STATE OF NEW MEXICO



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

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

June 30, 1997

Mobil Exploration & Producing U. S. Inc. c/o Permits West, Inc. 37 Verano Loop Santa Fe, New Mexico 87505 Attention: Brain Wood

Administrative Order DD-177(H) High Angle/Horizontal

Dear Mr. Wood:

Reference is made to your application dated June 15, 1997 on behalf of the operator Mobil Producing Texas & New Mexico Inc. ("Mobil") for authorization to institute high angle/horizontal directionally drilling in the Vacuum-Abo Pool within its Mobil North Vacuum Abo Pressure Maintenance Project Area in Lea County, New Mexico.

The Division Director Finds That:

- (1) The application of Mobil as Unit operator of the North Vacuum-Abo Unit (approved by Division Order No. R-4412, dated October 10, 1972) has been duly filed under the provisions of 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 11,274 on June 13, 1995;
- (2) By Division Order No. R-4430, as amended, Mobil was authorized to institute its Mobil North Vacuum Abo Pressure Maintenance Project comprising the following described area in Lea County, New Mexico, by the injection of gas and water into the North Vacuum-Abo Pool:

TOWNSHIP 17 SOUTH, RA	NGE 34 EAST. NMPM
Section 2:	SW/4
Section 3:	SE/4
Section 10:	E/2
Section 11:	S/2
Section 12:	NE/4 and S/2
Section 13:	N/2 and SW/4
Section 14:	All
Section 15:	E/2
Section 22:	E/2
Sections 23 and 24:	All
Section 25:	N/2 NE/4 and NW/4
Section 26:	All

Section 27: E/2

TOWNSHIP 17 SOUTH, RANGE 35 EAST, NMPM

Section 19: 7

W/2 NW/4.

- (3) Said Order No. R-4430, as amended, further provides for additional producing wells and injection wells at orthodox and unorthodox locations within the boundaries of the North Vacuum-Abo Unit Area as may be necessary to complete an efficient production and injection pattern, provided said wells are drilled no closer than 460 feet to the outer boundary of said Pressure Maintenance Project nor closer than 10 feet to any guarterquarter section or subdivision inner boundary (see Rule 10);
- (4) The North Vacuum-Abo Pool is subject to the "Special Rules and Regulations for the North Vacuum-Abo (Oil) Pool", as promulgated by Division Order No. R-2421, as amended, which provides for 80-acre oil spacing and proration units, or drilling units, and requires that wells be located within a 200 foot radius of the center of a governmental quarter-quarter section or lot, provided that the first well on the 80-acre unit is located in either the NW/4 or SE/4 of a governmental quarter section;
- Mobil is seeking to commence high angle/horizontal directional drilling in the North (5) Vacuum-Abo Pool within its Mobil North Vacuum Abo Pressure Maintenance Project Area, as described above in order to further enhance oil recovery from this existing secondary recovery project;
- The "project area", pursuant to Division General Rule 111.A(7), for said high (6) angle/horizontal drilling should coincide with that area described above as the Mobil North Vacuum Abo Pressure Maintenance Project Area;
- It is Mobil's intent at this time to recomplete: (7)

its North Vacuum Abo-Unit Well No. 244 (API (a) No. 30-025-28603), located within a standard 80-acre oil spacing and proration unit for the North Vacuum-Abo Pool comprising the W/2 SE/4 of said Section 23 at a standard oil well location 589 feet from the South line and 1859 feet from the East line (Unit O) of said Section 23, by milling a window in the 5-1/2 inch production casing string at an approximate depth of 8,370 feet, kick-off in a northwesterly direction, and drill a high-angle hole a lateral distance of approximately 1400 feet through the Abo formation; and,

its North Vacuum Abo-Unit Well No. 278 (API **(b)** No. 30-025-29235), located within a standard 80-acre oil

> spacing and proration unit comprising the S/2 SW/4 of said Section 23 at a standard oil well location 500 feet from the South line and 650 feet from the West line (Unit M) of said Section 23, by milling a window in the 5-1/2 inch production casing string at an approximate depth of 8,445 feet, kick-off in a southwesterly direction, and drill a high-angle hole a lateral distance of approximately 1700 feet through the Abo formation;

- (8) The applicable drilling window or "producing area", pursuant to Division General Rule 111.A(8), for said wellbores should include that area within the above-described Mobil North Vacuum Abo Pressure Maintenance Project and coinciding high angle/horizontal directional drilling project area that is no closer than 460 feet to its outer boundary; and,
- (9) It appears the applicant has satisfied all of the appropriate requirements prescribed in said Rule 111.D and E, 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.

IT IS THEREFORE ORDERED THAT:

(1) Mobil Producing Texas & New Mexico Inc. ("Mobil"), as Unit operator of the North Vacuum-Abo Unit (approved by Division Order No. R-4412, dated October 10, 1972), is hereby authorized to initiate a high angle/horizontal directional drilling project within the North Vacuum-Abo Pool in Lea County, New Mexico, by recompleting its:

(a) North Vacuum Abo-Unit Well No. 244 (API No. 30-025-28603), located at a standard oil well location 589 feet from the South line and 1859 feet from the East line (Unit O) of said Section 23, by milling a window in the 5-1/2 inch production casing string at an approximate depth of 8,370 feet, kick-off in a northwesterly direction, and drill a high-angle hole a lateral distance of approximately 1400 feet through the Abo formation; and,

(b) North Vacuum Abo-Unit Well No. 278 (API No. 30-025-29235), located at a standard oil well location 500 feet from the South line and 650 feet from the West line (Unit M) of said Section 23, by milling a window in the 5-1/2 inch production casing string at an approximate depth of 8,445 feet, kick-off in a southwesterly direction, and drill a high-angle hole a lateral distance of approximately 1700 feet through the Abo formation.

<u>PROVIDED HOWEVER THAT</u> prior to commencing directional drilling operations in said wellbores, the applicant shall establish the location of the kick-off point by means of a directional survey

acceptable to the Division.

<u>PROVIDED FURTHER THAT</u> 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 each wellbore 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", pursuant to Division General Rule 111.A(7), for said high angle/horizontal drilling should coincide with the Mobil North Vacuum Abo Pressure Maintenance Project (approved by Division Order No. R-4430, as amended) comprising the following described area in Lea County, New Mexico:

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	TIDOOTIT		

Section 2:	SW/4
Section 3:	SE/4
Section 10:	E/2
Section 11:	S/2
Section 12:	NE/4 and S/2
Section 13:	N/2 and SW/4
Section 14:	All
Section 15:	E/2
Section 22:	E/2
Sections 23 and 24:	All
Section 25:	N/2 NE/4 and NW/4
Section 26:	All
Section 27:	E/2

TOWNSHIP 17 SOUTH. RANGE 35 EAST. NMPMSection 19:W/2 NW/4.

(4) The applicable drilling window or "producing area", pursuant to Division General Rule 111.A(8), for said wellbores should include that area within the above-described Mobil North Vacuum Abo Pressure Maintenance Project and coinciding high angle/horizontal directional drilling project area that is no closer than 460 feet to its outer boundary.

(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, and Order Nos. R-2421, as amended, and R-4430, as amended.

(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 depths (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-Mobil

Rue: 6-15-97 Susp: NA Rehasud: 6-30-97

June 30, 1997

Mobil Exploration & Producing U. S. Inc. c/o Permits West, Inc. 37 Verano Loop Santa Fe, New Mexico 87505

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Administrative Order DD ***(H) High Angle/Horizontal

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- (5) Mobile is seeking to commence high angle/horizontal directional drilling in the North Vacuum-Abo Pool within its Mobile North Vacuum Abo Pressure Maintenance Project Area, as described above in order to further enhance oil recovery from this existing secondary recovery project;
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- (7) It is Mobile's intent at this time to recomplete:

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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

SEAL

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

Mobil Exploration & Producing U.S. Inc.

P.O. BOX 633 MIDLAND, TEXAS 79702-0633

June 11, 1997

State of New Mexico Energy and Minerals Department Oil Conservation Division 2040 South Pacheco Santa Fe, New Mexico 87505

Dear Mr. Stogner:

Mobil is currently accelerating a "horizontal program" in our North Vacuum Abo Unit. The program includes two producers and four injection wells. We would appreciate your assistance in obtaining approval to spud the two well producers by June 30, 1997.

Attached for your information is a copy of the C-101, C-102, a map with the two horizontals depicted, a cross-section, , proposed wellbore sketch and well profile data. The two well producers are located in the interior of the unit and do not require offset operator approval.

Call me at (915) 688-2585 if you have further questions.

Sincerely,

Shuley Houchins

Shirley Houchins Environmental & Regulatory Technician

cc: NMOCD, P.O. Box 1980, Hobbs, NM 88240 Attachments

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				•	DR DIVISION USE ON				
			NEW MEXIC		nserval	TION DIV	ISION		
			ADMINISTRAT	FIVE APPI	LICATIO	N COV	ERSHEET		
		THIS COV	ERSHEET IS MANDATORY FOR ALL	ADMINISTRATIVE API	PLICATIONS FOR	EXCEPTIONS TO	DIVISION RULES AN	DREGULATIONS	
Applic	ation Acr	(DHC- (P	[NSP-Non-Standar [DD-Direction Downhole Commingling] C-Pool Commingling] [([WFX-Waterflood Ex [SWD-Salt Wate -Qualified Enhanced Oil R	nal Drilling) [; [CTB-Lease (OLS - Off-Lease pansion] [PM r Disposal] [SD-Simultan Commingling e Storage] IX-Pressure (IPI-Injection	eous Dedica] [PLC-Po [OLM-Off-Lo Maintenanco Pressure Inc	ation] ol/Lease Comr base Measuren b Expansion] crease]	nent]	
[1]	ТҮРЕ	OF A	PPLICATION - Chec	k Those Whi	ch Apply f	or [A]			
1-7		[A]	Location - Spacing L NSL NSP						
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		[B]	Commingling - Stora	-		OLS			
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		[C]	Injection - Disposal	- Pressure Inc	rease - Enl	hanced Oil	Recovery		-
[2]	NOTI	FICA	ION REQUIRED TO	D: - Check Th	hose Which	n Apply, or	Does Not	Apply	
		[A]	G Working, Royalty						
		[B]	Offset Operators,	Leaseholders	or Surface	e Owner			
		[C]	Application is On	e Which Req	uires Publis	shed Legal	Notice		
		[D]	U.S. Bureau of Land						
		[E]	G For all of the above	ve, Proof of N	Notification	or Publica	tion is Attac	hed, and/or,	
		[F]	U Waivers are Attac	hed				,	

INFORMATION / DATA SUBMITTED IS COMPLETE - Statement of Understanding [3]

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I further verify that all applicable API Numbers are included. I understand that any omission of data, information or notification is cause to have the application package returned with no action taken.

BRIAN WOOD Print or Type Name

Note: Statement must be completed by an individual with supervisory capacity. (cusulta pt IPSZ Title Signature

6-15-97 Date

State of New Mexico Form C-101 Energy, Minerals & Natural Resources Department District I Revised February 10, 1994 PO Box 1980, Hobbs, NM 88241-1980 Instructions on back District II **OIL CONSERVATION DIVISION** Submit to Appropriate District Office PO Drawer DD, Artesia, NM 88211-0719 District III P.O. Box 2088 State Lease - 6 Copies 1000 Rio Brazos Rd., Aztec, NM 87410 Fee Lease - 5 Copies Santa Fe, NM 87504-2088 District IV PO Box 2088, Santa Fe, NM 87504-2088 AMENDED REPORT APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE ² OGRID Number ¹Operator name and Address MOBIL PRODUCING TX & NM INC.* *MOBIL EXPLORATION & PRODUCING US INC. AS AGENT FOR MPTM 3 API Number P.O. BOX 633, MIDLAND, TX 79702 30-025-28603 30-0 ⁴ Property Code ⁶ Well Number ⁵ Property Name 8055 NORTH VACUUM ABO 244 Surface Location UL or lot no. Section Lot. Idn Feet from the North/South Line Feet from the East/West line Township Range County 0 23 17-S 589' SOUTH 1859' EAST 34-E LEA 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 .1 23 17-S 34-E 1637' SOUTH 2688' WEST LEA Proposed Pool 1 ¹⁰ Proposed Pool 2 11 Work Type Code 12 Well Type Code 13 Cable/Rotary ¹⁴ Lease Type Code ¹⁵ Ground Level Elevation P O ROTARY S 4000' ¹⁶ Multiple 17 Proposed Depth 18 Formations 19 Contractor 20 Spud Date 8528' Abo 06-30-97 NO ²¹ Proposed Casing and Cement Program Casing weight/foot Setting Depth Estimated TOC Hole Size **Casing Size** Sacks of Cement 17 1/2" 13 3/8" 48# H40 400' CIRCULATED SURFACE 12 1/2" 8 5/8" 28# **S80** 5000' CIRCULATED SURFACE 7 7/8" 5 1/2" 4800-7300' CIRCULATED SURFACE 15.5# K55 17# 7300-TD CIRCULATED SURFACE EXISTING WELLBORE **N80** 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 ²³ I hereby certify that the information given above is true and complete to the best **OIL CONSERVATION DIVISION** of my knowledge and belief. Approved by: Signature: c)<u>vinc</u> Title: Printed name: SHIRLEY HOUCHINS Approval Date: Expiration Date: Title: **ENVIRONMENTAL & REGULATORY TECHNICIAN** Conditions of Approval: Date: Phone:

Attached

(915) 688-2585

06-12-97

State of New Mexico ' Energy, Minerals and Natural Resources Department

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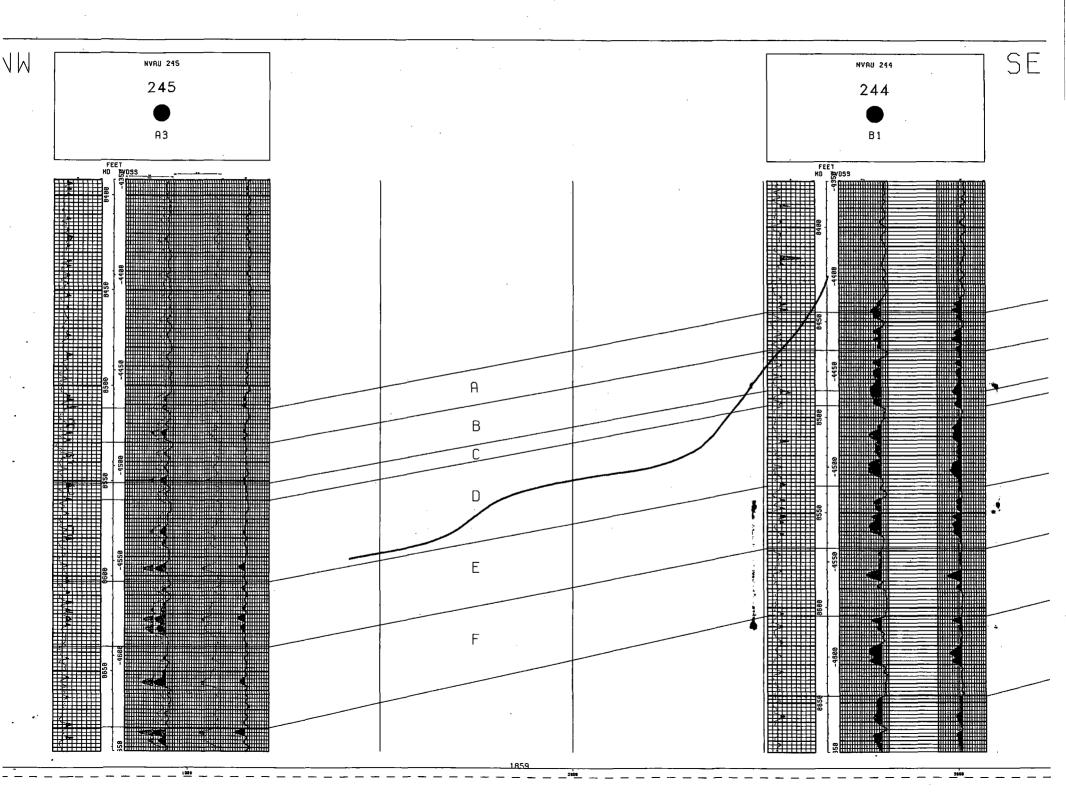
District I PO Box 1980, Hobbs, NM 88241-1980 District II PO Drawer DD, Artesia, NM 88211-0719 District III 1000 Rio Brazos Rd., Aztec, NM 87410 District IV PO Box 2088, Santa Fe, NM 87504-2088

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 Numbe	٢		Pool Code			Pool Name				
30-	-025-280	503		NORTH VACUUM Abo							
Property			Propery Name Well Number							Well Number	
805	5	NORTH V	NORTH VACUUM Abo 244								
OGRID										Elevation	
Ì						US INC	. AS AGENT FO				4000'
L				7	^o Surface						
UI or lot no.	Section	Township	Range	Lot. Idn	Feet from		North/South Line	Feet from the	East/W	est line	County
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			L	I m Hole I o			nt From Surface				
	C	T			-			The state of the	D		
UL or lot no.	Section	Township	Range	Lot. Idn	Feet from		North/South Line	Feet from the		est line	County
J ¹² Dedicated Acre	23	17-S	34-E	Code 115 Or	163 der No.		SOUTH	2688'	WE	51	LEA
- Dedicated Acte			.onsonuation		dei No.						
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		8688						¹⁷ OPERAT	FOR CH	ERTIF	ICATION
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								ENV. & REG	. TECH	INICIAN	۱ <u>ــــــــــــــــــــــــــــــــــــ</u>
								06-12-97			
· · ·							-	Date			
								¹⁸ SURVEY		DTIEL	
	ę.		~		v		V. Vacuum Abe Umit #234	I hereby certify th			on shown on this plat
		N. Vacuum	140				Abe Unit #234	was plotted from me or under my	field note	s of ac	tual surveys made by that the same is true
-		Unit #24		10 14 1			0	and correct to the best			
		1932 -52-2		BHL 1639	FSL		1980'550	- 545 IFE			
		30-025-2	28604	\$ 2688'	FWL		30-04	5-28314			
				<u>\</u>	<u>.</u>			Date of Survey		•	
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North Vacuum	Abo Ilais			Ň							ĺ
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ORATION & PRODUCING US
00 FEET 30-May-1997
VACUUM ABO UNIT ZONTAL WELL PROGRAM PHASE I

NVAU #244 Lea County, New Mexico

I. GENERAL DRILLING SUMMARY

A. Objective

The objective of this project is to mill a window in the 5-1/2" casing from 8366' to 8375' and drill an open hole lateral in the Abo formation with a vertical section of 1380 ft.

- B. Procedure
 - 1. Prepare location and dig workover pit.
 - 2. Bleed well down. MIRU pulling unit and required H₂S equipment.

-1

- 3. ND wellhead. NU BOP (double ram w/ stripper head). POH w/ production/injection equipment. Set CIBP and whipstock at 8425 and mill window from 8366 to 8375 ft.
- 4. Drill curve and lateral to a vertical section of 1380 ft. Drilling operations complete.

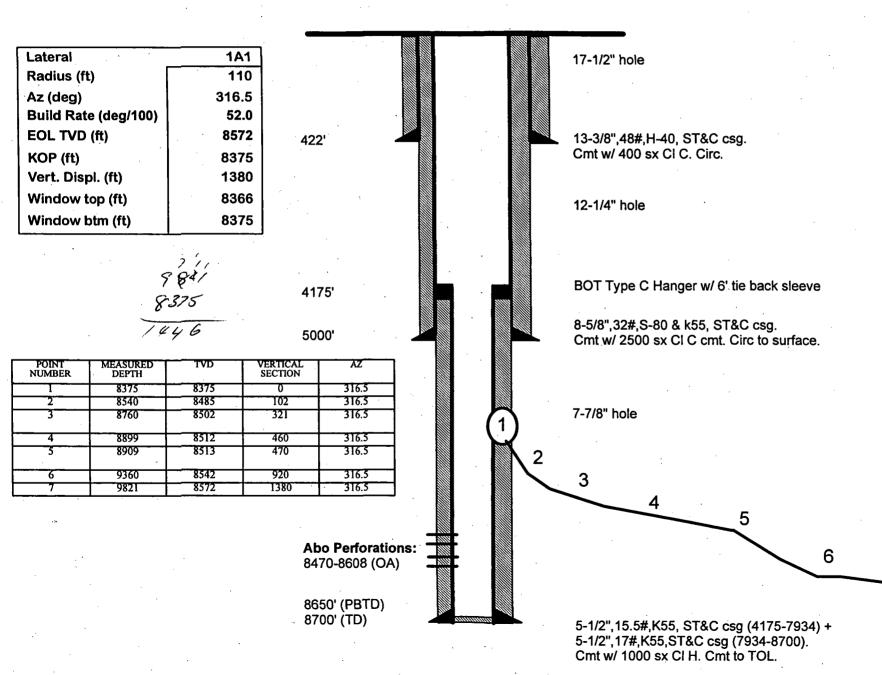
Note: Whipstock and CIBP will be retrieved after lateral section is stimulated.

North Vacuum Abo Unit #244 Proposed

589' FSL & 1859' FEL Sec 23, T17S - R34E Lea County, New Mexico

GL = 4028' DF = 4045' KB = 17' AGL Drilled date = 4/84

7



WELL PLANNING REPORT

MOBIL E&P SERVICES, INC.

NVAU #244

MOBIL E&P SERVICES, INC. NVAU #244

TOOL ANGLE DIRECTION VERTICAL LATITUDE DEPARTURE VERTICAL DOG MEASURED SECTION LEG FACE DEG DEG DEPTH (Ft.) (Ft.) DEPTH 0.00 0.00 0.000 0.000 8375.00 0.00 8375.00 316.499 8380.00 0.08 N 0.08 W 0.11 2.600 8380.00 8390.00 7.800 316.499 8389.95 0.74 N 0.70 W 1.02 1.94 W 2.05 N 13.000 316.499 8399.79 2.82 8400.00 3.79 W 4.00 N 5.51 8410.00 18.200 316.499 8409.41 316.499 8418.76 6.24 W 9.06 8420.00 23.400 6.57 N 316,499 9.25 W 13.44 28,600 8427.74 9.75 N 8430.00 33,800 316.499 8436.30 13.51 N 12.82 W 18.62 8440.00 39.000 316.499 8444.34 17.81 N 16.90 W 24.56 8450.00 21.47 W 31.19 316.499 8451.82 22.63 N 8460.00 44.200 316.499 8458.66 27.91 N 26.49 W 38.48 49.400 8470.00 8464.81 31.91 W 46.36 54.600 316.499 33.63 N 8480.00 59,800 316.499 8470.23 39.72 N 37.69 W 54.76 8490.00 65.000 316.499 8474.86 46.15 N 43.79 W 63.62 8500.00 52.85 N 50.15 W 72.86 8510.00 70.200 316.499 8478.67 56.73 W 82.41 8481.63 75.400 316.499 59.78 N 8520.00 63.46 W 92.19 80.600 316.499 8483.70 66.87 N 8530.00 85.668 316.499 8484.87 73.89 N 70.12 W 101.86 52.000 316.499 8539.75 74.07 N 70.29 W 102.11 8540.00 85.668 316.499 8484.89 77.16 W 316.499 8485.64 81.30 N 112.09 85.668 8550.00 84.02 W 122.06 8486.40 88.54 N 8560.00 85.668 316.499 95.77 N 90.88 W 132.03 8487.15 8570.00 85.668 316.499 316.499 142.00 8487.91 103.00 N 97.75 W 85.668 8580.00 316.499 8488.67 110.23 N 104.61 W 151.97 85.668 8590.00 85.668 316,499 8489.42 117.47 N 111.48 W 161.94 8600.00 118.34 W 171.91 8490.18 124.70 N 85.668 316.499 8610.00 316.499 8490.93 131.93 N 125.20 W 181.89 85.668 8620.00 191.86 139.17 N 132.07 W 85.668 316.499 8491.69 8630.00 138.93 W 201.83 316.499 8492.44 146.40 N 85.668 8640.00 153.63 N 145.80 W 211.80 85.668 316.499 8493.20 8650.00 221.77 160.87 N 152.66 W 316.499 8493.95 8660.00 85.668 168.10 N 159.52 W 231.74 316.499 8494.71 85.668 8670.00 85.668 316.499 8495.46 175.33 N 166.39 W 241.71 8680.00 251.69 316,499 8496.22 182.56 N 173.25 W 8690.00 85.668 180.12 W 261.66 85.668 316.499 8496.97 189.80 N 8700.00 186.98 W 271.63 197.03 N 8710.00 85.668 316.499 8497.73 85.668 193.84 W 281.60 316,499 8498.49 204.26 N 8720.00 8499.24 211.50 N 200.71 W 291.57 85.668 316.499 8730.00 207.57 W 301.54 85.668 316.499 8500.00 218.73 N 8740.00 214.44 W 311.51 316.499 8500.75 225.96 N 8750.00 85.668 233.19 N 221.30 W 321.49 8501.51 85.668 316.499 8760.00 240.43 N 228.16 W 331.46 8502.26 85.668 316.499 8770.00 8503.02 247.66 N 235.03 W 341.43 85.668 316.499 8780.00 351.40 254.89 N 241.89 W. 8503.77 8790.00 85.668 316.499

262.13 N

8504.53

316.499

85.668

8800.00

248.76 W

361.37

MOBIL E&P SERVICES, INC. NVAU #244

MEASURED ANGLE DIRECTION VERTICAL LATITUDE DEPARTURE VERTICAL DOG TOOL DEPTH DEG DEG DEPTH SECTION LEG (Ft.) (Ft.) FACE 85.668 316.499 8505.28 255.62 W 8810.00 269.36 N 371.34 8820.00 85.668 316.499 8506.04 276.59 N 262.48 W 381.31 316.499 269.35 W 8830.00 85.668 8506.79 283.83 N 391.29 85.668 316.499 291.06 N 276.21 W 401.26 8840.00 8507.55 298.29 N 283.08 W 85.668 316.499 411.23 8850.00 8508.31 8860.00 85.668 316.499 8509.06 305.52 N 289.94 W 421.20 85.668 316.499 8509.82 312.76 N 296.80 W 431.17 8870.00 8880.00 85.668 316.499 8510.57 319.99 N 303.67 W 441.14 8890.00 85.668 316.499 8511.33 327.22 N 310.53 W 451.12 316.499 333.67 N 0.000 8898.91 85.668 8512.00 316.65 W 460.00 0.000 8898.91 85.668 316.499 8512.00 333.67 N 316.65 W 460.00 0.000 0.000 334.46 N 317.40 W 461.09 8900.00 85.733 316.499 8512.08 86.275 316.501 340.99 N 323.60 W 470.10 6.000 0.168 8909.04 8512.71 324.26 W 316.501 341.69 N 471.06 8910.00 86.275 8512.77 86.275 316.501 348.93 N 331.13 W 481.04 8920.00 8513.42 8930.00 86.275 316.501 8514.07 356.17 N 338.00 W 491.02 8940.00 86.275 316.501 8514.72 363.41 N 344.87 W 501.00 351.74 W 8950.00 86.275 316.501 8515.37 370.65 N 510.98 377.88 N 358.61 W 86.275 316.501 520.96 8960.00 8516.02 316.501 385.12 N 365.48 W 530.94 8970.00 86.275 8516.67 8980.00 86.275 316.501 8517.32 392.36 N 372.34 W 540.91 86.275 316.501 8517.97 399.60 N 379.21 W 550.89 8990.00 406.84 N 386.08 W 9000.00 86.275 316.501 8518.62 560.87 392.95 W 316.501 414.08 N 570.85 9010.00 86.275 8519.27 421.32 N 399.82 W 580.83 9020.00 86.275 316.501 8519.92 406.69 W 590.81 9030.00 86.275 316.501 8520.57 428.55 N 435.79 N 413.56 W 600.79 9040.00 86.275 316.501 8521.22 9050.00 86.275 316.501 8521.87 443.03 N 420.43 W 610.77 9060.00 86.275 316.501 8522.52 450.27 N 427.30 W 620.75 457.51 N 434.16 W 630.72 316.501 8523.17 9070.00 86.275 9080.00 86.275 316.501 8523.82 464.75 N 441.03 W 640.70 447.90 W 316.501 8524.47 471.99 N 650.68 9090.00 86.275 479.22 N 454.77 W 660.66 9100.00 86.275 316.501 8525.12 486.46 N 86.275 316.501 8525.77 461.64 W 670.64 9110.00 680.62 316.501 8526.42 493.70 N 468.51 W 9120.00 86.275 316.501 8527.07 500.94 N 475.38 W 690.60 9130.00 86.275 700.58 9140.00 86,275 316.501 8527.72 508.18 N 482.25 W 710.56 515.42 N 489.12 W 9150.00 86.275 316.501 8528.36 522.66 N 495.98 W 720.53 9160.00 86.275 316.501 8529.01 8529.66 529.89 N 502.85 W 730.51 86.275 316.501 9170.00 316.501 740.49 8530.31 537.13 N 509.72 W 9180.00 86.275 544.37 N 516.59 W 750.47 86.275 316.501 8530.96 9190.00 551.61 N 523.46 W 760.45 86.275 316.501 8531.61 9200.00 86.275 316.501 8532.26 558.85 N 530.33 W 770.43 9210.00 537.20 W 9220.00 86.275 316.501 8532.91 566.09 N 780.41

MOBIL E&P SERVICES, INC. NVAU #244

MEASUDED	ANCLE	DIDECTION	VEDTICAL		DERADTURE			
MEASURED DEPTH	ANGLE DEG	DIRECTION DEG	DEPTH	LATITUDE (FL)	DEPARTURE (Ft)	VERTICAL SECTION	DOG LEG	TOOL FACE
9230.00	86.2 75	316.501	8533.56	573.33 N	544.07 W	790.39		
9240.00	86.27 5	316.501	8534.21	580.56 N	550.94 W	800.37		
9250.00	86.2 75	316.501	8534.86	587.80 N	557.80 W	810.34		
9260.00	86.2 75	316.501	8535.51	595.04 N	564.67 W	820.32		
9270.00	86 . 2 75	316.501	8536.16	602.28 N	571.54 W	830.30		
9280.00	86.2 75	316.501	8536.81	609.52 N	578.41 W	840.28		
9290.00	86.2 75	316.501	8537.46	616.76 N	585.28 W	850.26		
9300.00	86.2 75	316.501	8538.11	624.00 N	592.15 W	860.24		
9310.00	86 .275	316 501	8538.76	631.23 N	599.02 W `	870.22		
9320.00	86 .275	316.501	8539.41	638.47 N	605.89 W	880.20		
9330.00	86.2 75	316.501	8540.06	645.71 N	612.76 W	890.18		
9340.00	86.2 75	316.501	8540.71	652.95 N	619.62 W	900.15		
9350.00	86.2 75	316.501	8541.36	660.19 N	626.49 W	9 10.13		
9359.89	86.27 5	316.501	8542.00	667.35 N	633.29 W	920.01	0.000	0.000
9360.00	86 .269	316.500	8542.01	667.43 N	633.36 W	920.11		
9360.01	86.2 69	316.500	8542.01	667.43 N	633.37 W	920.12	6.000	187.411
9370.00	86 .269	316.500	8542.66	674.66 N	640.23 W	930.09		
9380.00	86 .269	316.500	8543.31	681.90 N	647.10 W	940.07		
9390.00	86.2 69	316.500	8543.96	689.14 N	653.97 W	950.05	÷	
9400.00	86 .269	316.500	8544.61	696.38 N	660.84 W	960.03		
9410.00	86 .269	316.500	8545.26	703.62 N	667.71 W	970.01		
9420.00	86 .269	316.500	8545.91	710.86 N	674.58 W	979.98		· · · · ·
9430.00	86 .269	316.500	8546.56	718.09 N	681.44 W	989.96	•	
9440.00	86 .269	316.500	8547.21	725.33 N	688.31 W	999.94		
9450.00	86 .269	316.500	8547.86	732.57 N	695.18 W	1009.92		
9460.00	86.2 69	316.500	8548.51	739.81 N	702.05 W	1019.90		•
9470.00	86.26 9	316.500	8549.17	747.05 N	708.92 W	1029.88		
9480.00	86 .269	316.500	8549.82	754.29 N	715.79 W	1039.86		
9490.00	86 .269	316.500	8550.47	761.53 N	722.66 W	1049.84		
9500.00	86 .269	316.500	8551.12	768.76 N	729.53 W	1059.81		
9510.00	86 .269	316.500	8551.77	776.00 N	736.40 W	1069.79		·
9520.00	86.26 9	316.500	8552.42	783.24 N	743.27 W	1079.77		
9530.00	86 .269	316.500	8553.07	790.48 N	750.13 W	1089.75		
9540.00	86 .269	316.500	8553.72	797.72 N	757.00 W	1099.73		
9550.00	86 .269	316.500	8554.37	804.96 N	763.87 W	1109.71		
9560.00	86.269	316.500	8555.02	812.19 N	770.74 W	1119.69		
9570.00	86.269	316.500	8555.67	819.43 N	777.61 W ·	1129.67		
9580.00	86.2 69	316.500	8556.32	826.67 N	784.48 W	1139.65		
9590.00	86 .269	316.500	8556.98	833.91 N	791.35 W	1149.62		
9600.00	86 .269	316.500	8557.63	841.15 N	798.22 W	1159.60		
9610.00	86.2 69	316.500	8558.28	848.39 N	805.09 W	1169.58		
9620.00	86 .269	316.500	8558.93	855.62 N	811.95 W	1179.56		
9630.00	86 .269	316,500	8559.58	862.86 N	818.82 W	1189.54		
9640.00	86.2 69	316.500	8560.23	870.10 N	825.69 W	1199.52		
9650.00	86.2 69	316.500	8560.88	877.34 N	832.56 W	1209.50		

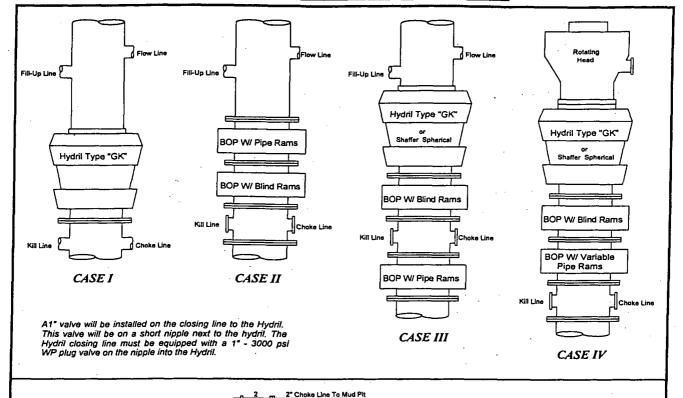
MOBIL E&P SERVICES, INC. NVAU #244

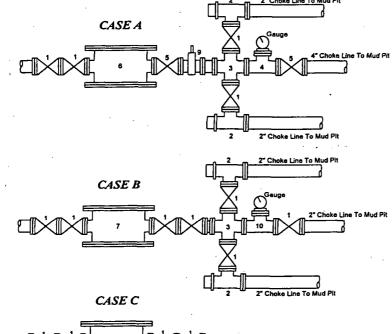
DIRECTION VERTICAL LATITUDE DEPARTURE MEASURED ANGLE · DOG TOOL VERTICAL DEPTH DEG DEG DEPTH (Ft.) (Ft.) LEG SECTION FACE 884.58 N 86.269 316.500 839.43 W 9660.00 8561.53 1219.48 86.269 316.500 9670.00 8562.18 891.82 N 846.30 W 1229.45 9680.00 86.269 316.500 8562.83 899.05 N 853.17 W 1239.43 9690.00 86.269 316.500 8563.48 906.29 N 860.04 W 1249.41 316.500 9700.00 86.269 8564.13 913.53 N 866.91 W 1259.39 9710.00 86.269 316.500 920.77 N 873.78 W 8564.78 1269.37 86.269 316.500 8565.44 928.01 N 880.64 W 9720.00 1279.35 86.269 316.500 8566.09 935.25 N 887.51 W 9730.00 1289.33 9740.00 86.269 316.500 8566.74 942.48 N 894.38 W 1299.31 9750.00 86.269 316.500 8567.39 949.72 N 901.25 W 1309.29 86.269 316.500 956.96 N 908.12 W 9760.00 8568.04 1319.26 86.269 316.500 964.20 N 914.99 W 9770.00 8568.69 1329.24 9780.00 86.269 316.500 8569.34 971.44 N 921.86 W 1339.22 86.269 316.500 978.68 N 928.73 W 9790.00 8569.99 1349.20 9800.00 86.269 316.500 8570.64 985.92 N 935.60 W 1359.18 942.46 W 9810.00 86.269 316.500 8571.29 993.15 N 1369.16 86.269 316.500 1000.39 N 949.33 W 9820.00 8571.94 1379.14 0.000 9820.87 86.269 316.500 8572.00 1001.02 N 949.93 W 1380.00 0.000

The Dogleg Severity is in Degrees per 100.00 Feet Vertical Section was calculated along an Azimuth of 316.500° (True)

Based upon Minimum Curvature type calculations. At a Measured Depth of 9820.87 Feet, the Bottom Hole Displacement is 1380.00 Feet, in the Direction of 316.500° (True)

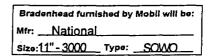
SCHEDULE B MINIMUM BLOWOUT PREVENTER REQUIREMENTS





2" Choke Line To Mud Pit

BOP SIZE	BOP CASE		CHOKE CASE
11		3000	С
· .			-



Legend

- 2" flanged all steel valve must be either 1. Cameron "F", Halliburton Low Torque or Shaffer Flo-Seal.
- 2. 2" flanged adjustable chokes, min. 1" full
- opening & equiped with hard trim. 3.
- 4.
- б.
- 6.
- 7.
- opening & equiped with nard trim.
 4" x 2" flanged steel toel cross.
 4" flanged at steel valve (Type as in no. 1).
 Drilling Spool with 2" x 4" flanged outlet.
 Drilling Spool with 2" x 2" flanged outlet.
 2" x 2" flanged steel cross.
 4" programma constitut outlet valve 8.
- 9. 4" pressure operated gate valve. 10. 2" flanged steel tee.

Notes

Choke manifold may be located in any convenient position. Use all steel fittings throughout. Make 90° turns with buil plugged tees only. No field welding will be permitted on any of the components of the choke manifold and related equipment upstream of the chokes. The choke spool and all lines and fittings must be at least equivalent to the test pressure of the preventers required. Independent closing control unit with clearly marked controls to be located on derrick floor near driller's position.

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

OIL CONSERVATION DIVISION P.O. Box 2088 Santa Fe, NM 87504-2088

State of New Mexico

Energy, Minerals & Natural Resources Department

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 ² OGRID Number ¹Operator name and Address MOBIL PRODUCING TX & NM INC.* *MOBIL EXPLORATION & PRODUCING US INC. AS AGENT FOR MPTM 3 API Number P.O. BOX 633, MIDLAND, TX 79702 30-025-28603 30-0 ⁴ Property Code ⁵ Property Name ⁶ Well Number 8055 NORTH VACUUM ABO 244 Surface Location UL or lot no. Section Township Range Lot. Idn Feet from the North/South Line Feet from the East/West line County 0 34-E 589' SOUTH 23 17-S 1859' EAST LEA 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 23 17-S 34-E 1637' SOUTH 2688' WEST J LEA Proposed Pool 1 ¹⁰ Proposed Pool 2 11 Work Type Code 12 Well Type Code 13 Cable/Rotary 14 Lease Type Code 15 Ground Level Elevation 0 P ROTARY S 4000' 19 Contractor 20 Spud Date ¹⁶ Multiple 17 Proposed Depth 18 Formations 8528' NO Abo 06-30-97 ²¹ Proposed Casing and Cement Program Hole Size Casing Size Casing weight/foot Setting Depth Sacks of Cement Estimated TOC 17 1/2" 13 3/8" 400' 48# H40 CIRCULATED SURFACE 12 1/2" 8 5/8" 28# **S80** 5000' CIRCULATED SURFACE 5 1/2" 4800-7300' 7 7/8" CIRCULATED SURFACE 15.5# K55 7300-TD SURFACE EXISTING WELLBORE 17# N80 CIRCULATED 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 ²³ I hereby certify that the information given above is true and complete to the best OIL CONSERVATION DIVISION of my knowledge and belief. Approved by: Signature: Printed name: Title: SHIRLEY HOUCHINS Expiration Date: Title: Approval Date: ENVIRONMENTAL & REGULATORY TECHNICIAN Conditions of Approval: Date: Phone:

Attached

(915) 688 - 2585

06-12-97

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 and Natural Resources Department

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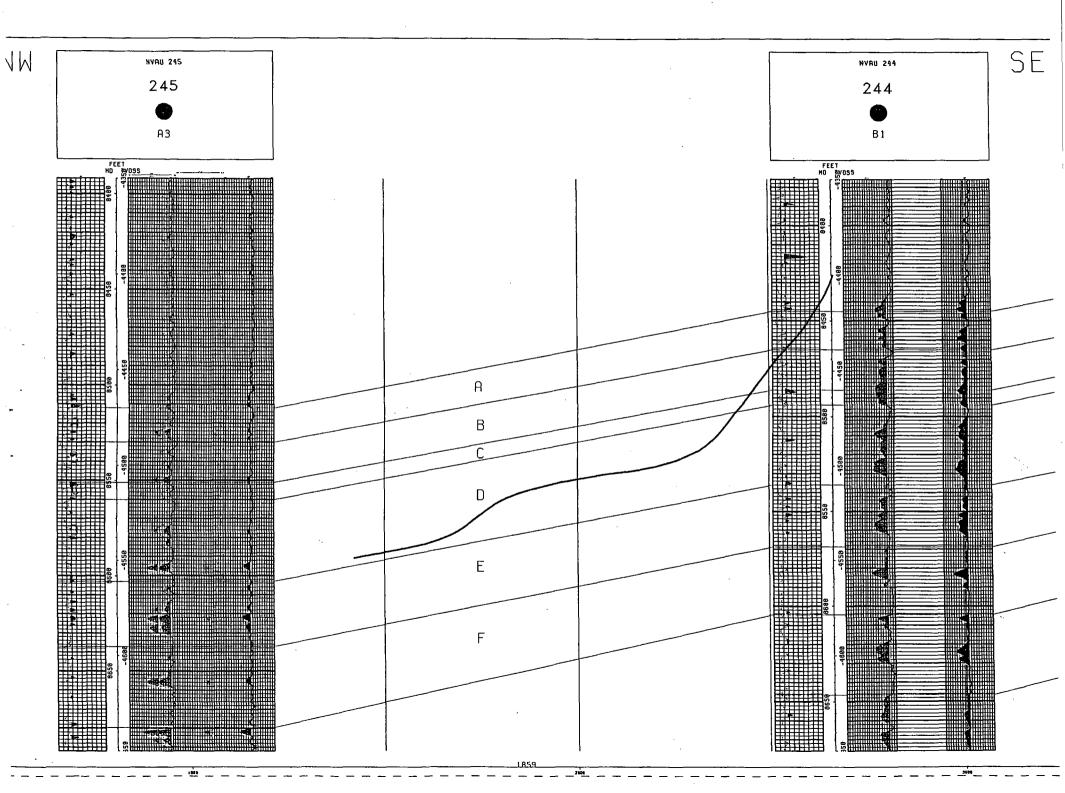
OIL CONSERVATION DIVISION P.O. Box 2088 Santa Fe, New Mexico 87504-2088 Form C-102 Revised February 10, 1994 Instructions on back Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

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AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

		Pool Code			Pool Name						
30-025-28603 NORTH VACUUM Abo											
	Property Code Propery Name										Well Number
805	8055 NORTH VACUUM Abo										244
OGRID				Operator Na	me			Elevation			
			PRODUCIN				. AS AGENT FO	R MOTM			4000'
						ce Locati					4000
UI or lot no.	Section	Township	Range	Lot. Id		from the	North/South Line	Feet from the	East/We	est line	County
0	23	17-S	34-E			589'	SOUTH	1859'	EAS		LEA
							nt From Surface				
	Г <u></u>	I				· · · · · · · · · · · · · · · · · · ·			<u> </u>		
UL or lot no.	Section	Township	Range	Lot. Id	ł	from the	North/South Line	Feet from the	East/We		County
J ¹² Dedicated Acres	23	17–S	34-E Consolidation			1637'	SOUTH	2688'	WE	ST	LEA
- Dedicated Acres		t or Initia	Consolidation	Code	15 Order No.						
L											
NO ALLOV	VABLE						UNTIL ALL INT			NCON	SOLIDATED
		OR A N	IONSTAI		D UNIT H	AS BEEN	APPROVED B	Y THE DIVISI	ON		<u></u>
								¹⁷ OPERAT	FOR CE	RTIFI	CATION
											contained herein is knowledge and belief.
											ŕ
								-			
								Shula H			
								Signature			
								SHIRLEY HOUCHINS			
								Printed Name			
								ENV. & REG	. TECH	NICIAN	
								Title 06-12-97			
· · ·	[1			[Date			[]
<u></u>								18 SURVEY			
			·								shown on this plat
								was plotted from	field notes	of actu	al surveys made by at the same is true
								and correct to the best	of my belief.	UNU 111	u ine sume is inte
				BHL /(5	39'FSL 88'FWL			ł			
-			÷	26	88' FWL].]]
				N.		l l		Date of Survey			
				·····				Signature and Seal of F	Professional Q	Incorr	
				Ì,					U		
					N, Inc.						
					` # 244		1859'				
	1										
					8						
		·			2			Certificate Number		_	II
								<u> </u>			



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	229 .•	300 •	∮ 201 .●	268 ●	135 .•	265 •	11 162 •	- 225 ●	134	<u>- 226</u> ●	12 158 .•	274 ●	2 .¢	19 ●
	299 9	228 •	270 ●	202 •	264	148 ,●	263 ●	140 •	262	150 •	261	159 .●	14 -•-	23 3 • .•
			164 •	269 ●	170 •				165	260	152 •	223	6 ,● NO	M(RTH
			298 •	130 Ø	283 I •	3ŖĮD ,●	GES. ●	_ŞŢ# .•	AŢĘ, ●	147 - Je	258 •	169 ,•	•AI	3Ģ_Ē
		15	166 •	296 •	139 .•	297 ¹ •	.4 .9 .9	256 •	121 •	255 • 219	.3 ²³⁰ ,●	254 ●		18 •
17	S		295 •	144 .•	275 ●	171 •	282 ●	124 ,•	252 •	ø	253	231 ,•´	13 ●	11
34.	_E		203	293 •	• •	294 1 •		281	204 .•	251	205 , e .	250 •	206 •	
			292 •	²₿°0]	₽¶H_		CƯỆN		- ,			207 ,•	221	
			22209 •	291 •220	210 -H 🔎	245 245 2014- *	23 <u>156</u> -н ^{150-н}	56-н	116 •	235 ²⁴ •	4	222		19
			290 •	220	<u></u>	213 36 1	244	¥ 117 .♥ 237	238A •	109 •	246	×		
XA UUM_	С () Abo) _WE	143 • 5 <u>T</u> 289	277+ UNI	1 <u>36</u> Г 249	243	137 •	•	112 ,•	• 218	•			
		27	•	157 • 276	•	118 •	242	96 .• _240	239	ø 2:	5		-	
		£ (149 , ¢	•	138	241 2	,•	• 95			MOBIL EXI	LORATION	& PRODUC	ING US
107-111-0			288 •	145 .•	287 -•-	153 •	286 - • -		 F	┱┱╖═╡	VACUUM_GE VACUUM FII	LD, LEA CO	UNTY, NEW	
Well Sy NIECTOR - PLUGGED OF OIL OIL Surface Loc	CONVERTED) N C) <u>C(</u>) ÆÆN	I Ľ Tra	MR	L H VACUUM	30-May- ABO UN	1997 NT
+ UNKNOWN			_		R 588	1888 1588 268	19 2568 9888 35	AR 1888				PHASE	I]

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NVAU #244 Lea County, New Mexico

I. GENERAL DRILLING SUMMARY

A. Objective

The objective of this project is to mill a window in the 5-1/2" casing from 8366' to 8375' and drill an open hole lateral in the Abo formation with a vertical section of 1380 ft.

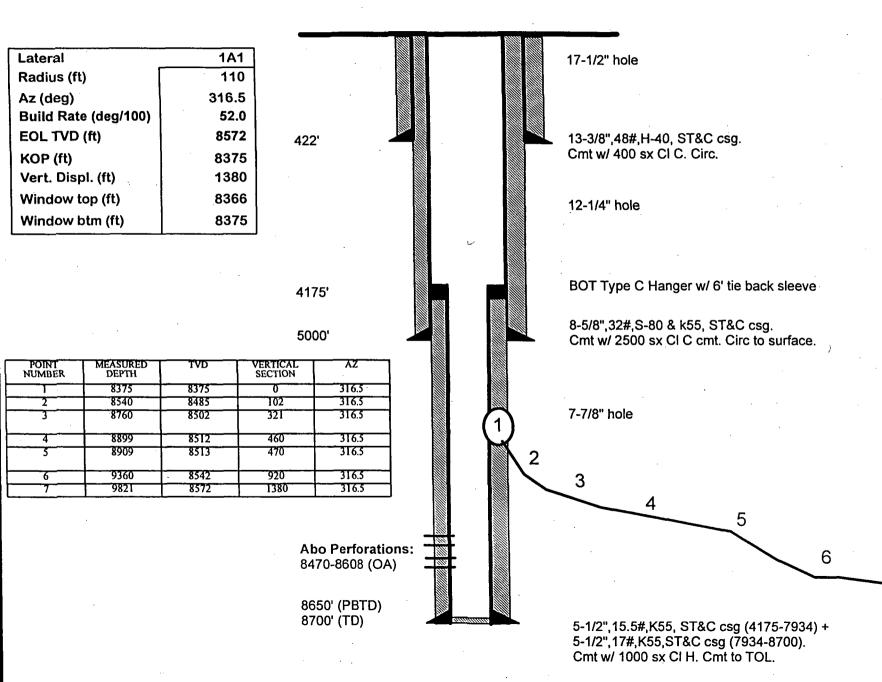
B. Procedure

- 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 w/ stripper head). POH w/ production/injection equipment. Set CIBP and whipstock at 8425 and mill window from 8366 to 8375 ft.
- 4. Drill curve and lateral to a vertical section of 1380 ft. Drilling operations complete.

Note: Whipstock and CIBP will be retrieved after lateral section is stimulated.

North Vacuum Abo Unit #244 Proposed

589' FSL & 1859' FEL Sec 23, T17S - R34E Lea County, New Mexico GL = 4028' DF = 4045' KB = 17' AGL Drilled date = 4/84



WELL PLANNING REPORT

MOBIL E&P SERVICES, INC.

NVAU #244

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MOBIL E&P SERVICES, INC. NVAU #244

MEASURED DEPTH	ANGLE DEG	DIRECTION DEG	VERTICAL DEPTH	LATITUDE (FL)	DEPARTURE (FL)	VERTICAL SECTION	DOG LEG	TOOL FACE
0075.00	0.000	0.000	8375.00	0.00	0.00	0.00		
8375.00		316.499	8380.00	0.08 N	0.08 W	0.11		
8380.00	2.600	316.499	8389.95	0.74 N	0.70 W	1.02		•
8390.00	7.800			2.05 N	1.94 W	2.82		
8400.00	13.000	316.499	8399.79		3.79 W	5.51		
8410.00	18.200	316.499	8409.41	4.00 N	3.79 VV	5.51		
8420.00	23.400	316.499	8418.76	6.57 N	6.24 W	9.06		
8430.00	28,600	316.499	8427.74	9.75 N	9.25 W	13.44		
8440.00	33.800	316.499	8436.30	13.51 N	12.82 W	18.62		
8450.00	39.000	316.499	8444.34	17.81 N	16.90 W	24.56		
8460.00	44.200	316.499	8451.82	22.63 N	21.47 W	31.19		
6400.00	44.200	010.400	0401.02				•	
8470.00	49.400	316.499	8458.66	27.91 N	26.49 W	38.48		
8480.00	54.600	316.499	8464.81	33.63 N	31.91 W	46.36		
8490.00	59.800	316.499	8470.23	39.72 N	37.69 W	54.76		
8500.00	65.000	316.499	8474.86	46.15 N	43.79 W	63.62		
	70.200	316.499	8478.67	52.85 N	50.15 W	72.86		
8510.00	10.200	310.433	0410.01	02.00				
8520.00	75,400	316.499	8481.63	59.78 N	56.73 W	82.41		
8530.00	80,600	316.499	8483.70	66.87 N	63.46 W	92.19		
8539.75	85.668	316.499	8484.87	73.89 N	70.12 W	101.86	52.000	316.499
8540.00	85,668	316.499	8484.89	74.07 N	70.29 W	102.11		
	85.668	316.499	8485.64	81.30 N	77.16 W	112.09		
8550.00	65.000	510.435	0400.04	01.00 11				
8560.00	85.668	316,499	8486.40	88.54 N	84.02 W	122.06		
8570.00	85.668	316.499	8487.15	95.77 N	90.88 W	132.03		
8580.00	85.668	316.499	8487.91	103.00 N	97.75 W	142.00		
8590.00	85.668	316.499	8488.67	110.23 N	104.61 W	151.97		
	85.668	316.499	8489.42	117.47 N	111.48 W	161.94		
8600.00	65.000	510.455	0400.42	• • • • • • •				
8610.00	85.668	316,499	8490.18	124.70 N	118.34 W	171.91		
8620.00	85.668	316.499	8490.93	131.93 N	125.20 W	181.89		
8630.00	85.668	316.499	8491.69	139.17 N	132.07 W	191.86		
8640.00	85.668	316.499	8492.44	146.40 N	138.93 W	201.83		
	85.668	316.499	8493.20	153.63 N	145.80 W	211.80		
8650.00	05.000	510.455	0400.20					
8660.00	85.668	316.499	8493.95	160.87 N	152.66 W	221.77		
8670.00	85.668	316.499	8494.71	168.10 N	159.52 W	231.74		
8680.00	85.668	316.499	8495.46	175.33 N	166. 39 W	241.71		
8690.00	85.668	316.499	8496.22	182.56 N	173.25 W	251.69		
8700.00	85.668	316.499	8496.97	189.80 N	180.12 W	261.66		
0/00.00	00.000				400.00.144	074 62		
8710.00	85.668	316.499	8497.73	197.03 N	186.98 W	271.63		
8720.00	85.668	316.499	8498.49	204.26 N	193.84 W	281.60		
8730.00	85.668	316.499	8499.24	211.50 N	200.71 W	291.57		
8740.00	85.668	316.499	8500.00	218.73 N	207.57 W	301.54		
8750.00	85.668	316.499	8500.75	225.96 N	214.44 W	311.51		
	05 000	246 400	8501.51	233.19 N	221. 30 W	321.49		
8760.00	85.668	316.499			228.16 W	331.46		
8770.00	85.668	316.499	8502.26	240.43 N	~235.03 W	341.43		
8780.00	85.668	316.499	8503.02	247.66 N		341.43		
8790.00	85.668	316.499	8503.77	254.89 N	241.89 W			
8800.00	85.668	316.499	8504.53	262.13 N	248.76 W	361.37		

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MOBIL E&P SERVICES, INC. NVAU #244

MEASURED DEPTH	ANGLE DEG	DIRECTION DEG	VERTICAL DEPTH	LATITUDE (Ft.)	DEPARTURE (FL)	VERTICAL SECTION	DOG LEG	TOOL FACE
0040.00	85,668	316.499	8505.28	269.36 N	255.62 W	371.34		
8810.00 8820.00	85.668	316.499	8506.04	276.59 N	262.48 W	381.31		
8830.00	85.668	316.499	8506.79	283.83 N	269.35 W	391.29		
	85.668	316.499	8507.55	291.06 N	276.21 W	401.26		
8840.00	85.668	316.499	8508.31	298.29 N	283.08 W	411.23		
8850.00	65.000	510.435	0000.01	200.20 11				
8860.00	85.668	316.499	8509.06	305.52 N	289.94 W	421.20		
8870.00	85.668	316.499	8509.82	312.76 N	296.80 W	431.17		
8880.00	85.668	316.499	8510.57	319.99 N	303.67 W	441.14		
8890.00	85.668	316.499	8511.33	327.22 N	310.53 W	451.12		0.000
8898.91	85.668	316.499	8512.00	333.67 N	316.65 W	460.00	0.000	0.000
	05 660	316.499	8512.00	333.67 N	316.65 W	460.00	0.000	0.000
8898.91	85.668	316.499	8512.08	334.46 N	317.40 W	461.09		
8900.00	85.733	316.501	8512.71	340.99 N	323.60 W	470.10	6.000	0.168
8909.04	86.275		8512.77	341.69 N	324.26 W	471.06		
8910.00	86.275	316.501		348.93 N	331.13 W	481.04		
8920.00	86.275	316.501	8513.42	340.93 N	331.13 14	401.04		
8930.00	86.275	316.501	8514.07	356.17 N	338.00 W	491.02		
8940.00	86.275	316.501	8514.72	363.41 N	344.87 W	501.00		
8950.00	86.275	316.501	8515.37	370.65 N	351.74 W	510.98		
8960.00	86.275	316.501	8516.02	377.88 N	358.61 W	520.96		
8970.00	86.275	316.501	8516.67	385.12 N	365.48 W	530.94		
6970.00	00.275	510.001	0010.07		i.			
8980.00	86.275	316.501	8517.32	392.36 N	372.34 W	540.91		
8990.00	86.275	316.501	8517.97	399.60 N	379.21 W	550.89		
9000.00	86.275	316.501	8518.62	406.84 N	386.08 W	560.87		
9010.00	86.275	316.501	8519.27	414.08 N	392.95 W	570.85		
9020.00	86.275	316.501	8519.92	421.32 N	399.82 W	580.83		
	00.075	216 501	8520.57	428.55 N	406.69 W	590.81		
9030.00	86.275	316.501	8520.57	435.79 N	413.56 W	600.79		
9040.00	86.275	316.501 316.501	8521.87	443.03 N	420.43 W	610.77		
9050.00	86.275		8522.52	450.27 N	427.30 W	620.75		
9060.00	86.275	316.501 316.501	8523.17	457.51 N	434.16 W	630.72		
9070.00	86.275	310.501	0323.17	407.01 14				
9080.00	86.275	316.501	8523.82	464.75 N	441.03 W	640.70		
9090.00	86.275	316.501	8524.47	471.99 N	447.90 W	650.68		
9100.00	86.275	316.501	8525.12	479.22 N	454.77 W	660.66		
9110.00	86.275	316.501	8525.77	486.46 N	461.64 W	670.64		
9120.00	86.275	316.501	8526.42	493.70 N	468.51 W	680.62		
	00.075	246 501	8527.07	500.94 N	475.38 W	690.60		
9130.00	86.275	316.501		508.18 N	482.25 W	700.58		
9140.00	86.275	316.501	8527.72	515.42 N	489.12 W	710.56		
9150.00	86.275	316.501	8528.36	522.66 N	495.98 W	720.53		
9160.00	86.275	316.501	8529.01		502.85 W	730.51		
9170.00	86.275	316.501	8529.66	529.89 N	JUZ.00 44	,		
9180.00	86.275	316.501	8530.31	537.13 N	509.72 W	740.49		
9190.00	86.275	316.501	8530.96	544.37 N	516.59 W	750.47	· •	
9200.00	86.275	316.501	8531.61	551.61 N	523.46 W	760.45		
9210.00	86.275	316.501	8532.26	558.85 N	530.33 W	770.43		
9220.00	86.275	316.501	8532.91	566.09 N	537.20 W	780.41		
9220.00	00.270	010.001						

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MOBIL E&P SERVICES, INC. NVAU #244

MEASURED DEPTH	ANGLE DEG	DIRECTION DEG	VERTICAL DEPTH	LATITUDE (FL)	DEPARTURE (FL)	VERTICAL SECTION	DOG LEG	TOOL FACE
9230.00	86.2 75	316.501	8533.56	573.33 N	544.07 W	790.39		
9240.00	86.275	316.501	8534.21	580.56 N	550.94 W	800.37		
9250.00	86.275	316.501	8534.86	587.80 N	557.80 W	810.34		
9260.00	86.275	316.501	8535.51	595.04 N	564.67 W	820.32		
9270.00	86.275	316.501	8536.16	602.28 N	571.54 W	830.30		
				002.2011		000.00		
9280.00	86.2 75	316.501	8536.81	609.52 N	578.41 W	840.28		
9290.00	86.2 75	316.501	8537.46	616.76 N	585.28 W	850.26		
9300.00	86.2 75	316.501	8538.11	624.00 N	592.15 W	860.24		
9310.00	86.27 5	316.501	8538.76	631.23 N	599.02 W	870.22		
9320.00	86.27 5	316.501	8539.41	638.47 N	605.89 W	880.20		
9330.00	86.27 5	316.501	8540.06	645.71 N	612.76 W	890.18		
9340.00	86.2 75	316.501	8540.71	652.95 N	619.62 W	900.15		
9350.00	86.2 75	316.501	8541.36	660.19 N	626.49 W	910.13		
9359.89	86.2 75	316. 501	8542.00	667.35 N	633.29 W	920.01	0.000	0.000
9360.00	86.2 69	316.500	8542.01	667.43 N	633.36 W	920.11		
0260.04	ee 1 e0	246 600	8549.04	007 40 N	COO 07 W/			
9360.01 9370.00	86.269	316.500 316.500	8542.01	667.43 N	633.37 W	920.12	6.000	187.411
	86.269		8542.66	674.66 N	640.23 W	930.09		
9380.00	86 .269	316.500	8543.31	681.90 N	647.10 W	940.07		
9390.00	86.2 69	316.500	8543.96	689.14 N	653.97 W	950.05		
9400.00	86.2 69	316.500	8544.61	696.38 N	660.84 W	960.03		
9410.00	86.2 69	316.500	8545.26	703.62 N	667.71 W	970.01		
9420.00	86.269	316.500	8545.91	710.86 N	674.58 W	979.98		
9430.00	86.269	316.500	8546.56	718.09 N	681.44 W	989.96		
9440.00	86 .269	316.500	8547.21	725.33 N	688.31 W	999.94		
9450.00	86.2 69	316.500	8547.86	732.57 N	695.18 W	1009.92		
9460.00	86.26 9	316.500	8548.51	739.81 N	702.05 W	1019.90		
9470.00	86.2 69	316.500	8549.17	747.05 N	708.92 W	1029.88		
9480.00	86.2 69	316.500	8549.82	754.29 N	715.79 W	1039.86		
9490.00	86.2 69	316.500	8550.47	761.53 N	722.66 W	1049.84		
9500.00	86 .269	316.500	8551.12	768.76 N	729.53 W	1059.81		
9510.00	86.2 69	316.500	8551.77	776.00 N	736.40 W	1069.79		
9520.00	86.2 69	316.500	8552.42	783.24 N	743.27 W	1079.77		
9530.00	86.2 69	316,500	8553.07	790.48 N	750.13 W	1089.75		
9540.00	86.269	316.500	8553.72	797.72 N	757.00 W	1099.73		
9550.00	86.269	316.500	8554.37	804.96 N	763.87 W	1109.71		
								·
9560.00	86.269	316.500	8555.02	812.19 N	770.74 W	1119.69		
9570.00	86.269	316.500	8555.67	819.43 N	777.61 W ·	1129.67		
9580.00	86.2 69	316.500	8556.32	826.67 N	784.48 W	1139.65		
9590.00	86.2 69	316.500	8556.98	833.91 N	791.35 W	1149.62		
9600.00	86.2 69	316.500	8557.63	841.15 N	798.22 W	1159.60		
9610.00	86.2 69	316.500	8558.28	848.39 N	805.09 W	1169.58		
9620,00	86.269	316.500	8558.93	855.62 N	811.95 W	1179.56		
9630.00	86.269	316.500	8559.58	862.86 N	818.82 W	1189.54		
9640.00	86.269	316.500	8560.23	870.10 N	825.69 W	1199.52		
9650.00	86.269	316.500	8560.88	877.34 N	832.56 W	1209.50		
3000.00	JU.200	010.000	2000.00		002.00 11	1200.00		

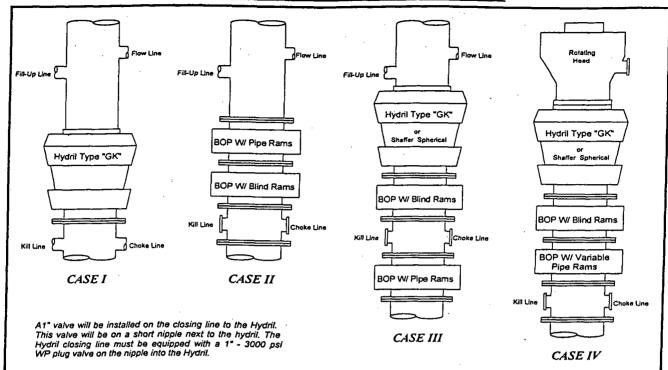
MOBIL E&P SERVICES, INC. NVAU #244

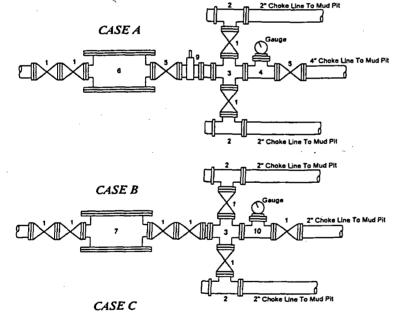
MEASURED DEPTH	ANGLE DEG	DIRECTION DEG	VERTICAL DEPTH	LATITUDE (FL)	DEPARTURE (FL)	VERTICAL SECTION	DOG LEG	TOOL FACE
				004 50 N	839.43 W	1219.48		
9660.00	86.269	316.500	8561.53					
9670.00	86.269	316.500	8562.18	891.82 N	846.30 W	1229.45		
9680.00	86.269	316.500	8562.83	899.05 N	853.17 W	1239.43		
9690.00	86.269	316.500	8563.48	906.29 N	860.04 W	1249.41		
9700.00	86.269	316.500	8564.13	913.53 N	866.91 W	1259.39		· · ·
	00.000	316.500	8564.78	920 77 N	873.78 W	1269.37		
9710.00	86.269	316.500	8565.44	928.01 N	880.64 W	1279.35		
9720.00	86.269			935.25 N	887.51 W	1289.33		
9730.00	86.269	316.500	8566.09		894.38 W	1299.31		
9740.00	86.269	316.500	8566.74	942.48 N		1309.29		
9750.00	86.269	316.500	8567.39	949.72 N	901.25 W	1309.29		
9760.00	86.269	316.500	8568.04	956.96 N	908.12 W	1319.26		
9770.00	86.269	316.500	8568.69	964.20 N	914.99 W	1329.24		
9780.00	86.269	316.500	8569.34	971.44 N	921.86 W	1339.22		
	86.269	316.500	8569.99	978.68 N	928.73 W	1349.20		
9790.00		316.500	8570.64	985.92 N	935.60 W	1359.18		
9800.00	86.269	310.000	0370.04	303.32 11				
9810.00	86,269	316.500	8571.29	993.15 N	942.46 W	1369.16		
9820.00	86.269	316.500	8571.94	1000.39 N	949.33 W	1379.14		
9820.87	86.269	316.500	8572.00	1001.02 N	949.93 W	1380.00	0.000	0.000

The Dogleg Severity is in Degrees per 100.00 Feet Vertical Section was calculated along an Azimuth of 316.500° (True)

Based upon Minimum Curvature type calculations. At a Measured Depth of 9820.87 Feet, the Bottom Hole Displacement is 1380.00 Feet, in the Direction of 316.500° (True)

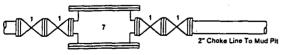
SCHEDULE B MINIMUM BLOWOUT PREVENTER REQUIREMENTS





BOP SIZE	BOP CASE		CHOKE CASE
11	1	3000	C

•	Bradenhead furnished by Mobil will be:
	Mfr: National
'	Size:1 <u>1"-3000</u> Type: <u>SOWO</u>



Legend

- 1. 2" flanged all steel valve must be either Cameron "F", Halilburton Low Torque or Shaffer Flo-Seal.
- 2" flanged adjustable chokes, min. 1" full opening & equiped with hard trim. 2.

- opening & equiped with hard trim. 3. 4" x 2" flanged steel cross. 4. 4" flanged steel tee. 6. 4" flanged all steel valve (Type as in no. 1). 6. Drilling Spool with 2" x 4" flanged outlet. 7. Drilling Spool with 2" x 2" flanged outlet. 8. 2" x 2" flanged steel cross. 9. 4" pressure operated gate valve.

- 10, 2" flanged steel tee.

Notes

Choke manifold may be located in any convenient position. Use all steel fittings throughout. Make 90° turns with bull plugged tees only. No field welding will be permitted on any of the components of the choke manifold and related equipment upstream of the chokes. The choke spool and all lines and fittings must be at least equivalent to the test pressure of the preventers required. Independent closing control unit with clearly marked controls to be located on derrick floor near driller's position.

C678 b			
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

ADMINISTRATIVE APPLICATION COVERSHEET

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS

Application Acronyms:

[NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location] [DD-Directional Drilling] [SD-Simultaneous Dedication] [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling] [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement] [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion] [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase] [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

- [1] **TYPE OF APPLICATION -** Check Those Which Apply for [A]
 - [A] Location Spacing Unit Directional Drilling

Check One Only for [B] or [C]

- [B] Commingling Storage Measurement DHC CTB PLC PC OLS OLM
- [C] Injection Disposal Pressure Increase Enhanced Oil Recovery WFX PMX SWD IPI EOR PPR

[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or 🖾 Does Not Apply

- [A] Uvorking, Royalty or Overriding Royalty Interest Owners
- [B] Offset Operators, Leaseholders or Surface Owner
- [C] Application is One Which Requires Published Legal Notice
- [D] U.S. Bureau of Land Management Commissioner of Public Lands, State Land Office
- [F] **Waivers are Attached**

[3] INFORMATION / DATA SUBMITTED IS COMPLETE - Statement of Understanding

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I further verify that all applicable API Numbers are included. I understand that any omission of data, information or notification is cause to have the application package returned with no action taken.

BRIAN WOOD

Print or Type Name

Note: Statement must be completed by an ipdividual with supervisory capacity

Signature

Consultant

5-15-97

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· · · · · · · · · · · · · · · · · · ·		,		S	tate of New	Mexic	0				Form C-10	
District I			Energ	y, Minerals	& Natural R	esource	s Depar	ment		Revised	February 10, 199	
PO Box 1980, Hobbs, District II	NM 88241-1980		01							_	instructions on bac	
PO Drawer DD, Artes	sia, NM 88211-0	719	O		SERVAT		DIVIS	ION	Subr		riate District Offi	
District III 1000 Rio Brazos Rd.,	Aztec, NM 8741	0			P.O. Box 2		2000				te Lease - 6 Copi ee Lease - 5 Copi	
District IV PO Box 2088, Santa F	e. NM 87504-20	88		Santa	Fe, NM 8	5/504	-2088			Г	ee Lease - 5 Copr	
	,	-				,					NDED REPORT	
APPLIC	CATION				LL, RE-E	NTEI	R, DEI	EPEN,	PLUGBAC		D A ZONE	
MOBIL PRO	UCING TX	•	perator name an	a Address							4500 4	
1			ucing us in	C AS AG	ENT FOR M	ртм					-1520-1	
P.O. BOX 6				0. AU AU							PI Number 25-24748	
	perty Code		10.02		5	Proper	ty Name			30-0	⁶ Well Number	
	8055					-		ARO			278	
L			<u> </u>		⁷ Surface L						219	
UL or lot no.	Section_	Township	Range	Lot. Idn	Feet from			outh Line	Feet from the	East/West line	County	
M	23	17-S	Ĭ		500			UTH	561'	EAST	LEA	
		<u> </u>		l Pottom U								
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UL or lot no.						Feet from the	East/West line					
	27 17-S 34-E 6 9 Proposed Pool 1				685	»- 1	UN	RTH	561 10 Proposed P		LEA	
								·,				
¹¹ Work 1	ype Code	1	² Well Type C	Code	¹³ Cable	Rotary		¹⁴ Lea	se Type Code	¹⁵ Ground	Level Elevation	
P-DI	VIATION		0		ROT	FARY			S		4029'	
¹⁶ Mu	ltiple		17 Proposed De	epth	18 Form	nations ¹⁹ Contractor			20 S	pud Date		
	NO		8599'		۵	ABO				06-30-97		
				²¹ Propos	sed Casing a		nent Pro	ogram		00		
Hole S	lize	Ca	sing Size	· · · · · ·	weight/foot	1	letting De		Sacks of Ceme	at E	stimated TOC	
17 1/			3 3/8"	48#	 H–40		400'		500 SXS		SURFACE	
12 1/			3 5/8"		2 & 17#		5500'		2970 SXS		C / SURFACE	
7 7/			2" LINER	15.5#			TD 880		1220 SXS		C / SURFACE	
			RIGINAL		ASING	1	DISTUR				/	
²² Describe the p Describe the blow	proposed proposed proposed proposed proposed prevention of the second se	gram. If thi on program	s application is , if any. Use a	to DEEPEN iditional she	or PLUG BAC	CK give	the data o	n the press	ent productive zone	and proposed ne	w productive zone.	
SEE ATTACI	HMENT											
	·											
²³ I hereby certif of my knowledge		ormation giv	en above is true	e and comple	ete to the best			OIL CO	ONSERVATIO	N DIVISION		
Signature:	n Hours	Nuno			-	Approved by:						
Printed name: S	Printed name: SHIRLEY HOUCHINS						Title:					
Title: ENVIRONMENTAL & REGULATORY TECHNICIAN						Approval Date: Expiration Date:						
Date:			Phone:			Conditions of Approval:						
06-12-97 (915) 688-2585						Attached []						

1

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

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State of New Mexico Energy, Minerals and Natural Resources Department

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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 Numbe	r .		Pool Code				Pool Name		<u> </u>	
30-	-025-247	748				NORT	H VACUUM Abo				
Property						егу Nar					Well Number
805	5	NORTH V		Abo							278
OGRID					Oper	ator Na	me			Elevation	
B-152	20-1			GTX&NM		US INC	. AS AGENT FO				4029'
<u>B=102</u>											4023
UI or lot no.	Section	Township	Range	Lot. Idn	Feet from		North/South Line	Feet from the	East/We	est line	County
M	23	17-S	34-E		500		SOUTH	650	WE		LEA
L				 Im Hole Log			nt From Surface				
					<u>,</u>						
UL or lot no.	Section	Township	Range	Lot. Idn	Feet from		North/South Line	Feet from the	East/W		County
	27	17-5	34-E		685	5'	NORTH	561	EAS	ST	LEA
¹² Dedicated Acre	s ¹³ Joint	or Infill 14C	Consolidation	n Code 15 Ord	ler No.	• •					
NO ALLO	WABLE V	VILL BE AS	SSIGNED	TO THIS C	OMPLET	TION I	UNTIL ALL INT	FERESTS HAV	E BEE	NCON	ISOLIDATED
		OR A N	ONSTA	NDARD UN	IT HAS	BEEN	APPROVED B	Y THE DIVISI	ON		
					·	T		¹⁷ OPERAT	FOR CE	RTIE	ICATION
	Ĭ							I hereby certify	that the	informatio	m contained herein is
								true and complete	to the b	est of my	knowledge and belief.
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									.,	•	
			Sec.	23		1	· · · · · · · · · · · · · · · · · · ·		Houch	Mrs.	
	1		0.00					Signature SHIRLEY HO	UCHINS		
								Printed Name	0011110		
	4					4		ENV. & REG	. TECH	NICIAN	
								Title			
								06-12-97			
l								Date			
	I							¹⁸ SURVEY			
											on shown on this plat tual surveys made by
							,	me or under my and correct to the best	supervision	, and 1	that the same is true
		650'	#278						cg <i>m</i> y comp.		
			ςī								
			<u>°</u>								
								Date of Survey			
Secret	/ /							Signature and Seal of	Professional	Surveyer:	
BHL											
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561' F	EL					1					
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		15	166 • 295	296 • 144	139 ,• 275	297 ¹ • 171	4 142 282	256 • 124	121 • 252	255 • 219 Ø	.3 ²³⁰ • 253	254 • 231	10 ,♥ 13	18 • 11
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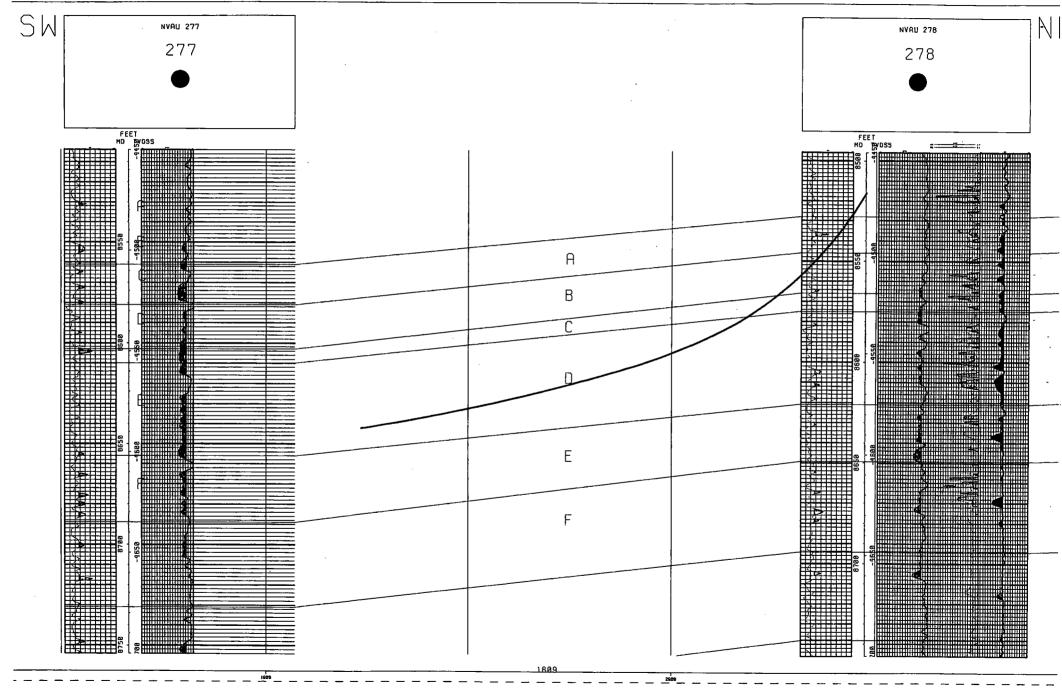
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NVAU #278 Lea County, New Mexico

I. GENERAL DRILLING SUMMARY

A. Objective

The objective of this project is to mill a window in the 5-1/2" casing from 8441' to 8450' 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.

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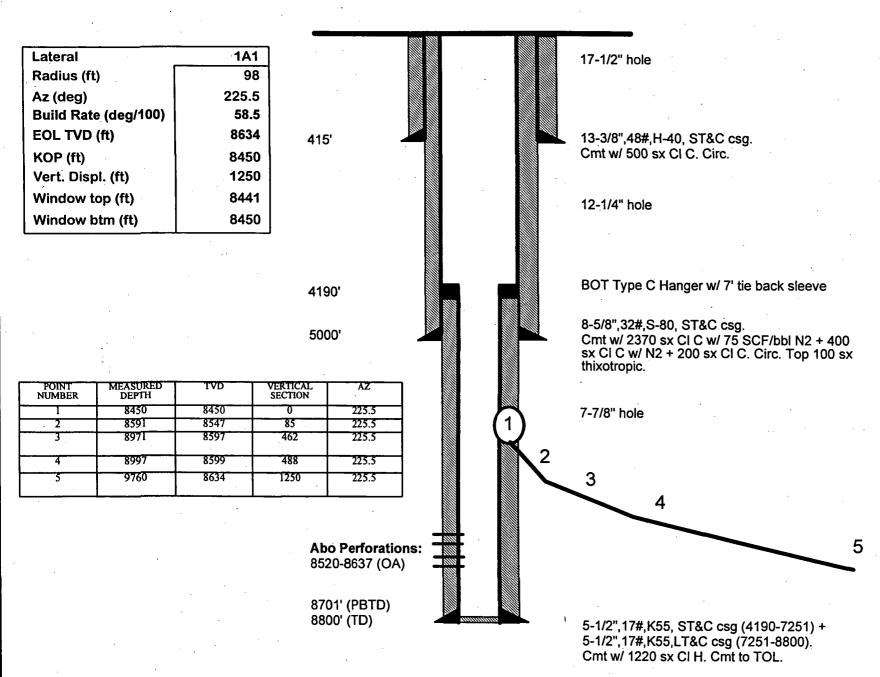
- 3. ND wellhead. NU BOP (double ram w/ stripper head). POH w/ production/injection equipment. Set CIBP and whipstock at 8508 and mill window from 8441 to 8450 ft.
- 4. Drill curve and lateral to a vertical section of 1250 ft. Drilling operations complete.

Note: Whipstock and CIBP will be retrieved after lateral section is stimulated.

North Vacuum Abo Unit #278 Proposed

500' FSL & 650' FWL Sec 23, T17S - R34E Lea County, New Mexico

GL = 4029' DF = 4046' KB = 16.5' AGL Drilled date = 7/85



WELL PLANNING REPORT

MOBIL E&P SERVICES, INC.

NVAU #278

N/A 10-Jun-97

SPERRY-SUN DRILLING SERVICES WELL PROFILE DATA

MOBIL E&P SERVICES, INC. NVAU #278

DOG TOOL LATITUDE DEPARTURE VERTICAL ANGLE DIRECTION VERTICAL MEASURED SECTION LEG FACE DEG DEPTH (FL) (FL) DEPTH DEG 0.00 0.000 8450.00 0.00 0.00 8450.00 0.000 225.500 8474.73 2.22 S 2.26 W 3.17 8475.00 14.625 12.49 8.75 S 8.91 W 8500.00 29.250 225.500 8497.86 27.34 19.50 W 225.500 8517.88 19.16 S 8525.00 43.875 32.78 S 33.36 W 46.77 225.500 8533.51 8550.00 58,500 48.72 S 49.58 W 69.51 225.500 8543.72 8575.00 73.125 8547.09 59.59 S 60.64 W 85.02 58.500 225.500 82.420 225.500 8590.89 67.08 W 94.05 8600.00 225.500 8548.29 65.92 S 82.420 84.76 W 118.84 225.500 8551.59 83.29 S 8625.00 82.420 102.43 W 143.62 100.66 S 8554.88 8650.00 82.420 225.500 118.03 S 120.11 W 168.40 225.500 8558.18 8675.00 82.420 137.79 W 193.18 82.420 225.500 8561.48 135.40 S 8700.00 217.96 8564.78 152.77 S 155.46 W 82.420 225.500 8725.00 242.74 225.500 8568.07 170.14 S 173.14 W 8750.00 82,420 267.52 187.51 S 190.81 W 8775.00 82.420 225.500 8571.37 292.31 204.88 S 208.49 W 225.500 8574.67 82.420 8800.00 226.16 W 317.09 82.420 225.500 8577.97 222.25 S 8825.00 82.420 225.500 8581.26 239.62 S 243.84 W 341.87 8850.00 366.65 261.51 W 225.500 8584.56 256.99 S 8875.00 82.420 274.36 S 279.19 W 391.43 225.500 8587.86 8900.00 82.420 416.21 291.73 S 296.86 W 225.500 8591.16 8925.00 82.420 314.54 W 441.00 309.10 S 225.500 8594.46 8950.00 82.420 329.67 W 462.21 0.000 0.000 225.500 8597.28 323.97 S 82.420 8971.40 225.500 8597.69 326.47 S 332.22 W 465.78 84.525 8975.00 0.000 470.00 58.500 225.500 8598.00 329.43 S 335.23 W 87.000 8979.23 2.000 0.000 488.06 342.09 S 348.11 W 225.500 8598.89 87.362 8997.31 490.75 343.97 S 350.03 W 225.500 8599.01 87.362 9000.00 367.84 W 515.72 87.362 225.500 8600.16 361.47 S 9025.00 540.70 385.65 W 225,500 8601.31 378.98 S 9050.00 87.362 396.48 S 403.46 W 565.67 9075.00 87.362 225.500 8602.47 421.28 W 590.64 87.362 225.500 8603.62 413.99 S 9100.00 439.09 W 615.62 87.362 8604.77 431.49 S 225.500 9125.00 456.90 W 640.59 448.99 S 225.500 8605.92 9150.00 87.362 665.56 225.500 8607.07 466.50 S 474.71 W 87.362 9175.00 492.53 W 690.54 484.00 S 9200.00 87.362 225.500 8608.22 8609.37 501.51 S 510.34 W 715.51 9225.00 87.362 225.500 740.48 528.15 W 87.362 225.500 8610.52 519.01 S 9250.00 765.46 545.96 W 536.52 S 9275.00 87.362 225.500 8611.67 554.02 S 563.78 W 790.43 8612.82 87.362 225.500 9300.00 581.59 W 815.40 8613.97 571.52 S 225.500 87.362 9325.00 840.38 589.03 S 599.40 W 8615.12 9350.00 87.362 225.500 865.35 225.500 606.53 S 617.21 W 8616.27 9375.00 87.362 624.04 S 635.03 W 890.32 225.500 8617.43 87.362 9400.00 915.30 225.500 8618.58 641.54 S 652.84 W 87.362 9425.00 940.27 670.65 W 87.362 225.500 8619.73 659.04 S 9450.00

N/A 10-Jun-97

SPERRY-SUN DRILLING SERVICES WELL PROFILE DATA

MOBIL E&P SERVICES, INC. NVAU #278

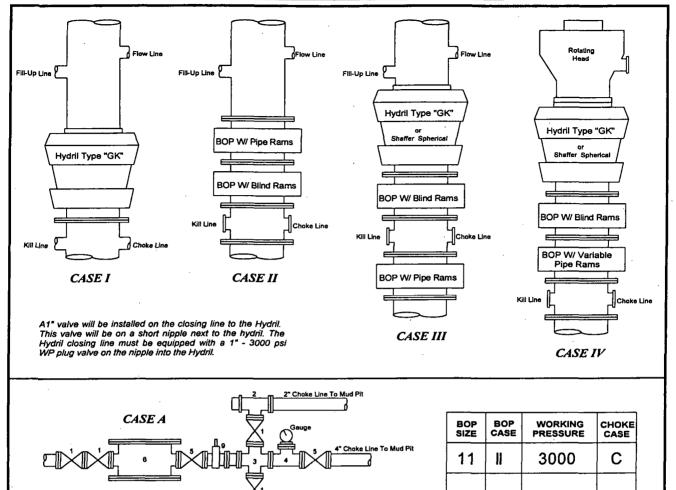
N/A 10-Jun-97

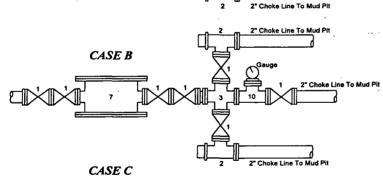
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The Dogleg Severity is in Degrees per 100.00 Feet Vertical Section was calculated along an Azimuth of 225.500° (True)

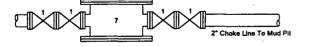
Based upon Minimum Curvature type calculations. At a Measured Depth of 9760.06 Feet, the Bottom Hole Displacement is 1250.00 Feet, in the Direction of 225.500° (True)

SCHEDULE B MINIMUM BLOWOUT PREVENTER REQUIREMENTS





Brad	enhead furi	nished by	Mobil will be:
Mfr: _	Nationa	al	
Size;1	1" - 3000	Туре:	SOWO



Legend

- 1. 2" flanged all steel valve must be either Cameron "F", Halliburton Low Torque or Shaffer Flo-Seal.
- 2" flanged adjustable chokes, min. 1" full opening & equiped with hard trim. 4" x 2" flanged steel cross. 2.
- 3.
- 4" x 2" hanged steel cross.
 4" flanged steel tee.
 4" flanged all steel valve (Type as in no. 1).
 Drilling Spool with 2" x 4" flanged outlet.
 Drilling Spool with 2" x 2" flanged outlet.

- 2" x 2" flanged steel cross.
 4" pressure operated gate valve.
 2" flanged steel tee.

Notes

Choke manifold may be located in any convenient position. Use all steel fittings throughout. Make 90° turns with bull plugged tees only. No field welding will be permitted on any of the components of the choke manifold and related equipment upstream of the chokes. The choke spool and all lines and fittings must be at least equivalent to the test pressure of the preventers required. Independent closing control unit with clearly marked controls to be located on derrick floor near driller's position.

District I PO Box 1980, Hobbs, I District II PO Drawer DD, Artesi District III 1000 Rio Brazos Rd., A District IV PO Box 2088, Santa Fe	a, NM 88211-071 Aztec, NM 87410			y, Mineral IL CON]	SERVAT P.O. Box :	Resources Dep	ISION	Sub		Ins oropria State	Form C- ebruary 10, 1 tructions on b te District Of Lease - 6 Coj Lease - 5 Coj
										1END	ED REPOR
APPLIC	ATION		ERMIT T		LL, RE-E	NTER, D	EEPEN	, PLUGBAC			A ZONE
MOBIL PROD		-		a Address		÷ .				D 4	500 4
*MOBIL EXP				C. AS AG	ENT FOR M	IPTM				-	520-1 Number
P.O. BOX 63						·			20.0		5-24748
	perty Code				. 3	Property Nam	18		30-0		/ell Number
	8055					RTH VACUUN					278
			J		⁷ Surface 1				1		
UL or lot no.	Section	Township	Range	Lot. Idn	Feet from		/South Line	Feet from the	East/West	line	County
м	23	17–S	34-E		500	י ו	SOUTH	561'	EAST		LEA
	<u>. </u>	8	Proposed 1	Bottom He	ole Location	If Different	From Su	rface			
UL or lot no.	Section	Township	Range	Lot. Idn	Feet from		/South Line		East/West	line	County
	27	17–S	34-E		685		IORTH	561	EAST		LEA
	9			I				10 Proposed P	1		
	<u> </u>							·			
¹¹ Work Ty	pe Code	12	Well Type C	ode	¹³ Cable	Rotary	14 Le	ase Type Code	15 Gro	und Lev	rel Elevation
	-										
P-DIV 16 Mult	VIATION		0 17 Proposed De	onth	18 Form	TARY	19	S Contractor	- 2	4029'	
1/101	upio		•	P				Condition		-	
N	10		8599'	²¹ Propos		BO nd Cement I				06–3	0-97
Hole Si			ing Size		weight/foot			Sacks of Ceme		Betim	ated TOC
				<u> </u>							
17 1/3			3/8"	48#	H-40	<u>40</u> 550		500 SXS			
<u>12 1/</u> 7 7/8			<u>5/8"</u> 2" LINER	<u>28, 3</u> 15.5#	2 & 17# K-55	TD 88		2970 SXS 1220 SXS			SURFACE
///	b		GINAL		ASING	UNDISTU		1220 373			SUNFACE
22		TCali		DEEDEN							
Describe the blow	out preventior	am. 11 uns 1 program,	if any. Use ad	ditional she	or PLUG BAC ets if necessary	.K give the dau	on the pres	ent productive zone	and propose	1 new p	roducuve zone.
SEE ATTACH	MENT										
³ I hereby certify		nation give	n above is true	and comple	te to the best		OIL C	ONSERVATIO		 N	<u> </u>
f my knowledge : ignature:		•				Approved by					
rinted name: SH	— ———————————————————————————————————					Title:	· <u> </u>				
			ATORY TEC	HNICIAN		Approval Da	e:	Ех	piration Date	:	
ate:			Phone:			Conditions of	Approval:	,,,,,,,,,,			
06-12-97			(915) 688	8-2585		Attached		·			

06-12-97

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 and Natural Resources Department

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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

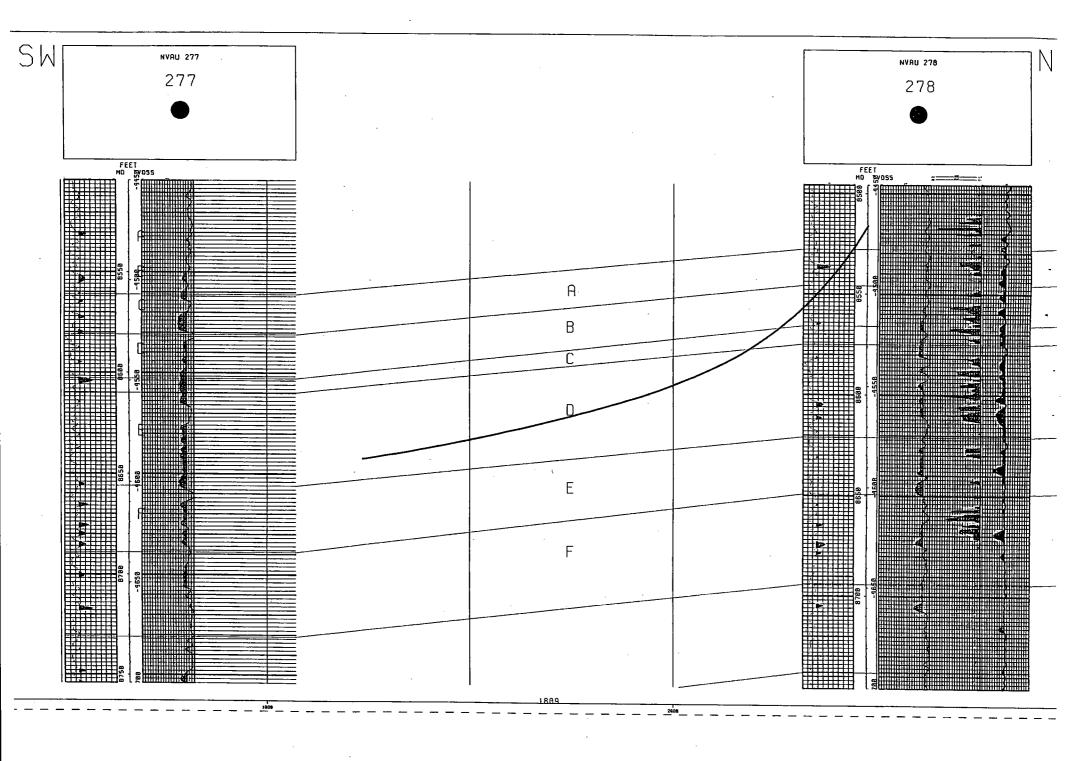
WELL LOCATION AND ACREAGE DEDICATION PLAT

30-025-24748 Property Code Property Code Well Number 8055 NORTH VACUUM Abc 278 278 OCRUD No. MOBIL PRODUCING TX & Nu NUC. Operation Name 218 OCRUD No. MOBIL PRODUCING TX & Nu NUC. Operation Name 2003' I'' of ot no. Section Township Range Lot. Idn Feet from the Esst/West line County I'' of ot no. Section Township Range Lot. Idn Feet from the Esst/West line County I'' of ot no. Section Township Range Lot. Idn Feet from the Esst/West line County I'' of ot no. Section Township Range Lot. Idn Feet from the Sect from the Esst/West line County I'' operator focili I'Consolidation Code I''Order No. NORTH Set from the Esst from the Esst/West line County I' operator focili I'/Order No. I'' Set from the Set from the Esst from the Esst from the Set from the	API Number Pool Code Pool Name											
8065 NORTH VACUUM Abo 278 OCRU No. MOBIL PRODUCING TX & NM INC. Operation Name Elevation B-1520-1 "MOBIL EXPLORATION & FRODUCING US INC. AS AGENT FOR MPTM 4029' "In ordination of the section	30-	-025–24	748		·							
OCRU No. B-1520-1 MOBIL PRODUCING TX & MM INC. "MOBIL PRODUCING TX & MM INC." UI or lot no. 28 MOBIL PRODUCING TX & MM INC." With a construction of the second of the sec	Property	Code				Pro	pery Na	me				Well Number
MOBIL PRODUCING TX & MM INC.*' 4028' "WOBIL EXPLODICING US INC. AS AGENT FOR MPTM 4028' "Surface Location "Surface Location WOBIL PRODUCING US INC. AS AGENT FOR MPTM "Surface Location Work in the least of t	805	5	NORTH		Abo							278
B-1520-1 *MOBIL EXPLORATION & PRODUCING US INC. AS AGENT FOR MPTM 4023' "Burdiace Location "Burdiace Location "Burdiace Location Feet from the East/West line County M 23 17-S 34-E Feet from the Feet from the Section WEST LEA "I Bottom Hole Location If Different From Surface WEST LEA ************************************	OGRID	No.	MOBIL	PRODUCIN	G TY & NM	INC *	rator Na	me				Elevation
¹⁰ Surface Location ¹⁰ Uor lot no. Section Township Range Lot. Ida Feet from the 500' North/South Line Feet from the 650 WEST LEA ¹¹ Bottom Hole Location If Different From Surface ¹¹ Bottom Hole Location If Different From Surface West LEA ¹¹ Bottom Hole Location If Different From Surface ¹¹ Bottom Hole Location If Different From Surface East/West line County ¹¹ Dedicated Acres ¹³ Joint or Infill ¹⁴ Consolidation Code ¹³ Order No. Soft EAST LEA ¹¹ Dedicated Acres ¹³ Joint or Infill ¹⁴ Oronolidation Code ¹³ Order No. Soft NORTH Soft EAST LEA ¹¹ Dedicated Acres ¹³ Joint or Infill ¹⁴ Oronolidation Code ¹³ Order No. ¹⁵ Order No. Soft IA NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEENCONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION I have certify that the belementic control due for the face of counties onto the face of counties on the face of counter of the face of counties on the face of counties of the face of	B-152	0-1					US INC	. AS AGENT FO	R MPTM			4029'
M 23 17-S 34-E 500' SOUTH 650 WEST LEA "Bottom Hole Location If Different From Surface Volta Color County 27 17-S 34-E 665' NORTH 561 East/West line County **Dedicated Acres **Joint or Infill **Consolidation Code **Order No. **Order No. NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEENCONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION **OPERATOR CERTIFICATION Image: Sec. 2.3 //85 //85 Sec. Sec. Sec. 2.3 //85 //85 Sec. Sec. Sec. Sec. 2.3 //85 1/85 Sec. Sec. Sec. Sec. 2.3 //85 1/85 Sec. Sec. Sec. Sec. 2.3 //85 1/85 Sec. Sec. Sec. Sec. 2.3 //85 Sec.												
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BHL X 685, FNL 561, FEL (6)			1	-					Date of Survey		_	
BHL X 685, FNL 561, FEL (6)	Sec. 27								Signature and Seal of F	Professional	Surveyer:	[[
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NVAU #278 Lea County, New Mexico

I. GENERAL DRILLING SUMMARY

A. Objective

The objective of this project is to mill a window in the 5-1/2" casing from 8441' to 8450' 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.

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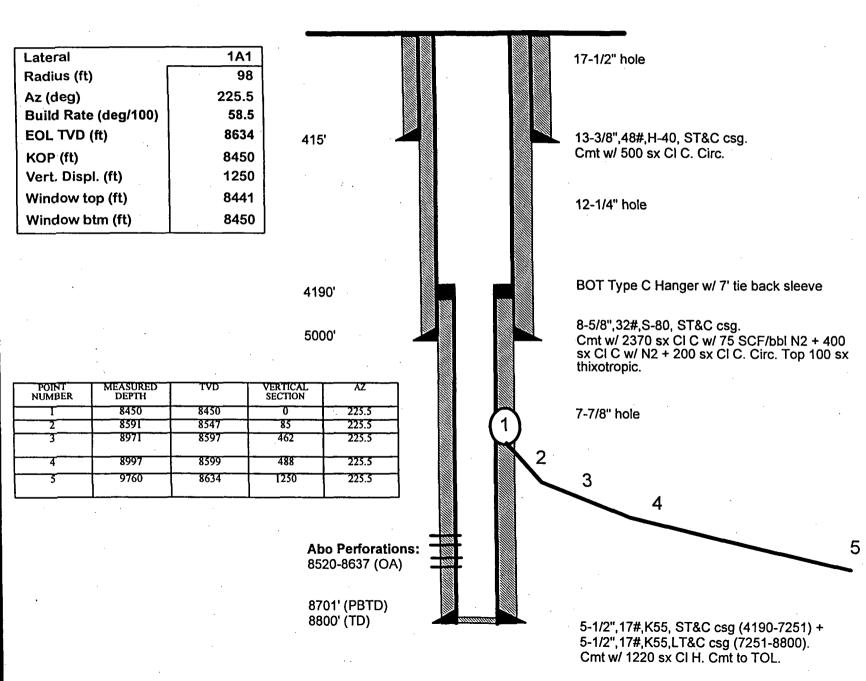
- 3. ND wellhead. NU BOP (double ram w/ stripper head). POH w/ production/injection equipment. Set CIBP and whipstock at 8508 and mill window from 8441 to 8450 ft.
- 4. Drill curve and lateral to a vertical section of 1250 ft. Drilling operations complete.

Note: Whipstock and CIBP will be retrieved after lateral section is stimulated.

North Vacuum Abo Unit #278 Proposed

500' FSL & 650' FWL Sec 23, T17S - R34E Lea County, New Mexico

GL = 4029' DF = 4046' KB = 16.5' AGL Drilled date = 7/85



WELL PLANNING REPORT

MOBIL E&P SERVICES, INC.

NVAU #278

N/A 10-Jun-97

SPERRY-SUN DRILLING SERVICES WELL PROFILE DATA

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MOBIL E&P SERVICES, INC. NVAU #278

N/A 10-Jun-97

MEASURED DEPTH	ANGLE DEG	DIRECTION DEG	VERTICAL DEPTH	LATITUDE (FL)	DEPARTURE (FL)	VERTICAL SECTION	DOG LEG	TOOL FACE
8450.00	0.000	0.000	8450.00	0.00	0.00	0.00		
8475.00	14.625	225.500	8474.73	2.22 S	2.26 W	3.17		
8500.00	29.250	225.500	8497.86	8.75 S	8.91 W	12.49		
8525.00	43.875	225.500	8517.88	19.16 S	19.50 W	27.34		
8550.00	58.500	225.500	8533.51	32.78 S	33.36 W	46.77		
						10.77		
8575.00	73.125	225.500	8543.72	48.72 S	49.58 W	69.51		
8590.89	82.420	225.500	8547.09	59.59 S	60.64 W	85.02	58,500	225.500
8600.00	82.420	225.500	8548.29	65.92 S	67.08 W	94.05		
8625.00	82.420	225,500	8551.59	83.29 S	84.76 W	118.84		
8650.00	82.420	225.500	8554.88	100.66 S	102.43 W	143.62		
						•		
8675.00	82.420	225.500	8558.18	118.03 S	120.11 W	168.40		
8700.00	82.420	225.500	8561.48	135.40 S	137.79 W	193.18		
8725.00	82.420	225.500	8564.78	152.77 S	155.46 W	217.96		
8750.00	82.420	225.500	8568.07	170.14 S	173.14 W	242.74		
8775.00	82.420	225.500	8571.37	187.51 S	190.81 W	267.52		
8800.00	82.420	225.500	8574.67	204.88 S	208.49 W	292.31		
8825.00	82.420	225.500	8577.97	204.00 S	226.16 W	317.09		
8850.00	82.420	225.500	8581.26	239.62 S	243.84 W	317.09		
8875.00	82.420	225.500	8584.56	256.99 S	261.51 W	366.65		
8900.00	82.420	225.500	8587.86	274.36 S	279.19 W	391.43		
0000.00	VL.420	220.000	0007.00	214.50 0	210.10 44	591.45		
8925.00	82.420	225.500	8591.16	291.73 S	296.86 W	416.21		
8950.00	82.420	225.500	8594.46	309.10 S	314.54 W	441.00		
8971.40	82.420	225.500	8597.28	323.97 S	329.67 W	462.21	0.000	0.000
8975.00	84.525	225.500	8597.69	326.47 S	332.22 W	465.78		
8979.23	87.000	225.500	8598.00	329.43 S	335.23 W	470.00	58.500	0.000
0007.24	07 000	225 500	0500.00		040 44 14			
8997.31	87.362	225.500	8598.89	342.09 S	348.11 W	488.06	2.000	0.000
9000.00	87.362	225.500	8599.01	343.97 S	350.03 W	490.75		
9025.00	87.362	225.500	8600.16	361.47 S	367.84 W	515.72		
9050.00 9075.00	87.362 87.362	225.500	8601.31	378.98 S	385.65 W	540.70		
9075.00	07.302	225.500	8602.47	396.48 S	403.46 W	565.67		
9100.00	87.362	225.500	8603.62	413.99 S	421.28 W	590.64		
9125.00	87.362	225.500	8604.77	431.49 S	439.09 W	615.62		
9150.00	87.362	225.500	8605.92	448.99 S	456.90 W	640.59		
9175.00	87.362	225.500	8607.07	466.50 S	474.71 W	665.56		
9200.00	87.362	225.500	8608.22	484.00 S	492.53 W	690.54		
9225.00	87.362	225.500	0600.07	501.51 S	540 24 140	745 54		
9250.00	87.362 87.362	225.500	8609.37 8610.52	519.01 S	510.34 W 528.15 W	715.51 740.48		
9275.00	87.362	225.500	8611.67	536.52 S	545.96 W	740.48 765.46		
	87.362	225.500		554.02 S		790.43		
9300.00	87.362		8612.82		563.78 W			
9325.00	01.302	225.500	8613.97	571.52 S	581.59 W	815.40		
9350.00	87.362	225.500	8615.12	589.03 S	599.40 W	840.38	•	
9375.00	87.362	225.500	8616.27	606.53 S	617.21 W	865.35		
9400.00	87.362	225.500	8617.43	624.04 S	635.03 W	890.32		
9425.00	87.362	225.500	8618.58	641.54 S	652.84 W	915.30		
9450.00	87.362	225.500	8619.73	659.04 S	670.65 W	940.27		

SPERRY-SUN DRILLING SERVICES WELL PROFILE DATA

MOBIL E&P SERVICES, INC. NVAU #278

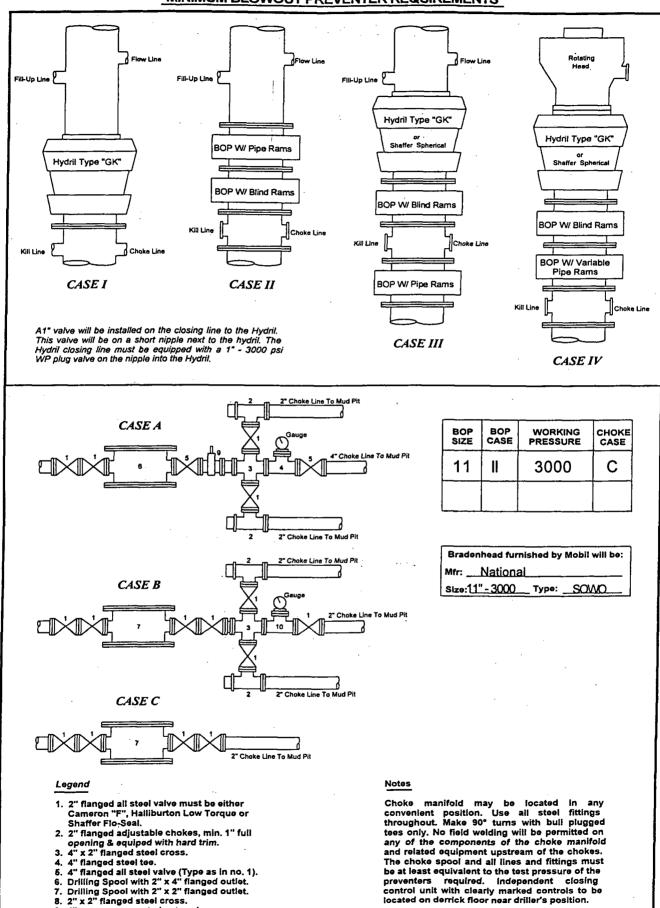
N/A 10-Jun-97

MEASURED DEPTH	ANGLE DEG	DIRECTION DEG	VERTICAL DEPTH	LATITUDE (FL)	DEPARTURE (Ft.)	VERTICAL SECTION	DOG LEG	TOOL FACE
9475.00	87.362	225.500	8620.88	676.55 S	688.46 W	965,25		
9500.00	87.362	225.500	8622.03	694.05 S	.706.27 W	990,22		
9525.00	87.362	225.500	8623.18	711.56 S	724.09 W	1015.19		•
9550.00	87.362	225,500	8624.33	729.06 S	741.90 W	1040.17		
9575.00	87.362	225.500	8625.48	746.56 S	759.71 W	1065.14		
9600.00	87.362	225.500	8626.63	764.07 S	777.52 W	1090.11		
9625.00	87.362	225.500	8627.78	781.57 S	795.34 W	1115.09		
9650.00	87.362	225.500	8628.93	799.08 S	813.15 W	1140.06		
9675.00	87.362	225.500	8630.08	816.58 S	830.96 W	1165.03		
9700.00	87.362	225.500	8631.24	834.09 S	848.77 W	1190.01		
9725.00	87.362	225.500	8632.39	851.59 S	866.59 W	1214.98		
9750.00	87.362	225.500	8633.54	869.09 S	884.40 W	1239.95	•	
9760.06	87.362	225.500	8634.00	876.14 S	891.57 W	1250.00	0.000	0.000

The Dogleg Severity is in Degrees per 100.00 Feet Vertical Section was calculated along an Azimuth of 225.500° (True)

Based upon Minimum Curvature type calculations. At a Measured Depth of 9760.06 Feet, the Bottom Hole Displacement is 1250.00 Feet, in the Direction of 225.500° (True)

SCHEDULE B MINIMUM BLOWOUT PREVENTER REQUIREMENTS



9. 4" pressure operated gate valve. 10. 2" flanged steel tee.

(10-31-96)S MNATISCEUWTXBOPS CVS

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

> CASE NO. 4831 Order No. R-4430

APPLICATION OF MOBIL OIL CORPORATION FOR A PRESSURE MAINTENANCE PROJECT, LEA COUNTY, NEW MEXICO.

also su R-4430-A

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on September 27, 1972, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this <u>27th</u> day of October, 1972, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Mobil Oil Corporation, seeks authority to institute a pressure maintenance project in the North Vacuum-Abo Pool in its North Vacuum-Abo Unit Area, Lea County, New Mexico, by the injection of gas and water into the Abo formation through 34 wells located in Sections 3, 10, 11, 12, 13, 14, 15, 22, 23, 24, 25, 26, and 27, Township 17 South, Range 34 East, NMPM, Lea County, New Mexico.

(3) That the applicant further seeks the designation of the project area and the promulgation of special rules and regulations governing said project including a provision for administrative approval for unorthodox locations for injection wells and producing wells.

(4) That initially the project area should comprise only the following-described area:

Case No. 4831 Order No. R-4430

> LEA COUNTY, NEW MEXICO TOWNSHIP 17 SOUTH, RANGE 34 EAST, NMPM 2: SW/4 Section Section 3: SE/4 Section 10: E/2Section 11: S/2 Section 12: NE/4 and S/2Section 13: N/2 and SW/4Section 14: A11 Section 15: E/2 Section 22: E/2Sections 23 and 24: All Section 25: NW/4 and N/2 NE/4 Section 26: All Section 27: E/2

> TOWNSHIP 17 SOUTH, RANGE 35 EAST, NMPM Section 19: W/2 NW/4

(5) That a pressure maintenance project, designated the Mobil North Vacuum-Abo Pressure Maintenance Project, comprising the above-described area is in the interest of conservation and should result in greater ultimate recovery of oil, thereby preventing waste.

(6) That an administrative procedure should be established whereby said project area may be expanded for good cause shown and whereby additional injection wells and producing wells at orthodox and unorthodox locations in the project area may be approved without the necessity of notice and hearing.

That special rules and regulations for the operation of (7) the Mobil North Vacuum-Abo Pressure Maintenance Project should be promulgated and, for operational convenience, such rules should provide certain flexibility in authorizing the production of the project allowable from any well or wells in the project area in any proportion, provided that no well in the project area which directly or diagonally offsets a well on another lease producing from the same common source of supply should be allowed to produce in excess of top unit allowable for the North Vacuum-Abo Pool until such time as the well has experienced a substantial response to water injection. When such a response has occurred, the well should be permitted to produce up to two times top unit allowable for the North Vacuum-Abo Pool. Production of such well at a higher rate should be authorized only after notice and hearing.

IT IS THEREFORE ORDERED:

(1) That the applicant, Mobil Oil Corporation, is hereby authorized to institute a pressure maintenance project in the

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-3-Case No. 4831 Order No. R-4430

North Vacuum-Abo Pool in its North Vacuum-Abo Unit Area, Lea County, New Mexico, to be designated the Mobil North Vacuum Abo Pressure Maintenance Project, by the injection of gas and water into the Abo formation, through the following-described wells:

		COUNTY, NEW MEXIC SOUTH, RANGE 34		PM
OPERATOR	LEASE	WELL NO.	SECTION	LOCATION
Mobil	Bridges State	172	3	P
Mobil	11 11	166	10	H
Shell	State "VH"	1	10	P
Mobil	Bridges State	130 (a dual completion)	15	н
Mobil	85 88	144	15	P
Mobil	State "J"	9	22	H
Shell	Location	to be drilled	22	P
Mobil	Bridges State	157 .	27	H
Mobil	11 11	145	27	P
Mobil	10 17	148	11	N
Mobil	17 87	173	14	F
Mobil	TT TF	171	14	N
Mobil	83 83	151 (a dual	23	F
		completion)		
Mobil	State "KK"	1	23	N
Mobil	Bridges State	118	26	F
Mobil		153	26	Ň
Mobil	19 11	140	11	P
Mobil	TT TT	125 (a dual	14	H
MODII		completion)	4 7	**
Nobil	17 17	124 (a dual	14	P
Mobil		•	74	E
	11 .	completion)	23	н
Mobil	11 II	128 117 (p. dup)	23	P
Mobil		117 (a dual	23	P
	88 . BR	completion) 96	26	
Mobil	11 U		26	H P
Mobil		95 (a dual	26	F
	TT P1	completion)	12	N
Mobil	IT II	150 147 (o duol	12	N F
Mobil		147 (a dual	12	L .
	97 J 97	completion)	10	· NT
Mobil		120 (a dual	13	N
	ti 16	completion)	24	-
Mobil	**	119 (a triple	24	F
_		completion)		
Mobil	17 17	109 (a triple	24	N
		completion)		
Mobil	DI 17	108 (a triple	25	F
		completion)		
Mobil	98 EL	161	12	H
Mobil	n 11	159	12	P
Mobil	89 8 7	169	13	H
Pennzoil	Mobil State	1	24	H
Shell	State "C"	2	24	Р

Case No. 4831 Order No. R-4430

(2) That Special Rules and Regulations governing the operation of the Mobil North Vacuum-Abo Pressure Maintenance Project, Lea County, New Mexico, are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS FOR THE MOBIL NORTH VACUUM-ABO PRESSURE MAINTENANCE PROJECT

RULE 1. The project area of the Mobil North Vacuum-Abo Pressure Maintenance Project, hereinafter referred to as the Project, shall comprise the area described as follows:

LEA C	OUNTY, NEW MEXICO
TOWNSHIP 17	SOUTH, RANGE 34 EAST, NMPM
Section 2:	SW/4
Section 3:	SE/4
Section 10:	E/2
Section 11:	S/2
Section 12:	NE/4 and S/2
Section 13:	N/2 and SW/4
Section 14:	All
Section 15:	E/2
Section 22:	E/2
Sections 23	and 24: All
Section 25:	NW/4 and $N/2$ $NE/4$
Section 26:	All
Section 27:	E/2

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TOWNSHIP 17 SOUTH, RANGE 35 EAST, NMPM Section 19: W/2 NW/4

RULE 2. The allowable for the Project shall be the sum of the allowables of the several wells within the project area, including those wells which are shut-in, curtailed, or used as injection wells. Allowables for all wells shall be determined in a manner hereinafter prescribed.

RULE 3. Allowables for injection wells may be transferred to producing wells within the project area, as may the allowables for producing wells which, in the interest of more efficient operation of the Project, are shut-in or curtailed because of high gas-oil ratio or are shut-in for any of the following reasons: pressure regulation, control of pattern or sweep efficiencies, or to observe changes in pressures or changes in characteristics of reservoir liquids or progress of sweep.

RULE 4. The allowable assigned to any well which is shutin or which is curtailed in accordance with the provisions of Rule 3 which allowable is to be transferred to any well or wells in the project area for production, shall in no event be greater than its ability to produce during the test prescribed by Rule 6,

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-5-Case No. 4831 Order No. R-4430

below, or greater than the current top unit allowable for the pool during the month of transfer, whichever is less.

RULE 5. The allowable assigned to any injection well on an 80-acre proration unit shall be top unit allowable for the North Vacuum-Abo Pool.

RULE 6. The allowable assigned to any well which is shutin or curtailed in accordance with Rule 3, shall be determined by a 24-hour test at a stabilized rate of production, which shall be the final 24-hour period of a 72-hour test throughout which the well should be produced in the same manner and at a constant rate. The daily tolerance limitation set forth in Commission Rule 502 I (a) and the limiting gas-oil ratio (2,000 to 1) for the pool shall be waived during such tests. The project operator shall notify all operators offsetting the well, as well as the Commission, of the exact time such tests are to be conducted. Tests may be witnessed by representatives of the offsetting operators and the Commission, if they so desire.

RULE 7. The basic allowable assigned to each producing well in the Project shall be equal to the well's ability to produce or to top unit allowable for the pool, whichever is less. Wells capable of producing more than top unit allowable may also receive transfer allowable, provided however, that no producing well in the project area which directly or diagonally offsets a well on another lease producing from the same common source of supply shall receive an allowable or produce in excess of two times top unit allowable for the pool. Each producing well shall be subject to the limiting gas-oil ratio (2,000 to 1) for the pool.

RULE 8. Each month the project operator shall submit to the Commission a Pressure Maintenance Project Operator's Report, on a form prescribed by the Commission, outlining thereon the data required, and requesting allowables for each of the several wells in the Project as well as the total project allowable based upon the pool's depth bracket allowable and the market demand percentage factor in effect. The aforesaid Pressure Maintenance Project Operator's Report shall be filed in lieu of Form C-120 for the Project.

RULE 9. The Commission shall, upon review of the report and after any adjustments deemed necessary, calculate the allowable for each well in the Project for the next succeeding month in accordance with these rules. The sum of the allowables so calculated shall be assigned to the Project and may be produced from the wells in the Project in any proportion except that no well in the Project which directly or diagonally offsets a well on another lease producing from the same common source of supply shall produce in excess of two times top unit allowable for the pool. -6-Case No. 4831 Order No. R-4430

RULE 10. The Secretary-Director of the Commission is hereby authorized to approve such additional producing wells and injection wells at orthodox and unorthodox locations within the boundaries of the North Vacuum-Abo Unit Area as may be necessary to complete an efficient production and injection pattern, provided said wells are drilled no closer than 660 feet to the outer boundary of said unit nor closer than 10 feet to any quarter-quarter section or subdivision inner boundary. To obtain such approval, the project operator shall file proper application with the Commission, which application, if it seeks authorization to convert additional wells to injection or to drill additional production or injection wells shall include the following: C

(1) A plat showing the location of proposed well, all wells within the project area, and offset operators, locating wells which offset the project area.

(2) A schematic drawing of the proposed well which fully describes the casing, tubing, perforated interval, and depth.

(3) A letter stating that all offset operators to the proposed well have been furnished a complete copy of the application and the date of notification.

The Secretary-Director may approve the proposed well if, within 20 days after receiving the application, no objection to the proposal is received. The Secretary-Director may grant immediate approval, provided waivers of objection are received from all offset operators.

Expansion of the project area may be approved by the Secretary-Director of the Commission administratively when good cause is shown therefor.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

> STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

BRUCE KING, Chairman

ALEX J. ARMIJO, Member

SEAL

A. L. PORTER, Jr., Member & Secretary

dr/

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

APPLICATION OF MOBIL OIL CORPORATION FOR A PRESSURE MAINTENANCE PROJECT, LEA COUNTY, NEW MEXICO.

CASE NO. 4831 Order No. R-4430-A

NUNC PRO TUNC

BY THE COMMISSION:

It appearing to the Commission that due to clerical error Order No. R-4430, dated October 27, 1972, does not correctly state the intended order of the Commission,

IT IS THEREFORE ORDERED:

(1) That Rule 10 on Page 6 of Order No. R-4430 should read in its entirety as follows:

"RULE 10. The Secretary-Director of the Commission is hereby authorized to approve such additional producing wells and injection wells at orthodox and unorthodox locations within the boundaries of the North Vacuum-Abo Unit Area as may be necessary to complete an efficient production and injection pattern, provided said wells are drilled no closer than 460 feet to the outer boundary of said unit nor closer than 10 feet to any quarter-quarter section or subdivision inner boundary. To obtain such approval, the project operator shall file proper application with the Commission, which application, if it seeks authorization to convert additional wells to injection or to drill additional production or injection wells shall include the following:"

(2) That this order shall be effective <u>nunc pro tunc</u> as of October 27, 1972.

DONE at Santa Fe, New Mexico, this <u>30th</u> day of November, 1973.

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

I. R. TRUJILLO, Chairman

ARMEGO, Member PORTER, Jr., Member & Secretary

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dr/

Page 428 New Mexico

R. W. Byram & Co., - Dec., 1973

(SHUGART YATES-SEVEN RIVERS, QUEEN-GRAYBURG (GULF LITTLEFIED SHUGART WATERFLOOD) POOL - Cont'd.)

NOW, on this 16th day of November, 1972, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Gulf Oil Corporation, seeks authority to institute a waterflood project on its Littlefield "AB" Federal Lease, Shugart Yates-Seven Rivers, Queen-Grayburg Pool, by the injection of water into the Queen formation through three injection wells in Section 22, Township 18 South, Range 31 East, NMPM, Eddy County, New Mexico.

(3) That the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.

(4) That the proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(5) That the subject application should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

IT IS THEREFORE ORDERED:

(1) That the applicant, Gulf Oil Corporation, is hereby authorized to institute a waterflood project in the Shugart Yates-Seven Rivers, Queen-Grayburg Pool by the injection of water into the Queen formation through the following-described wells in Section 22, Township 18 South, Range 31 East, NMPM, Eddy County, New Mexico:

Federal "AB" Littlefield Well 9, Unit H Federal "AB" Littlefield Well 10, Unit B Federal "AB" Littlefield Well 14, Unit O

(2) That injection in each of the aforesaid wells shall be through internally plastic-coated tubing set in a packer located as near as is practicable to the uppermost perforation; that the casing-tubing annulus of each injection well shall be loaded with an inert fluid and equipped with a pressure guage at the surface.

(3) That the subject waterflood project is hereby designated the Gulf Littlefield Shugart Waterflood Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(4) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(5) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

NORTH VACUUM-ABO POOL (Mobil Pressure Maintenance Project) Lea County, New Mexico

Order No. R-4430, Authorizing Mobil Oil Corporation to Institute a Pressure Maintenance Project in the North Vacuum-Abo Pool, Lea County, New Mexico, October 27, 1972, as Corrected by Order No. R-4430-A, October 27, 1972.

Application of Mobil Oil Corporation for a Pressure Maintenance Project, Lea County, New Mexico.

> CASE NO. 4831 Order No. R-4430

ORDER OF THE COMMISSION

BY THE COMMISSION: This cause came on for hearing at 9 a.m. on September 27, 1972, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 27th day of October, 1972, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Mobil Oil Corporation, seeks authority to institute a pressure maintenance project in the North Vacuum-Abo Pool in its North Vacuum-Abo Unit Area, Lea County, New Mexico, by the injection of gas and water into the Abo formation through 34 wells located in Sections 3, 10, 11, 12, 13, 14, 15, 22, 23, 24, 25, 26, and 27, Township 17 South, Range 34 East, NMPM, Lea County, New Mexico.

(3) That the applicant further seeks the designation of the project area and the promulgation of special rules and regulations governing said project including a provision for administrative approval for unorthodox locations for injection wells and producing wells.

(4) That initially the project area should comprise only the following-described area:

LEA COUNTY, NEW MEXICO
TOWNSHIP 17 SOUTH, RANGE 34 EAST, NMPM
Section 2: SW/4
Section 3: SE/4
Section 10: E/2
Section 11: S/2
Section 12: NE/4 and S/2
Section 13: N/2 and SW/4
Section 14: All
Section 15: E/2
Section 22: E/2
Sections 23 and 24: All
Section 25: NW/4 and N/2 NE/4
Section 26: All
Section 27: E/2
TOWNSHIP 17 SOUTH, RANGE 35 EAST, NMPM

Section 19: W/2 NW/4

R. W. Byram & Co., - Dec., 1973

(5) That a pressure maintenance project, designated the Mobil North Vacuum-Abo Pressure Maintenance Project, comprising the above-described area is in the interest of conservation and should result in greater ultimate recovery of oil, thereby preventing waste.

That an administrative procedure should be established whereby said project area may be expanded for good cause shown and whereby additional injection wells and producing wells at orthodox and unorthodox locations in the project area may be approved without the necessity of notice and hearing.

(7) That special rules and regulations for the operation of the Mobil North Vacuum-Abo Pressure Maintenance Project should be promulgated and, for operational convenience, such rules should provide certain flexibility in authorizing the production of the project allowable from any well or wells in the project area in any proportion, provided that no well in the project area which directly or diagonally offsets a well on another lease producing from the same common source of supply should be allowed to produce in excess of top unit allowable for the North Vacuum-Abo Pool until such time as the well has experienced a substantial response to water injection. When such a response has occurred, the well should be per-North Vacuum-Abo Pool. Production of such well at a higher rate should be authorized only after notice and hearing.

IT IS THEREFORE ORDERED:

(1) That the applicant, Mobil Oil Corporation, is hereby authorized to institute a pressure maintenance project in the North Vacuum-Abo Pool in its North Vacuum-Abo Unit Area, Lea County, New Mexico, to be designated the Mobil North Vacuum Abo Pressure Maintenance Project, by the injection of gas and water into the Abo formation, through the followingdescribed wells:

LEA COUNTY, NEW MEXICO TOWNSHIP 17 SOUTH, RANGE 34 EAST, NMPM

OPERATOR LEASE WELL NO. SECTION LOCATION

Mobil	Bridges State	172	3	P				
Mobil		166	10	Ĥ				
Shell	State "VH"	1	10	P				
Mobil	Bridges State		15	Ĥ				
MODIL	Dridges State	completion)		••				
Mobil	** **	144	15	Р				
Mobil	State ''J''	9	22	Ĥ				
Shell	Location	to be drilled	22	P				
Mobil	Bridges State		27	Ĥ				
Mobil		145	27	P				
Mobil	Bridges State	148	īi	Ň				
Mobil	11 J	173	14	F				
Mobil	<i>u</i> ,,	171	14	Ň				
Mobil	ss ,	151 (a dual	23	F				
MODII		completion)	20	•				
Mobil	State "KK"	1	23	N				
Mobil	Bridges State	118	26	F				
Mobil	««	153	26	N				
Mobil	,,	140	11	P ·				
Mobil	" , , , , , , , , , , , , , , , , , , ,	125 (a dual	14	Н				
		completion)						
Mobil		124 (a dual	14	Р				
		completion)						
Mobil		128	23	н				
	" ,,	117 (a dual	23	P				
Mobil		completion)	20	•				
34.3.43	,,		96	บ				
Mobil		96	26	Н				
Mobil	*** **	95 (a dual	26	Р				
		completion)						

Mobil	* *	"	150	12	N
Mobil	"	"	147 (a dual completion)	13	F
Mobil	44	,,	120 (a dual completion)	13	N
Mobil	44	• • • •	119 (a triple completion)	24	F
Mobil	"	,	109 (a triple completion)	24	N
Mobil	44	,,	108 (a triple completion)	24	F
Mobil	44	,,	161	12	Н
Mobil	**	,,	159	12	P
Mobil	"	,,	169	13	Ĥ
Pennzoil	Mobil Stat			24	H
She!1	State "C"		2	24	P

(2) That Sepcial Rules and Regulations governing the operation of the Mobil North Vacuum-Abo Pressure Maintenance Project, Lea County, New Mexico, are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS FOR THE MOBIL NORTH VACUUM-ABO

PRESSURE MAINTENANCE PROJECT

RULE 1. The project area of the Mobil North Vacuum-Abo Pressure Maintenance Project, hereinafter referred to as the Project, shall comprise the area described as follows:

LEA COUNTY, NEW MEXICO
TOWNSHIP 17 SOUTH, RANGE 34 EAST, NMPM
Section 2: SE/4
Section 3: SE/4
Section 10: E/2
Section 11: S/2
Section 12: NE/4 and S/2
Section 13: N/2 and SW/4
Section 14: All
Section 15: E/2
Section 22: E/2
Sections 23 and 24: All
Section 25: NW/4 and N/2 NE/4
Section 26: All
Section 27: E/2
TOWNSHIP 17 SOUTH, RANGE 35 EAST, MNPM
Section 19: W/2 NW/4

RULE 2. The allowable for the Project shall be the sum of the allowables of the several wells within the project area, including those wells which are shut-in, curtailed, or used as injection wells. Allowables for all wells shall be determined in a manner hereinafter prescribed.

RULE 3. Allowables for injection wells may be transferred to producing wells within the project area, as may the al-lowables for producing wells which, in the interest of more efficient operation of the Project, are shut-in or curtailed because of high gas-oil ratio or are shut-in for any of the following reasons: pressure regulation, control of pattern or sweep efficiencies, or to observe changes in pressures or changes in characteristics of reservoir liquids or progress of sweep.

RULE 4. The allowable assigned to any well which is shutin or which is curtailed in accordance with the provisions of Rule 3 which allowable is to be transferred to any well or wells in the project area for production, shall in no event be greater than its ability to produce during the test prescribed by Rule 6, below, or greater than the current top unit allowable for the pool during the month of transfer, whichever is less.

SECTION IV

R. W. Byram & Co., - Dec., 1973

(NORTH VACUUM-ABO (MOBIL PRESSURE MAIN-TENANCE PROJECT) POOL - Cont'd.)

RULE 5. The allowable assigned to any injection well on an 80-acre proration unit shall be top unit allowable for the North Vacuum-Abo Pool.

RULE 6. The allowable assigned to any well which is shutin or curtailed in accordance with Rule 3, shall be determined by a 24-hour test at a stabilized rate of production, which shall be the final 24-hour period of a 72-hour test throughout which the well should be produced in the same manner and at a constant rate. The daily tolerance limitation set forth in Commission Rule 502 I (a) and the limiting gas-oil ratio (2000 to 1) for the pool shall be waived during such tests. The project operator shall notify all operators offsetting the well, as well as the Commission, of the exact time such tests are to be conducted. Tests may be witnessed by representatives of the offsetting operators and the Commission, if they so desire.

RULE 7. The basic allowable assigned to each producing well in the Project shall be equal to the well's ability to produce or to top unit allowable for the pool, whichever is less. Wells capable of producing more than top unit allowable may also receive transfer allowable, provided however, that no producing well in the project area which directly or diagonally offsets a well on another lease producing from the same common source of supply shall receive an allowable or produce in excess of two times top unit allowable for the pool. Each producing well shall be subject to the limiting gas-oil ratio (2000 to 1) for the pool.

RULE 8. Each month the project operator shall submit to the Commission a Pressure Maintenance Project Operator's Report, on a form prescribed by the Commission, outlining thereon the data required, and requesting allowables for each of the several wells in the Project as well as the total project allowable based upon the pool's depth bracket allowable and the market demand percentage factor in effect. The aforesaid Pressure Maintenance Project Operator's Report shall be filed in lieu of Form C-120 for the Project.

RULE 9. The Commission shall, upon review of the report and after any adjustments deemed necessary, calculate the allowable for each well in the Project for the next succeeding month in accordance with these rules. The sum of the allowables so calculated shall be assigned to the Project and may be produced from the wells in the Project in any proportion except that no well in the Project which directly or diagonally offsets a well on another lease producing from the same common source of supply shall produce in excess of two times top unit allowable for the pool.

RULE 10. (As Corrected by Order No. R-4430-A, October 27, 1972.) The Secretary-Director of the Commission is hereby authorized to approve such additional producing wells and injection wells at orthodox and unorthodox locations within the boundaries of the North Vacuum-Abo Unit Area as may be necessary to complete an efficient production and injection pattern, provided said wells are drilled no closer than 460 feet to the outer boundary of said unit nor closer than 10 feet to any quarter-quarter section or subdivision inner boundary. To obtain such approval, the project operator shall file proper application with the Commission, which application, if it seeks authorization to convert additional wells to injection or to drill additional production or injection wells shall include the following: (1) A plat showing the location of proposed well, all wells within the project area, and offset operators, locating wells which offset the project area.

(2) A schematic drawing of the proposed well which fully describes the casing, tubing, perforated interval, and depth.

(3) A letter stating that all offset operators to the proposed well have been furnished a complete copy of the application and the date of notification.

The Secretary-Director may approve the proposed well if, within 20 days after receiving the application, no objection to the proposal is received. The Secretary-Director may grant immediate approval, provided waivers of objection are received from all offset operators.

Expansion of the project area may be approved by the Secretary-Director of the Commission administratively when good cause is shown therefor.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deen necessary.

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

DRINKARD POOL (Downes Lease Waterflood) Lea County, New Mexico

Order No. R-4445, Authorizing The Wiser Oil Company to Institute a Waterflood Project on its Downes Lease, Drinkard Pool, Lea County, New Mexico, December 1, 1972.

Application of the Wiser Oil Company for a Waterflood Project, Lea County, New Mexico.

CASE NO 4868 Order No. R-4445

ORDER OF THE COMMISSION

BY THE COMMISSION: This cause came on for hearing at 9 a.m. on November 29, 1972, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 1st day of December, 1972, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof. R. W. Byram & Co., - Jan., 1973

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NORTH VACUUM-ABO UNIT Lea County, New Mexico

Order No. R-4412, Approving the North Vacuum-Abo Unit Agreement, Lea County, New Mexico, October 10, 1972.

Application of Mobil Oil Corporation for Approval of the North Vacuum-Abo Unit Agreement, Lea County, New Mexico.

> CASE NO. 4830 Order No. R-4412

ORDER OF THE COMMISSION

BY THE COMMISSION: This cause came on for hearing at 9 o'clock a.m. on September 27, 1972, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 10th day of October, 1972, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Mobil Oil Corporation, seeks approval of the North Vacuum-Abo Unit Agreement covering 5,835.30 acres, more or less, of State lands described as follows:

> LEA COUNTY, NEW MEXICO TOWNSHIP 17 SOUTH, RANGE 34 EAST, NMPM Section 2: SW/4 - TO Section 2: Section 3: SE/4 E/2+160 S/2 and N/2 NE/4 A Section 10: Section 11: NE/4 and S/2 NE/4 and W/2 Section 12: Section 13: Section 14: All E/2 Section 15: E/2Section 22: Section 23: A11 Section 24: All N/2 NE/4 and NW/4Section 25: Section 26: A11 Section 27: E/2

> TOWNSHIP 17 SOUTH, RANGE 35 EAST, NMPM Section 19: W/2 NW/4

(3) That approval of the proposed unit agreement should promote the prevention of waste and the protection of correlative rights within the unit area.

IT IS THEREFORE ORDERED:

(1) That the North Vacuum-Abo Unit Agreement is hereby approved.

(2) That the plan contained in said unit agreement for the development and operation of the unit area is hereby approved in principle as a proper conservation measure; provided however, that notwithstanding any of the provisions contained in said unit agreement, this approval shall not be considered as waiving or relinquishing, in any manner, any right, duty, or obligation which is now, or may hereafter be, vested in the Commission to supervise and control operations for the exploration and development of any lands committed to the unit and production of oil or gas therefrom.

(3) That the unit operator shall file with the Commission an executed original or executed counterpart of the unit agreement within 30 days after the effective date thereof; that in the event of subsequent joinder by any party or expansion or contraction of the unit area, the unit operator shall file with the Commission within 30 days thereafter counterparts of the unit agreement reflecting the subscription of those interests having joined or ratified.

(4) That this order shall become effective upon the approval of said unit agreement by the Commissioner of Public Lands for the State of New Mexico; that this order shall terminate ipso facto upon the termination of said unit agreement; and that the last unit operator shall notify the Commission immediately in writing of such termination.

(5) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

VACUUM GRAYBURG-SAN ANDRES UNIT Lea County, New Mexico

Order No. R-4433, Approving the Vacuum Grayburg-San Andres Unit Agreement, Lea County, New Mexico, November 8, 1972, as Amended by Order No. R-4433-A, November 8, 1972.

Application of Texaco Inc. for Approval of the Vacuum Grayburg San Andres Unit Agreement, Lea County, New Mexico.

> CASE NO. 4851 Order No. R-4433

ORDER OF THE COMMISSION

BY THE COMMISSION: This cause came on for hearing at 9 o'clock a.m. on November 1, 1972, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.