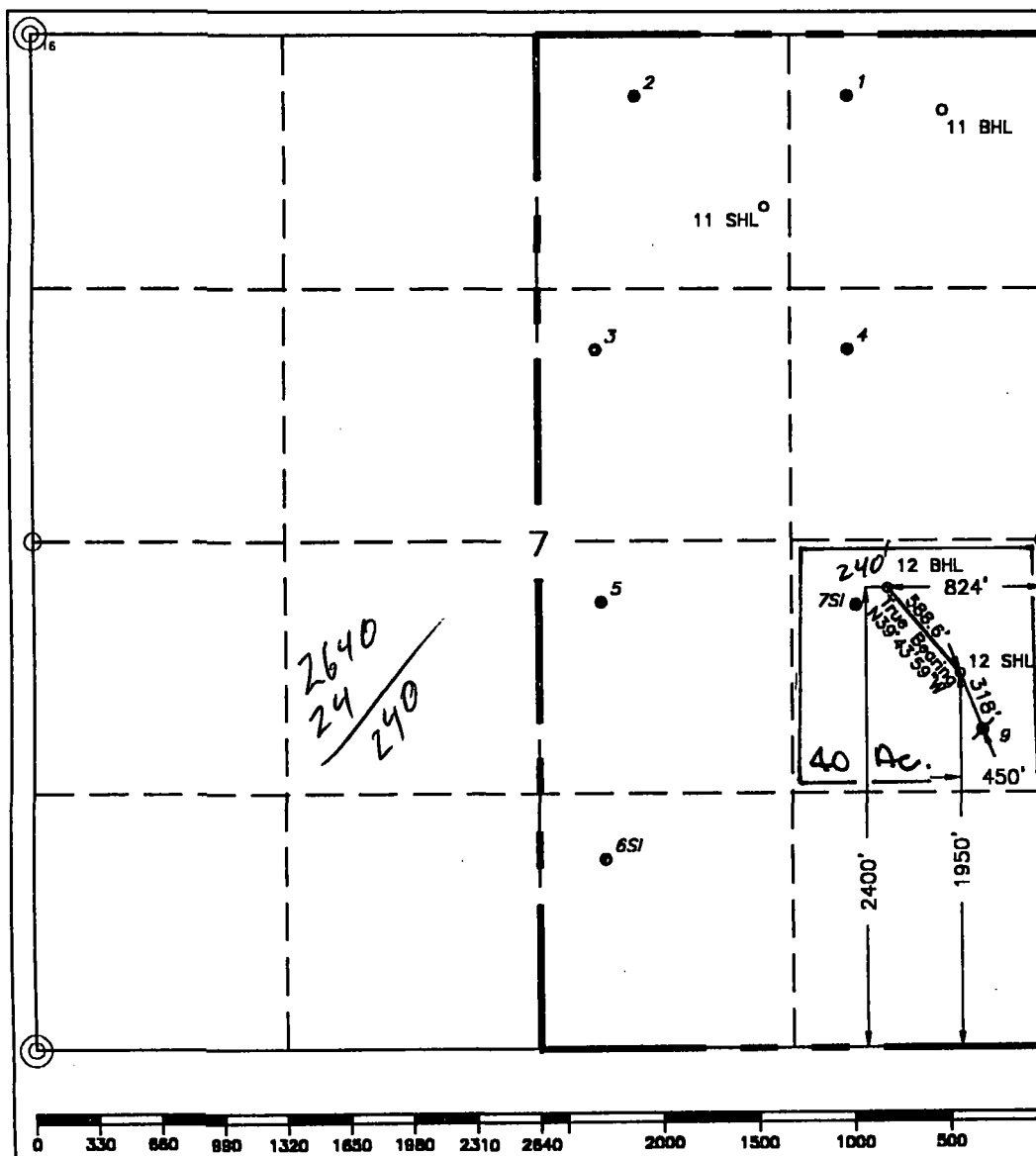
State Lease-4 copies  
Fee Lease-3 copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number		<sup>2</sup> Pool Code		<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> OGRID 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>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 Engineer's Assistant	
Company Texaco Expl. & Prod. Inc.	
Date June 12, 1997	
<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 June 4, 1997	
Signature & Seal of Professional Surveyor <i>John S. Piper</i>	
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 Loraine  
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. Wade Howard*

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**

- |                                                                    |                                               |
|--------------------------------------------------------------------|-----------------------------------------------|
| <input type="checkbox"/> Registered                                | <input checked="" type="checkbox"/> Certified |
| <input type="checkbox"/> Express Mail                              | <input type="checkbox"/> Insured              |
| <input checked="" type="checkbox"/> Return Receipt for Merchandise | <input type="checkbox"/> COD                  |

**7. Date of Delivery**

**5. Received By: (Print Name)**

**6. Signature: (Addressee or Agent)**

X

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

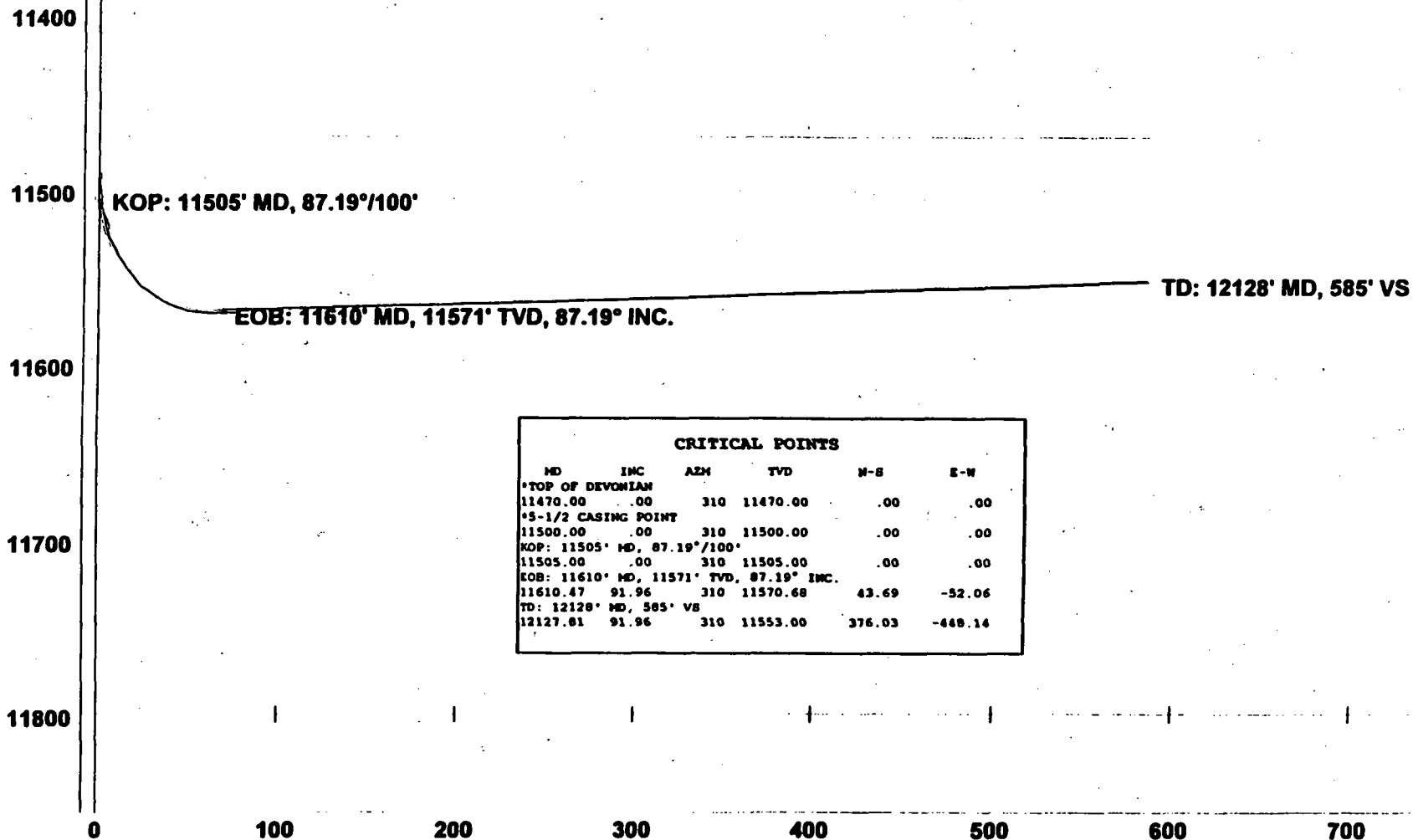
PS Form 3811, December 1994

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:\WINSERVE\NMSAN12.SVY  
 Date/Time: Wednesday, June 04, 1997

TRUE VERTICAL DEPTH (Ft)



CRITICAL POINTS					
MD	INC	AZM	TVD	N-S	E-W
*TOP OF DEVONIAN					
11470.00	.00	310	11470.00	.00	.00
*5-1/2 CASING POINT					
11500.00	.00	310	11500.00	.00	.00
KOP: 11505' MD, 87.19°/100'					
11505.00	.00	310	11505.00	.00	.00
EOB: 11610' MD, 11571' TVD, 87.19° INC.					
11610.47	91.96	310	11570.68	43.69	-52.06
TD: 12128' MD, 585' VS					
12127.81	91.96	310	11553.00	376.03	-448.14

-- PRELIMINARY WELL PLAN --

VERTICAL SECTION (Ft) @ 310.00°



Job Number: P97-255N

State/Country:

Company: TEXACO E &amp; P, INC.

Declination:

Lease/Well: NEW MEXICO STATE AN #18Brid:

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

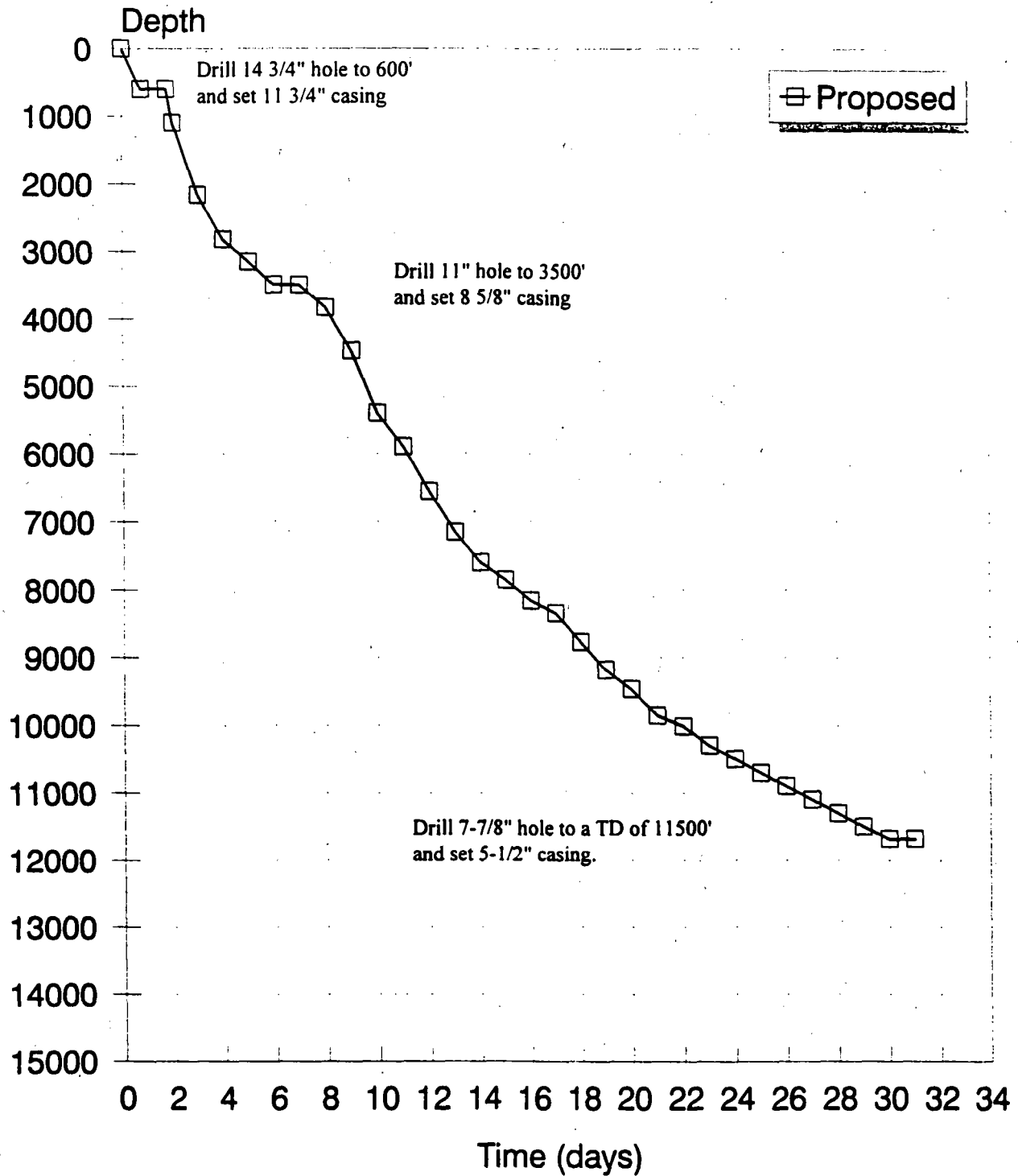
Vertical Section Plane 310.00

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



1400

1500

1600

1700

1800

151'

Woodford

11457  
3920  
-7487

Devonian

11608  
3920  
-7638

50' hi to Sinc #4403  
106' hi to T&P #117F  
87' hi to Sinc #1-4011  
224' hi to Humble #180

TD11833

DST #9 11634-11762

open 3 hrs weak to strong flow

off 3 hrs 10 min TSTM

recovered W/B 2000', 2800' oil

478' x 200' H.O. & G.C.D.M below

30" TSTP 4691 FSTP 4664

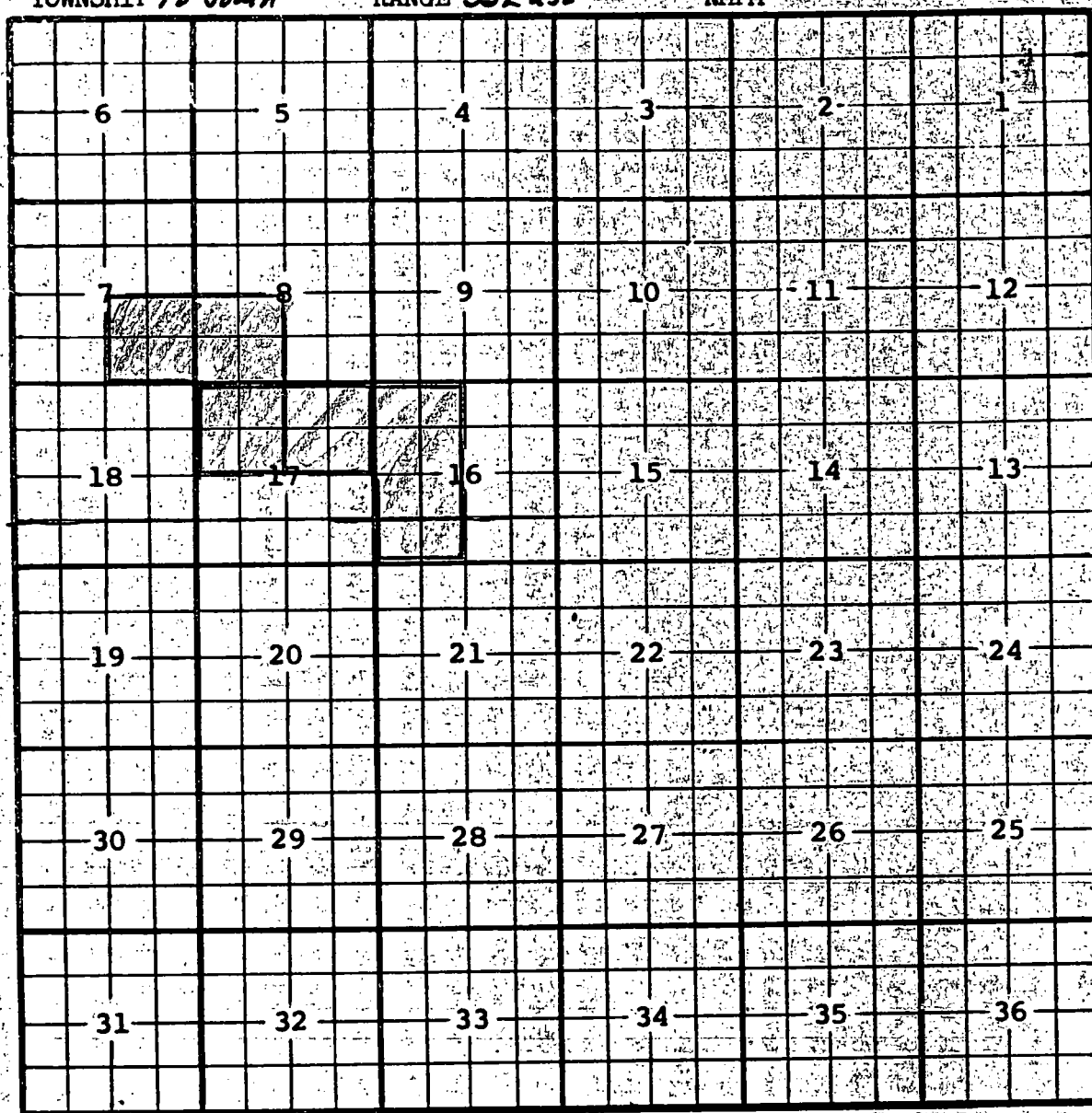
F 949 - 11639#

ST. AN' No. 8



COUNTY *Lea*POOL *Mid-Vacuum-Devonian*TOWNSHIP *18 South*RANGE *35 East*

NMFM



Description:  $\frac{NW}{4}$  Sec. 17 (R-2527, 8-1-63)

Ext:  $\frac{SE}{4}$  Sec. 7;  $\frac{SW}{4}$  Sec. 8 (R-2569, 10-1-63) -  $\frac{NE}{4}$  Sec. 17 (R-2651, 3-1-64)

Redesignated (R-3116, 10-1-66) Ext:  $\frac{W}{2}$  Sec. 16 (R-8125, 1-14-86)

CMD :  
OG5SECT

ONGARD  
INQUIRE LAND BY SECTION

08/26/97 18:22:20  
OGOMES -EMDV  
PAGE NO: 1

Sec : 07 Twp : 18S Rng : 35E Section Type : NORMAL

1 37.72 CS B01306 2 11/42 TEXACO EXPLORATIO U R P A A	C 40.00 CS B01306 2 11/42 TEXACO EXPLORATIO U R A A	B 40.00 CS E07653 3 12/63 TEXACO EXPLORATIO U R A A A	A 40.00 CS E07653 3 12/63 TEXACO EXPLORATIO R A
2 37.80 CS E06002 3 02/62 TOREADOR ROYALTY U R A P	F 40.00 CS E06002 3 02/62 TOREADOR ROYALTY U R A A	G 40.00 CS E07653 3 12/63 TEXACO EXPLORATIO R A	H 40.00 CS E07653 3 12/63 TEXACO EXPLORATIO R A

PF01 **HELP**  
PF07 **BKWD**

PF02  
PF08 **FWD**

PF03 **EXIT**  
PF09 **PRINT**

PF04 **GoTo**  
PF10 **SDIV**

PF05  
PF11

PF06  
PF12

CMD :  
OG5SECT

ONGARD  
INQUIRE LAND BY SECTION

08/26/97 18:22:49  
OGOMES -EMDV  
PAGE NO: 2

Sec : 07 Twp : 18S Rng : 35E Section Type : NORMAL

3 37.88 CS E06002 2 02/62 ORYX ENERGY CO R A	K 40.00 CS V04220 10/98 YATES PETROLEUM C R P	J 40.00 CS E07653 3 12/63 TEXACO EXPLORATIO R A A	I 40.00 CS E07653 3 12/63 TEXACO EXPLORATIO R A A
4 37.96 CS E06002 2 02/62 ORYX ENERGY CO R A	N 40.00 CS V04220 10/98 YATES PETROLEUM C R	O 40.00 CS E07653 3 12/63 TEXACO EXPLORATIO R A	P 40.00 CS E07653 3 12/63 TEXACO EXPLORATIO R A

PF01 HELP  
PF07 BKWD

PF02  
PF08 FWD

PF03 EXIT  
PF09 PRINT

PF04 GoTo  
PF10 SDIV

PF05  
PF11

PF06  
PF12

CMD :  
OG6C101

ONGARD  
C101-APPLICATION FOR PERMIT TO DRILL

08/26/97 17:47:07  
OGOMES -EMDV

OGRID Idn : 22351 API Well No: 30 25 34098 APD Status(A/C/P): A  
Opr Name, Addr: **TEXACO EXPLORATION & PRODUCTION** Aprvl/Cncl Date : 08-14-1997  
**205 EAST BENDER**  
**HOBBS,NM 88240**

Prop Idn: 11093 **STATE AN**

Well No: 12

	U/L	Sec	Township	Range	Lot	Idn	North/South	East/West
	---	---	-----	-----	-----	-----	-----	-----
Surface Locn :	I	7	18S	35E			FTG 1950 F S	FTG 450 F E
OCD U/L :	I		API County :	25				

Work typ(N/E/D/P/A) : N Well typ(O/G/M/I/S/W/C): O Cable/Rotary (C/R) : R  
Lease typ(F/S/P/N/J/U/I): S Ground Level Elevation : 3959

State Lease No: Multiple Comp (Y/N) : S  
Prpsd Depth : 12128 Prpsd Frmtn : DEVONIAN

**E0009: Enter data to modify record**

PF01 <b>HELP</b>	PF02	PF03 <b>EXIT</b>	PF04 <b>GoTo</b>	PF05	PF06 <b>CONFIRM</b>
PF07	PF08	PF09 <b>PRINT</b>	PF10 <b>C102</b>	PF11 <b>HISTORY</b>	PF12

WELL S T R	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC 1993	PROD	MP	ACCU
SINCLAIR OIL CORPORATION															
LEA 403 STATE															
1C2718535E OIL	PLUGGING APPROVED 1966														
TANARACK PETROLEUM COMPANY INCORPORATED															
ARCO STATE															
1F2718535E OIL	40 31 37 31 23 17 20 27 27 284F 33703														
GAS	573 509 477 373 324 234 244 212 197 3863 52107														
WAT	169 148 76 31 30 17 15 12 13 10 11 532 3530														
UNION OIL COMPANY OF CALIFORNIA															
SOUTH VACUUM UNIT 27															
112718535E OIL	PLUGGING APPROVED 1970														
GAS															
WAT															
YATES PETROLEUM CORPORATION															
HOUR GLASS STATE															
2N1018535E OIL	887 887P 887														
GAS	144 144 144														
WAT	137 137 137														
VACUUM BONE SPRING, WEST BS SR TO 9M															
KINDRED PETROLEUM CO.															
STATE M3															
2L 918534E OIL	PLUGGING APPROVED 1986														
GAS															
WAT															
SEELY OIL COMPANY															
STATE M3															
1K 918534E OIL	LAST PROD. DATE 03/91														
GAS															
WAT															
VACUUM CISCO PC 11M TO 12M															
MERIT ENERGY CO.															
PERMIAN STATE															
1M1817534E OIL	259	209	158			229	167	196	203	193	192	213	193	2212F	66132
GAS	487	448	251			223	243	287	361	261	262	242	261	3326	87562
WAT	9	25	93											127	2978
VACUUM DEVONIAN (ABANDONED) DV 12M TO 13M															
MARATHON OIL COMPANY															
MCALLISTER STATE															
5M2517534E OIL	ZONE ABANDONED														
GAS															
WAT															
MOBIL OIL CORPORATION															
BRIDGES STATE															
95P2617534E OIL	ZONE ABANDONED														
GAS															
WAT															
STATE CC COM															
1L3617534E OIL	ZONE ABANDONED														
GAS															
WAT															
COMPANY TOTAL OIL															
GAS															
WAT															
TEXACO INCORPORATED (BUCKEYE DISTRICT)															
NEW MEXICO STATE NCT 1															
11F3617534E OIL	ZONE ABANDONED														
GAS															
WAT															
17M3617534E OIL															
GAS	ZONE ABANDONED														
WAT															
COMPANY TOTAL OIL															
GAS															
WAT															
TIDEWATER OIL COMPANY															
STATE F															
6D3617534E OIL	ZONE ABANDONED														
VACUUM DEVONIAN, MID DM 11M TO 12M															
ATLANTIC RICHFIELD COMPANY															
LEA 403 STATE															
5F1718535E OIL	ZONE ABANDONED														
GAS															
WAT															
SETTY OIL COMPANY															
STATE AM															
8P 718535E OIL	PLUGGING APPROVED 1970														
GAS															
WAT															
9I 718535E OIL															
GAS	PLUGGING APPROVED 1970														
WAT															
COMPANY TOTAL OIL															
GAS															
WAT															
MARALO INC.															
MARALO SV 16 STATE															
1L1618535E OIL	RECOMPLETED TO LEA UND GROUP 3														
GAS															
WAT															
PENROC OIL CORPORATION															
LEA 403 STATE															
6B1718535E OIL	759	577	717	687	719	681	597	440	116	611	510	103	6517P	403559	
GAS	257	203	262	266	246	313	264	204	61	217	163	33	2511	89655	
WAT	15000	13552	15004	14320	15004	14520	15004	15004	14320	15004	14320	15004	176656	2079096	
LEA 4011 STATE															
1M 818535E OIL	LAST PROD. DATE 04/92														
GAS															
WAT															
STATE AF															
1M 818535E OIL	695	668	731	683	945	724	794	767	727	781	635	531	8681P	86510	
GAS	483	544	570	688	566	563	549	606	653	553	606	251	6632	48431	
WAT	45450	41050	62000	60000	62000	60000	62000	62000	60000	62000	60000	62000	698500	3317759	
COMPANY TOTAL OIL															
GAS	1434	1245	1448	1370	1664	1405	1391	1207	843	1392	1145	634	15198	951335	
WAT	740	747	832	954	812	876	813	810	714	770	769	306	9143	274187	
TEXAS PACIFIC OIL COMPANY INC															
STATE AF															
1M 818535E OIL	ZONE ABANDONED														
GAS															
WAT															
VACUUM DEVONIAN, SOUTH DV 11M TO 12M															
ATLANTIC RICHFIELD COMPANY															
LEA 403 STATE															
5M2218535E OIL	RECOMPLETED TO LEA UND GROUP 1														
GAS															
WAT															
8K2218535E OIL															
GAS	PLUGGING APPROVED 1975														
WAT															
COMPANY TOTAL OIL															
GAS															
WAT															



Texaco Exploration  
and Production Inc

500 North Loraine  
Midland TX 79701

P O Box 3109  
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

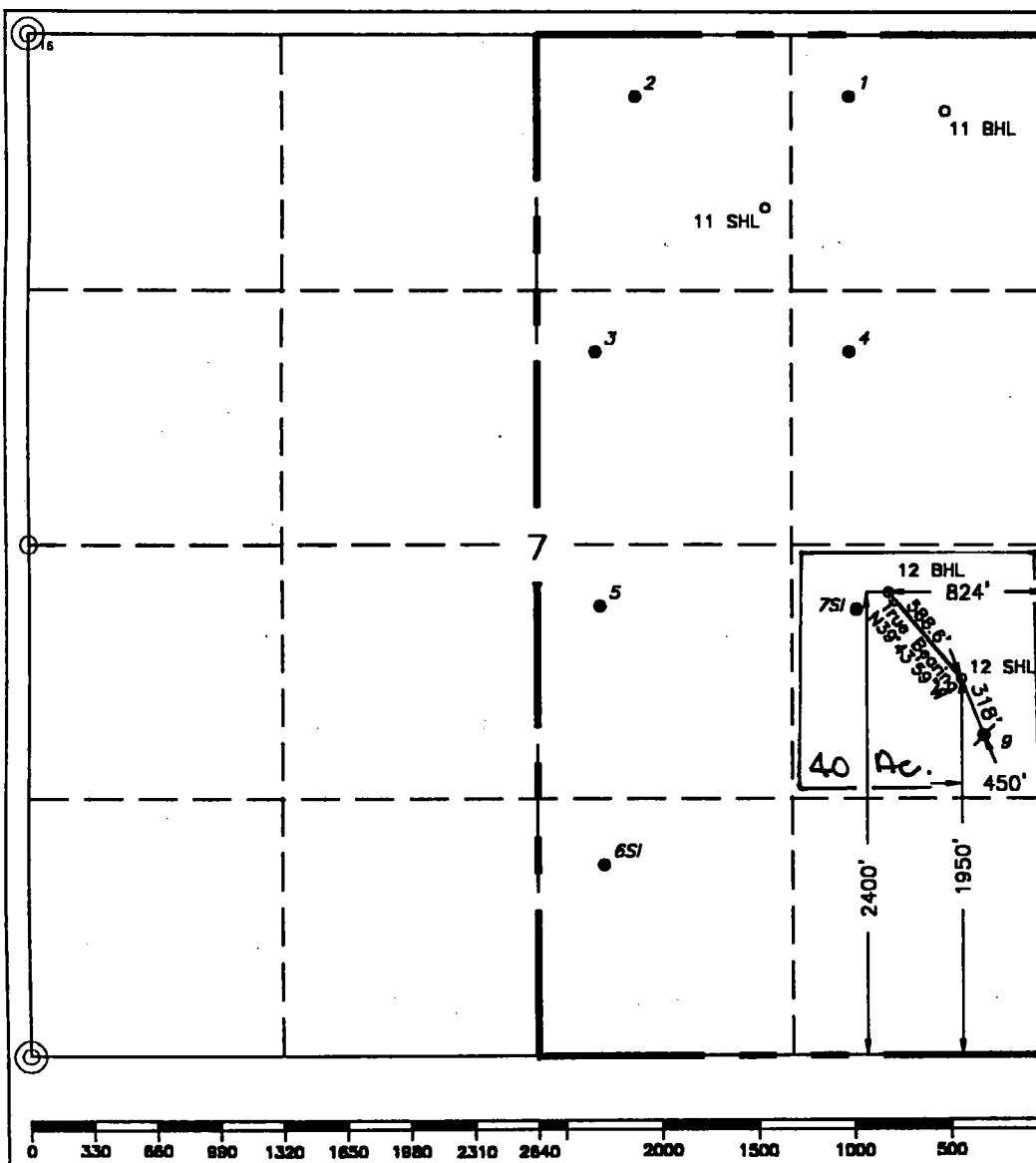
State Lease-4 copies  
Fee Lease-3 copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number		<sup>2</sup> Pool Code		<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> OGRID 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	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	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>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

C. Wade Howard

Printed Name

C. Wade Howard

Position

Engineer's Assistant

Company

Texaco Expl. & Prod. Inc.

Date

June 12, 1997

<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

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 Loraine  
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. Wade Howard*

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)**

X

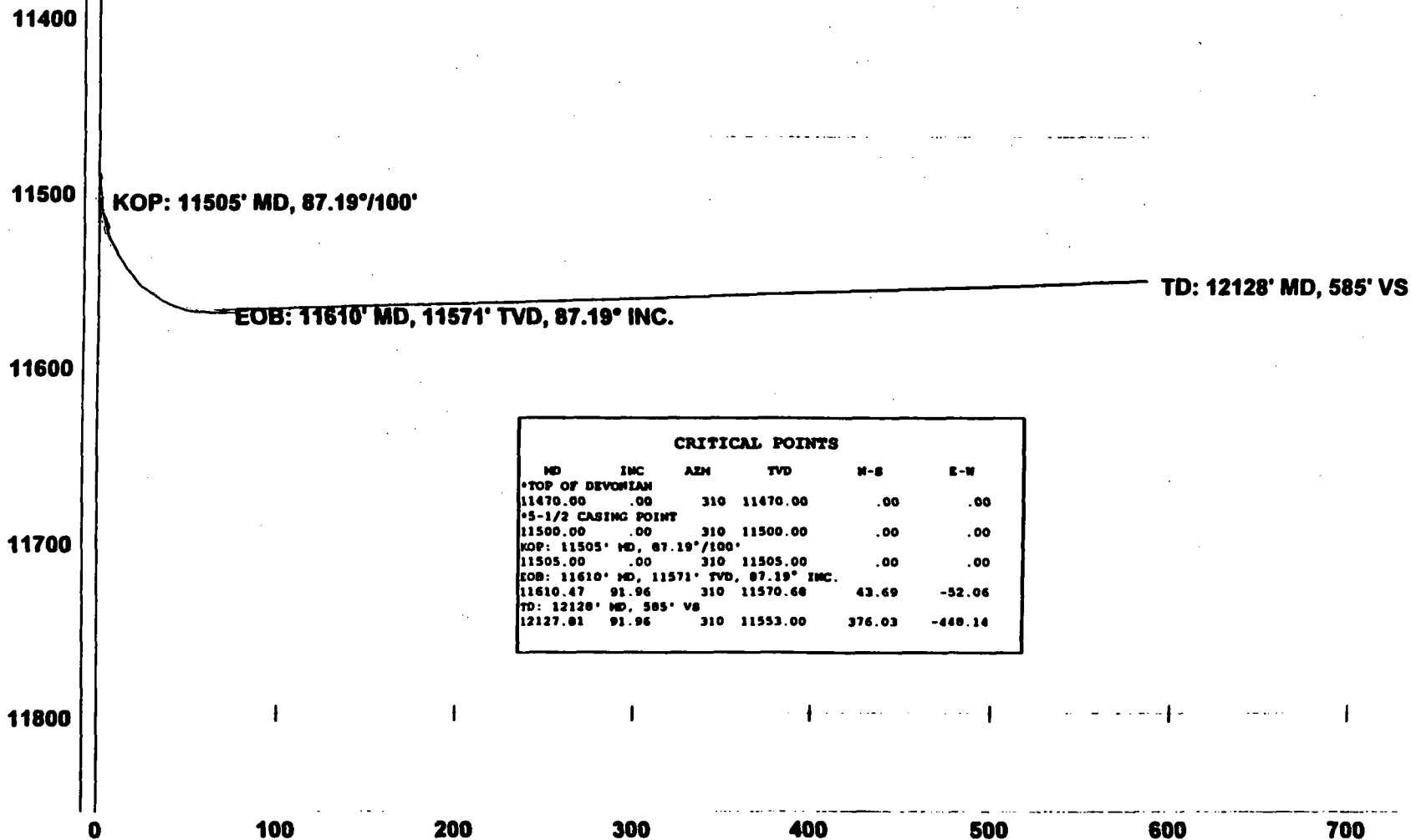
**8. Addressee's Address (Only if requested and fee is paid)**

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:\WINSERVE\NMSAN12.SVY  
 Date/Time: Wednesday, June 04, 1997



CRITICAL POINTS					
MD	INC	AZM	TVD	N-S	E-W
*TOP OF DEVONIAN					
11470.00	.00	310	11470.00	.00	.00
*5-1/2 CASING POINT					
11500.00	.00	310	11500.00	.00	.00
KOP: 11505' MD, 87.19°/100'					
11505.00	.00	310	11505.00	.00	.00
EOB: 11610' MD, 11571' TVD, 87.19° INC.					
11610.47	91.96	310	11570.68	43.69	-52.06
TD: 12128' MD, 585' VS					
12127.81	91.96	310	11553.00	376.03	-448.14

-- PRELIMINARY WELL PLAN --

VERTICAL SECTION (Ft) @ 310.00°



Job Number: P97-255N

State/Country:

Company: TEXACO E &amp; P, INC.

Declination:

Lease/Well: NEW MEXICO STATE AN #10rid:

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

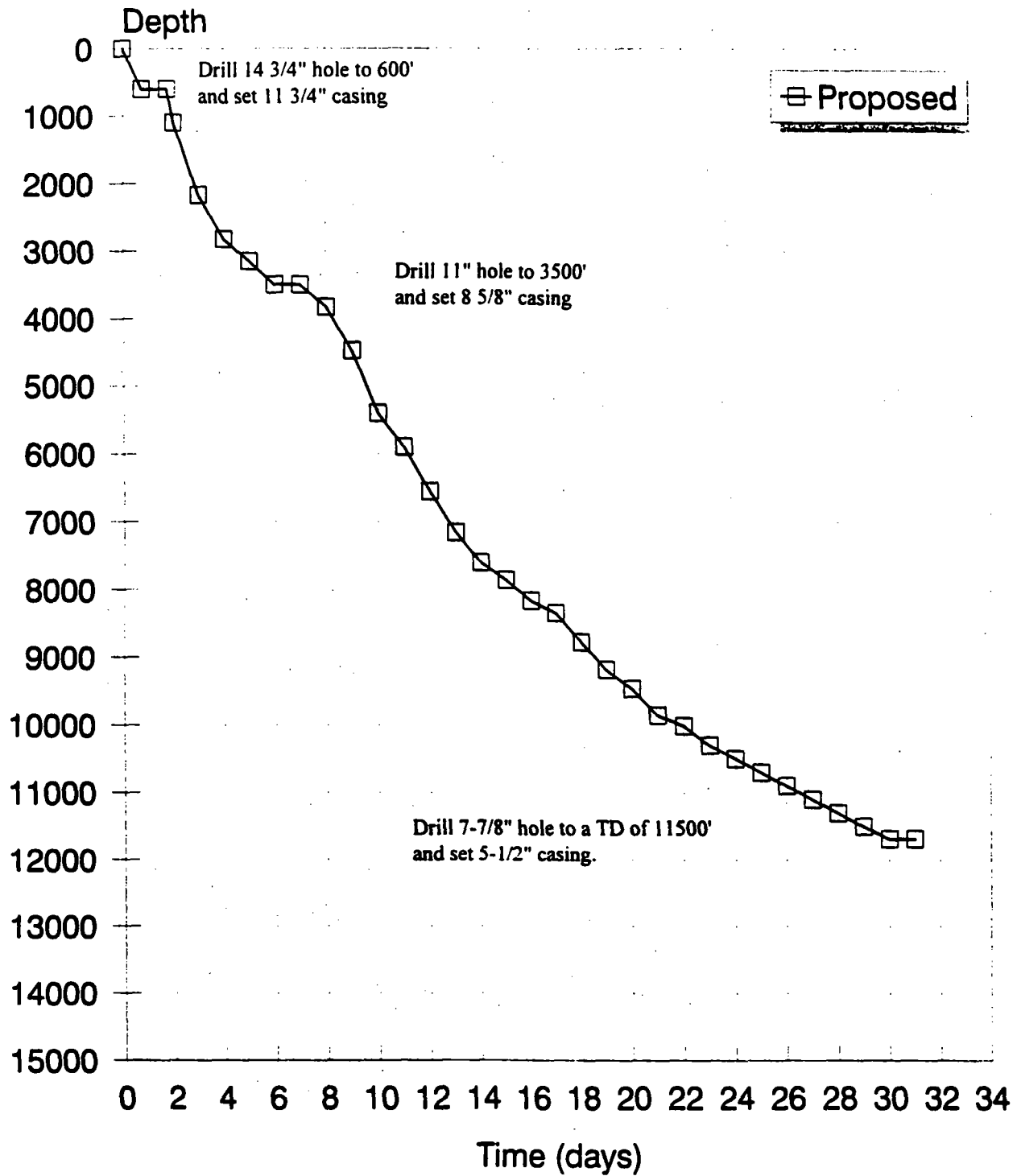
Minimum Curvature Method

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



Woodford

11457  
3970  
-7487

151'

Devonian

11608  
3970  
-7638

58' hi to Sine #4-403  
106' lo to T&P #18F  
87' lo to Sine #1-4011  
224' hi to Humble #18U

TD11833

DST #9 11634-11762

open 3 hrs weak to strong blow  
GFS 3 hrs 10 min TSTM  
recovered W/B 2000', 2800' oil  
478' TY 200' A+O = GCDM below  
30" ISEP 4691 FSEP 4664  
F 949-11639#

ST. AN' No. 8