

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
PO Drawer DD, Artesia, NM 88211-0719
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Department of Energy, Minerals & Natural Resources

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, NM 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 MOBIL PRODUCING TX & NM INC.* *MOBIL EXPLORATION & PRODUCING US INC. AS AGENT FOR MPTM P.O. BOX 633, MIDLAND, TX 79702		² OGRID Number 15144
⁴ Property Code 8055	⁵ Property Name NORTH VACUUM ABO Unit	³ API Number 30-0 30-025-24748
		⁶ Well Number 220

⁷ Surface Location									
UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
P	22	17-S	34-E		660	SOUTH	860	EAST	LEA

⁸ Proposed 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
P	22	17-S	34-E		1294	SOUTH	71	EAST	LEA

⁹ Proposed Pool 1 N Vacuum Abo	¹⁰ Proposed Pool 2
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¹¹ Work Type Code P	¹² Well Type Code I	¹³ Cable/Rotary ROTARY	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 4035'
¹⁶ Multiple NO	¹⁷ Proposed Depth 8609	¹⁸ Formations Abo	¹⁹ Contractor	²⁰ Spud Date 06-30-97

²¹ Proposed Casing and Cement Program					
Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
15"	12 3/4"	34#	250'	CIRCULATED	SURFACE
11"	8 5/8"	20, 24, & 28#	3015'	CIRCULATED	SURFACE
7 7/8"	5 1/2"	15.5 & 17#	8800' TD	CIRCULATED	SURFACE
EXISTING	WELLBORE				

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

SEE ATTACHMENT

Permit Expires 1 Year From Approval
Date Unless Drilling Underway
Plugback

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief. Signature: Shirley Houchins Printed name: SHIRLEY HOUCHINS Title: ENVIRONMENTAL & REGULATORY TECHNICIAN Date: 8-18-1997 Phone: (915) 688-2585		OIL CONSERVATION DIVISION Approved by: ORIGINAL SIGNED BY CHRIS WILLIAMS DISTRICT I SUPERVISOR Title: Approval Date: NOV 4 1997 Expiration Date: Conditions of Approval: Attached ☐	
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State of New Mexico
Geology, 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

API Number 30-025-24748	Pool Code 61760	Pool Name NORTH VACUUM Abo
Property Code 8055	Property Name NORTH VACUUM Abo Unit	Well Number 220
OGRID No. 15144	Operator Name MOBIL PRODUCING TX & NM INC.* *MOBIL EXPLORATION & PRODUCING US INC. AS AGENT FOR MPTM	Elevation 4035'

¹⁰ Surface Location

UI or lot no. P	Section 22	Township 17-S	Range 34-E	Lot. Idn	Feet from the 660	North/South Line SOUTH	Feet from the 860	East/West line EAST	County LEA
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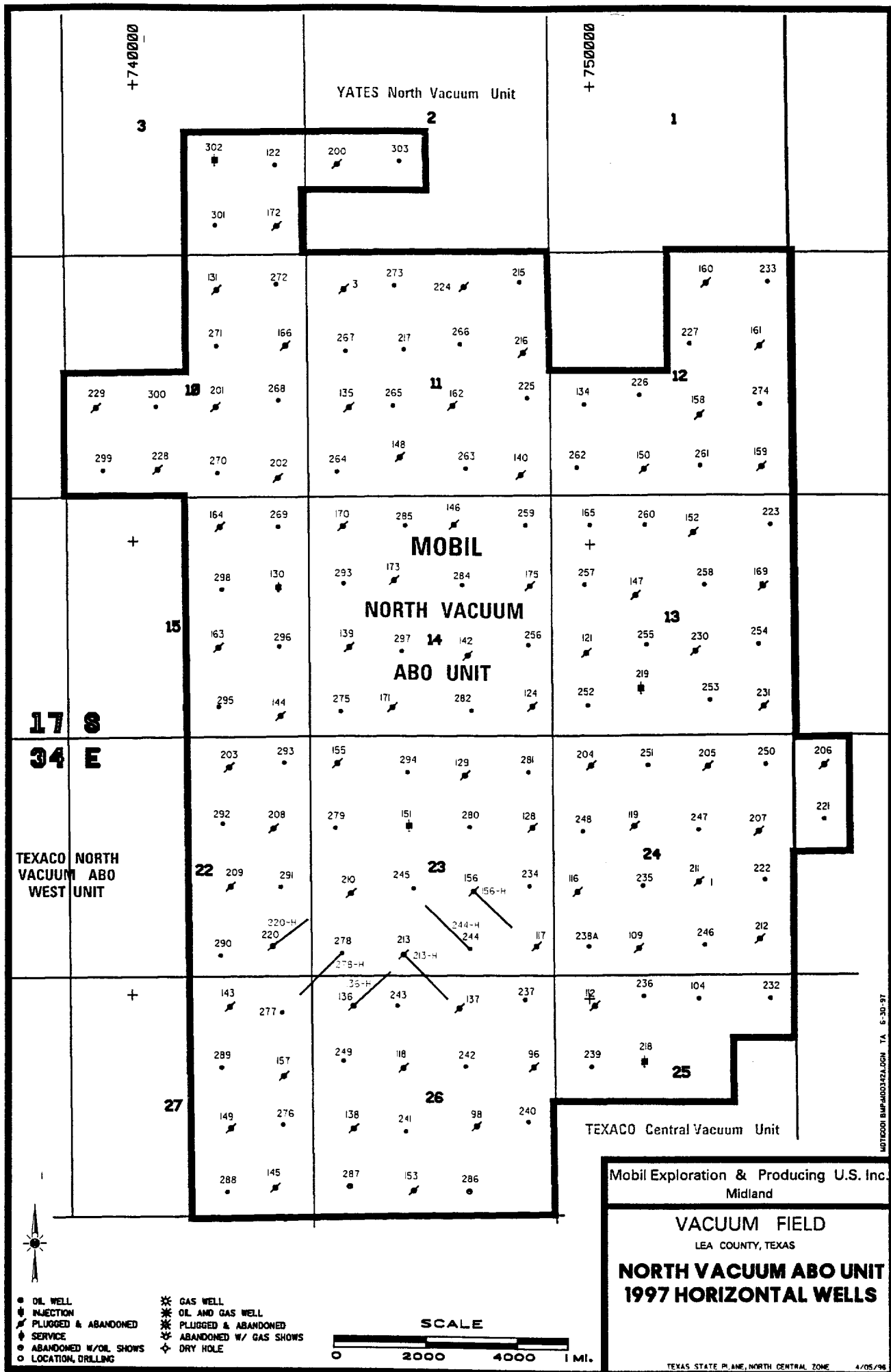
¹¹ Bottom Hole Location If Different From Surface

UL or lot no. P	Section 22	Township 17-S	Range 34-E	Lot. Idn	Feet from the 1294'	North/South Line SOUTH	Feet from the 71	East/West line EAST	County LEA
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¹² Dedicated Acres	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

				¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. <u>Shirley Houchins</u> Signature SHIRLEY HOCHINS Printed Name ENV. & REG. TECHNICIAN Title 8-18-1997 Date
				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 belief. Date of Survey Signature and Seal of Professional Surveyer: Certificate Number
				1294' FSL BHL 71' FEL 220 660' 860'



NVAU NO. 220W
Lea County, New Mexico

I. GENERAL DRILLING SUMMARY

A. Objective

The objective of this project is to set a whipstock and cut a window in the 5-1/2" casing from 8501'-8510' and drill an open hole lateral in the Abo formation with a vertical section of 1250 ft.

B. Procedure

1. Prepare location and dig workover pit.
2. Bleed well down. MIRU pulling unit and required H2S equipment.
3. ND wellhead. NU BOP (double ram with annular and stripper head). POH w/ injection equipment. Set CIBP and whipstock @ 8516' and mill window from 8501'-8510'.
4. Drill curve and lateral to a vertical section of 1250 ft. along an azimuth of 55 degrees. Drilling operations completed.

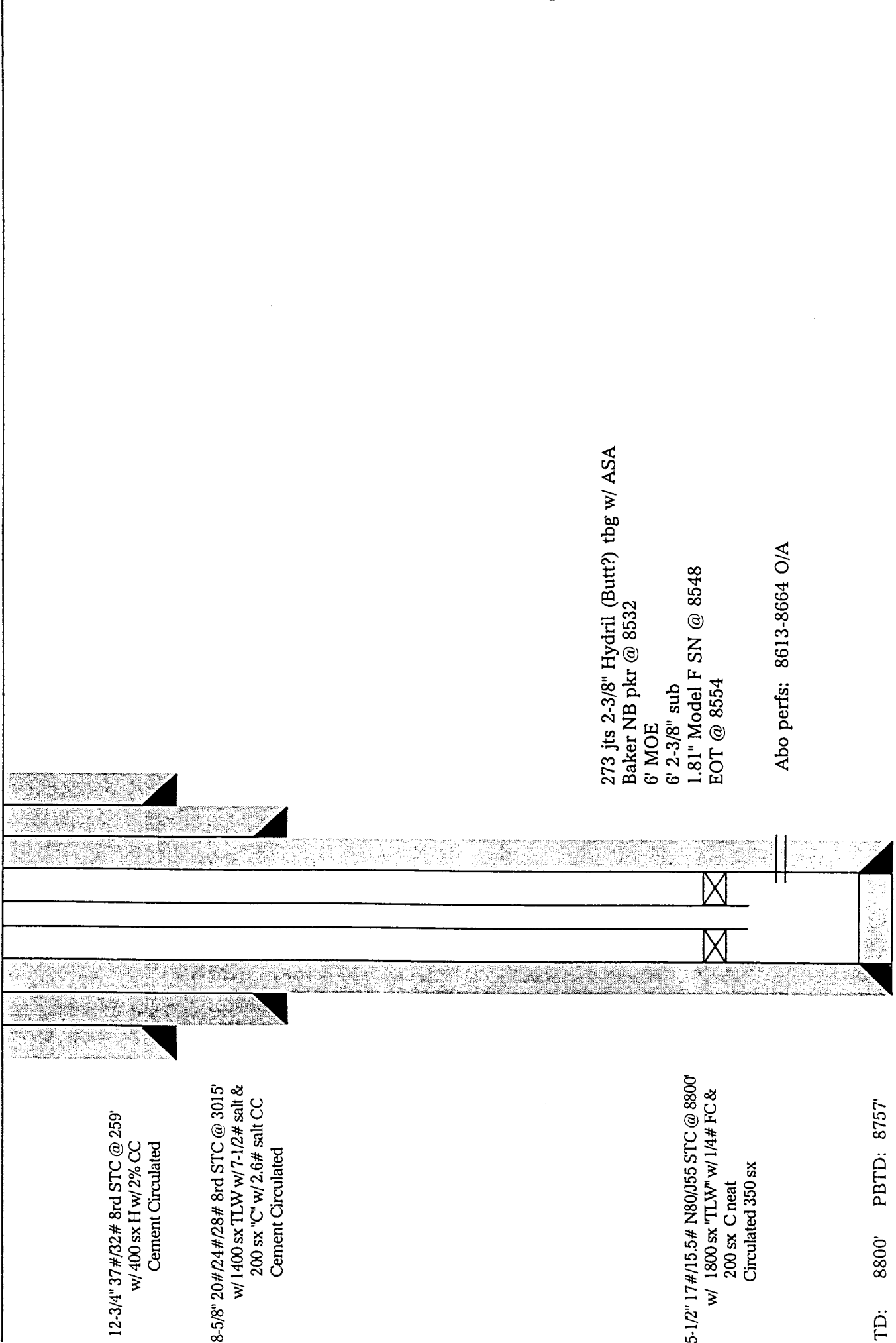
Note: Whipstock and CIBP MAY be removed following stimulation.

660' FSL
860' FEL
S-22
T17S
R34E
KB: 4044'
GL: 4035'

INVAU 220W
Vacuum Field
Lea County, New Mexico

MEE: 08/06/97
Spud: 05/19/74

Current Configuration

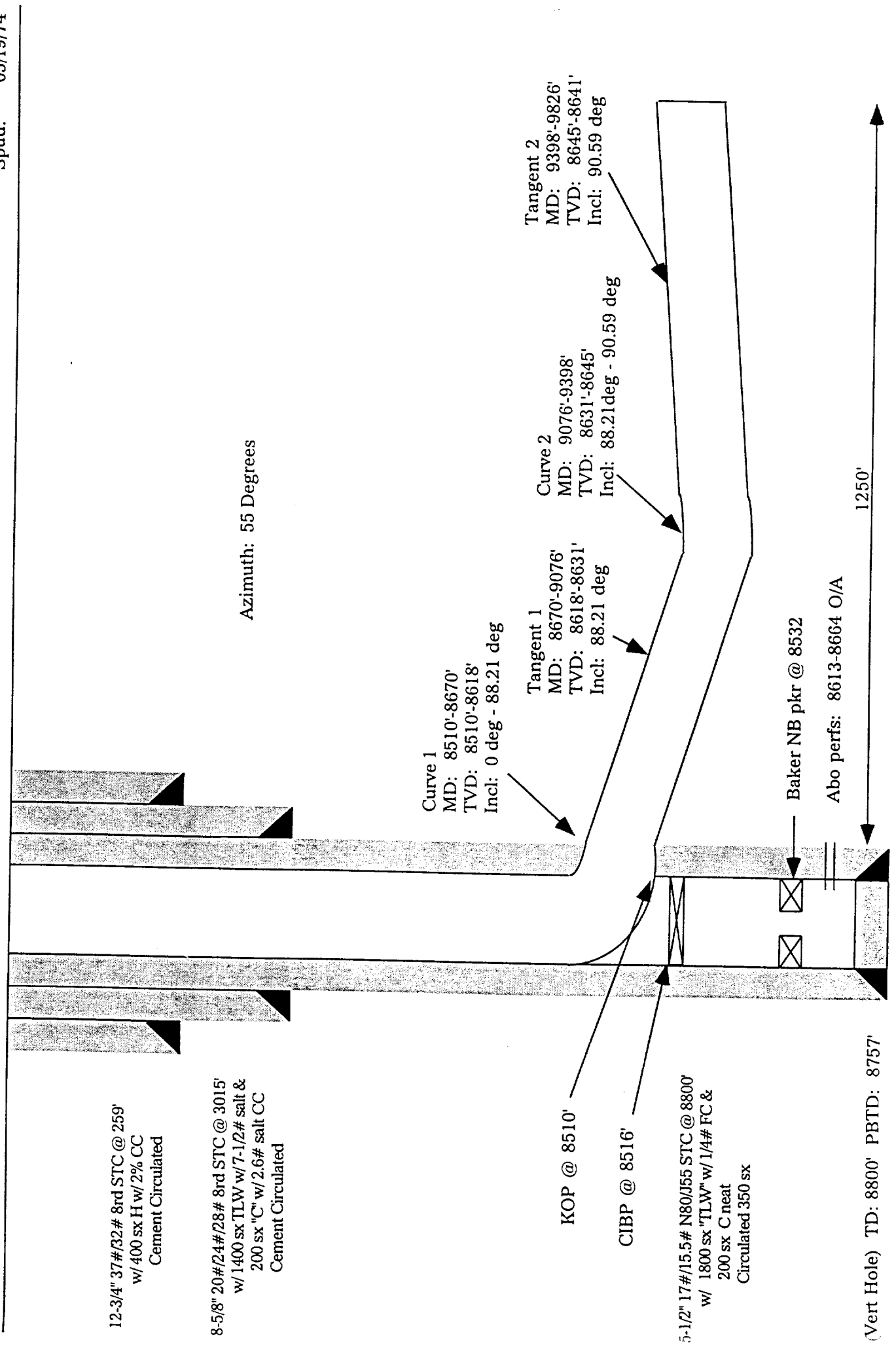


TD: 8800' PBTD: 8757'

00 132
860' FEL
S-22
T17S
R34E
KB: 4044'
GL: 4035'

NVAU 220W
Vacuum Field
Lea County, New Mexico
Proposed Configuration

MEE: 08/11/97
Spud: 05/19/74



**WELL PLANNING
REPORT**

MOBIL E&P SERVICES, INC.

NVAU #220

**N/A
11-Aug-97**

**PERRY-SUN DRILLING SERVICE
WELL PROFILE DATA**

**MOBIL E&P SERVICES, INC.
NVAU #220**

**N/A
11-Aug-97**

MEASURED DEPTH	ANGLE DEG	DIRECTION DEG	VERTICAL DEPTH	LATITUDE (Ft)	DEPARTURE (Ft)	VERTICAL SECTION	DOG LEG	TOOL FACE
8500.00	0.000	0.000	8500.00	0.00	0.00	0.00		
8510.00	0.000	0.000	8510.00	0.00	0.00	0.00	0.000	0.000
8518.00	3.000	55.000	8518.00	0.12 N	0.17 E	0.21	37.500	55.000
8520.00	3.800	55.000	8519.99	0.19 N	0.27 E	0.33		
8530.00	7.800	55.000	8529.94	0.77 N	1.10 E	1.34		
8540.00	11.800	55.000	8539.79	1.74 N	2.49 E	3.04		
8548.00	15.000	55.000	8547.57	2.81 N	4.01 E	4.89	40.000	0.000
8550.00	16.200	55.000	8549.50	3.12 N	4.45 E	5.43		
8560.00	22.200	55.000	8558.94	5.00 N	7.14 E	8.72		
8570.00	28.200	55.000	8567.98	7.44 N	10.63 E	12.97		
8580.00	34.200	55.000	8576.53	10.41 N	14.87 E	18.15		
8590.00	40.200	55.000	8584.49	13.88 N	19.82 E	24.20		
8600.00	46.200	55.000	8591.78	17.80 N	25.43 E	31.04		
8610.00	52.200	55.000	8598.31	22.14 N	31.62 E	38.60		
8620.00	58.200	55.000	8604.02	26.85 N	38.35 E	46.81		
8630.00	64.200	55.000	8608.83	31.87 N	45.52 E	55.57		
8640.00	70.200	55.000	8612.71	37.16 N	53.07 E	64.79		
8650.00	76.200	55.000	8615.59	42.65 N	60.91 E	74.35		
8660.00	82.200	55.000	8617.47	48.28 N	68.95 E	84.17		
8670.00	88.200	55.000	8618.30	53.99 N	77.11 E	94.13		
8670.01	88.208	55.000	8618.30	54.00 N	77.12 E	94.15	60.000	0.000
8680.00	88.208	55.000	8618.62	59.73 N	85.30 E	104.13		
8690.00	88.208	55.000	8618.93	65.46 N	93.48 E	114.12		
8700.00	88.208	55.000	8619.24	71.19 N	101.67 E	124.12		
8710.00	88.208	55.000	8619.55	76.92 N	109.86 E	134.11		
8720.00	88.208	55.000	8619.87	82.66 N	118.05 E	144.11		
8730.00	88.208	55.000	8620.18	88.39 N	126.23 E	154.10		
8740.00	88.208	55.000	8620.49	94.12 N	134.42 E	164.10		
8750.00	88.208	55.000	8620.80	99.86 N	142.61 E	174.09		
8760.00	88.208	55.000	8621.12	105.59 N	150.80 E	184.09		
8770.00	88.208	55.000	8621.43	111.32 N	158.99 E	194.08		
8780.00	88.208	55.000	8621.74	117.06 N	167.17 E	204.08		
8790.00	88.208	55.000	8622.06	122.79 N	175.36 E	214.08		
8800.00	88.208	55.000	8622.37	128.52 N	183.55 E	224.07		
8810.00	88.208	55.000	8622.68	134.25 N	191.74 E	234.07		
8820.00	88.208	55.000	8622.99	139.99 N	199.92 E	244.06		
8830.00	88.208	55.000	8623.31	145.72 N	208.11 E	254.06		
8840.00	88.208	55.000	8623.62	151.45 N	216.30 E	264.05		
8850.00	88.208	55.000	8623.93	157.19 N	224.49 E	274.05		
8860.00	88.208	55.000	8624.24	162.92 N	232.67 E	284.04		
8870.00	88.208	55.000	8624.56	168.65 N	240.86 E	294.04		
8880.00	88.208	55.000	8624.87	174.38 N	249.05 E	304.03		
8890.00	88.208	55.000	8625.18	180.12 N	257.24 E	314.03		
8900.00	88.208	55.000	8625.49	185.85 N	265.42 E	324.02		
8910.00	88.208	55.000	8625.81	191.58 N	273.61 E	334.02		

PERRY-SUN DRILLING SERVICE WELL PROFILE DATA

MOBIL E&P SERVICES, INC.
NVAU #220

N/A
11-Aug-97

MEASURED DEPTH	ANGLE DEG	DIRECTION DEG	VERTICAL DEPTH	LATITUDE (Ft.)	DEPARTURE (Ft.)	VERTICAL SECTION	DOG LEG	TOOL FACE
8920.00	88.208	55.000	8626.12	197.32 N	281.80 E	344.01		
8930.00	88.208	55.000	8626.43	203.05 N	289.99 E	354.01		
8940.00	88.208	55.000	8626.75	208.78 N	298.17 E	364.00		
8950.00	88.208	55.000	8627.06	214.52 N	306.36 E	374.00		
8960.00	88.208	55.000	8627.37	220.25 N	314.55 E	383.99		
8970.00	88.208	55.000	8627.68	225.98 N	322.74 E	393.99		
8980.00	88.208	55.000	8628.00	231.71 N	330.92 E	403.98		
8990.00	88.208	55.000	8628.31	237.45 N	339.11 E	413.98		
9000.00	88.208	55.000	8628.62	243.18 N	347.30 E	423.97		
9010.00	88.208	55.000	8628.93	248.91 N	355.49 E	433.97		
9020.00	88.208	55.000	8629.25	254.65 N	363.67 E	443.96		
9030.00	88.208	55.000	8629.56	260.38 N	371.86 E	453.96		
9040.00	88.208	55.000	8629.87	266.11 N	380.05 E	463.95		
9050.00	88.208	55.000	8630.19	271.84 N	388.24 E	473.95		
9060.00	88.208	55.000	8630.50	277.58 N	396.42 E	483.94		
9070.00	88.208	55.000	8630.81	283.31 N	404.61 E	493.94		
9076.06	88.208	55.000	8631.00	286.79 N	409.57 E	500.00	0.000	180.000
9080.00	88.051	55.000	8631.13	289.04 N	412.80 E	503.93		
9090.00	87.651	55.000	8631.50	294.78 N	420.98 E	513.93		
9100.00	87.251	55.000	8631.95	300.51 N	429.17 E	523.92		
9110.00	86.851	55.000	8632.46	306.23 N	437.35 E	533.90		
9111.31	86.798	55.000	8632.54	306.98 N	438.42 E	535.21	4.000	180.000
9120.00	86.798	55.000	8633.02	311.96 N	445.53 E	543.89		
9130.00	86.798	55.000	8633.58	317.69 N	453.71 E	553.87		
9140.00	86.798	55.000	8634.14	323.41 N	461.88 E	563.86		
9150.00	86.798	55.000	8634.70	329.14 N	470.06 E	573.84		
9160.00	86.798	55.000	8635.25	334.87 N	478.24 E	583.83		
9170.00	86.798	55.000	8635.81	340.60 N	486.42 E	593.81		
9180.00	86.798	55.000	8636.37	346.32 N	494.60 E	603.79		
9190.00	86.798	55.000	8636.93	352.05 N	502.78 E	613.78		
9200.00	86.798	55.000	8637.49	357.78 N	510.96 E	623.76		
9210.00	86.798	55.000	8638.05	363.50 N	519.14 E	633.75		
9220.00	86.798	55.000	8638.61	369.23 N	527.31 E	643.73		
9230.00	86.798	55.000	8639.16	374.96 N	535.49 E	653.72		
9240.00	86.798	55.000	8639.72	380.68 N	543.67 E	663.70		
9250.00	86.798	55.000	8640.28	386.41 N	551.85 E	673.68		
9260.00	86.798	55.000	8640.84	392.14 N	560.03 E	683.67		
9270.00	86.798	55.000	8641.40	397.86 N	568.21 E	693.65		
9280.00	86.798	55.000	8641.96	403.59 N	576.39 E	703.64		
9290.00	86.798	55.000	8642.52	409.32 N	584.57 E	713.62		
9300.00	86.798	55.000	8643.07	415.04 N	592.74 E	723.61		
9303.40	86.798	55.000	8643.26	416.99 N	595.53 E	727.00	0.000	0.000
9310.00	87.062	55.000	8643.62	420.77 N	600.92 E	733.59		
9320.00	87.462	55.000	8644.10	426.50 N	609.11 E	743.58		
9330.00	87.862	55.000	8644.50	432.23 N	617.29 E	753.57		

**PERRY-SUN DRILLING SERVICE
WELL PROFILE DATA**

**MOBIL E&P SERVICES, INC.
NVAU #220**

**N/A
11-Aug-97**

MEASURED DEPTH	ANGLE DEG	DIRECTION DEG	VERTICAL DEPTH	LATITUDE (Ft.)	DEPARTURE (Ft.)	VERTICAL SECTION	DOG LEG	TOOL FACE
9340.00	88.262	55.000	8644.84	437.96 N	625.48 E	763.57		
9350.00	88.662	55.000	8645.11	443.70 N	633.67 E	773.56		
9360.00	89.062	55.000	8645.31	449.43 N	641.85 E	783.56		
9370.00	89.462	55.000	8645.44	455.17 N	650.05 E	793.56		
9380.00	89.862	55.000	8645.50	460.90 N	658.24 E	803.56		
9383.45	90.000	55.000	8645.50	462.88 N	661.06 E	807.01	4.000	0.000
9390.00	90.262	55.000	8645.49	466.64 N	666.43 E	813.56		
9398.24	90.592	55.000	8645.42	471.37 N	673.18 E	821.80	4.000	0.000
9400.00	90.592	55.000	8645.41	472.37 N	674.62 E	823.56		
9410.00	90.592	55.000	8645.30	478.11 N	682.81 E	833.56		
9420.00	90.592	55.000	8645.20	483.85 N	691.00 E	843.56		
9430.00	90.592	55.000	8645.10	489.58 N	699.19 E	853.56		
9440.00	90.592	55.000	8644.99	495.32 N	707.38 E	863.56		
9450.00	90.592	55.000	8644.89	501.05 N	715.58 E	873.56		
9460.00	90.592	55.000	8644.79	506.79 N	723.77 E	883.56		
9470.00	90.592	55.000	8644.68	512.52 N	731.96 E	893.56		
9480.00	90.592	55.000	8644.58	518.26 N	740.15 E	903.56		
9490.00	90.592	55.000	8644.48	523.99 N	748.34 E	913.55		
9500.00	90.592	55.000	8644.37	529.73 N	756.53 E	923.55		
9510.00	90.592	55.000	8644.27	535.46 N	764.72 E	933.55		
9520.00	90.592	55.000	8644.17	541.20 N	772.91 E	943.55		
9530.00	90.592	55.000	8644.06	546.94 N	781.10 E	953.55		
9540.00	90.592	55.000	8643.96	552.67 N	789.30 E	963.55		
9550.00	90.592	55.000	8643.86	558.41 N	797.49 E	973.55		
9560.00	90.592	55.000	8643.75	564.14 N	805.68 E	983.55		
9570.00	90.592	55.000	8643.65	569.88 N	813.87 E	993.55		
9580.00	90.592	55.000	8643.55	575.61 N	822.06 E	1003.55		
9590.00	90.592	55.000	8643.44	581.35 N	830.25 E	1013.55		
9600.00	90.592	55.000	8643.34	587.08 N	838.44 E	1023.55		
9610.00	90.592	55.000	8643.24	592.82 N	846.63 E	1033.55		
9620.00	90.592	55.000	8643.13	598.55 N	854.82 E	1043.55		
9630.00	90.592	55.000	8643.03	604.29 N	863.02 E	1053.55		
9640.00	90.592	55.000	8642.93	610.03 N	871.21 E	1063.55		
9650.00	90.592	55.000	8642.82	615.76 N	879.40 E	1073.55		
9660.00	90.592	55.000	8642.72	621.50 N	887.59 E	1083.55		
9670.00	90.592	55.000	8642.62	627.23 N	895.78 E	1093.55		
9680.00	90.592	55.000	8642.51	632.97 N	903.97 E	1103.54		
9690.00	90.592	55.000	8642.41	638.70 N	912.16 E	1113.54		
9700.00	90.592	55.000	8642.31	644.44 N	920.35 E	1123.54		
9710.00	90.592	55.000	8642.20	650.17 N	928.54 E	1133.54		
9720.00	90.592	55.000	8642.10	655.91 N	936.74 E	1143.54		
9730.00	90.592	55.000	8642.00	661.64 N	944.93 E	1153.54		
9740.00	90.592	55.000	8641.89	667.38 N	953.12 E	1163.54		
9750.00	90.592	55.000	8641.79	673.12 N	961.31 E	1173.54		
9760.00	90.592	55.000	8641.69	678.85 N	969.50 E	1183.54		

**SPERRY-SUN DRILLING SERVICE
WELL PROFILE DATA**

**MOBIL E&P SERVICES, INC.
NVAU #220**

**N/A
11-Aug-97**

MEASURED DEPTH	ANGLE DEG	DIRECTION DEG	VERTICAL DEPTH	LATITUDE (Ft)	DEPARTURE (Ft)	VERTICAL SECTION	DOG LEG	TOOL FACE
9770.00	90.592	55.000	8641.58	684.59 N	977.69 E	1193.54		
9780.00	90.592	55.000	8641.48	690.32 N	985.88 E	1203.54		
9790.00	90.592	55.000	8641.38	696.06 N	994.07 E	1213.54		
9800.00	90.592	55.000	8641.27	701.79 N	1002.26 E	1223.54		
9810.00	90.592	55.000	8641.17	707.53 N	1010.46 E	1233.54		
9820.00	90.592	55.000	8641.07	713.26 N	1018.65 E	1243.54		
9826.46	90.592	55.000	8641.00	716.97 N	1023.94 E	1250.00	0.000	0.000

**The Dogleg Severity is in Degrees per 100.00 Feet
Vertical Section was calculated along an Azimuth of 55.000° (True)**

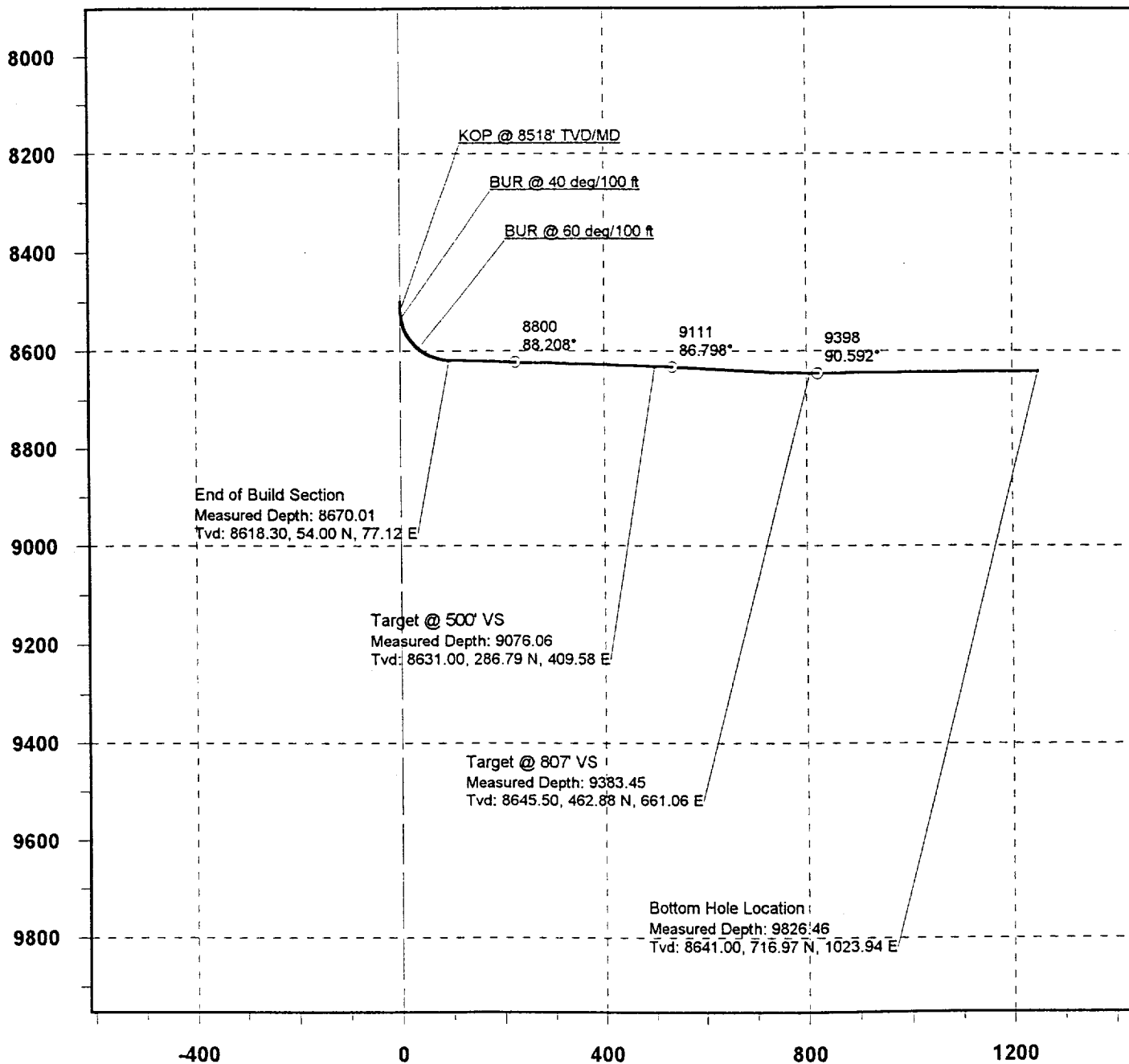
**Based upon Minimum Curvature type calculations. At a Measured Depth of 9826.46 Feet,
the Bottom Hole Displacement is 1250.00 Feet, in the Direction of 55.000° (True)**

PERRY-SUN DRILLING SERVICE
VERTICAL SECTION

MOBIL E&P SERVICES, INC.
NVAU #220

N/A
11-Aug-97

VERTICAL
DEPTH



VERTICAL SECTION - Direction: 55.000° (True)

Depths shown on plot are Measured Depths.

All measurements are in Feet.

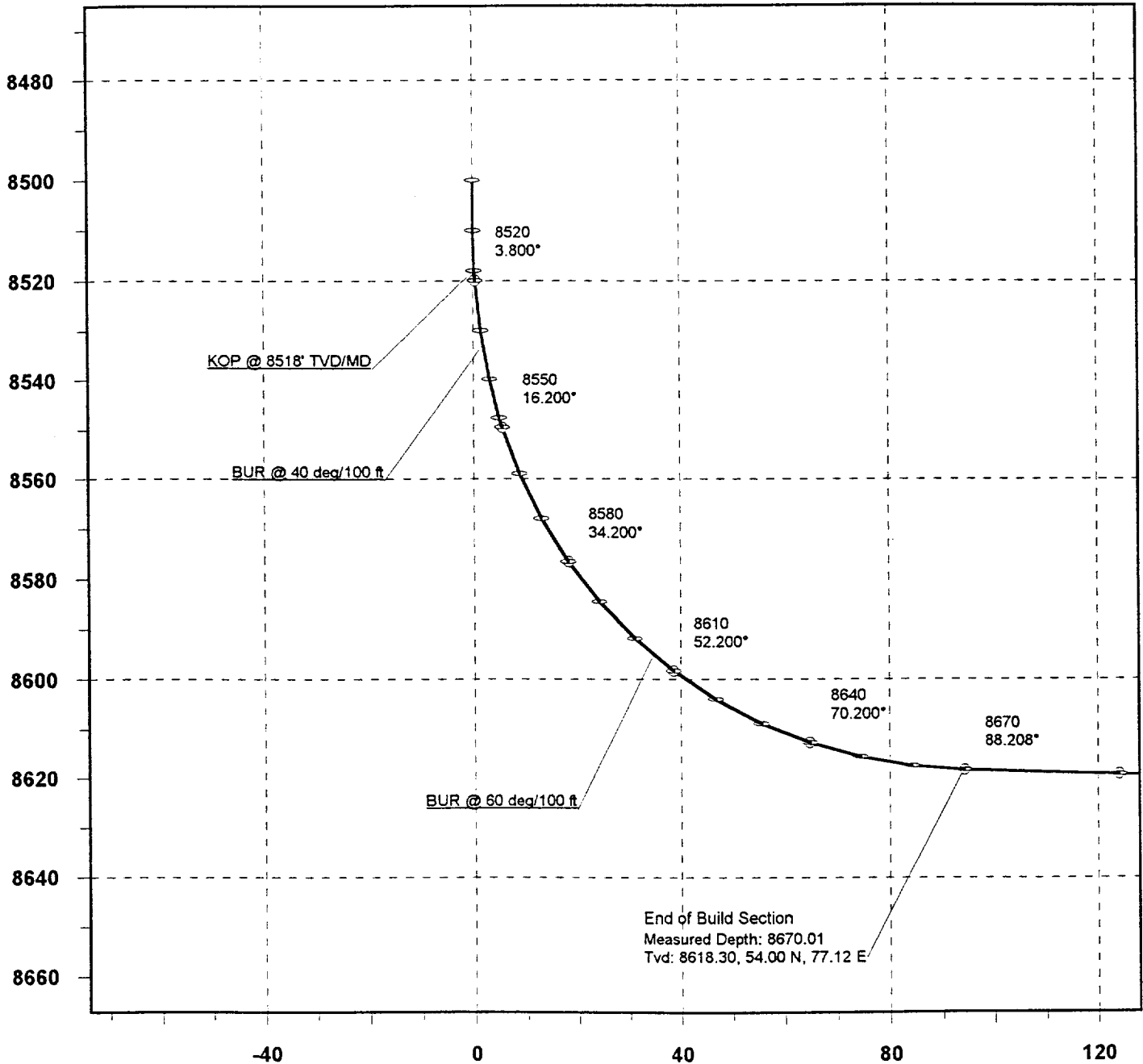
Received
HUBBS
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PERRY-SUN DRILLING SERVICE
VERTICAL SECTION

MOBIL E&P SERVICES, INC.
NVAU #220

N/A
11-Aug-97

VERTICAL
DEPTH



VERTICAL SECTION - Direction: 55.000° (True)

Depths shown on plot are Measured Depths.

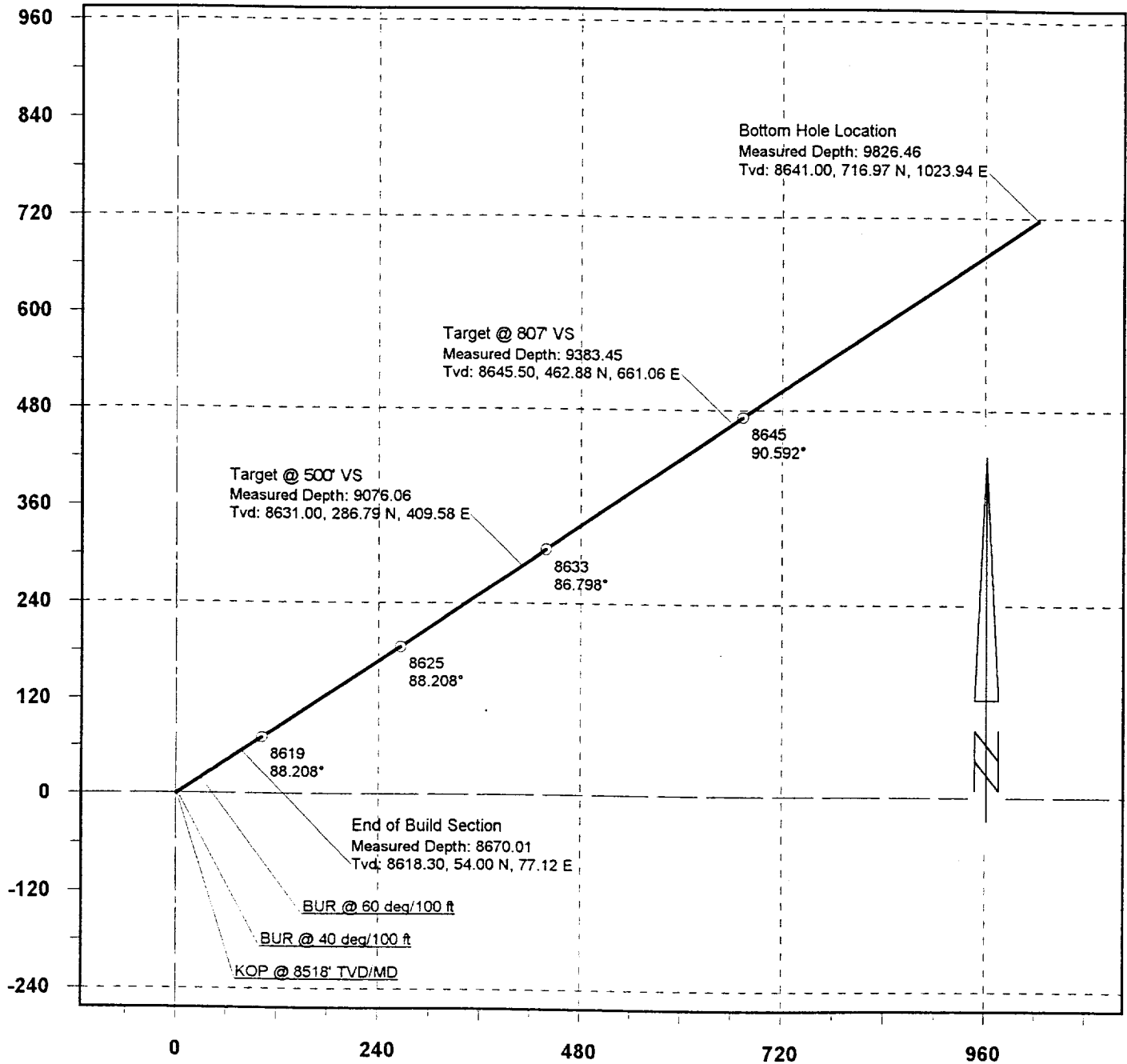
All measurements are in Feet.

PERRY-SUN DRILLING SERVICE HORIZONTAL SECTION

MOBIL E&P SERVICES, INC.
NVAU #220

N/A
11-Aug-97

LATITUDE
VALUES



DEPARTURE VALUES

Depths shown on plot are Vertical Depths.
All measurements are in Feet.