



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.

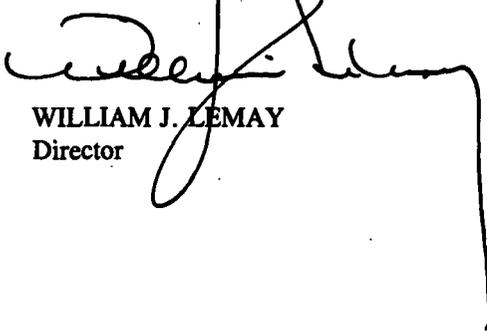
PROVIDED FURTHER THAT during or upon completion of said directional drilling operations, the applicant shall conduct an accurate wellbore survey from the kick-off point to total depth in order that the subsurface bottomhole location, as well as the wellbore's true depth and course, may be determined.

(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

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

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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

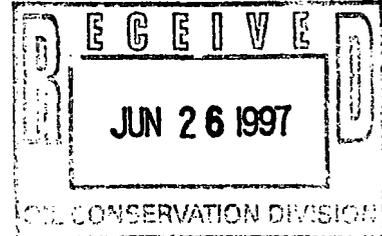
500 North Loraine
Midland TX 79701

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: NMOC, 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

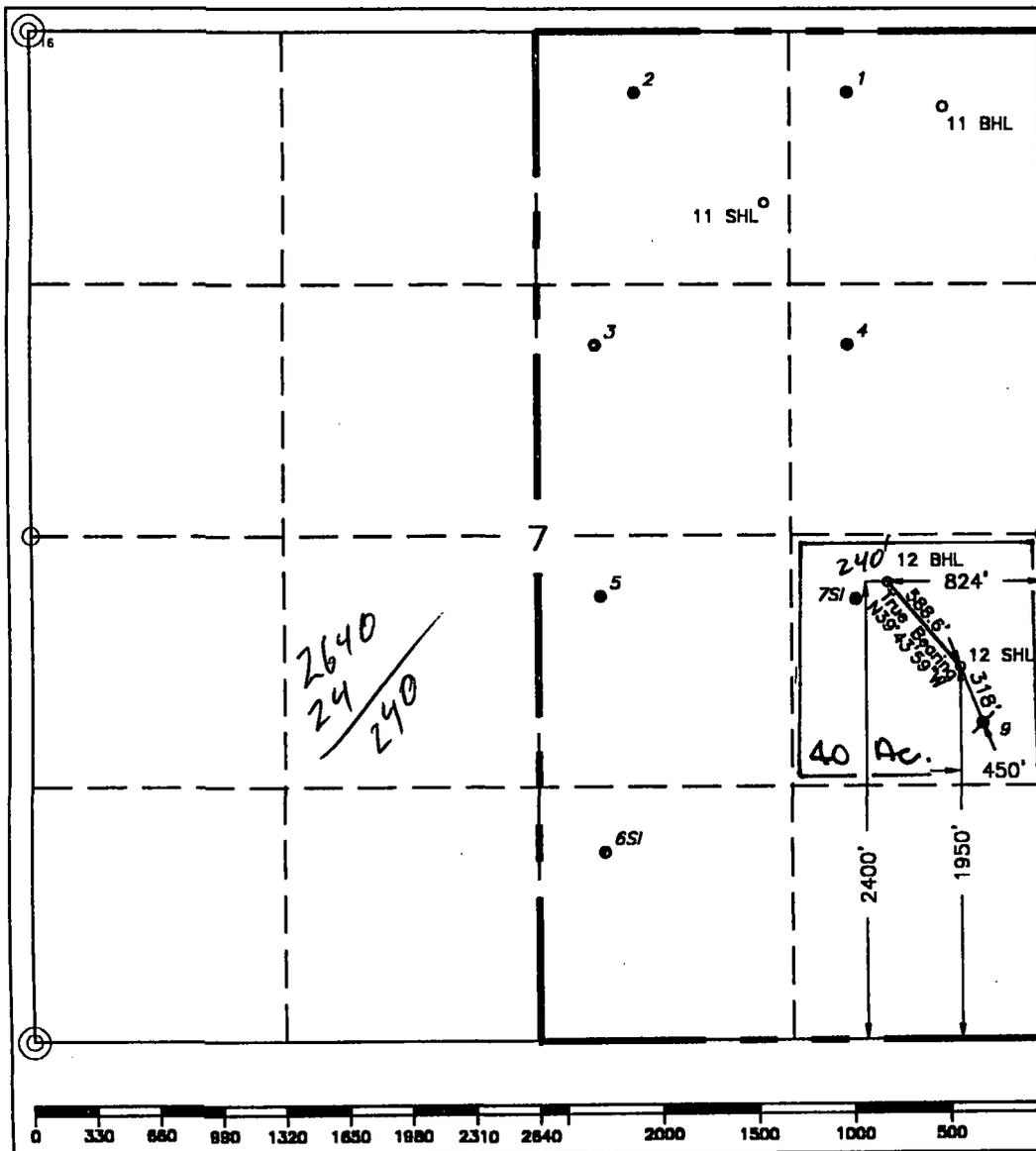
¹ API Number		² Pool Code		³ Pool Name	
				Vacuum; Devonian, Mid	
⁴ Property Code 11093		⁵ Property Name State "AN"			⁶ Well Number 12
⁷ OGRID No. 22351		⁸ Operator Name TEXACO EXPLORATION & PRODUCTION, INC.			⁹ Elevation 3959'

¹⁰ Surface Location									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	7	18-S	35-E		1950'	South	450'	East	Lea

¹¹ 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	County
1	7	18-S	35-E		2400'	South	824'	East	Lea

¹² Dedicated Acres 40	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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.



¹⁶ 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

¹⁷ 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: *John S. Piper*

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. 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)

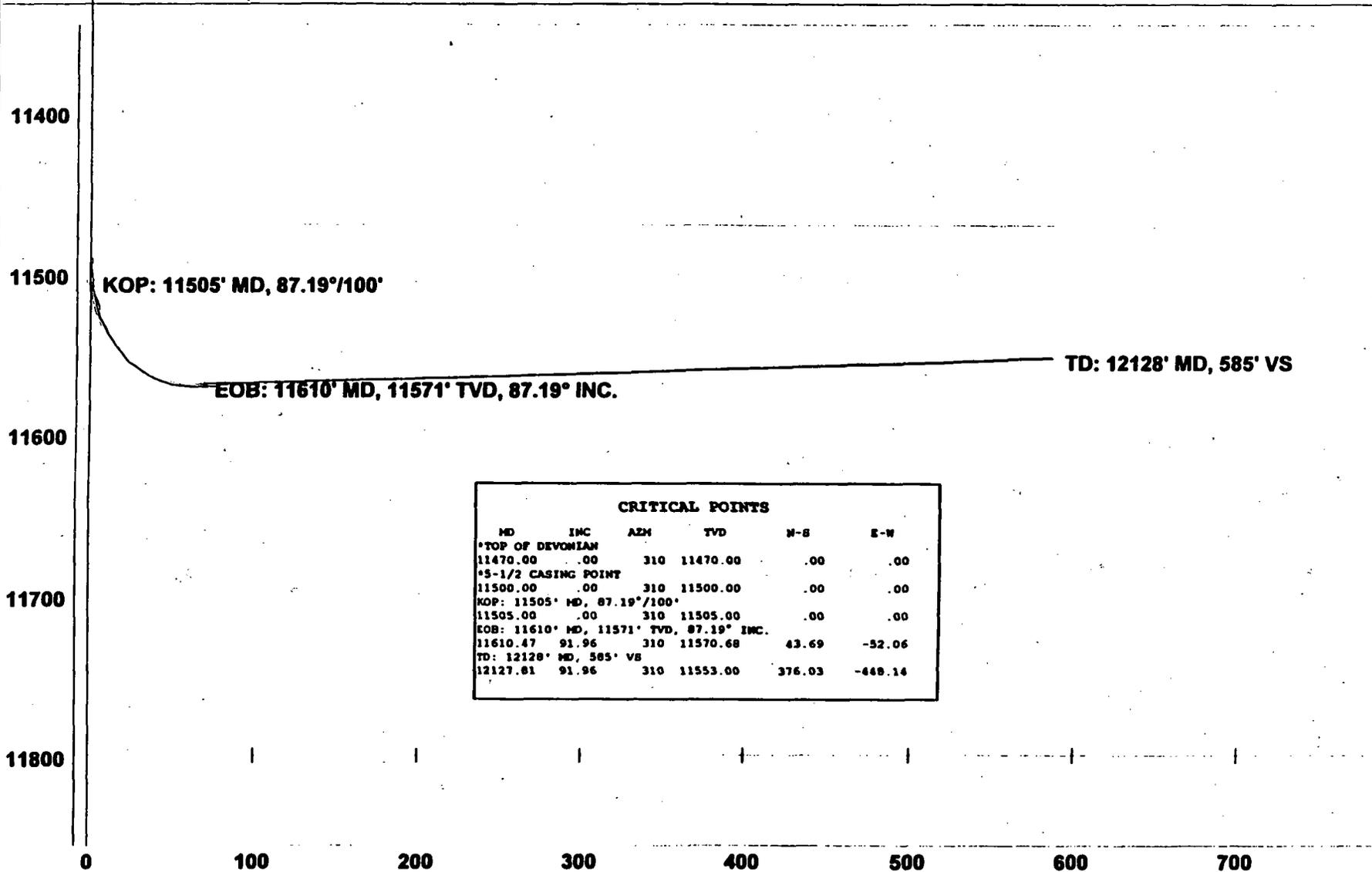
[Handwritten Signature]
 12/21/97

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

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	AZN	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
 Company: TEXACO E & P, INC.
 Lease/Well: NEW MEXICO STATE AN #10
 Location: LEA CO., NEW MEXICO
 Rig Name:
 RKB:
 G.L. or M.S.L.:

State/Country:
 Declination:
 Grid:
 File name: C:\WINSERVE\NMSAN12.SVY
 Date/Time: 04-Jun-97 / 13:41
 Curve Name: PRELIMINARY WELL PLAN

PHOENIX DRILLING SERVICES, INC.

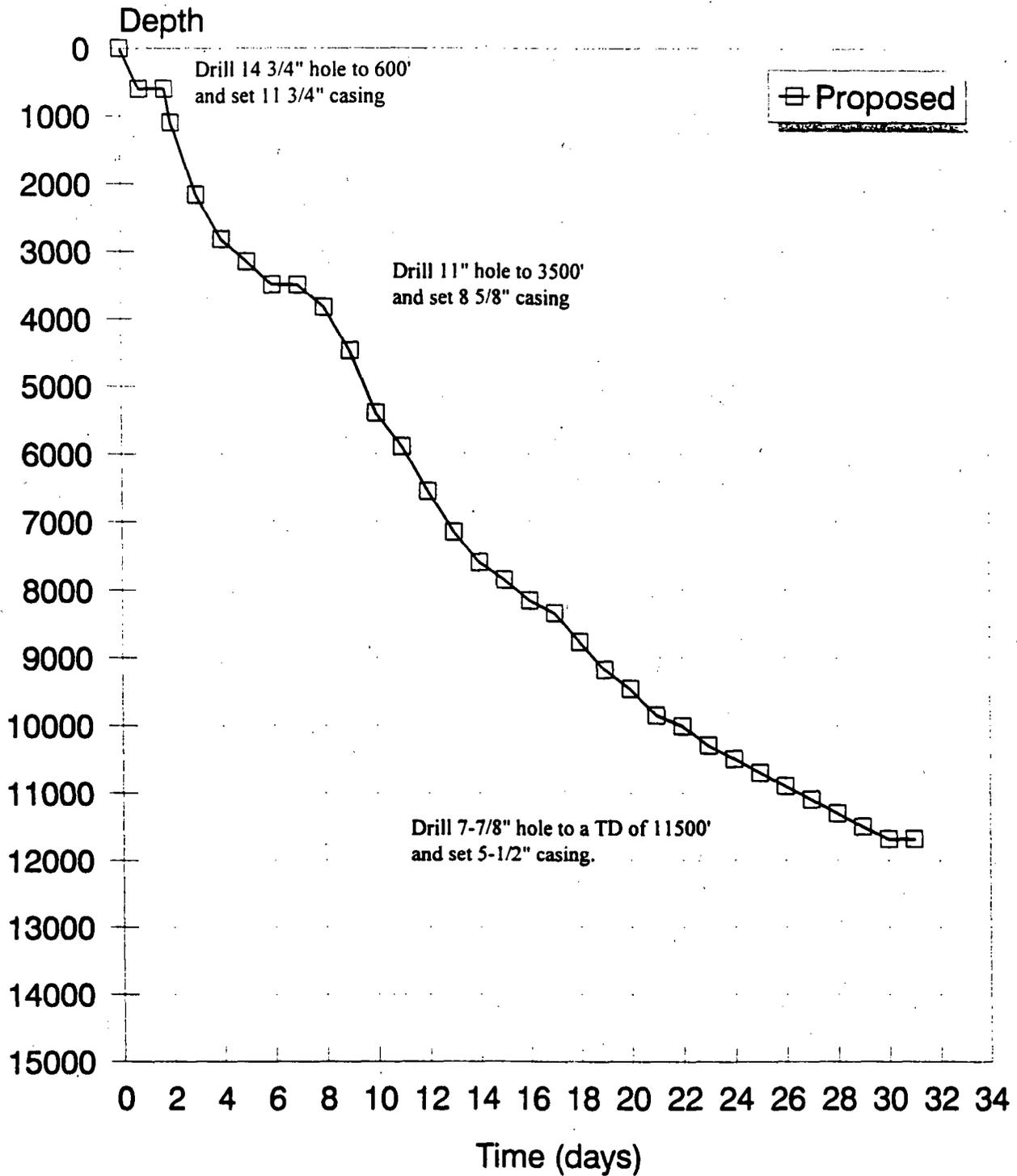
WINSERVE SURVEY CALCULATIONS
 Minimum Curvature Method
 Vertical Section Plane 310.00

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
TOP OF DEVONIAN									
11470.00	.00	310.00	11470.00	.00	.00	.00	.00	.00	.00
5-1/2 CASING POINT									
11500.00	.00	310.00	11500.00	.00	.00	.00	.00	.00	.00
KOP: 11505' MD, 87.19°/100'									
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
EOB: 11610' MD, 11571' TVD, 87.19° INC.									
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
TD: 12128' MD, 585' VS									
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'



9

TD 11833

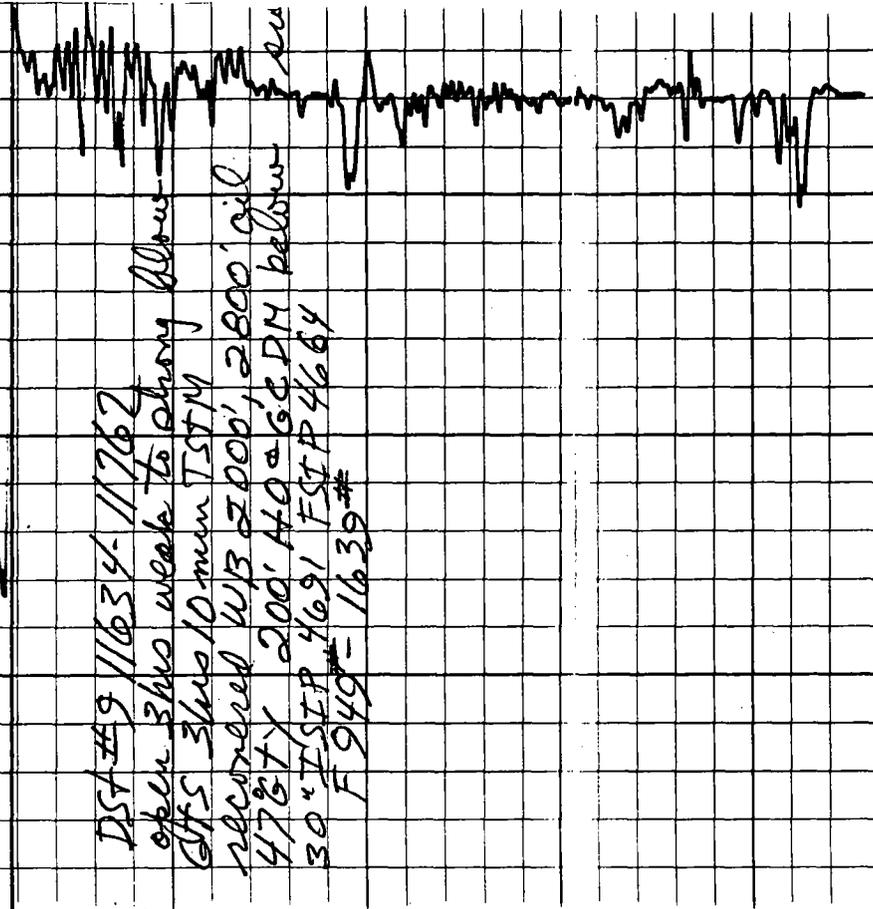
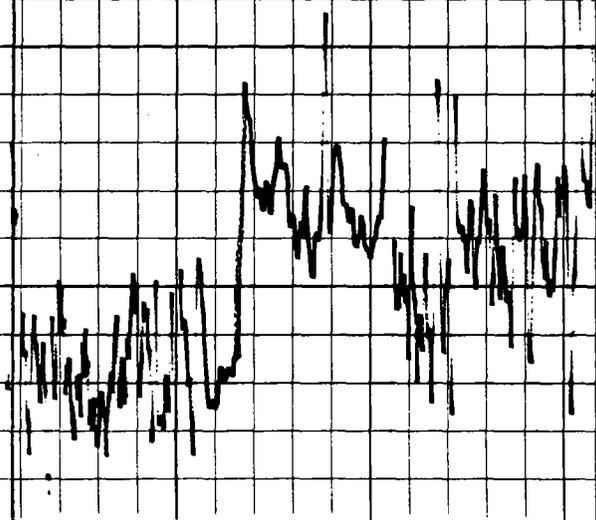
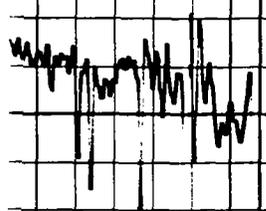
Woodford

11457
3970
-7487

Devonian

11608
3970
-7638

50' hi to Sunc #4403
106' hi to T.P. #1AF
87' hi to Sunc #1-4011
204' hi to Humble #180



DST #9 11634-11762
open 3 hrs weak to strong flow
GFS 3 hrs 10 min TSTM
recovered W/B 2000', 2800' oil
47% ty 200' A.O. G.C.D.M below
30" TSTP #4691 FSTP 4664
F 949-11639#

ST. AN' No. 8

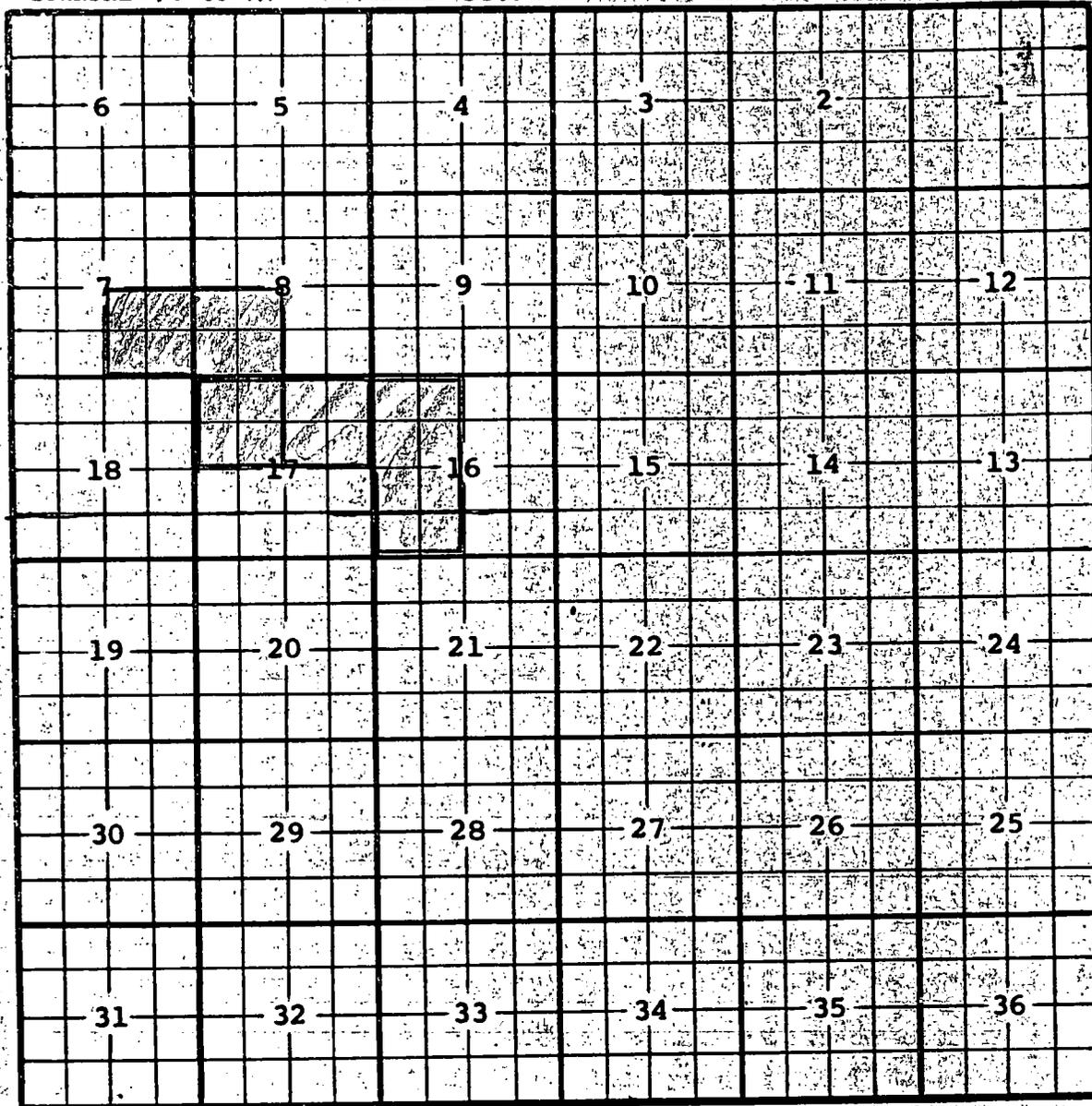
COUNTY *Lea*

POOL *Mid-Vacuum-Devonian*

TOWNSHIP *18 South*

RANGE *35 East*

NMPM



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, 1-14-66)

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 PF02 PF03 EXIT PF04 GoTo PF05 PF06
PF07 BKWD PF08 FWD PF09 PRINT PF10 SDIV PF11 PF12

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

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

PF01 HELP PF02 PF03 EXIT PF04 GoTo PF05 PF06
PF07 BKWD PF08 FWD PF09 PRINT PF10 SDIV PF11 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 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06 CONFIRM
PF07	PF08	PF09 PRINT	PF10 C102	PF11 HISTORY	PF12

WELL S T R	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC 1993	PROD	NP	ACCU														
SINCLAIR OIL CORPORATION																													
LEA 405 STATE																													
1C2718535E OIL	PLUGGING APPROVED 1966														2142														
TAMARACK PETROLEUM COMPANY INCORPORATED																													
ARCO STATE																													
1F2718535E OIL	68	225	40	31	37	31	31	23	17	20	27	27	284F	33703	33703														
GAS			523	513	509	417	375	324	254	244	212	197	3863	38184	38184														
WAT	169	148	76	31	30	17	15	12	13	10		11	532	532	3350														
UNION OIL COMPANY OF CALIFORNIA																													
SOUTH VACUUM UNIT 27																													
112718535E OIL	PLUGGING APPROVED 1970														35750														
GAS															10989														
WAT															8626														
YATES PETROLEUM CORPORATION																													
HOOR GLASS STATE																													
2M1018535E OIL															887P	887													
GAS															144	144													
WAT															137	137													
VACUUM BONE SPRING, WEST 05 08 TO 9M																													
KINDRED PETROLEUM CO.																													
STATE MS																													
2L 918534E OIL	PLUGGING APPROVED 1986														81														
GAS															358														
WAT															5312														
SEELY OIL COMPANY																													
STATE MS																													
1E 918534E OIL	LAST PROD. DATE 03/91														8	79216													
GAS																73427													
WAT																103231													
VACUUM CISCO PC 11M TO 12M																													
MERIT ENERGY CO.																													
PENNSIL STATE																													
1M1817534E OIL	259	209		158	229	167	196	203	193	192	213	193	2212F	66132	66132														
GAS	487	448		251	223	243	287	361	261	262	242	261	3326	87562	87562														
WAT	9	25		93									127	2978	2978														
VACUUM DEVONIAN (ABANDONED) DV 12M TO 13M																													
MARATHON OIL COMPANY																													
MCCALLISTER STATE																													
5M2517534E OIL	ZONE ABANDONED														7471														
GAS															24714														
WAT															9071														
MOBIL OIL CORPORATION																													
BRIDGES STATE																													
95P2617534E OIL	ZONE ABANDONED														37333														
GAS															171128														
WAT															1088														
STATE CC COM																													
1L3617534E OIL	ZONE ABANDONED														8909														
GAS															22946														
WAT															1766														
COMPANY TOTAL OIL																46242													
GAS															194074														
WAT															2854														
TEXACO INCORPORATED (BUCKEYE DISTRICT)																													
NEW MEXICO STATE NCT 1																													
11F3617534E OIL	ZONE ABANDONED														349439														
GAS															434709														
WAT															480700														
17M3617534E OIL	ZONE ABANDONED														142107														
GAS															302265														
WAT															24359														
COMPANY TOTAL OIL																491546													
GAS															734974														
WAT															505259														
TIDEWATER OIL COMPANY																													
STATE F																													
6D3617534E OIL	ZONE ABANDONED														778														
VACUUM DEVONIAN, MID DM 11M TO 12M																													
ATLANTIC RICHFIELD COMPANY																													
LEA 403 STATE																													
5F1718535E OIL	ZONE ABANDONED														163575														
GAS															40747														
WAT															721783														
BETTY OIL COMPANY																													
STATE W																													
8P 718535E OIL	PLUGGING APPROVED 1970														154326														
GAS															50931														
WAT															362233														
9I 718535E OIL	PLUGGING APPROVED 1970														71811														
GAS															21558														
WAT															69384														
COMPANY TOTAL OIL																226137													
GAS															72489														
WAT															431619														
MARALO INC.																													
MARALO SV 16 STATE																													
1L1618535E OIL	RECOMPLETED TO LEA UND GROUP 3														90077														
GAS															2347														
WAT															3093744														
PENROC OIL CORPORATION																													
LEA 403 STATE																													
6B1718535E OIL	759	577	717	687	719	681	597	440	116	611	510	103	6517P	403559	403559														
GAS	257	203	262	266	246	313	264	204	61	217	163	53	2511	89655	89655														
WAT	15000	13552	19004	14320	15004	14320	15004	13004	14520	15004	14520	15004	176656	2079096	2079096														
LEA 4011 STATE																													
1M 818535E OIL	LAST PROD. DATE 04/92														8	461266													
GAS																136081													
WAT																10338992													
STATE AF																													
1M 818535E OIL	695	668	731	683	945	724	794	767	727	781	635	531	8681P	86510	86510														
GAS	483	564	570	688	566	563	549	606	653	553	606	251	6632	48451	48451														
WAT	45450	41050	62000	60000	62000	60000	62000	62000	60000	62000	60000	62000	698500	3317779	3317779														
COMPANY TOTAL OIL																1454	1245	1448	1370	1664	1405	1391	1207	843	1392	1145	634	15198	95135
GAS	740	747	832	934	812	876	813	810	714	770	769	306	9143	274187	274187														
WAT	60450	54602	77004	74520	77004	74520	77004	77004	74520	77004	74520	77004	875156	5735867	5735867														
TEXAS PACIFIC OIL COMPANY INC																													
STATE AF																													
1M 818535E OIL	ZONE ABANDONED														275974														
GAS															88196														
WAT															1410696														
VACUUM DEVONIAN, SOUTH DV 11M TO 12M																													
ATLANTIC RICHFIELD COMPANY																													
LEA 403 STATE																													
3M2218535E OIL	RECOMPLETED TO LEA UND GROUP 1														517362														
GAS															46021														
WAT															2870533														
8K2218535E OIL	PLUGGING APPROVED 1975														28155														
GAS															2262														
WAT															25977														
COMPANY TOTAL OIL																545517													
GAS															48283														
WAT															2896510														



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

WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPORT

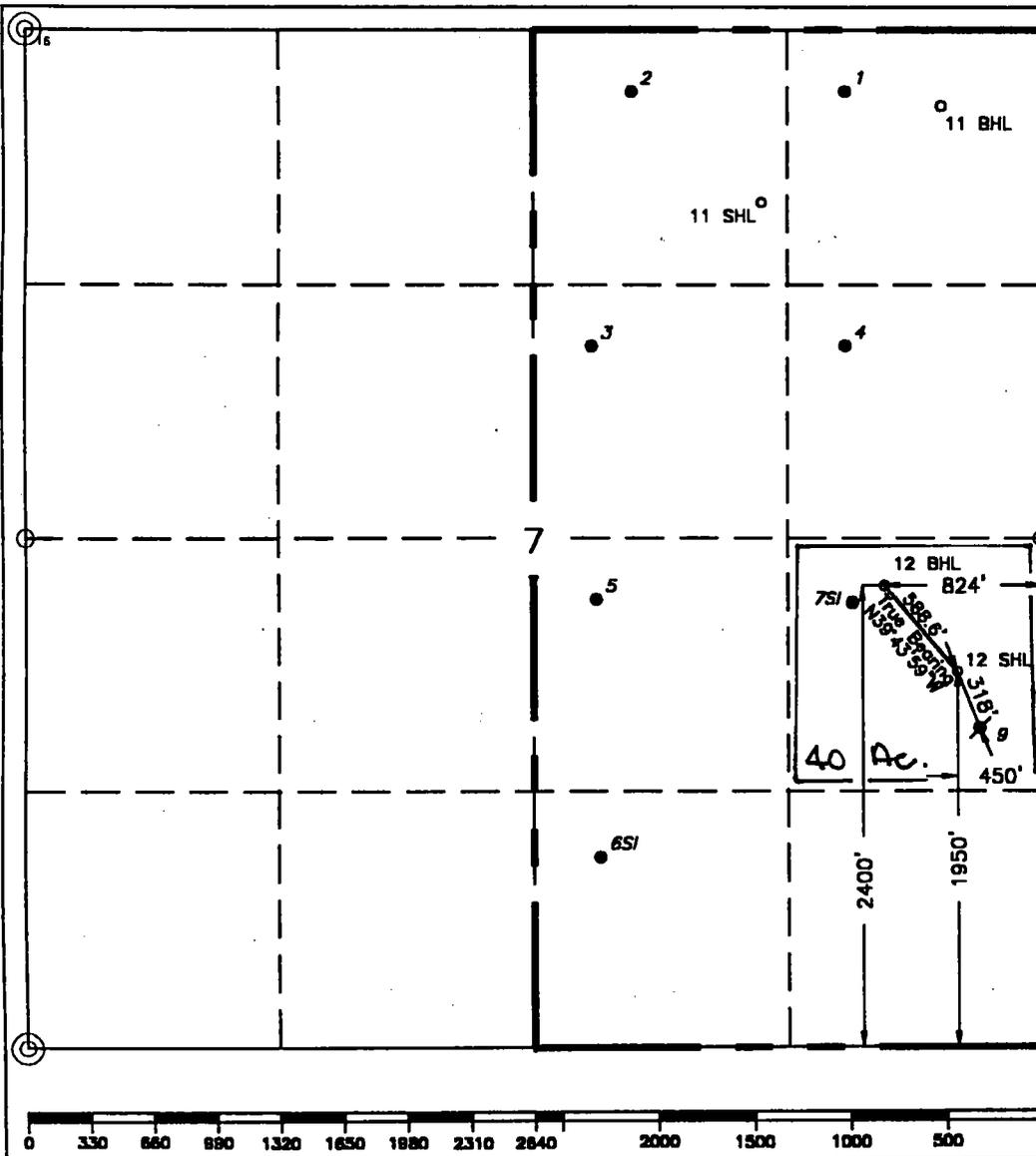
¹ API Number		² Pool Code		³ Pool Name	
				Vacuum; Devonian, Mid	
⁴ Property Code 11093		⁵ Property Name State "AN"			⁶ Well Number 12
⁷ OGRID No. 22351		⁸ Operator Name TEXACO EXPLORATION & PRODUCTION, INC.			⁹ Elevation 3959'

¹⁰ Surface Location									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	7	18-S	35-E		1950'	South	450'	East	Lea

¹¹ 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	County
1	7	18-S	35-E		2400'	South	824'	East	Lea

¹² Dedicated Acres 40	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ 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.



¹⁶ 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
¹⁷ 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. 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)

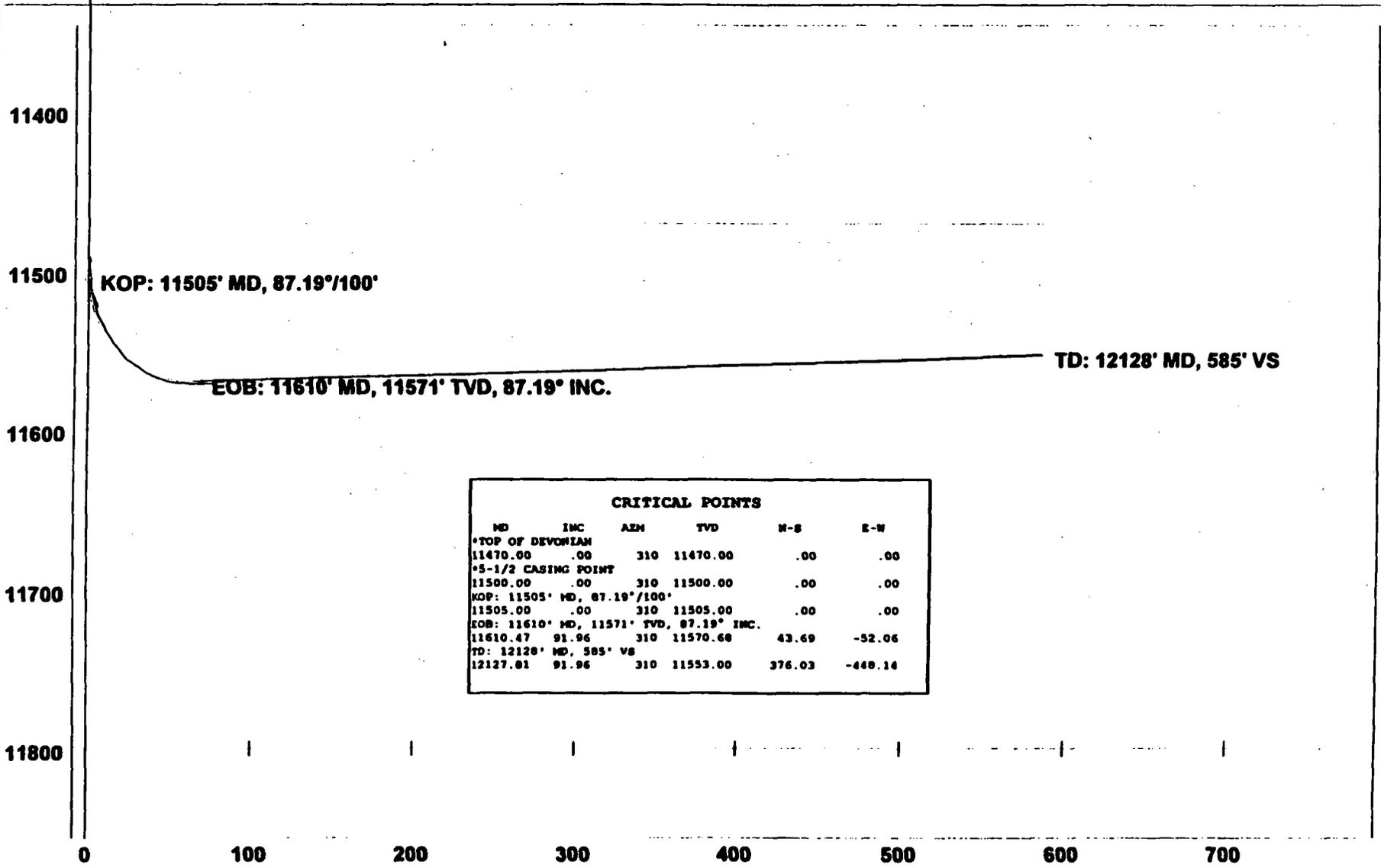
6. Signature: (Addressee or Agent)

[Handwritten Signature]
 10/21/97

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

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 & 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.

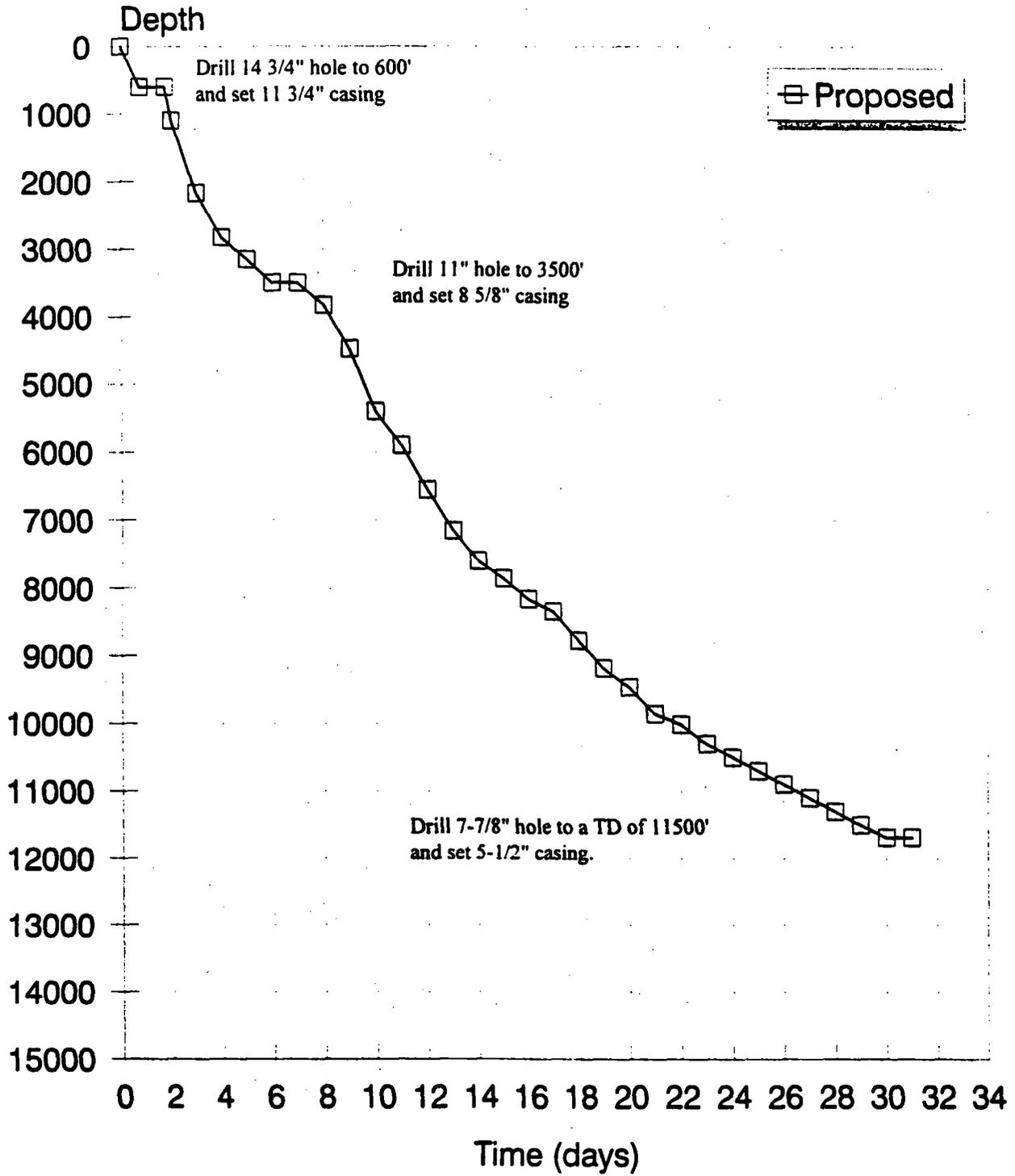
WINSERVE SURVEY CALCULATIONS

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
TOP OF DEVONIAN									
11470.00	.00	310.00	11470.00	.00	.00	.00	.00	.00	.00
5-1/2 CASING POINT									
11500.00	.00	310.00	11500.00	.00	.00	.00	.00	.00	.00
KOP: 11505' MD, 87.19°/100'									
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
EOB: 11610' MD, 11571' TVD, 87.19° INC.									
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
TD: 12128' MD, 585' VS									
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

1400
1500
151'
1600

Devonian

11608
3970
-7638

58' hi to Sine #4403
106' lo to T&P #187F
87' lo to Sine #1-4011
204' hi to Humble #180

1700
1800

TD11833

DST #9 11634-11762
open 3 hrs weak to strong blow
GTS 3 hrs 10 min TSTM
recovered W/B 2000', 2800' oil
47% TY 200' H₂O @ GCDM below
30" ISEP 4691 FSEP 4664
F 949 - 11639#

ST. AN' No. 8