

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
Energy, Minerals & Natural Resources Department

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	⁶ Well Number 136

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
D	26	17-S	34-E		660	NORTH	860	WEST	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
N	23	17-S	34-E		82	SOUTH	1690	WEST	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 4034'
¹⁶ Multiple NO	¹⁷ Proposed Depth 8551	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
12 1/4"	8 5/8"	20#	1650'	CIRCULATED	SURFACE
7 7/8"	4 1/2"	9.5 & 11.6#	8700'	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 Putting Underway

Plugback

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.		OIL CONSERVATION DIVISION	
Signature: Shirley Houchins		Approved by: ORIGINAL SIGNED BY CHRIS WILLIAMS	
Printed name: SHIRLEY HOUCHINS		Title: DISTRICT I SUPERVISOR	
Title: ENVIRONMENTAL & REGULATORY TECHNICIAN		Approval Date: AUG 25 1997	
Date: 8-18-1997		Expiration Date:	
Phone: (915) 688-2585		Conditions of Approval: Attached ☐	

507

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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

API Number 30-025-23462		Pool Code 61760	Pool Name NORTH VACUUM Abo
Property Code 8055	Property Name NORTH VACUUM Abo		Well Number 136
OGRID No. 15144	Operator Name MOBIL PRODUCING TX & NM INC.* *MOBIL EXPLORATION & PRODUCING US INC. AS AGENT FOR MPTM		Elevation

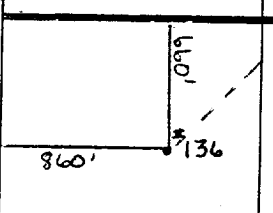
¹⁰ Surface Location

UI or lot no. D	Section 26	Township 17-S	Range 34-E	Lot. Idn	Feet from the 660	North/South Line NORTH	Feet from the 860	East/West line WEST	County LEA
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¹¹ Bottom Hole Location If Different From Surface

UL or lot no. N	Section 23	Township 17-S	Range 34-E	Lot. Idn	Feet from the 82	North/South Line SOUTH	Feet from the 1690	East/West line WEST	County LEA
¹² Dedicated Acres		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

Sec. 23			
Sec. 26			

¹⁷ OPERATOR CERTIFICATION
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

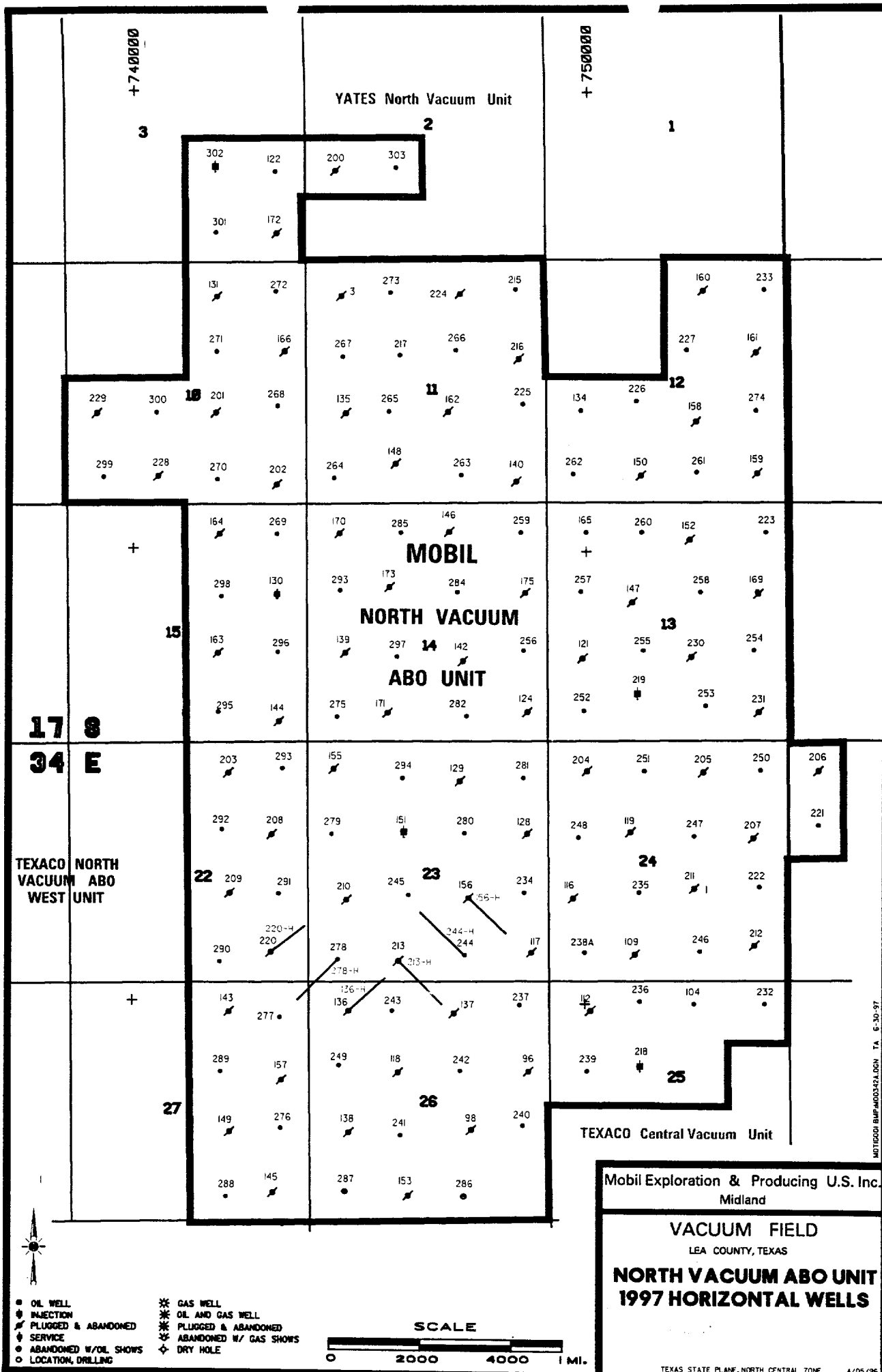
Shirley Houchins
Signature
SHIRLEY HOUCHINS
Printed Name
ENV. & REG. TECHNICIAN
Title
8-18-1997
Date

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 Surveyor.

Certificate Number



NVAU NO. 136W
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 8414'-8423' and drill an open hole lateral in the Abo formation with a vertical section of 1000 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 @ 8429' and mill window from 8414'-8423'.
4. Drill curve and lateral to a vertical section of 1000 ft. along an azimuth of 55 degrees. Drilling operations completed.

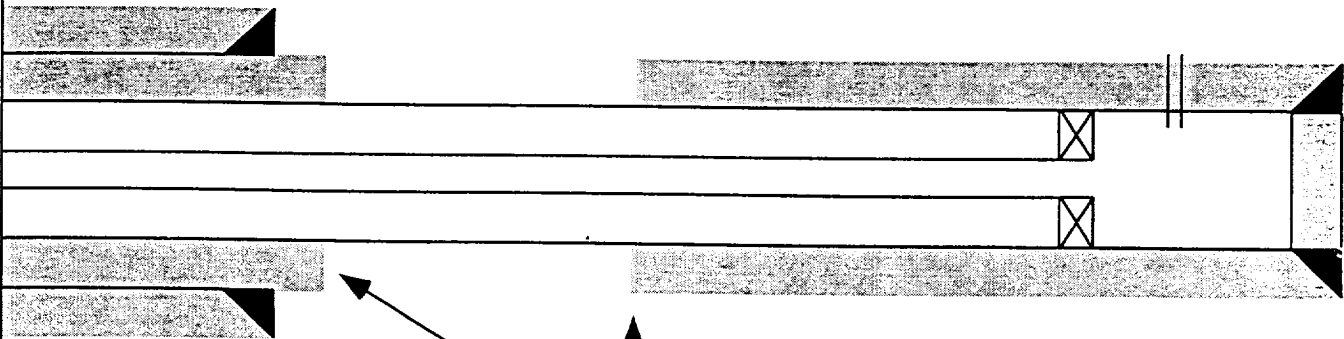
Note: Whipstock and CIBP MAY be removed following stimulation.

660' FNL
860' FWL
S-26
T17S
R34E
KB: 4048'
GL: 4033'

NVAU 136W
Vacuum Field
Lea County, New Mexico

MEE: 08/05/97
Spud: 04/20/70

Current Configuration



5-5/8" 20#/24# J55 STC @ 1725'
w/ 1100 sx "A" w/ 8% gel &
200 sx "A" neat @% CC
Cement Circulated

Annulus cmt'd w/ 750 sx Incor

TOC @ 2675' (TS)

5-1/2" 17#/15.5# N80 & 15.5# J55
csg @ 8700'
w/ 2900 sx "TLW" & 200 sx
Incor-lost returns & cmt'd
8-5/8" x 5-1/2" annulus w/
750 sx Incor

270 jts 2-3/8" J55 EUE 8rd tbg
Otis (Perment) TB pkr @ 8446'
w/ j-latch anchor seal assembly

Abo perfs: 8525-8680 O/A

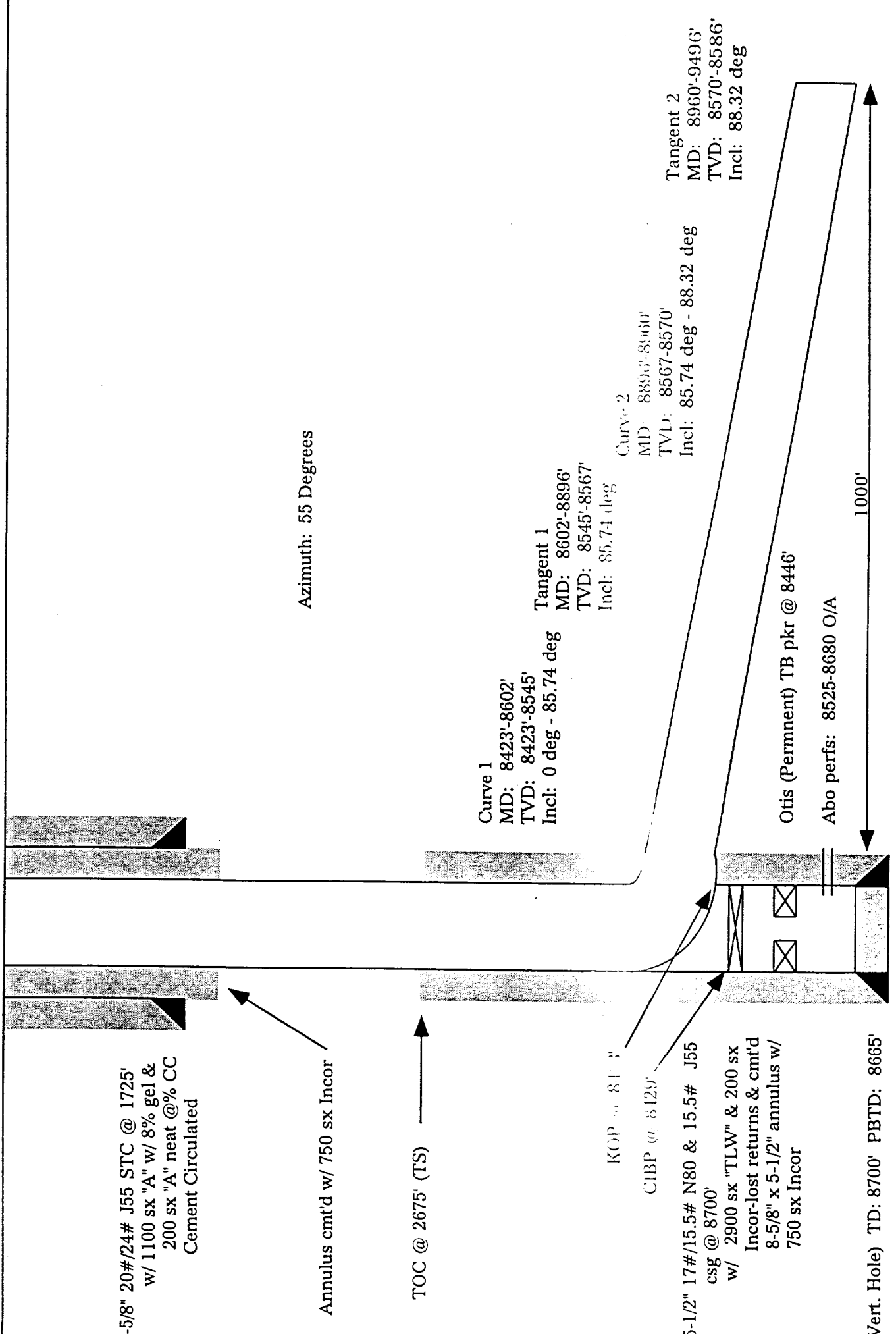
D: 8700' PBTD: 8665'

660' FNL
860' FWL
S-26
T17S
R34E
KB: 4048'
GL: 4033'

NVAU 130W
Vacuum Field
Lea County, New Mexico

MEE: 08/11/97
Spud: 04/20/70

Proposed Configuration



**WELL PLANNING
REPORT**

MOBIL E&P SERVICES, INC.

NVAU #136

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

S RRY-SUN DRILLING SERVICES WELL PROFILE DATA

MOBIL E&P SERVICES, INC.
NVAU #136

N/A
11-Aug-97

MEASURED DEPTH	ANGLE DEG	DIRECTION DEG	VERTICAL DEPTH	LATITUDE (Ft)	DEPARTURE (Ft)	VERTICAL SECTION	DOG LEG	TOOL FACE
8420.00	0.000	0.000	8420.00	0.00	0.00	0.00		
8423.00	0.000	0.000	8423.00	0.00	0.00	0.00	0.000	0.000
8430.00	2.625	55.000	8430.00	0.09 N	0.13 E	0.16		
8431.00	3.000	55.000	8431.00	0.12 N	0.17 E	0.21	37.500	55.000
8440.00	6.600	55.000	8439.96	0.55 N	0.79 E	0.96		
8450.00	10.600	55.000	8449.85	1.41 N	2.01 E	2.46		
8460.00	14.600	55.000	8459.61	2.66 N	3.80 E	4.64		
8461.00	15.000	55.000	8460.57	2.81 N	4.01 E	4.89	40.000	0.000
8470.00	19.500	55.000	8469.17	4.34 N	6.19 E	7.56		
8480.00	24.500	55.000	8478.43	6.49 N	9.26 E	11.31		
8490.00	29.500	55.000	8487.34	9.09 N	12.98 E	15.85		
8500.00	34.500	55.000	8495.82	12.13 N	17.32 E	21.14		
8510.00	39.500	55.000	8503.80	15.58 N	22.25 E	27.16		
8520.00	44.500	55.000	8511.23	19.41 N	27.73 E	33.85		
8530.00	49.500	55.000	8518.05	23.61 N	33.72 E	41.16		
8540.00	54.500	55.000	8524.21	28.13 N	40.17 E	49.04		
8550.00	59.500	55.000	8529.65	32.94 N	47.04 E	57.42		
8560.00	64.500	55.000	8534.34	38.00 N	54.27 E	66.25		
8570.00	69.500	55.000	8538.25	43.28 N	61.81 E	75.45		
8580.00	74.500	55.000	8541.34	48.73 N	69.59 E	84.96		
8590.00	79.500	55.000	8543.59	54.32 N	77.57 E	94.70		
8600.00	84.500	55.000	8544.98	59.99 N	85.68 E	104.60		
8602.48	85.742	55.000	8545.19	61.41 N	87.71 E	107.07	50.000	0.000
8610.00	85.742	55.000	8545.75	65.71 N	93.85 E	114.57		
8620.00	85.742	55.000	8546.49	71.43 N	102.02 E	124.54		
8630.00	85.742	55.000	8547.23	77.15 N	110.19 E	134.51		
8640.00	85.742	55.000	8547.98	82.87 N	118.36 E	144.49		
8650.00	85.742	55.000	8548.72	88.59 N	126.52 E	154.46		
8660.00	85.742	55.000	8549.46	94.31 N	134.69 E	164.43		
8670.00	85.742	55.000	8550.20	100.03 N	142.86 E	174.40		
8680.00	85.742	55.000	8550.95	105.75 N	151.03 E	184.37		
8690.00	85.742	55.000	8551.69	111.47 N	159.20 E	194.35		
8700.00	85.742	55.000	8552.43	117.19 N	167.37 E	204.32		
8710.00	85.742	55.000	8553.17	122.91 N	175.54 E	214.29		
8720.00	85.742	55.000	8553.92	128.63 N	183.71 E	224.26		
8730.00	85.742	55.000	8554.66	134.35 N	191.88 E	234.24		
8740.00	85.742	55.000	8555.40	140.07 N	200.04 E	244.21		
8750.00	85.742	55.000	8556.14	145.79 N	208.21 E	254.18		
8760.00	85.742	55.000	8556.89	151.51 N	216.38 E	264.15		
8770.00	85.742	55.000	8557.63	157.23 N	224.55 E	274.13		
8780.00	85.742	55.000	8558.37	162.95 N	232.72 E	284.10		
8790.00	85.742	55.000	8559.11	168.67 N	240.89 E	294.07		
8800.00	85.742	55.000	8559.86	174.39 N	249.06 E	304.04		
8810.00	85.742	55.000	8560.60	180.11 N	257.23 E	314.02		
8820.00	85.742	55.000	8561.34	185.83 N	265.40 E	323.99		

S MERRY-SUN DRILLING SERVICES **WELL PROFILE DATA**

MOBIL E&P SERVICES, INC.
NVAU #136

N/A
11-Aug-97

MEASURED DEPTH	ANGLE DEG	DIRECTION DEG	VERTICAL DEPTH	LATITUDE (Ft)	DEPARTURE (Ft)	VERTICAL SECTION	DOG LEG	TOOL FACE
8830.00	85.742	55.000	8562.08	191.55 N	273.56 E	333.96		
8840.00	85.742	55.000	8562.83	197.27 N	281.73 E	343.93		
8850.00	85.742	55.000	8563.57	202.99 N	289.90 E	353.91		
8860.00	85.742	55.000	8564.31	208.71 N	298.07 E	363.88		
8870.00	85.742	55.000	8565.05	214.43 N	306.24 E	373.85		
8880.00	85.742	55.000	8565.80	220.15 N	314.41 E	383.82		
8890.00	85.742	55.000	8566.54	225.87 N	322.58 E	393.80		
8896.22	85.742	55.000	8567.00	229.43 N	327.66 E	400.00	0.000	0.000
8900.00	85.893	55.000	8567.28	231.59 N	330.75 E	403.77		
8910.00	86.293	55.000	8567.96	237.31 N	338.92 E	413.74		
8920.00	86.693	55.000	8568.57	243.04 N	347.10 E	423.73		
8930.00	87.093	55.000	8569.11	248.77 N	355.28 E	433.71		
8940.00	87.493	55.000	8569.58	254.50 N	363.46 E	443.70		
8950.00	87.893	55.000	8569.99	260.23 N	371.64 E	453.69		
8960.00	88.293	55.000	8570.32	265.96 N	379.83 E	463.69		
8960.80	88.325	55.000	8570.34	266.42 N	380.49 E	464.49	4.000	0.000
8970.00	88.325	55.000	8570.61	271.69 N	388.02 E	473.68		
8980.00	88.325	55.000	8570.90	277.43 N	396.21 E	483.68		
8990.00	88.325	55.000	8571.20	283.16 N	404.39 E	493.67		
9000.00	88.325	55.000	8571.49	288.89 N	412.58 E	503.67		
9010.00	88.325	55.000	8571.78	294.63 N	420.77 E	513.67		
9020.00	88.325	55.000	8572.07	300.36 N	428.96 E	523.66		
9030.00	88.325	55.000	8572.36	306.09 N	437.15 E	533.66		
9040.00	88.325	55.000	8572.66	311.83 N	445.33 E	543.65		
9050.00	88.325	55.000	8572.95	317.56 N	453.52 E	553.65		
9060.00	88.325	55.000	8573.24	323.29 N	461.71 E	563.64		
9070.00	88.325	55.000	8573.53	329.03 N	469.90 E	573.64		
9080.00	88.325	55.000	8573.83	334.76 N	478.09 E	583.64		
9090.00	88.325	55.000	8574.12	340.49 N	486.27 E	593.63		
9100.00	88.325	55.000	8574.41	346.23 N	494.46 E	603.63		
9110.00	88.325	55.000	8574.70	351.96 N	502.65 E	613.62		
9120.00	88.325	55.000	8574.99	357.69 N	510.84 E	623.62		
9130.00	88.325	55.000	8575.29	363.43 N	519.03 E	633.61		
9140.00	88.325	55.000	8575.58	369.16 N	527.21 E	643.61		
9150.00	88.325	55.000	8575.87	374.89 N	535.40 E	653.61		
9160.00	88.325	55.000	8576.16	380.63 N	543.59 E	663.60		
9170.00	88.325	55.000	8576.46	386.36 N	551.78 E	673.60		
9180.00	88.325	55.000	8576.75	392.09 N	559.97 E	683.59		
9190.00	88.325	55.000	8577.04	397.83 N	568.15 E	693.59		
9200.00	88.325	55.000	8577.33	403.56 N	576.34 E	703.58		
9210.00	88.325	55.000	8577.63	409.29 N	584.53 E	713.58		
9220.00	88.325	55.000	8577.92	415.03 N	592.72 E	723.58		
9230.00	88.325	55.000	8578.21	420.76 N	600.91 E	733.57		
9240.00	88.325	55.000	8578.50	426.49 N	609.09 E	743.57		
9250.00	88.325	55.000	8578.79	432.23 N	617.28 E	753.56		

**FERRY-SUN DRILLING SERVICES
WELL PROFILE DATA**

**MOBIL E&P SERVICES, INC.
NVAU #136**

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

MEASURED DEPTH	ANGLE DEG	DIRECTION DEG	VERTICAL DEPTH	LATITUDE (Ft)	DEPARTURE (Ft)	VERTICAL SECTION	DOG LEG	TOOL FACE
9260.00	88.325	55.000	8579.09	437.96 N	625.47 E	763.56		
9270.00	88.325	55.000	8579.38	443.69 N	633.66 E	773.55		
9280.00	88.325	55.000	8579.67	449.43 N	641.85 E	783.55		
9290.00	88.325	55.000	8579.96	455.16 N	650.03 E	793.55		
9300.00	88.325	55.000	8580.26	460.89 N	658.22 E	803.54		
9310.00	88.325	55.000	8580.55	466.63 N	666.41 E	813.54		
9320.00	88.325	55.000	8580.84	472.36 N	674.60 E	823.53		
9330.00	88.325	55.000	8581.13	478.09 N	682.79 E	833.53		
9340.00	88.325	55.000	8581.42	483.83 N	690.97 E	843.52		
9350.00	88.325	55.000	8581.72	489.56 N	699.16 E	853.52		
9360.00	88.325	55.000	8582.01	495.29 N	707.35 E	863.52		
9370.00	88.325	55.000	8582.30	501.03 N	715.54 E	873.51		
9380.00	88.325	55.000	8582.59	506.76 N	723.72 E	883.51		
9390.00	88.325	55.000	8582.89	512.50 N	731.91 E	893.50		
9400.00	88.325	55.000	8583.18	518.23 N	740.10 E	903.50		
9410.00	88.325	55.000	8583.47	523.96 N	748.29 E	913.49		
9420.00	88.325	55.000	8583.76	529.70 N	756.48 E	923.49		
9430.00	88.325	55.000	8584.06	535.43 N	764.66 E	933.49		
9440.00	88.325	55.000	8584.35	541.16 N	772.85 E	943.48		
9450.00	88.325	55.000	8584.64	546.90 N	781.04 E	953.48		
9460.00	88.325	55.000	8584.93	552.63 N	789.23 E	963.47		
9470.00	88.325	55.000	8585.22	558.36 N	797.42 E	973.47		
9480.00	88.325	55.000	8585.52	564.10 N	805.60 E	983.46		
9490.00	88.325	55.000	8585.81	569.83 N	813.79 E	993.46		
9496.54	88.325	55.000	8586.00	573.58 N	819.15 E	1000.00	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)**

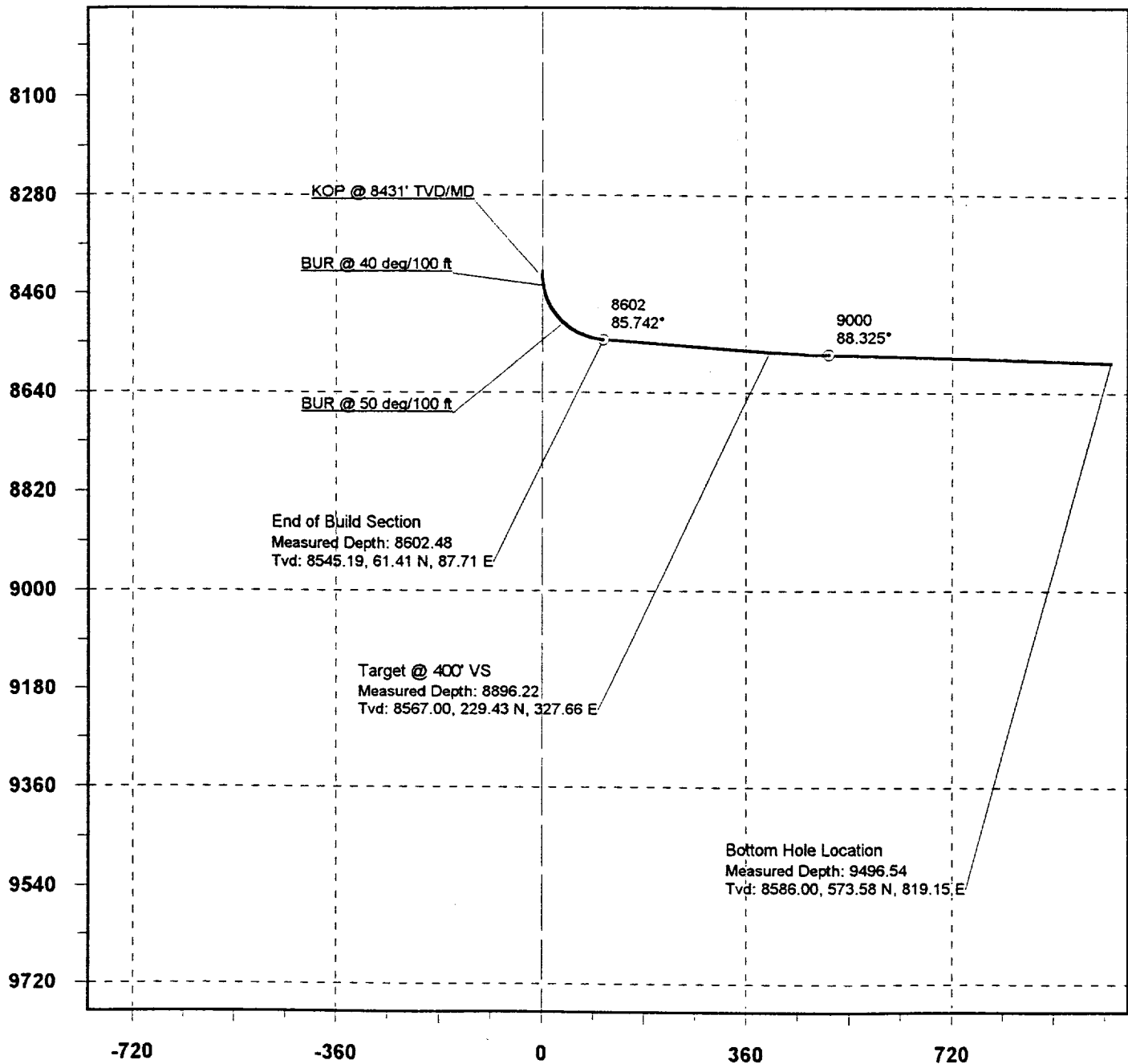
**Based upon Minimum Curvature type calculations. At a Measured Depth of 9496.54 Feet,
the Bottom Hole Displacement is 1000.00 Feet, in the Direction of 55.000° (True)**

S RRY-SUN DRILLING SERVICES VERTICAL SECTION

MOBIL E&P SERVICES, INC.
NVAU #136

N/A
11-Aug-97

VERTICAL
DEPTH



VERTICAL SECTION - Direction: 55.000° (True)

Depths shown on plot are Measured Depths.

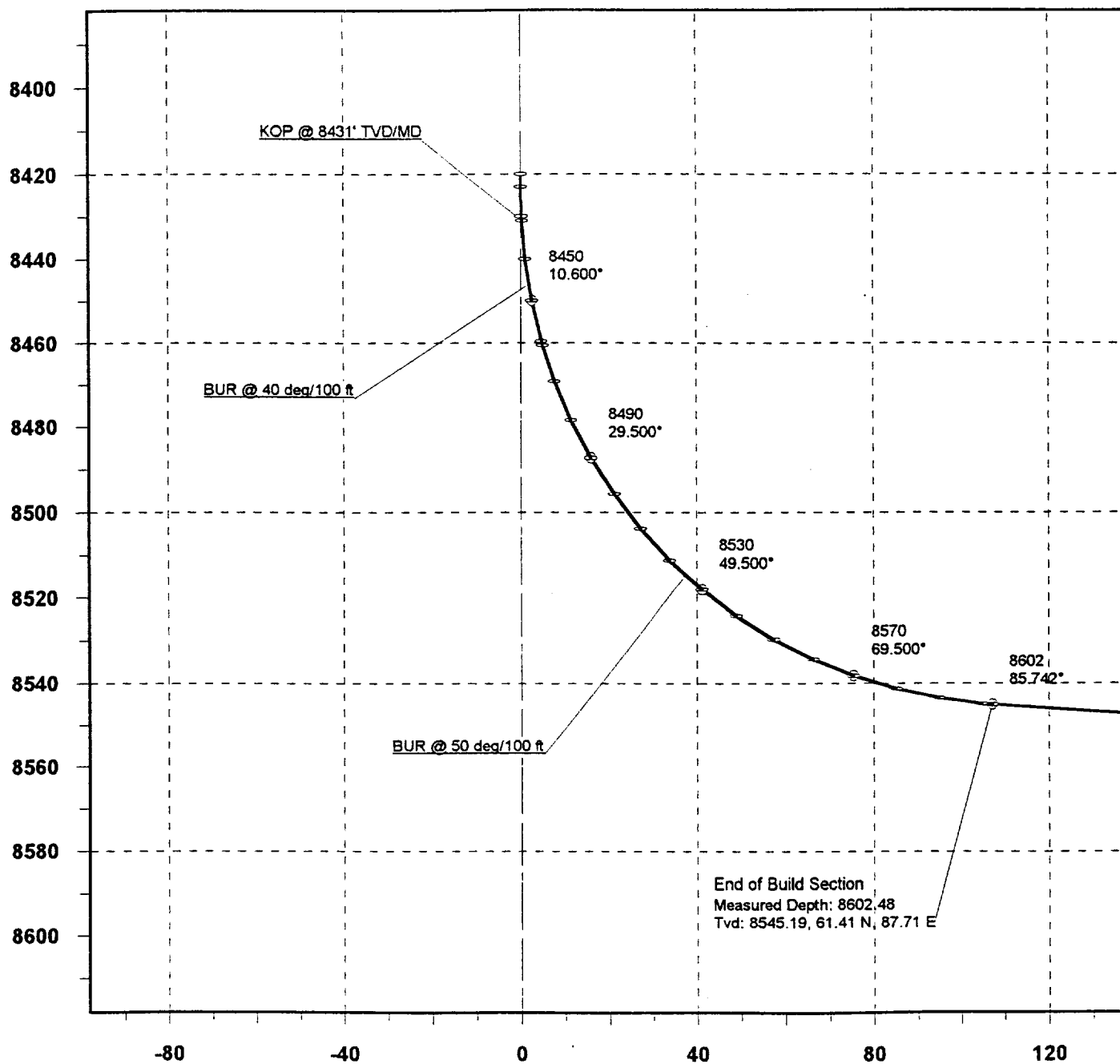
All measurements are in Feet.

SI RRY-SUN DRILLING SERVICES VERTICAL SECTION

MOBIL E&P SERVICES, INC.
NVAU #136

N/A
11-Aug-97

VERTICAL
DEPTH



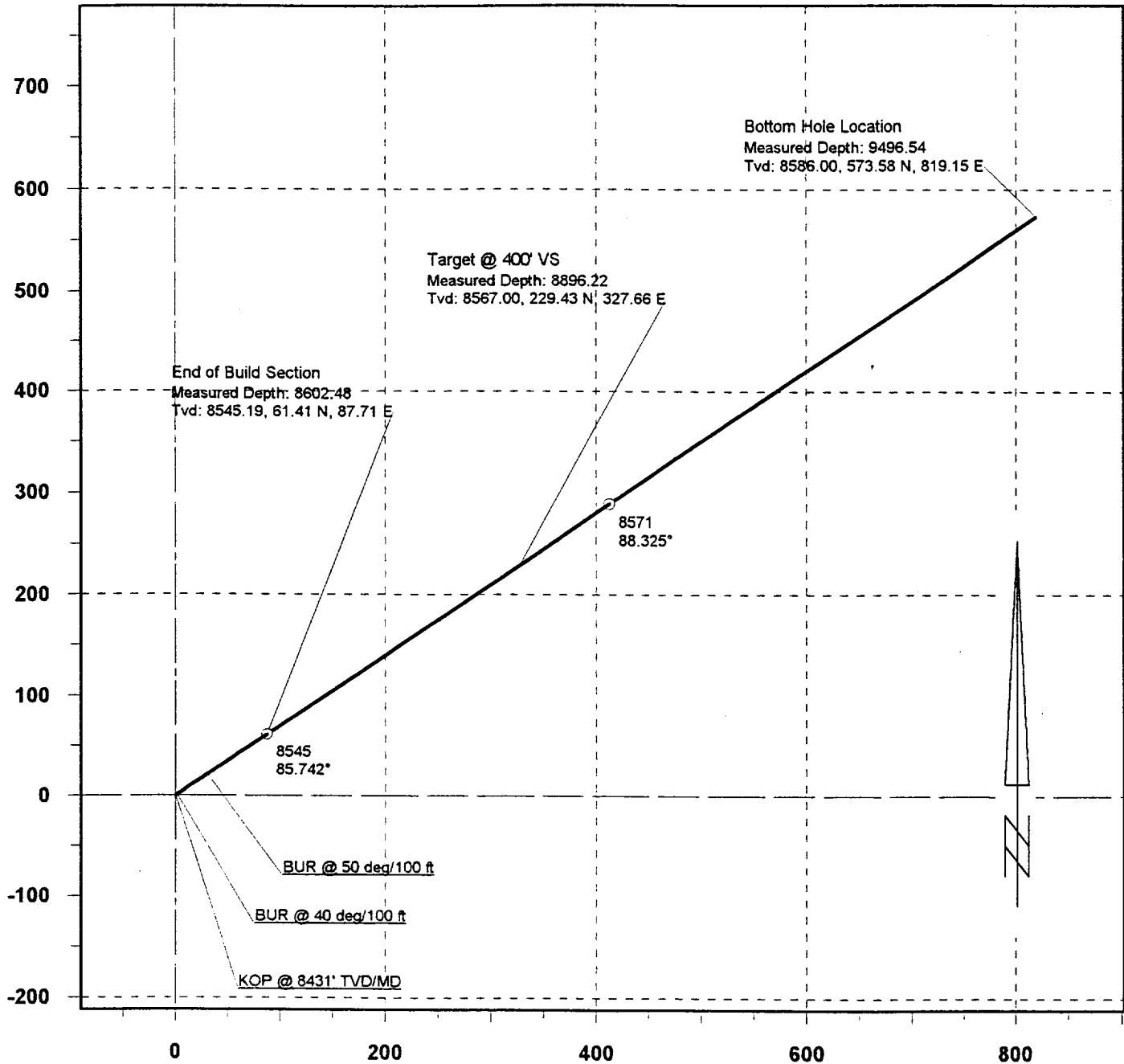
VERTICAL SECTION - Direction: 55.000° (True)
Depths shown on plot are Measured Depths.
All measurements are in Feet.

S RRY-SUN DRILLING SERVICES HORIZONTAL SECTION

MOBIL E&P SERVICES, INC.
NVAU #136

N/A
11-Aug-97

LATITUDE
VALUES



DEPARTURE VALUES

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