

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

Operator Name and Address: CONOCO INC. 10 DESTA DRIVE STE 100W MIDLAND, TEXAS 79705		OGRID Number 005073
Property Code 013396	Property Name Hardy 36 State	API Number 30-025-33240
		Well No. 20

Surface Location

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
I	36	20S	37E		1000	South	330	East	Lea

Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
Proposed Pool 1 North Hardy Tubb-Drinkard					Proposed Pool 2				

Work Type Code N	Well Type Code Q	Cable/Rotary R	Lease Type Code S	Ground Level Elevation 3492'
Multiple No	Proposed Depth 6930'	Formation Tubb-Drinkard	Contractor NA	Spud Date 2/1/96

Proposed Casing and Cement Program

Well Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12-1/4"	8-5/8"	24#	1500'	920	Surface
7-7/8"	5-1/2"	15.5#	6930'	1395	Surface

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 Tubb and Drinkard formations according to the plan outlined in the following attachments:

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

Permit Expires 6 Months From Approval
Date Unless Drilling Underway.

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

Signature: *Jerry W. Hoover*

Printed name: Jerry W. Hoover

Title: Sr. Conservation Coordinator

Date: 1/4/96 Phone: (915) 686-6548

OIL CONSERVATION DIVISION

ORIGINAL SIGNED BY JERRY SEXTON

Approved by: DISTRICT I SUPERVISOR

Title:

Approval Date: JAN 08 1996

Expiration Date:

Conditions of Approval:
Attached ☐

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised February 21, 1994
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☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025- 33240	² Pool Code 96356	³ Pool Name North Hardy Tubb-Drinkard
⁴ Property Code 013396	⁵ Property Name HARDY 36 STATE	⁶ Well Number 20
⁷ OGRID No. 005073	⁸ Operator Name CONOCO INC.	⁹ Elevation 3492

¹⁰Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	36	20-S	37-E		2000	SOUTH	330	EAST	LEA

¹¹Bottom 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 40	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16				<p>¹⁷ OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Jerry W. Hoover</i> Signature JERRY W. HOOVER Printed Name SR. CONSERVATION COORDINATOR Title 1/4/96 Date</p>
				<p>¹⁸ SURVEYOR CERTIFICATION</p> <p>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 best of my belief.</p> <p>JUNE 20 1996 Date of Survey Signature and Seal of Professional Surveyor: 8278 Certificate Number 8278</p>

PROPOSED WELL PLAN OUTLINE

WELL NAME **HARDY 36 STATE NO. 20**

LOCATION **2000' FSL 330' FEL SECT. 36 T-20S R-37E LEA CO.**

TVD IN 1000'	MD	FORMATION TOPS & TYPE	DRILLING PROBLEMS	TYPE OF FORMATION EVALUATION	HOLE SIZE	CASING SIZE DEPTH	FRAC GRAD	FORMATION PRESSURE GRADIENT	WT	MUD TYPE	DAYS
0			POSSIBLE HOLE ENLARGEMENT AND SLOUGHING		12-1/4"				8.4	FRESH	
1		RUSTLER 1430'				8-5/8" 1500' 24# K-55, ST&C 920 wt, circ cmt			10	BRINE	3
2		B/SALT 2550' YATES 2637'		2-MAN MUD LOGGERS ON AT 3500'							
3		7-RIVERS 2904' QUEEN 3333' PENROSE 3650' GRAYBURG 3802'									
4		SAN ANDRES 4030'		H2S MONITOR ON AT 4000'				Less than 8.3			
5			POSSIBLE LOST CIRCULATION AND SEEPAGE TO TOTAL DEPTH		7-7/8"						
6		GLORIETTA 5245' BLINEBRY 5790'	CASES OF DIFFERENTIAL STICKING THROUGH GLORIETTA						BRINE 10 - 10.2	STARCH	
7		TUBB 6333' DRINKARD 6620' ABO 6915' TD 6930'		GR-CAL-DDL-MSFL 3500' - TD GR-CAL-FDC-CNL-PE 3500' - TD Di-Electric 2000' min		5 1/2" TD 6930' 15.5#, K-55, LT&C 1395 wt, circ cmt		Less than 8.3 BHP = 2650 psi			17
8											
9											
10											
11											
12											
13											
14											
15											
16											

DATE December 5, 1995

APPROVED BILLY GOODWIN
DRILLING ENGINEER

WELL NAME: Hardy 36 State No.20

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

SURFACE CASING STRING

LEAD 650 sxs Class C Mixed at 13.7 ppg
Additives 4 % Gel + 2 % CaCl₂ + .2% SMS

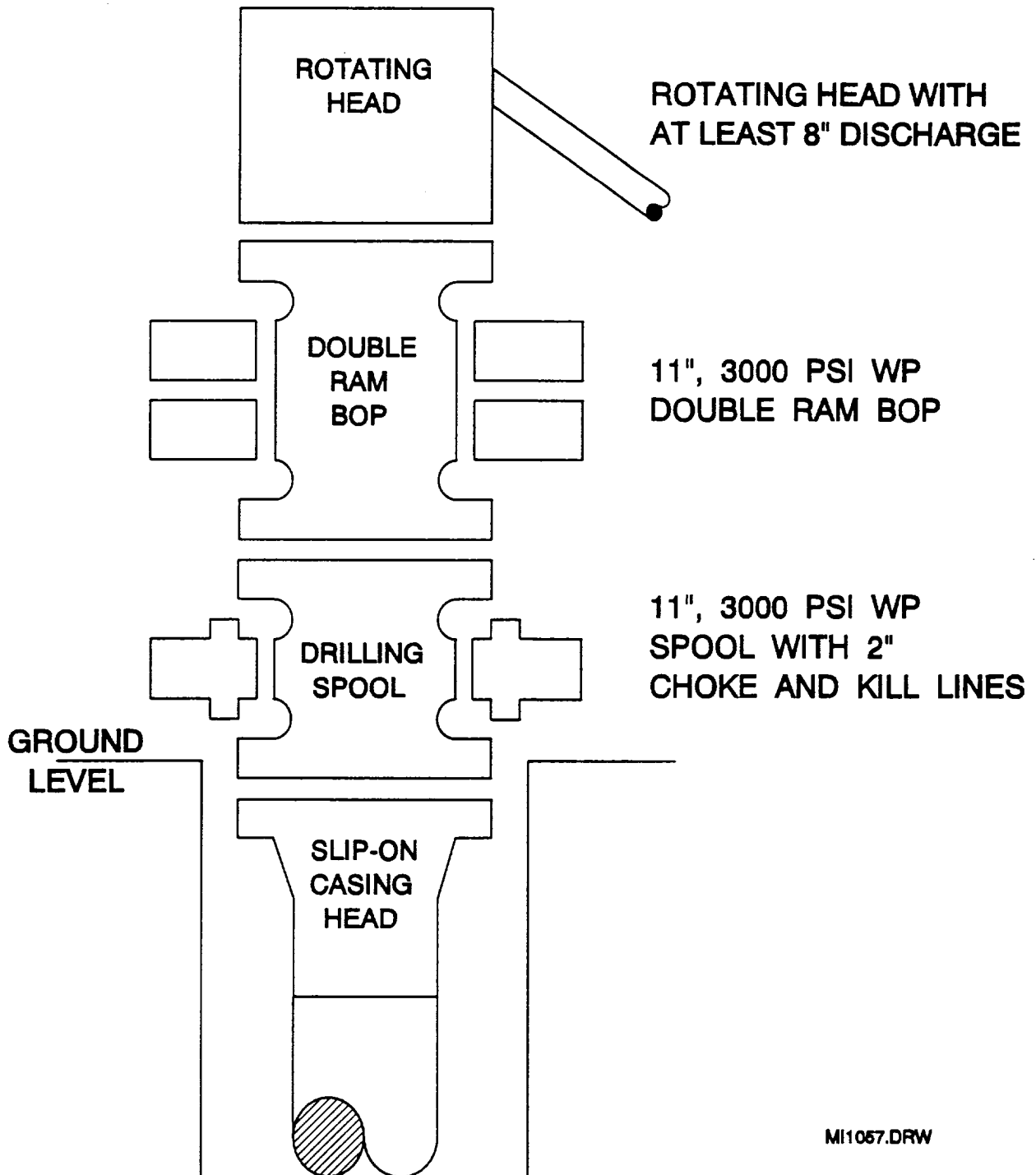
TAIL 270 sxs Class C Mixed at 14.8 ppg
Additives 2 % CaCl

PRODUCTION CASING STRING

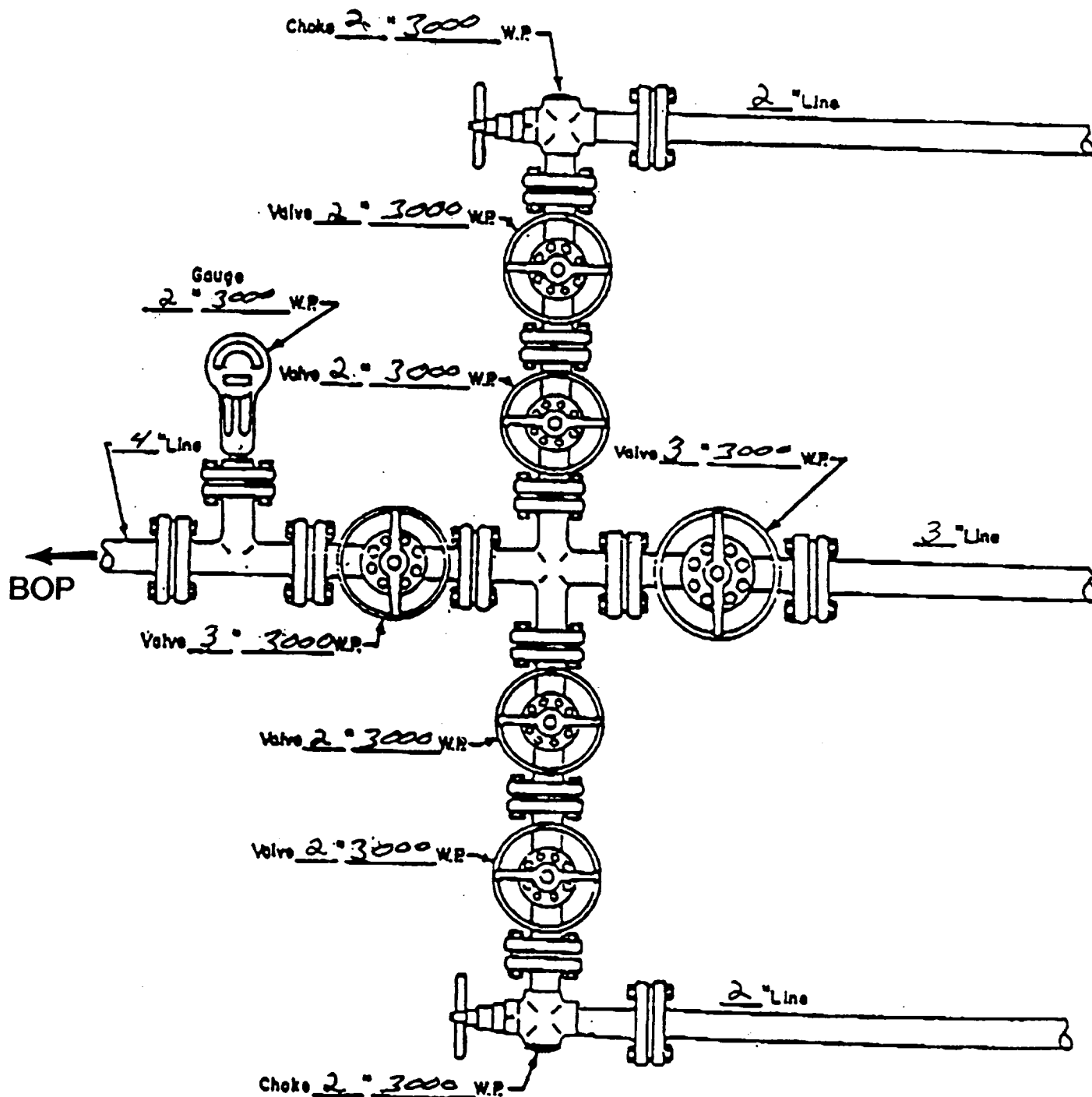
LEAD 685 sxs Class C Mixed at 12.1 ppg
Additives 2.5% SMS

TAIL 710 sxs Class C Mixed at 14.8 ppg
Additives 1.1% FL-62+2% BA-90+3% A-5+ .3% CD-32+ .2% SMS

BOP SPECIFICATIONS



CHOKE MANIFOLD DIAGRAM



MANIFOLD
3000 #W.P.

☒ Manual
☐ Hydraulic