

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 30-025-34953
<sup>4</sup> Property Code 25385	<sup>5</sup> Property Name State "25-A"	<sup>6</sup> Well No. 3

<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
N	25	20S	37E		510	South	1980	West	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-Strawn North	<sup>10</sup> Proposed Pool 2
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<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 3506'
<sup>16</sup> Multiple No	<sup>17</sup> Proposed Depth 8300'	<sup>18</sup> Formation Strawn	<sup>19</sup> Contractor	<sup>20</sup> Spud Date 3/15/00

<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"	M-50, 8-5/8"	23#	1500'	723	Surface
7-7/8"	J-55, 5-1/2"	17#	8000'	1206	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.

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

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

Signature: *Jo Ann Johnson*

Printed name: Jo Ann Johnson

Title: Sr. Property Analyst

Date: 2/24/00

Phone: 915/686-5515

OIL CONSERVATION DIVISION

Approved by:

ORIGINAL SIGNATURE OF APPROVING OFFICIAL

Title:

Approval Date: 2/24/00

Expiration Date:

Conditions of Approval:

Attached ☐

DISTRICT I  
1828 N. French Dr., Hobbs, NM 88240

DISTRICT II  
811 South First, Artesia, NM 88210

DISTRICT III  
1000 Rio Brazos Rd., Artesia, NM 87410

DISTRICT IV  
2040 South Pacheco, Santa Fe, NM 87505

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 30-025-34953	Pool Code 96893	Pool Name Hardy - Strawn, North
Property Code 25385	Property Name STATE "25-A"	Well Number 3
OGRID No. 005073	Operator Name CONOCO INC.	Elevation 3506'

Surface Location

UL or lot No. N	Section 25	Township 20 S	Range 37 E	Lot Idn	Feet from the 510	North/South line SOUTH	Feet from the 1980	East/West line WEST	County LEA
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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 160	Joint or Infill	Consolidation Code	Order No. NSL Applied For						

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

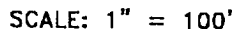
	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><u>Jo Ann Johnson</u> Signature Jo Ann Johnson Printed Name Sr. Property Analyst Title February 24, 2000 Date</p>
	<p>SURVEYOR CERTIFICATION</p> <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 the best of my belief.</p> <p>January 08, 2000 Date Surveyed <u>EARLY L. JONES</u> Signature &amp; Seal of Professional Surveyor NEW MEXICO 7977 W.O. No. 0061A Certificate No. 6690 Jones 7977 BASIN SURVEYS</p>

see Amended

## NEW MEXICO.



FROM THE JUNCTION OF US HWY 62/180 AND STATE HWY 8, GO SOUTH ON HWY 8 APPROX. 11 MILES TO CO. RD. C-49; THENCE EAST AND SOUTH EAST ON C-49 APPROX. 2 MILES TO A LEASE ROAD; THENCE NORTHEAST AND EAST ON LEASE ROAD APPROX. 1.5 MILE TO THE PROPOSED WELL LOCATION.



REF: STATE "25--A" No. 3 / Well Pad Topo

THE STATE "25-A" No. 3 LOCATED 510' FROM THE  
SOUTH LINE AND 1980' FROM THE WEST LINE OF  
SECTION 25, TOWNSHIP 20 SOUTH, RANGE 37 EAST,  
N.M.P.M., LEA COUNTY, NEW MEXICO.

W.O. Number: 0061

Drawn By: **K. GOAD**

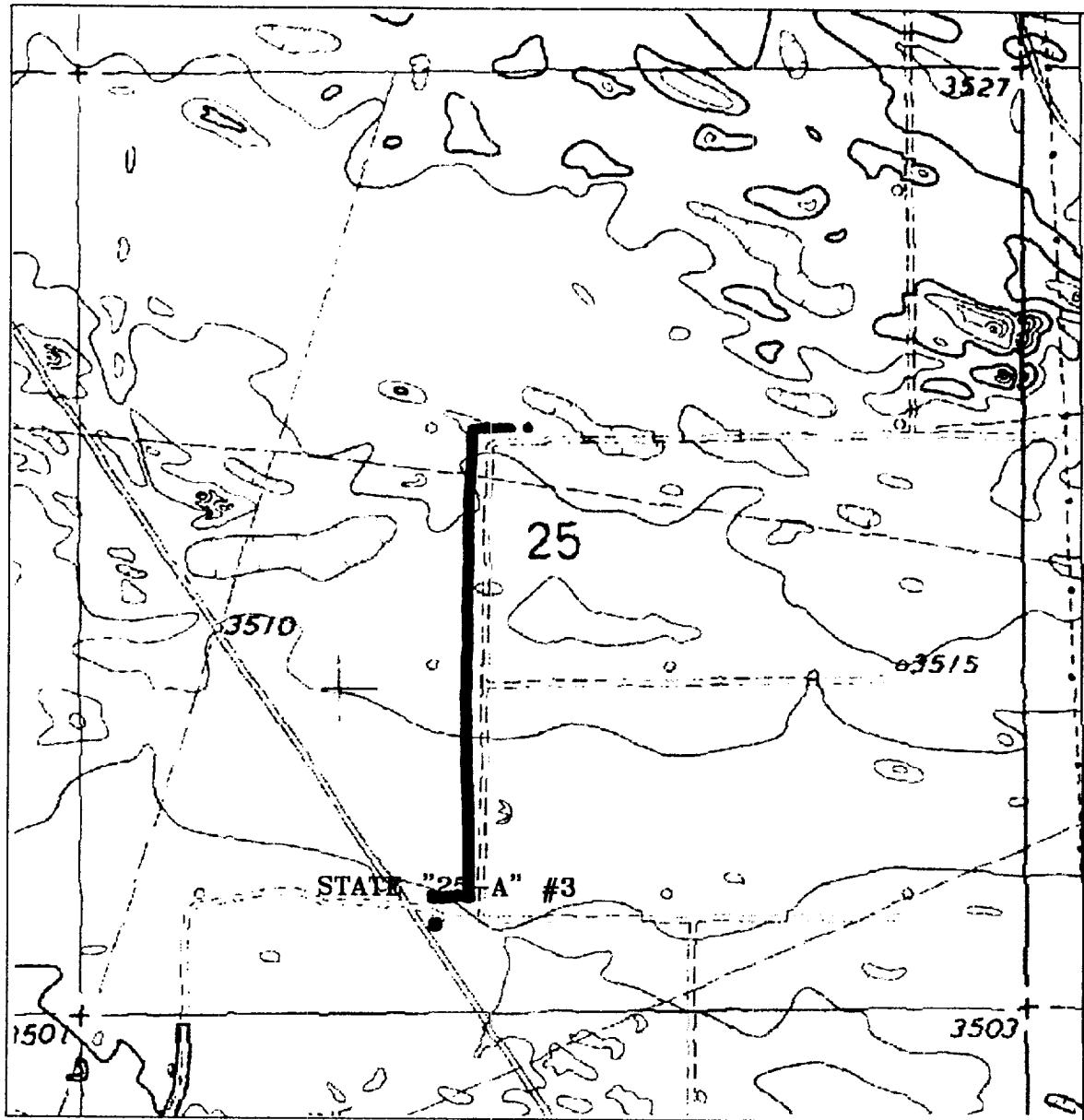
Date: 02-09-2000

Disk: KJG #122 - 0061A.DWG

Survey Date: 02-08-2000

Sheet 1 of 1 Sheets

# Proposed Pipeline 3168'



STATE "25-A" #3

Located at 510' FSL and 1980' FWL

Section 25, Township 20 South, Range 37 East,  
N.M.P.M., Lea County, New Mexico.

**basin**  
**surveys**

focused on excellence  
in the oilfield

P.O. Box 1786  
1120 N. West County Rd.  
Hobbs, New Mexico 88241  
(505) 393-7316 - Office  
(505) 392-3074 - Fax  
basinsurveys.com

W.O. Number: 0061AA - KJG #122

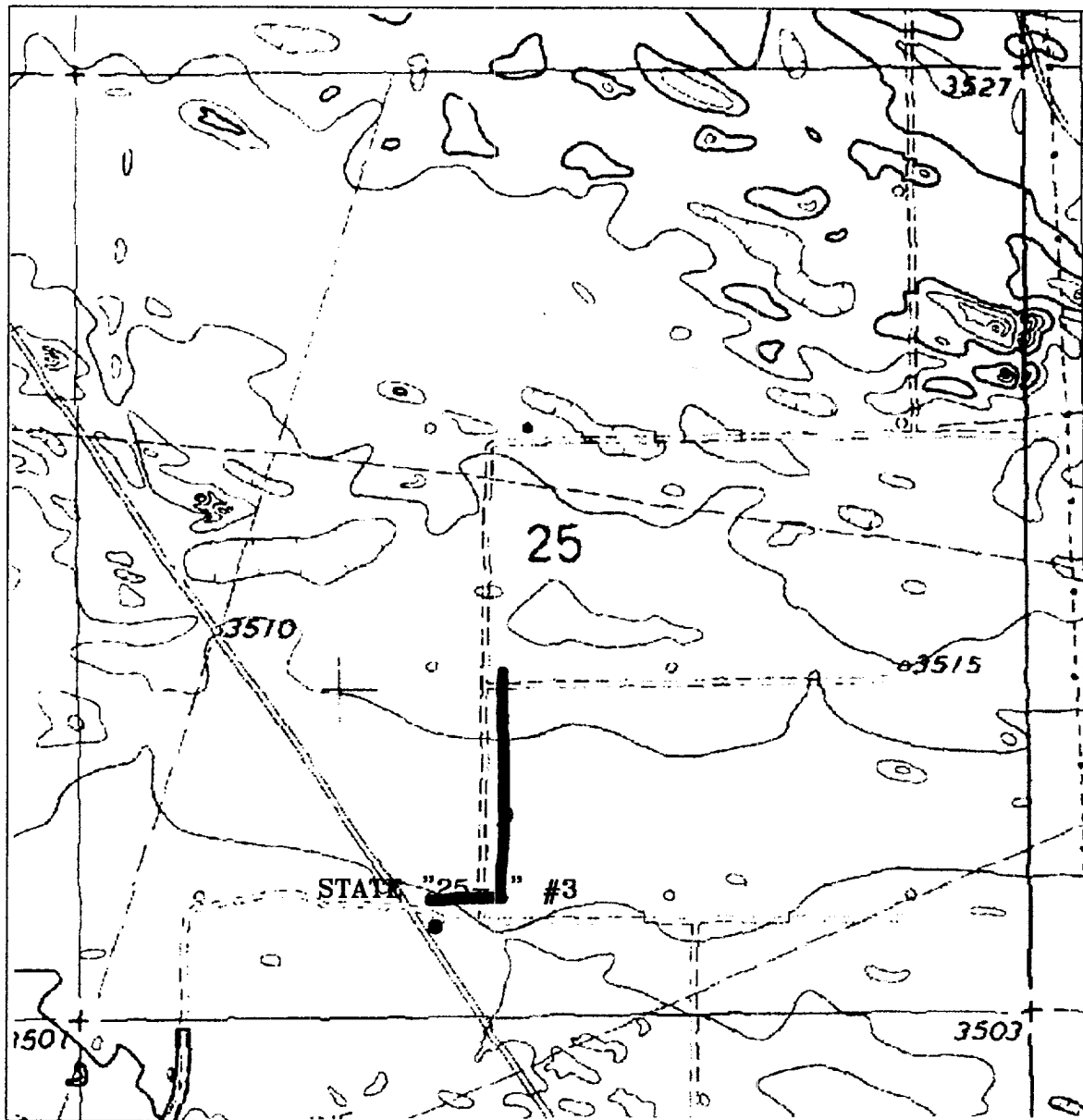
Survey Date: 02-08-2000

Scale: 1" = 1000'

Date: 02-09-2000

CONOCO INC.

# Proposed Powerline 1848'



STATE "25-A" #3

Located at 510' FSL and 1980' FWL

Section 25, Township 20 South, Range 37 East,  
N.M.P.M., Lea County, New Mexico.

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W.O. Number: 0061AA - KJG #122

Survey Date: 02-08-2000

Scale: 1" = 1000'

Date: 02-09-2000

CONOCO INC.

# PROPOSED WELL PLAN OUTLINE

WELL NAME  
LOCATION

State 25-A No.3  
510' FSL & 1980' FWL Sec 25, T20S, R37E

Ground Level : ?  
Kelly Bushing: 11' AGL

Depth MD	FORMATION TOPS	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	
1000									
	Top Salt @ 1,400'				8-5/8", 23#, M-50 ST&C @ 1,500'				3
		Washouts in Salt Section		7-7/8"	Circulate Cement			10 Brine	
2000							Less than 8.4		
	Base Salt @ 2,550'								
	Yates 2,670'		Mud Loggers F/ 2,650' to TD						
	7 Rivers 2,950'		H2S Monitor on at 2,650'						
3000									
		Possible gas & water flow							
	Queen 3,510'								
	Penrose 3,635'								
	Grayburg 3,770'								
4000	San Andres 4,000'	Lost Returns in San Andres							7
5000									
	Glorietta 5,275'	Possible differential sticking thru Glorietta & Paddock							
	Blaine Mkr 5,890'								
6000									
	Tubb 6,390'								
	Drinkard 6,700'								
	Abo 6,985'								
7000									
			First Log Run: GR-CAL-DLL-MLL-SGR FDC-CNL-PE : TD to 2650' Pull GR-CNL-Cal to Surf SGR interval to be chosen.						
			Second Log Run: 30 rotary sidewall cores						
	Strawn 7,700'		Possible Third Run: FMI imaging log						
8000	TD @ 8,000'	STOP DRILLING WHEN WOODFORD SHALE IS CUT Severe losses in Devonian			5-1/2", 17.0#, J-55 LT&C f/o'-8,000' Circulate Cement			10 ppg Starch Gel	20
	Devonian 8,115'								

Note: The Devonian formation is associated with severe lost circulation problems. This well will be TD'd very close to the top of the Devonian. The mud loggers will pick the Woodford shale which is 40' thick and sits on top of the Devonian. Stop drilling once the Woodford is entered.

DATE 07-Feb-00

Joe Huck, Geophysical Advisor

APPROVED

Yong Cho, Drilling Engineer

Joe Miller, Reservoir Engineer



**Proposal No: 180253052A**

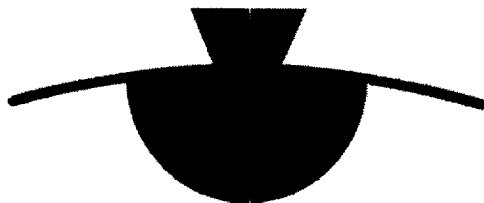
**Conoco  
State 25 A No. 3**

Sec. 25-T20S-R37E  
Lea County, New Mexico  
February 2, 2000

**Well Recommendation**

**Prepared for:**  
Yong Cho  
Drilling Engineer

**Prepared by:**  
Rocky Chambers  
Region Engineer  
Bus Phone: 915/683-2781  
Mobile: 915/557-1239  
Pager: 915/498-1605



**P O W E R V I S I O N<sup>SM</sup>**

**Service Point:**  
Hobbs  
Bus Phone: (505) 392-5556  
Fax: (505) 392-7307

**Service Representatives:**  
Wayne Davis  
Account Manager  
Bus Phone: (915) 683-2781

**Operator Name:** Conoco  
**Well Name:** State 25 A No. 3  
**Job Description:** 8-5/8" Surface  
**Date:** February 2, 2000



**Proposal No:** 180253052A

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**JOB AT A GLANCE**

Depth (TVD)	1,500 ft
Depth (MD)	1,500 ft
Hole Size	12.25 in
Casing Size/Weight :	8 5/8 in, 24 lbs/ft
Pump Via	Casing 8 5/8" O.D. (8.097" I.D) 24 #
Total Mix Water Required	6,555 gals
Spacer	
Mud Clean I	1,500 gals
Density	8.4 ppg
Lead Slurry	
LEAD SLURRY	528 sacks
Density	12.7 ppg
Yield	1.88 cf/sack
Tail Slurry	
TAIL SLURRY	195 sacks
Density	14.8 ppg
Yield	1.34 cf/sack
Displacement	
FRESH WATER	93 bbls



**Operator Name:** Conoco  
**Well Name:** State 25 A No. 3  
**Job Description:** 8-5/8" Surface  
**Date:** February 2, 2000



**Proposal No:** 180253052A

## WELL DATA

### ANNULAR GEOMETRY

ANNULAR I.D. (in)	DEPTH(ft)	
	MEASURED	TRUE VERTICAL
12.250 HOLE	1,500	1,500

### SUSPENDED PIPES

DIAMETER (in)		WEIGHT (lbs/ft)	DEPTH(ft)	
O.D.	I.D.		MEASURED	TRUE VERTICAL
8.625	8.097	24	1,500	1,500

Float Collar set @	1,460 ft
Mud Density	9.00 ppg
Est. Static Temp.	86 ° F
Est. Circ. Temp.	85 ° F

### VOLUME CALCULATIONS

1,200 ft	x	0.4127 cf/ft	with	100 % excess	=	988.9 cf
300 ft	x	0.4127 cf/ft	with	100 % excess	=	247.6 cf
40 ft	x	0.3576 cf/ft	with	0 % excess	=	14.3 cf (inside pipe)
<b>TOTAL SLURRY VOLUME</b>					=	1250.9 cf
					=	223 bbls

**Operator Name:** Conoco  
**Well Name:** State 25 A No. 3  
**Job Description:** 8-5/8" Surface  
**Date:** February 2, 2000



**Proposal No:** 180253052A

## FLUID SPECIFICATIONS

Spacer			1,500.0 gals Mud Clean I @ 8.4 ppg	
<u>FLUID</u>	<u>VOLUME CU-FT</u>	<u>VOLUME FACTOR</u>	<u>AMOUNT AND TYPE OF CEMENT</u>	
Lead Slurry	989	/ 1.88	= 528 sacks (35:65) Poz (Fly Ash):Class C Cement + 2% bwoc Calcium Chloride + 0.25 lbs/sack Cello Flake + 0.005 gps FP-6L + 6% bwoc Bentonite + 96.5% Fresh Water	
Tail Slurry	262	/ 1.34	= 195 sacks Class C Cement + 2% bwoc Calcium Chloride + 0.005 gps FP-6L + 56.3% Fresh Water	
Displacement			93.0 bbls FRESH WATER + 56.3% Fresh Water	

## **CEMENT PROPERTIES**

	<b>SLURRY NO. 1</b>	<b>SLURRY NO. 2</b>
Slurry Weight (ppg)	12.70	14.80
Slurry Yield (cf/sack)	1.88	1.34
Amount of Mix Water (gps)	10.07	6.35
Amount of Mix Fluid (gps)	10.07	6.35

**Operator Name:** Conoco  
**Well Name:** State 25 A No. 3  
**Job Description:** 5-1/2" Long String  
**Date:** February 2, 2000



**Proposal No:** 180253052A

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**JOB AT A GLANCE**

Depth (TVD)	8,000 ft
Depth (MD)	8,000 ft
Hole Size	7.875 in
Casing Size/Weight :	5 1/2 in, 17 lbs/ft
Pump Via	Casing 5 1/2" O.D. (4.892" I.D) 17 #
Total Mix Water Required	10,238 gals
Spacer	
Mud Clean I	1,500 gals
Density	8.4 ppg
Lead Slurry	
LEAD SLURRY	718 sacks
Density	12.7 ppg
Yield	1.85 cf/sack
Tail Slurry	
TAIL SLURRY	488 sacks
Density	14.8 ppg
Yield	1.34 cf/sack
Displacement	
FRESH WATER	185 bbls

**Operator Name:** Conoco  
**Well Name:** State 25 A No. 3  
**Job Description:** 5-1/2" Long String  
**Date:** February 2, 2000



**Proposal No:** 180253052A

## WELL DATA

### ANNULAR GEOMETRY

ANNULAR I.D. (in)	DEPTH(ft)	
	MEASURED	TRUE VERTICAL
8.097 CASING	1,500	1,500
7.875 HOLE	8,000	8,000

### SUSPENDED PIPES

DIAMETER (in)		WEIGHT (lbs/ft)	DEPTH(ft)	
O.D.	I.D.		MEASURED	TRUE VERTICAL
5.500	4.892	17	8,000	8,000

Float Collar set @ 7,960 ft  
 Mud Density 8.70 ppg  
 Est. Static Temp. 129 ° F  
 Est. Circ. Temp. 122 ° F

### VOLUME CALCULATIONS

1,500 ft	x	0.1926 cf/ft	with	0 % excess	=	288.9 cf
4,000 ft	x	0.1733 cf/ft	with	50 % excess	=	1039.5 cf
2,500 ft	x	0.1733 cf/ft	with	50 % excess	=	649.7 cf
40 ft	x	0.1305 cf/ft	with	0 % excess	=	5.2 cf (inside pipe)
<b>TOTAL SLURRY VOLUME</b>					=	1983.3 cf
					=	354 bbls

**Operator Name:** Conoco  
**Well Name:** State 25 A No. 3  
**Job Description:** 5-1/2" Long String  
**Date:** February 2, 2000



**Proposal No:** 180253052A

## FLUID SPECIFICATIONS

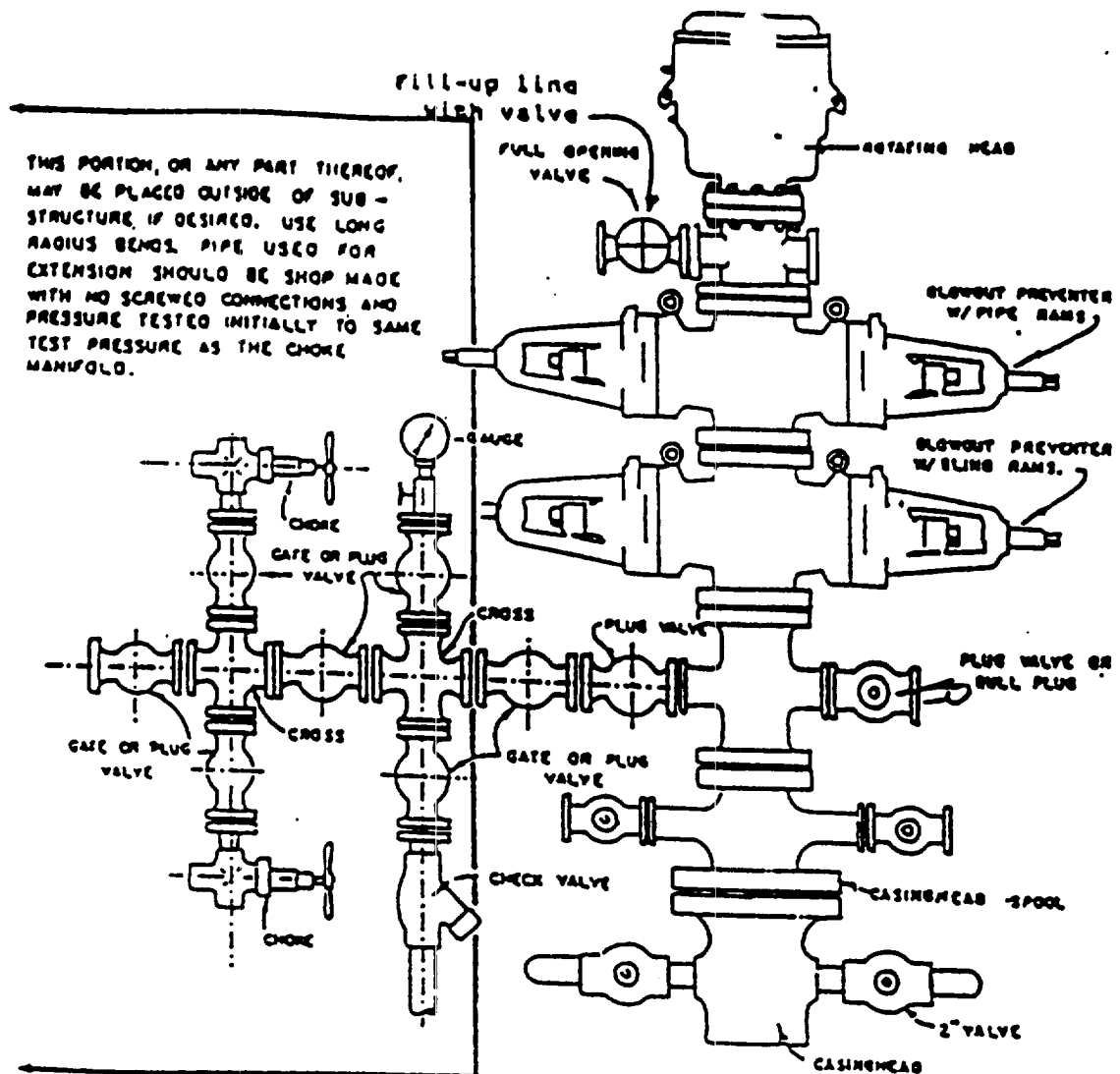
Spacer

1,500.0 gals Mud Clean I @ 8.4 ppg

<u>FLUID</u>	<u>VOLUME CU-FT</u>	<u>VOLUME FACTOR</u>	<u>AMOUNT AND TYPE OF CEMENT</u>
Lead Slurry	1328	/ 1.85	= 718 sacks (35:65) Poz (Fly Ash):Class C Cement + 0.25 lbs/sack Cello Flake + 0.005 gps FP-6L + 6% bwoc Bentonite + 95.7% Fresh Water
Tail Slurry	655	/ 1.34	= 488 sacks Class C Cement + 1% bwoc BA-58 + 0.8% bwoc FL-50 + 0.4% bwoc CD-32 + 0.005 gps FP-6L + 0.2% bwoc Sodium Metasilicate + 55.8% Fresh Water
Displacement			185.1 bbls FRESH WATER + 55.8% Fresh Water

## **CEMENT PROPERTIES**

	<b>SLURRY NO. 1</b>	<b>SLURRY NO. 2</b>
Slurry Weight (ppg)	12.70	14.80
Slurry Yield (cf/sack)	1.85	1.34
Amount of Mix Water (gps)	9.98	6.29
Amount of Mix Fluid (gps)	9.99	6.30

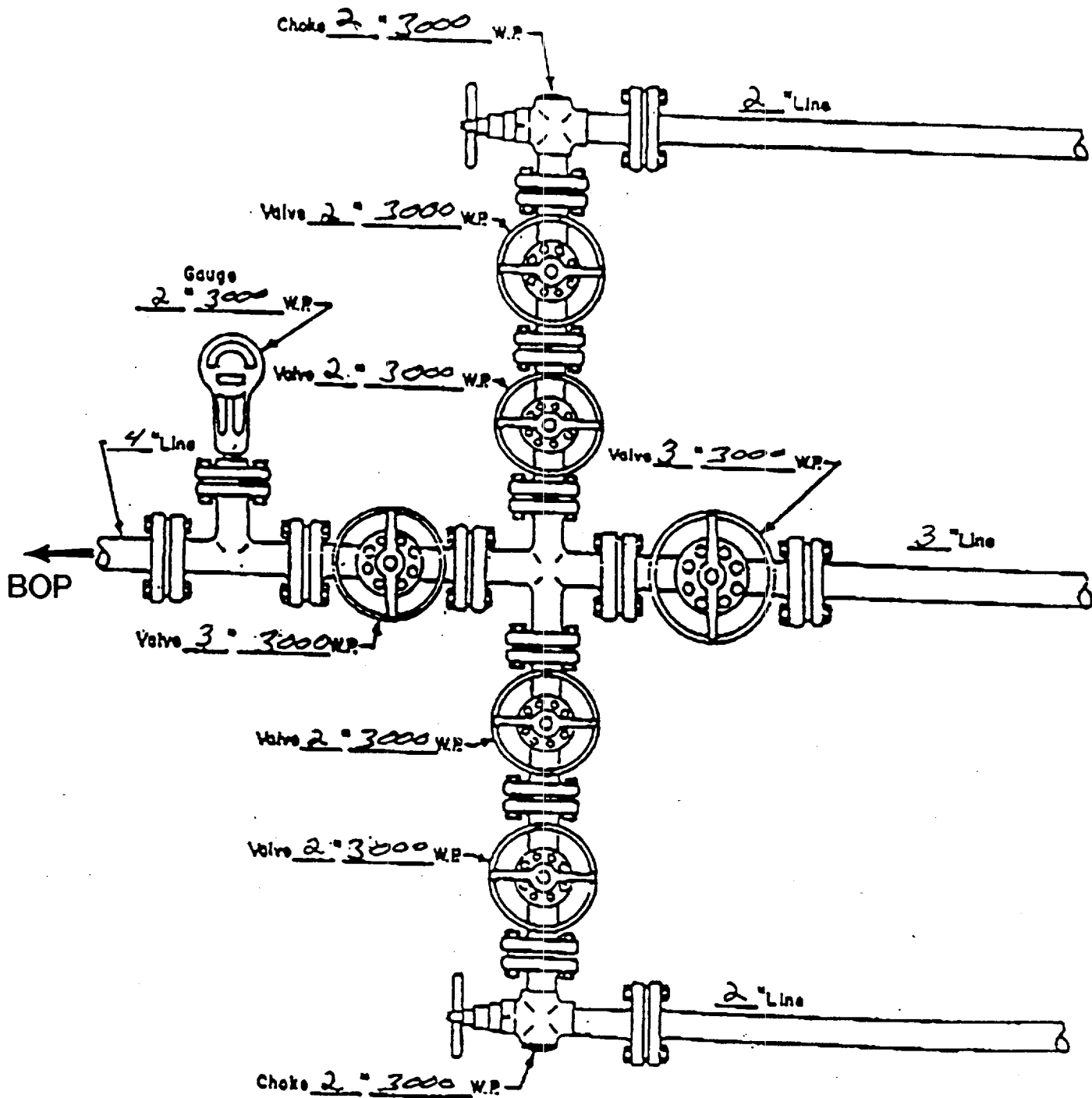


## BLOWOUT PREVENTER HOOKUP

Drilling contractors used in the San Juan Basing supply 3000 psi equipment, but cannot provide annular preventors because of sub-structure limitations. Maximum anticipated surface pressures for this well will not exceed the working pressure of the proposed BOP system. Please see the attached BOP diagram details 2000 psi equipment according to Onshore Order No. 2 even though the equipment will test to 3000 psi. The 2000 psi system allows deletion of the annular preventor and fulfills your requirements (note diagram No. 1). In addition, the following equipment will comprise the 2000 psi system:

1. Two rams with one blind and one pipe ram.
2. Kill line (2 inch maximum).
3. One kill line valve.
4. One choke line valve.
5. Two chokes (reference diagram No. 1).
6. Upper kelly cock valve with handle.
7. Safety valve and subs to fit all drill strings in use.
8. Two-inch minimum choke line.
9. Pressure gauge on choke manifold.
10. Fill-up line above the upper most preventor.
11. Rotating head.

# CHOKE MANIFOLD DIAGRAM



MANIFOLD  
3200 #V.P.

☒ Manual  
☐ Hydraulic

ABOVE DATE DOES NOT  
INDICATE WHEN  
CONFIDENTIAL LOGS  
WILL BE RELEASED

ELF

9/22