

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 South First, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
2040 South Pacheco  
Santa Fe, NM 87505

Form C-101  
Revised March 17, 1999

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**

<sup>1</sup> Operator Name and Address Conoco Inc., 10 Desta Drive, Suite 649W, Midland, TX 79705		<sup>2</sup> OGRID Number 005073
		<sup>3</sup> API Number 30-025-35771
<sup>3</sup> Property Code 3105	<sup>5</sup> Property Name State F1	<sup>6</sup> Well No. 15

<sup>7</sup> Surface Location									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
W	1	21S	36E		500'	South	2000'	East	Lea

<sup>8</sup> 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
<sup>9</sup> Proposed Pool 1 Hardy Abo						<sup>10</sup> Proposed Pool 2			

<sup>11</sup> Work Type Code N	<sup>12</sup> Well Type Code O	<sup>13</sup> Cable/Rotary R	<sup>14</sup> Lease Type Code S	<sup>15</sup> Ground Level Elevation 3500'
<sup>16</sup> Multiple No	<sup>17</sup> Proposed Depth 7750'	<sup>18</sup> Formation Abo	<sup>19</sup> Contractor	<sup>20</sup> Spud Date 01/10/02

<sup>21</sup> Proposed Casing and Cement Program					
Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12 1/4"	J-55, 8-5/8"	24#	1500'	665'	Surface
7 7/8"	L-80, 5 1/2"	17#	7750'	990'	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.

1. Well Location and Acreage Dedication Plat (C-102)
2. Proposed Well Plan Outline
3. Cementing Program
4. BOP/Choke Diagram

Permit Expires 1 Year From Approval  
Date Unless Drilling Underway

<sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief. Signature: <i>Kimberly Southall</i> Printed name: Kimberly Southall Title: Associates Assistant Date: 11/20/01		OIL CONSERVATION DIVISION Approved by: Title: Approval Date: Expiration Date: Conditions of Approval: Attached <input type="checkbox"/>	
Phone: 915/686-5565			

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State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised March 17, 1999

Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION

2040 South Pacheco  
Santa Fe, New Mexico 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-35771	Pool Code 97075	Pool Name Hardy Abo
Property Code 3105	Property Name STATE F1	Well Number 15
OGRID No. 005073	Operator Name CONOCO INC.	Elevation 3500'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
W	1	21 S	36 E		500	SOUTH	2000	EAST	LEA

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
Dedicated Acres 40	Joint or Infill	Consolidation Code	Order No.						

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

LOT 12 - 40.0 AC.	LOT 11 - 40.0 AC.	LOT 10 - 40.0 AC.	LOT 9 - 40.0 AC.
LOT 13 - 40.0 AC.	LOT 14 - 40.0 AC.	LOT 15 - 40.0 AC.	LOT 16 - 40.0 AC.

LAT - N32°30'07.5"  
LONG - W103°13'01.0"

500'  
3500.4' 3500.3'  
3501.5' 3498.2'  
2000'

**OPERATOR CERTIFICATION**  
I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.  
Signature: Kay Maddox  
Printed Name: KAY MADDUX  
Title: Regulatory Agent  
Date: 11/15/2001

**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.  
November 9, 2001  
Date Surveyed: November 9, 2001  
Signature & Seal of Professional Surveyor: GARY L. JONES  
Certification No. 7977  
Professional Land Surveyor No. 2037  
BASIC SURVEYS

# PROPOSED WELL P-1 OUTLINE

State F-1 #15  
500' FSL 2000' FEL. Sec 1, T2TS, R36E, Lea Co., NM.

Ground Level : 3,504  
Kelly Bushing: 11' AGL

LOCATION

Depth MD	FORMATION TOPS (from GL)	DRILLING PROBLEMS	TYPE OF FORMATION EVALUATION	HOLE SIZE	CASING PROGRAM	FRAC GRAD	FORM. PRES. GRAD.	Mud Weight & Type	Days
0		Possible Hole Enlargement & Sloughing		12-1/4"			Less than 8.3	8.4 - 9.5 Fresh	
1									
2									
3									
4									
5									
6									
7									
8									
9									
1000									
1	Top Salt @ 1,365'				8-5/8", 24# J-55 ST&C @ 1,500'				3
2									
3									
4		Washouts in Salt Section		7-7/8"	Circulate Cement			10 Brine	
5									
6									
7									
8									
9									
2000							Less than 8.4		
1									
2									
3									
4									
5	Base Salt @ 2,530'		Mud Loaders @ 2,600'						
6	Yates 2,674'		H2S monitor equipment on @ 2,600'						
7									
8	7 Rivers 2,934'								
9									
3000									
1									
2									
3									
4	Queen 3,443'								
5	Penrose 3,542'								
6	Gravura 3,690'								
7									
8									
9	San Andres 3,940'	Mud loss in San Andres is likely. Possible loss of returns.							
4000									
1									
2									
3									
4		Losses as great as 40 bph likely from 3900' to 6800'.							
5									
6									
7									
8									
9									
5000									
1	Glorietta 5,182'	Possible differential sticking thru Glorietta. Possible lost returns.							7
2									
3									
4									
5									
6									
7	Blainebrv 5,760'								
8									
9									
6000									
1									
2									
3	Tubb 6,331'								10
4									
5									
6	Drinkard 6,660'								
7									
8									
9	Abo 6,952'		First Log Run: HALS-Micro CFL-Cal-GR CNL-DLL-PE-Sonic TD-2500'					10 ppa Starch Gel	
7000									
1		Minor mud loss possible upon drilling into Strawn.							
2									
3									
4									
5									
6									
7	Strawn @ 7,729'	Offset data from:	Second Log Run: GR-CNL-Cal TD-surf		5-1/2", 17# L-80 LT&C set @ 7750'				
8	TD @ 7750'		Possible Third Run: FMI imaging log		Circulate cement either single or 2 stage				
9									
8000									
1		Oxy State F-1 #1							17

DATE

19-Nov-01

Al Gomez, Geologist

APPROVED

*Y.P. Ortiz*  
Y.P. Ortiz, Drilling Engineer

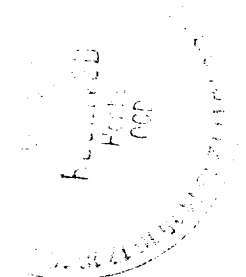
Jim Hubbard, Reservoir Engineer



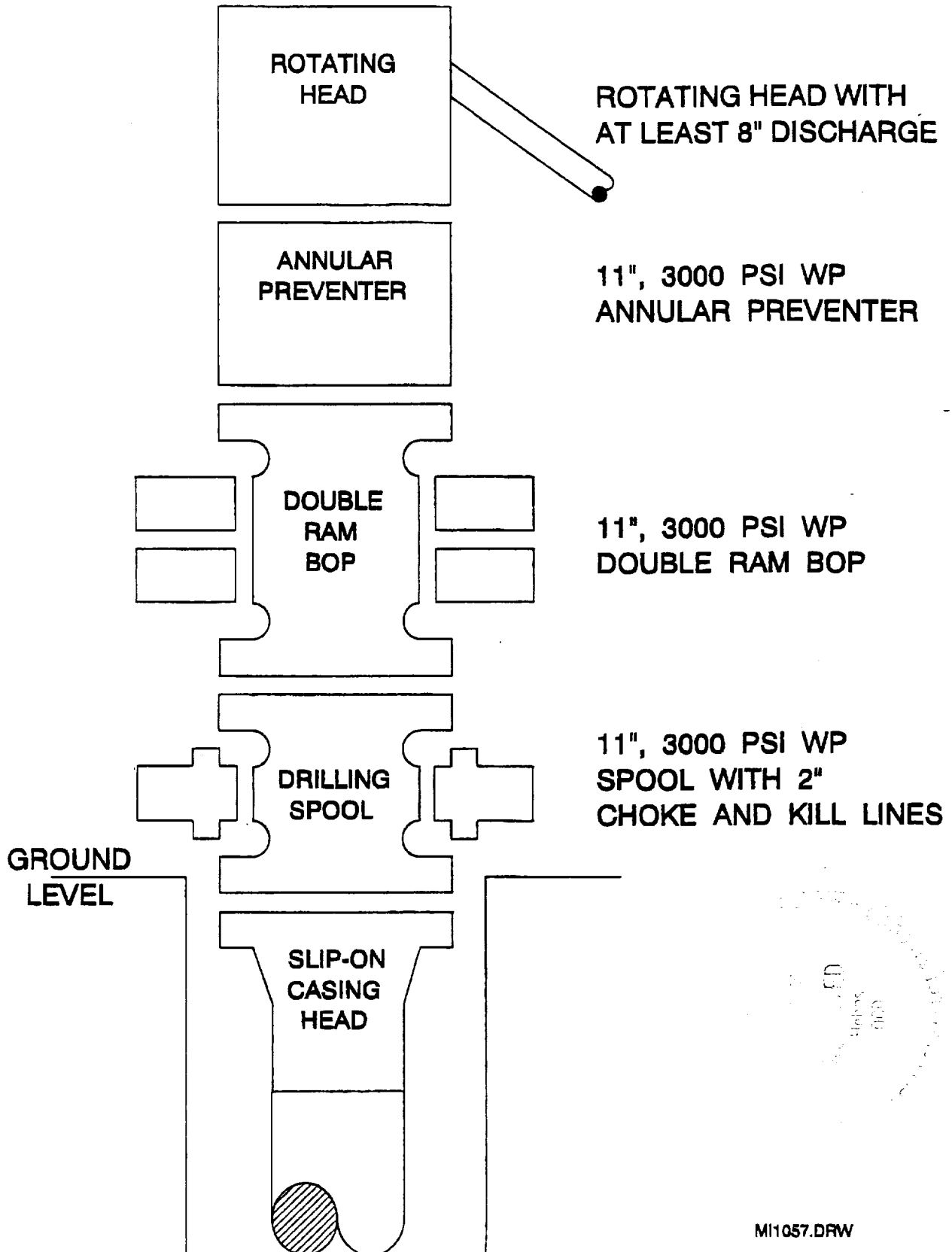
**State F-1 #15**  
**PROPOSED CASING & CEMENT PLAN**

Surface casing size:	8-5/8", 24#, J-55, ST&C	Casing OD:	8.625 in
Surface casing depth:	1,500 ft	Casing ID:	8.097 in
Hole size:	12.25 in	Shoe jt length:	40 ft
Static temperature:	89 deg F	Lead Excess:	101 %
Circulating temperature:	85 deg F	Tail Excess:	106 %
Lead:	465 sx	Cl C + 0.25 pps Cello Flake + 0.005 gps FP-6L + 2% Sodium Metasilicate	
Tail:	200 sx	Cl C + 2% CaCl + 0.005 gps FP-6L	
<b>Properties</b>		<b>Lead</b>	<b>Tail</b>
Slurry Weight (ppg)		12.4	14.8
Slurry Yield (cfps)		2.15	1.34
Mix Water (gps)		12.33	6.35
Pump time - 70 BC (HH:MM)		6:25	2:20
Free Water (mls) @ 80 deg F @ 90 deg angle		0	0
Fluid Loss (cc/30 min) @ 1000 psi and 80 deg F		854	900
Compressive Strength (psi)			
12 hrs @	89 deg F	124	1200
24 hrs @	89 deg F	250	2500

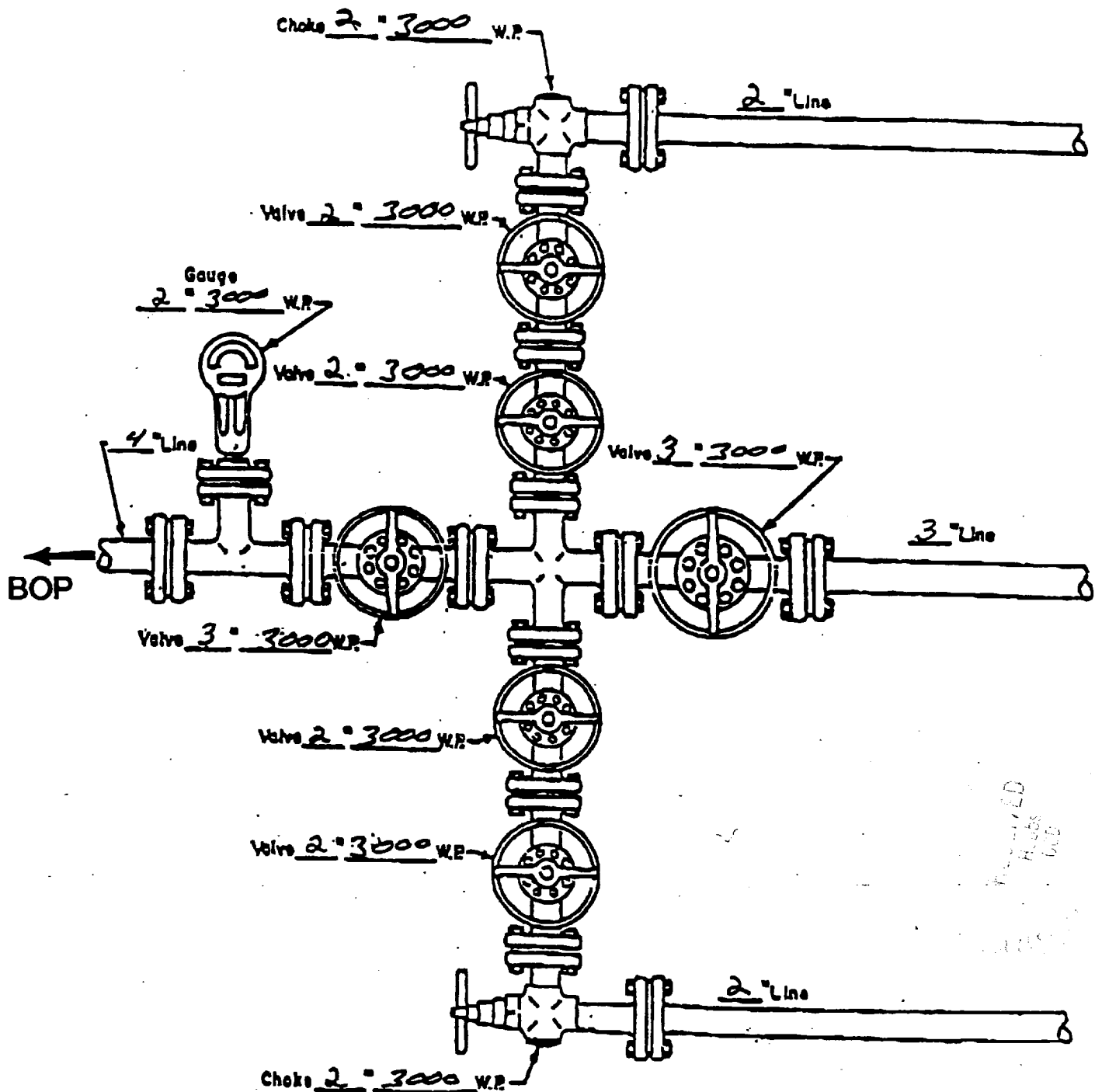
Production casing size:	5-1/2", 17#, L80, LT&C	Casing OD:	5.500 in
Production casing depth:	8,050 ft	Casing ID:	4.892 in
Hole size:	7.875 in	Shoe jt length:	80 ft
Static temperature:	128 deg F	Lead Excess:	51 %
Circulating temperature:	122 deg F	Tail Excess:	51 %
Lead:	565 sx	50:50 Poz:Cl C + 5% bwow NaCl + 0.25 pps Cello Flake + 0.005 gps FP-6L + 10% Bentonite	
Tail:	425 sx	15:61:11 Poz:Cl C:CSE + 5% bwow NaCl + 1% FL-62 + 0.005 gps FP-6L	
<b>Properties</b>		<b>Lead</b>	<b>Tail</b>
Slurry Weight (ppg)		11.85	13.6
Slurry Yield (cfps)		2.41	1.49
Mix Water (gps)		13.79	7.31
Pump time - 70 BC (HH:MM)		2:58	2:31
Free Water (mls) @ 80 deg F @ 90 deg angle		1	0
Fluid Loss (cc/30 min) @ 1000 psi and 80 deg F		792	62
Compressive Strength (psi)			
12 hrs @	124 deg F	50	1013
24 hrs @	124 deg F	175	1875



# BOP SPECIFICATIONS



# CHOKE MANIFOLD DIAGRAM



MANIFOLD  
3000 #W.P.

- ☒ Manual
- ☐ Hydraulic

ELF 6/26/02  
ABOVE DATE DOES NOT  
INDICATE WHEN  
CONFIDENTIAL LOGS  
WILL BE RELEASED