

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

¹ Operator Name and Address TEXACO EXPLORATION & PRODUCTION INC. 205 E. Bender, HOBBS, NM 88240		² OGRID Number 022351
³ API Number 3002524112		⁶ Well No. 5
⁴ Property Code 11123	⁵ Property Name NORTH VACUUM ABO WEST UNIT	

⁷ Surface Location									
UI or lot no.	Section	Township	Range	Lot.Idn	Feet From The	North/South Line	Feet From The	East/West Line	County
D	22	17S	34E		660	NORTH	660	WEST	LEA

⁸ 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
N	15	17S	34E		522'	South	2055'	West	Lea
⁹ Proposed Pool 1 Vacuum Abo, North (unitized)					¹⁰ Proposed Pool 2				

¹¹ Work Type Code P	¹² WellType Code O	¹³ Rotary or C.T. R	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 4048
¹⁶ Multiple No	¹⁷ Proposed Depth 8852	¹⁸ Formation ABO	¹⁹ Contractor Yale E Key	²⁰ Spud Date 04/02/98

²¹ Proposed Casing and Cement Program

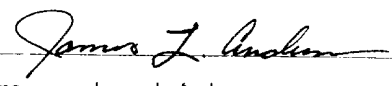
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
No Change					

²² 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.

Objective: Texaco intends to directionally drill a 1848' horizontal lateral northeast from the subject well.
1. MIRU pulling unit. POH with production equipment.
2. Run in hole with kickoff plug and whipstock. Run GYRO survey to orient the whipstock at 45 deg.
3. Run in hole with mill, motor, collars and drill pipe. Mill window in casing. Build radius at 40 deg per 100'.
4. Directionally drill NE lateral to the proposed bottomhole location 1848' away. TOH with equipment.
5. Retrieve whipstock and plug.
6. Acidize lateral using 60 gal per foot of pay.
7. Run production equipment and return to production.

Permit Expires 1 Year From Approval
Date Unless Dating Otherwise
Directionally

²³ 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 

Printed Name James L. Anderson

Title Prod. Engineer

Date 3/30/98

Telephone 397-0420

OIL CONSERVATION DIVISION

Approved By: ORIGINAL SIGNED BY

GARY WINK

Title: FIELD REP. #

Approval APR 03 1998

Expiration Date:

Conditions of Approval:

Attached ☐

DISTRICT I

P.O. Box 1970, 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-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 3002524112	² Pool Code 61760	³ Pool Name VACUUM ABO, NORTH
⁴ Property Code 11123	⁵ Property Name NORTH VACUUM ABO WEST UNIT	⁶ Well No. 5
⁷ OGRID Number 022351	⁸ Operator Name TEXACO EXPLORATION & PRODUCTION INC.	⁹ Elevation 4048

¹⁰ Surface Location

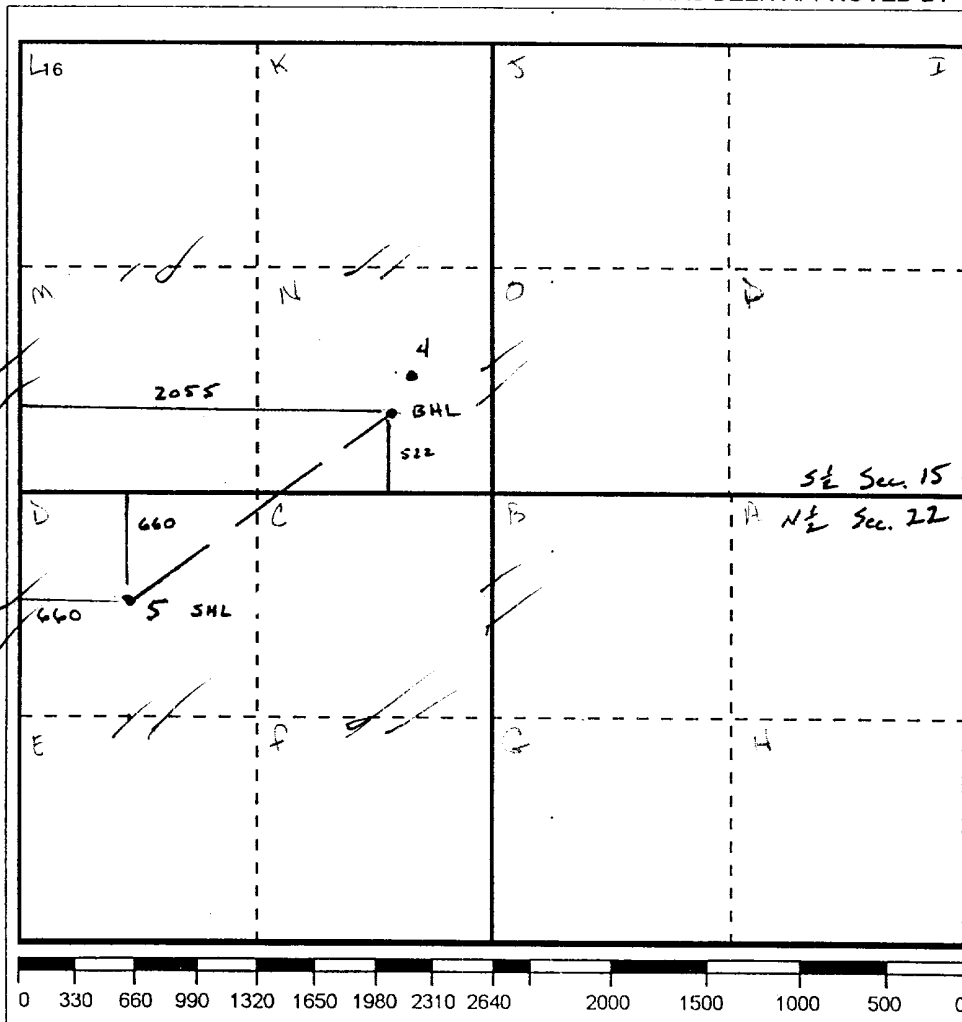
UI or lot no.	Section	Township	Range	Lot.Idn	Feet From The	North/South Line	Feet From The	East/West Line	County
D	22	17S	34E		660	NORTH	660	WEST	LEA

¹¹ Bottom Hole Location If Different From Surface

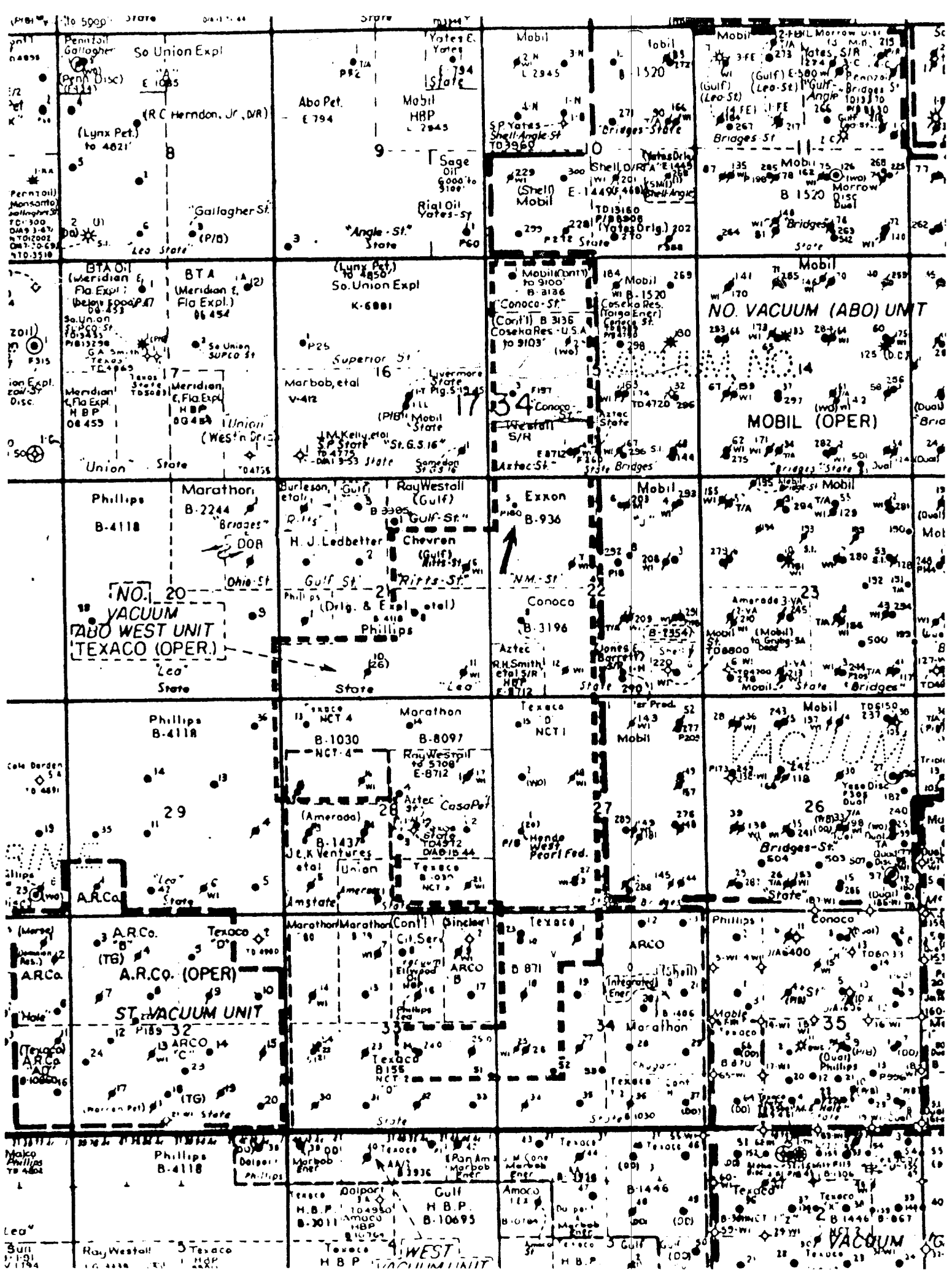
UI or lot no.	Section	Township	Range	Lot.Idn	Feet From The	North/South Line	Feet From The	East/West Line	County
N	15	17S	34E		522'	South	2055'	West	Lea

¹² Dedicated Acres 80 160	¹³ Joint or Infill No	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



17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief <i>James L. Anderson</i> Signature Printed Name James L. Anderson Position Prod. Engineer Date 3/30/98
18 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 Signature & Seal of Professional Surveyor Certificate No.



NORTH VACUUM ABO WEST UNIT

16

"Conoco" State

"Conoco" State

"NV"

"CQ"

"Rice"

"LEA" State

"Conoco" State

"D" NCT-1

State 2-B

"O" NCT-2

25 ("V"-10)

P/B

T-17-S

R-34-E

MOBIL OIL

North Vacuum
Abo Unit

1 mile

"P" 1

"I" 1

"LL" 1

"GS 16" - 1

"T" NCT-4

"B" 8097

WVU-1

WVU-3

WVU-4

WVU-5

Amerada-1

"AF" - 1

"T" NCT-3

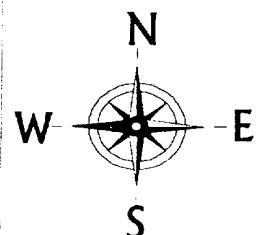
- Oil Producer
- ▲ Water Injection
- ⊙ P & A
- TA, inactive
- Location
- △ Offset Wells

21

24

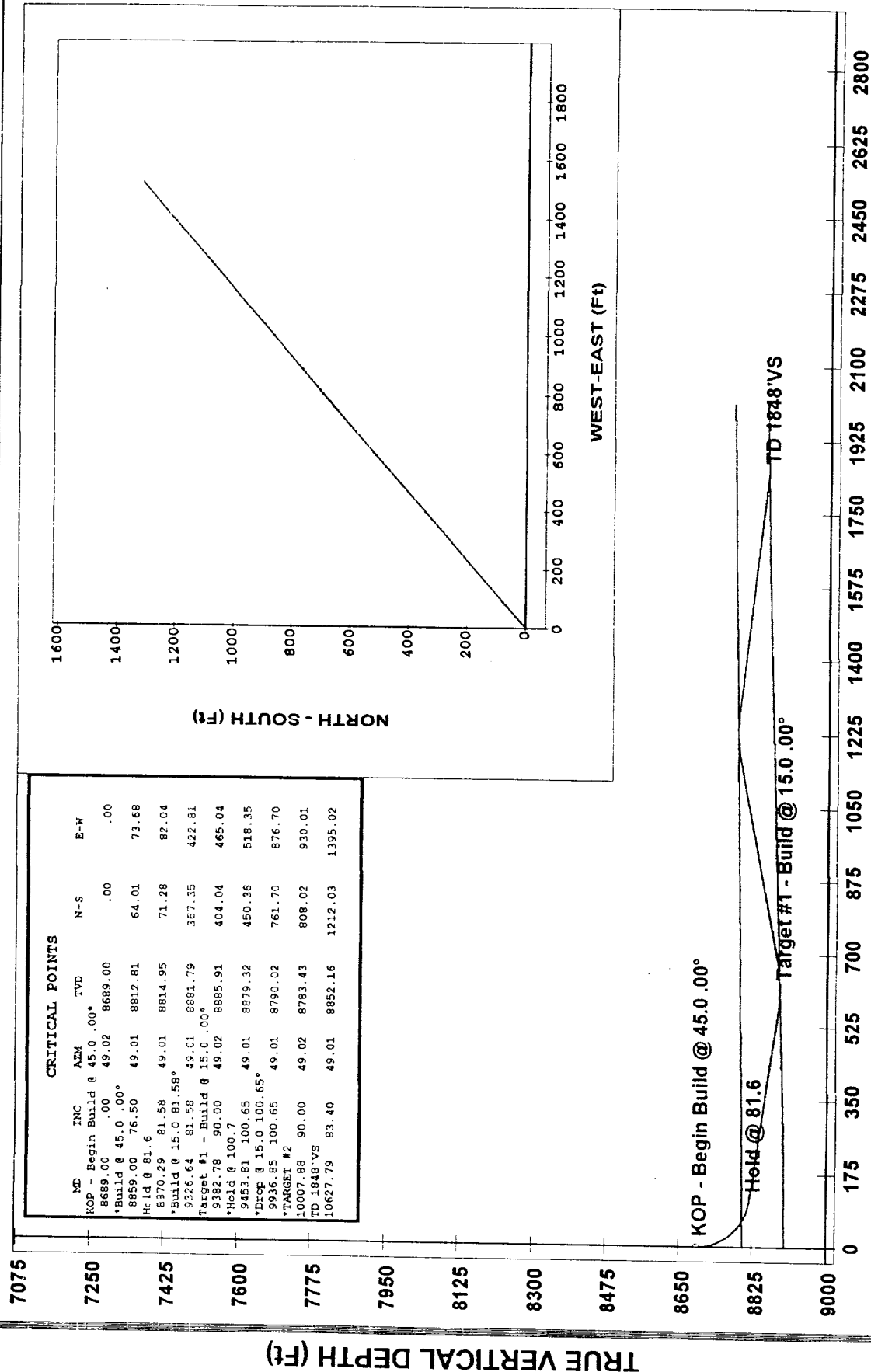
25

James Anderson 3/30/98



File name: C:\TEXACO~1\NVAWU\NVAWU_5\NVAWU05.SVY
Date/Time: 13-Jan-98 / 13:53

Company: Texaco E & P
Lease/Well: NVAWU #5
Location: Lea County, New Mexico
State/Country:
Declination:
Grid:



-- NVAWU#5 - NORTHEAST(REV.0)

VERTICAL SECTION (Ft) @ 49.02°



Job Number:

Company: Texaco E & P
 Lease/Well: NVAWU #6
 Location: Lea County, New Mexico
 Rig Name: Yale E. Key #119
 RKB: 4067
 G.L. or M.S.L.: 4048

State/Country:

Declination:
 Grid:
 File name: C:\TEXACO~1\NVAWU\NVAWU_6\NVAWU06.SVY
 Date/Time: 13-Jan-98 / 13:53
 Curve Name: NVAWU#6 - NORTHEAST(REV.0)

PHOENIX DRILLING SERVICES, INC.

WINSERVE SURVEY CALCULATIONS
Minimum Curvature Method
 Vertical Section Plane 49.02

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	Course Length FT	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	Direction Deg	BUILD RATE Deg/100	WALK RATE Deg/100	Dogleg Severity Deg/100
8689.00	.00	49.02		8689.00	.00	.00	.00	.00	.00	.00	.00	.00
8699.00	4.50	49.01	10.00	8698.99	.26	.30	.39	.39	49.01	45.00	.00	45.00
8709.00	9.00	49.01	10.00	8708.92	1.03	1.18	1.57	1.57	49.01	45.00	.00	45.00
8719.00	13.50	49.01	10.00	8718.72	2.31	2.66	3.52	3.52	49.01	45.00	.00	45.00
8729.00	18.00	49.01	10.00	8728.35	4.09	4.70	6.23	6.23	49.01	45.00	.00	45.00
8739.00	22.50	49.01	10.00	8737.72	6.36	7.32	9.69	9.69	49.01	45.00	.00	45.00
8749.00	27.00	49.01	10.00	8746.80	9.10	10.48	13.88	13.88	49.01	45.00	.00	45.00
8759.00	31.50	49.01	10.00	8755.53	12.31	14.16	18.76	18.76	49.01	45.00	.00	45.00
8769.00	36.00	49.01	10.00	8763.84	15.95	18.36	24.32	24.32	49.01	45.00	.00	45.00
8779.00	40.50	49.01	10.00	8771.69	20.01	23.03	30.51	30.51	49.01	45.00	.00	45.00
8789.00	45.00	49.01	10.00	8779.03	24.46	28.15	37.29	37.29	49.01	45.00	.00	45.00

KOP - Begin Build @ 45.0 .00°

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	Course Length FT	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	Direction Deg	BUILD RATE Deg/100	WALK RATE Deg/100	Dogleg Severity Deg/100
8799.00	49.50	49.01	10.00	8785.82	29.27	33.69	44.63	44.63	49.01	45.00	.00	45.00
8809.00	54.00	49.01	10.00	8792.01	34.42	39.62	52.48	52.48	49.01	45.00	.00	45.00
8819.00	58.50	49.01	10.00	8797.56	39.87	45.89	60.80	60.80	49.01	45.00	.00	45.00
8829.00	63.00	49.01	10.00	8802.45	45.60	52.48	69.52	69.52	49.01	45.00	.00	45.00
8839.00	67.50	49.01	10.00	8806.63	51.55	59.33	78.60	78.60	49.01	45.00	.00	45.00
8849.00	72.00	49.01	10.00	8810.09	57.70	66.41	87.98	87.98	49.01	45.00	.00	45.00
Build @ 45.0 .00°												
8859.00	76.50	49.01	10.00	8812.81	64.01	73.68	97.60	97.60	49.01	45.00	.00	45.00
Hold @ 81.6												
8870.29	81.58	49.01	11.28	8814.95	71.28	82.04	108.68	108.68	49.01	45.00	.00	45.00
8970.76	81.58	49.01	100.47	8829.67	136.46	157.06	208.07	208.07	49.01	.00	.00	.00
9070.76	81.58	49.01	100.00	8844.31	201.34	231.74	306.99	306.99	49.01	.00	.00	.00
9170.76	81.58	49.01	100.00	8858.96	266.22	306.41	405.91	405.91	49.01	.00	.00	.00
9270.76	81.58	49.01	100.00	8873.60	331.10	381.09	504.83	504.83	49.01	.00	.00	.00
Build @ 15.0 81.58°												
9326.64	81.58	49.01	55.88	8881.79	367.35	422.81	560.11	560.11	49.01	.00	.00	.00
9326.64	81.58	49.01	.00	8881.79	367.35	422.81	560.11	560.11	49.01	15.00	.00	15.00
9352.78	85.50	49.01	26.14	8884.73	384.39	442.42	586.08	586.08	49.01	15.00	.00	15.00
Target #1 - Build @ 15.0 .00°												
9382.78	90.00	49.02	30.00	8885.91	404.04	465.04	616.05	616.05	49.01	15.00	.00	15.00
9412.78	94.50	49.01	30.00	8884.73	423.70	487.67	646.02	646.02	49.01	15.00	.00	15.00
9442.78	99.00	49.01	30.00	8881.20	443.23	510.15	675.80	675.80	49.01	15.00	.00	15.00
Hold @ 100.7												
9453.81	100.65	49.01	11.03	8879.32	450.36	518.35	686.67	686.67	49.01	15.00	.00	15.00
9553.81	100.65	49.01	100.00	8860.83	514.82	592.54	784.95	784.95	49.01	.00	.00	.00
9653.81	100.65	49.01	100.00	8842.34	579.27	666.73	883.22	883.22	49.01	.00	.00	.00
9753.81	100.65	49.01	100.00	8823.86	643.73	740.91	981.50	981.50	49.01	.00	.00	.00
9853.81	100.65	49.01	100.00	8805.37	708.18	815.10	1079.77	1079.77	49.01	.00	.00	.00

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	Course Length FT	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	Direction Deg	BUILD RATE Deg/100	WALK RATE Deg/100	Dogleg Severity Deg/100
Drop @ 15.0 100.65°												
9936.85	100.65	49.01	83.04	8790.02	761.70	876.70	1161.38	1161.38	49.01	.00	.00	.00
9936.97	100.64	49.01	.12	8789.99	761.78	876.80	1161.50	1161.50	49.01	-15.00	.00	15.00
9947.88	99.00	49.01	10.91	8788.13	768.83	884.91	1172.25	1172.25	49.01	-15.00	.00	15.00
9977.88	94.50	49.01	30.00	8784.61	788.37	907.39	1202.03	1202.03	49.01	-15.00	.00	15.00
TARGET #2												
10007.88	90.00	49.02	30.00	8783.43	808.02	930.01	1232.00	1232.00	49.01	-15.00	.00	15.00
10037.88	85.50	49.01	30.00	8784.61	827.68	952.64	1261.97	1261.97	49.01	-15.00	.00	15.00
10051.88	83.40	49.01	14.00	8785.96	836.82	963.16	1275.91	1275.91	49.01	-15.00	.00	15.00
10151.88	83.40	49.01	100.00	8797.46	901.97	1038.15	1375.24	1375.24	49.01	.00	.00	.00
10251.88	83.40	49.01	100.00	8808.95	967.12	1113.13	1474.58	1474.58	49.01	.00	.00	.00
10351.88	83.40	49.01	100.00	8820.45	1032.27	1188.12	1573.92	1573.92	49.01	.00	.00	.00
10451.88	83.40	49.01	100.00	8831.94	1097.42	1263.11	1673.26	1673.26	49.01	.00	.00	.00
10551.88	83.40	49.01	100.00	8843.44	1162.58	1338.10	1772.59	1772.59	49.01	.00	.00	.00
TD 1848 VS												
10627.79	83.40	49.01	75.91	8852.16	1212.03	1395.02	1848.00	1848.00	49.01	.00	.00	.00