

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

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-101
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 6 Copies
Fee Lease - 5 Copies

☒ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address. CONOCO INC. 10 DESTA DRIVE STE 100W MIDLAND, TEXAS 79705		² OGRID Number 005073
		³ API Number 30 - 0 25-32513
⁴ Property Code 13396	⁵ Property Name Hardy 36 State	
		⁶ Well No. 4

⁷ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	36	20S	37E		1880	South	1680	East	Lea

⁸ Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
⁹ Proposed Pool 1 Wildcat Ellenburger-Granite Wash					¹⁰ Proposed Pool 2				

¹¹ Well Type Code N	¹² Well Type Code 0	¹³ Cable/Rotary R	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 3490'
¹⁶ Multiple No	¹⁷ Proposed Depth 6975'	¹⁸ Formation Granite Wash	¹⁹ Contractor	²⁰ Spud Date 9/1/94

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"	54.5H	500'	525	Surface
12-1/4"	9-5/8"	36H	3850'	1400	Surface
8-3/4"	7"	26H	10,550'	1870	Surface

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.

It is proposed to drill this well vertically through the Granite Wash formation according to the plan outlined in the following attachments:

1. Well Location & Acreage Dedication Plat (C-102)
2. Proposed Well Plan Outline
3. Cementing Program
4. BOP & Choke Manifold Specifications

OPER. OGRID NO. 5073
PROPERTY NO. 13396
POOL CODE 96634
EFF DATE 8/19/94
API NO. 30-025-32513

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature: <i>Jerry W. Hoover</i>
Printed name: Jerry W. Hoover
Title: Sr. Conservation Coordinator
Date: 8/10/94
Phone: (915) 686-6548

OIL CONSERVATION DIVISION

Approved by: ORIGINAL SIGNED BY JERRY SEXTON	
Title: DISTRICT SUPERVISOR	
Approval Date: AUG 19 1994	Expiration Date:
Conditions of Approval: Attached <input type="checkbox"/>	

District I
PO Box 1968, Hobbs, NM 88241-1968
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State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-10
Revised February 10, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number		Pool Code		Pool Name	
				Wildcat Ellenburger - Granite Wash	
Property Code		Property Name			Well Number
13396		HARDY 36 STATE			4
OGRID No.		Operator Name			Elevation
005073		CONOCO, INC.			3490

10 Surface Location

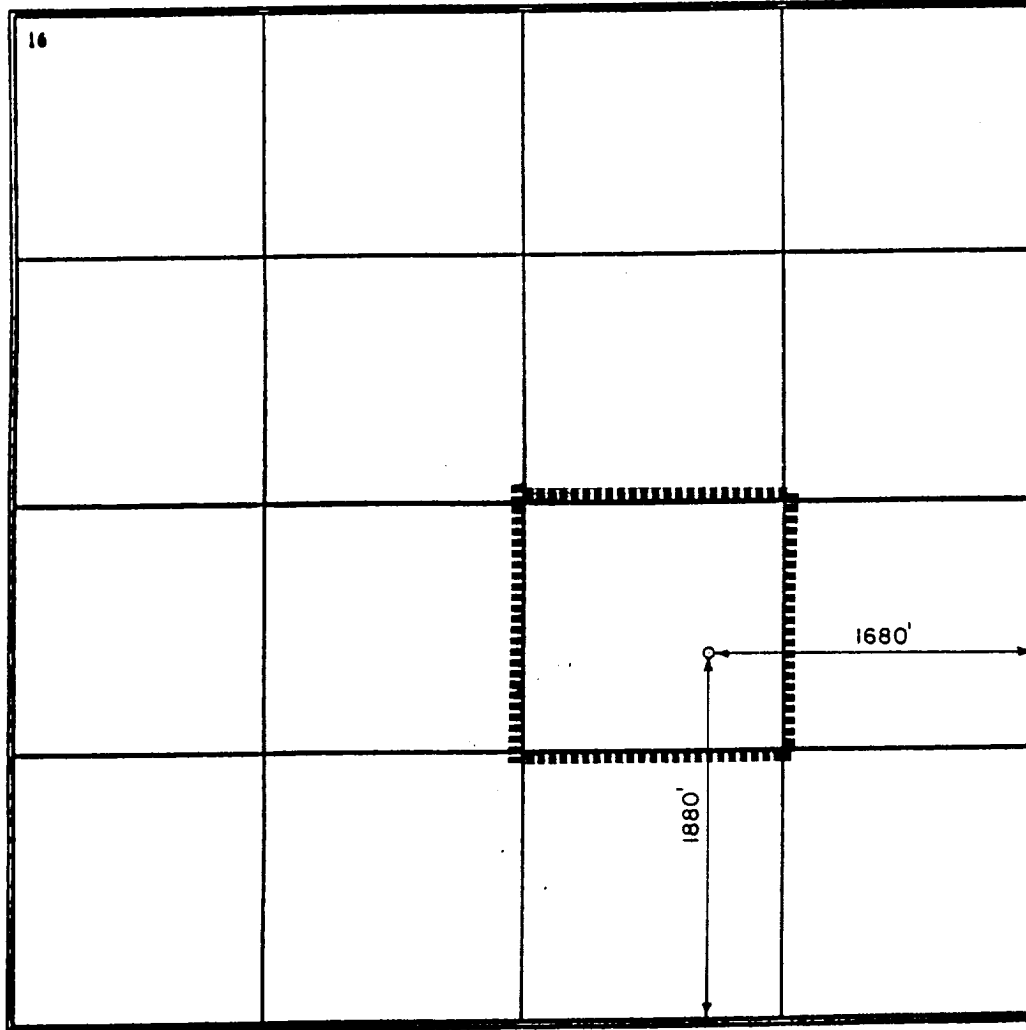
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	36	20-S	37-E		1880	SOUTH	1680	EAST	LEA

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

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

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



17 OPERATOR CERTIFICATION

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

Jerry W. Hoover
Signature
Jerry W. Hoover
Printed Name
Sr. Conservation Coordinator
Title
5/16/94
Date

18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

April 12, 1994
Date of Survey
Signature and Seal of Professional Surveyor:
Earl Foote
Certificate Number



PROPOSED WELL PLAN OUTLINE

WELL NAME **HARDY STATE 36 NO.4**
 LOCATION **SEC 36, T20S, R37E, LEA Co., NEW MEXICO**

Est. GL = 3490'

Est. KB = 3506'

TVD IN 1000'	MD	FORMATION TOPS & TYPE	DRILLING PROBLEMS	TYPE OF FORMATION EVALUATION	HOLE SIZE	CASING SIZE DEPTH	FRAC GRAD	FORMATION PRESSURE GRADIENT	MUD WT TYPE	DAYS
0					17-1/2	13-3/8" 54.5, K-55 ST&C @ 500'			SPUD	
1		RUSTLER 1295' TOP SALT 1390'	WASHOUTS IN SALT SECTION		12-1/4			<8.3	10 PPG BRINE	
2		BOTTOM SALT 2510' YATES 2610'	LOST CIRCULATION TO 5000' SEEPAGE TO SEVERE							
3		SEVEN RIVERS 2882'	ACTIVE WATERFLOOD ZONE	TWO MAN MUDLOG @ 3500		9-5/8" 36# K-55 LT&C @ 3850' (DRIIFT @ 8-3.4")				
4		QUEEN 3520' GRAYBURG 3785' SAN ANDRES 4009'	POSSIBLE DEVIATION TO TD						FRESH WATER	
5		GLORIETA 5217'	PARTIAL LOSSES POSSIBLE					<8.4		
6		BLINEBRY MKR 5703'								
7		TUBB MARKER 6310' DRINKARD 6602' ABO 6886'	HARDY ST. 36 -1 HAD LOSSES @ 6357' OF 170 BPH - MUDDER UP		8-3/4				MUD UP @ 6300' FW GEL 8.5-8.7 WL 35cc	
8		STRAWN 7510'								
9		DEVONIAN 7986'	POSSIBLE SEVERE LOSSES FROM DEVONIAN TO TD							
10		SIMPSON 9640' McKEE SAND 9940' ELLENBURG LIME 10180' GRANITE WASH 10456'	WASHOUTS IN McKEE SAND HARDY ST. 36 -1 HAD LOSSES OF 10 BPH @ 10,300' - USED 8.8 MW & C ₂ CO ₃ TO STOP LOSSES			7" 26# K-55 & L-80 @ 10,550'		8.7-8.8	REDUCE WL @ 9400' TO 15cc MW @ 8.7-9.0	
11		TD @ 10550'		GR-CAL-LDT-CNL GR-DLL-MSFL GR-SON(LS)-DIEL 2000' OF NMR LOG ROTARY SW CORES						
12										
13										
14										
15										
16										

DATE 8/2/94

PREPARED BY: BILLY GOODWIN
 DRILLING ENGINEER

DAMIAN BARRETT
 RESERVOIR ENGINEER

WELL NAME: Hardy 36 State No. 1

C E M E N T I N G P R O G R A M

SURFACE CASING STRING

<u>525</u>	sxs	Class	<u>C</u>	Mixed at	<u>14.8</u>	ppg
Additives	<u>2 % A-7P</u>					
<u> </u>	sxs	Class	<u> </u>	Mixed at	<u> </u>	ppg
Additives	<u> </u>					

1st INTERMEDIATE CASING STRING

LEAD	<u>1150</u>	sxs	Class	<u>C</u>	Mixed at	<u>12.7</u>	ppg
Additives	<u>35:65:6 + 10 pps A-5 + .25 pps Cello</u>						
TAIL	<u>250</u>	sxs	Class	<u>C</u>	Mixed at	<u>14.8</u>	ppg
Additives	<u>2 % A-7P</u>						

PRODUCTION CASING STRING

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LEAD	<u>530</u>	sxs	Class	<u>H</u>	Mixed at	<u>12.5</u>	ppg
Additives	<u>2 % SMS + 3 % A-9</u>						
TAIL	<u>230</u>	sxs	Class	<u>H</u>	Mixed at	<u>16.2</u>	ppg
Additives	<u>1.1% FL-62+3% A-9+.3% CD-32+.2% SMS+3% R-3</u>						

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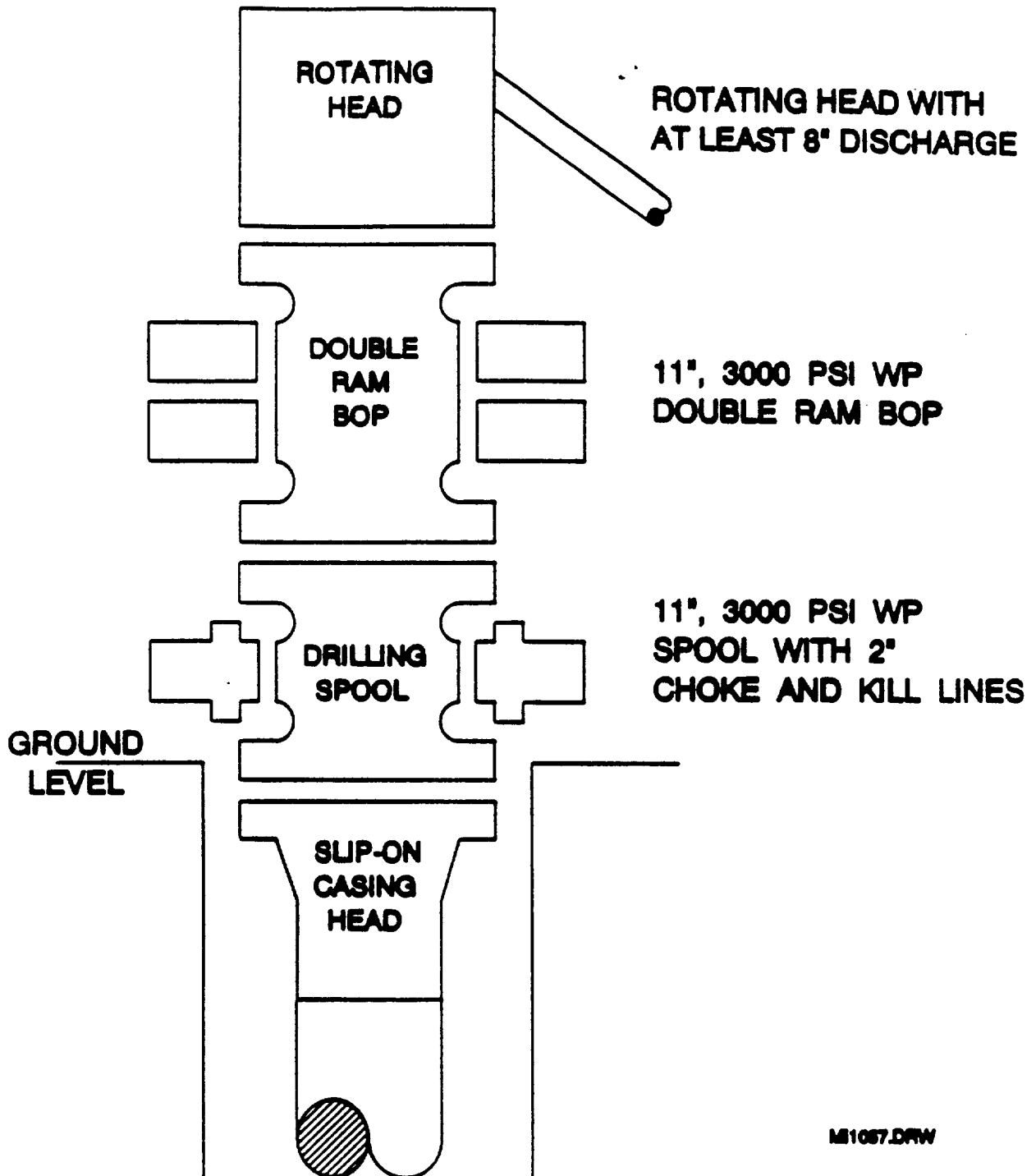
LEAD	<u>500</u>	sxs	Class	<u>C</u>	Mixed at	<u>14.8</u>	ppg
Additives	<u>1.1% FL-62+.3% CD-32+.2% SMS+3% A-9</u>						
TAIL	<u> </u>	sxs	Class	<u> </u>	Mixed at	<u> </u>	ppg
Additives	<u> </u>						

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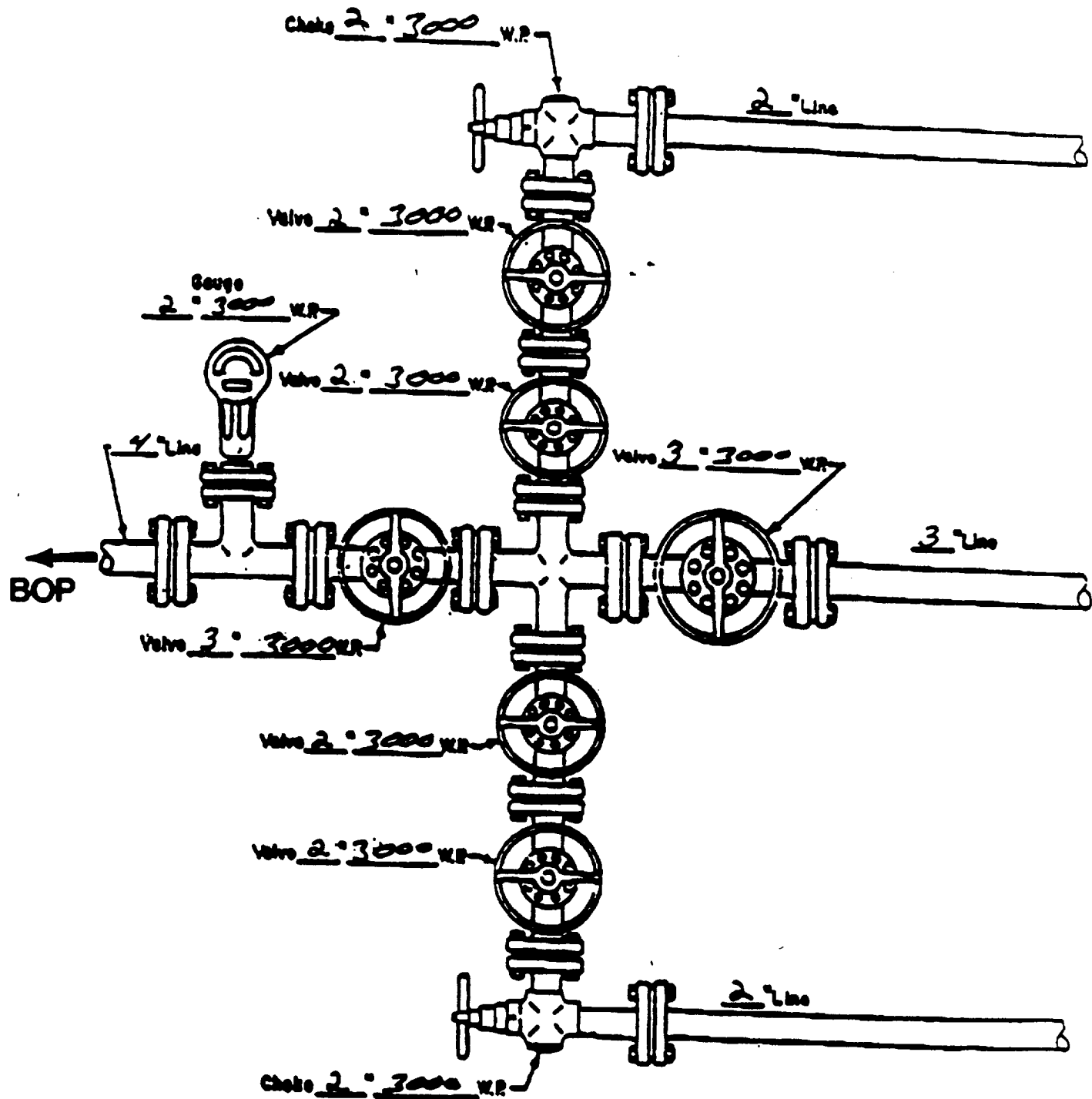
LEAD	<u>280</u>	sxs	Class	<u>C</u>	Mixed at	<u>12.4</u>	ppg
Additives	<u>2% SMS</u>						
TAIL	<u>330</u>	sxs	Class	<u>C</u>	Mixed at	<u>14.8</u>	ppg
Additives	<u>1.1% FL-62+.3% CD-32+.2% SMS+3% A-9</u>						

BOP SPECIFICATIONS



ME1057.DRW

CHOKE MANIFOLD DIAGRAM



MANIFOLD
3000 #W.P.

☒ Manual
☐ Hydraulic