

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
811 S. 1st Street, Artesia, NM 88210-2834
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-101
Revised October 18, 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 Phillips Petroleum Company 5525 Highway 64, NBU 3004 Farmington, NM 87401		² OGRID Number 017654
⁴ Property Code 009259	⁵ Property Name San Juan 31-6 Unit	³ API Number 30-0 39-26432
		⁶ Well No. 46M

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
0	32	31N	6W		425'	South	2325'	East	Rio Arriba

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
0									

⁹ Proposed Pool 1 Basin Dakota 71599					¹⁰ Proposed Pool 2 Blanco Mesaverde 72319				
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¹¹ Work Type Code N	¹² Well Type Code M	¹³ Cable/Rotary R	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 6450'
¹⁶ Multiple Y	¹⁷ Proposed Depth 8007'	¹⁸ Formation Dakota	¹⁹ Contractor 4CAT - Key Energy	²⁰ Spud Date 4th Qtr 2000

²¹ Proposed Casing and Cement Program					
Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12-1/4"	9-5/8"	36#, J/K-55	320'*	159 sx Type 3	Surface
8-3/4"	7"	20#, J/K-55	3747'	L-449 sx Type 3	Surface
				T-50 sx Type 3	
6-1/4"	4-1/2"	11.6#, I-80	8007'	335 sx C1 H	**

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

- * The surface casing will be set at a minimum of 320', but could be set deeper if required to maintain hole stability.
- ** The production casing cement is calculated to cover the openhole interval with 60% excess and annular volume 100' within intermediate casing shoe. Depending on hole conditions, the well may be cemented in a single stage or two staged.

See attached for details on the BOP equipment and Cathodic Protection.

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

Signature: Monica D. Rodahl
Printed name: Monica D. Rodahl Date: 04/04/00
Title: Regulatory Assistant Phone: 599-3480

OIL CONSERVATION DIVISION

Approved by: Charlie T. Lerner
Title: DEPUTY OIL & GAS INSPECTOR, DIST. 43
Approval Date: APR 10 2000 Expiration Date: APR 10 2001

Hold C104 for NSL

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Form C-102
Revised October 18, 1994
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Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ APN Number 3003926432		² Pool Code 71599	³ Pool Name Basin Dakota
⁴ Property Code 009259	⁵ Property Name SAN JUAN 31-6 UNIT		⁶ Well Number 46M
⁷ OGRID No. 017654	⁸ Operator Name PHILLIPS PETROLEUM COMPANY		⁹ Elevation 6450'

¹⁰ Surface Location

UL or lot no. 0	Section 32	Township 31N	Range 6W	Lot Idn	Feet from the 425'	North/South line SOUTH	Feet from the 2325'	East/West line EAST	County RIO ARRIBA
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¹¹ Bottom Hole Location If Different From Surface

UL or lot no. 0	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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¹² Dedicated Acres 320 E/2	¹³ Joint or Infill J	¹⁴ Consolidation Code U	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

<div data-bbox="284 1244 609 1585"> </div>	<div data-bbox="511 968 1063 1936"> <p>N89° 17' W 5293.20'</p> <p>E-289-43</p> <p>E-289-45</p> <p>E-346-26</p> <p>200 acres</p> <p>2325'</p> <p>425'</p> <p>West 5280.00'</p> </div>	<div data-bbox="1071 957 1534 1936"> <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>Monica D. Rodahl</p> <p>Signature</p> <p>Monica D. Rodahl</p> <p>Printed Name</p> <p>Regulatory Assistant</p> <p>Title</p> <p>March 31, 2000</p> <p>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 the best of my belief.</p> <p>12/15/99</p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyer:</p> <p>Certificate Number</p> </div>
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☐ AMENDED REPORT

West 5280.00'

PHILLIPS PETROLEUM COMPANY

1
36°52'30"

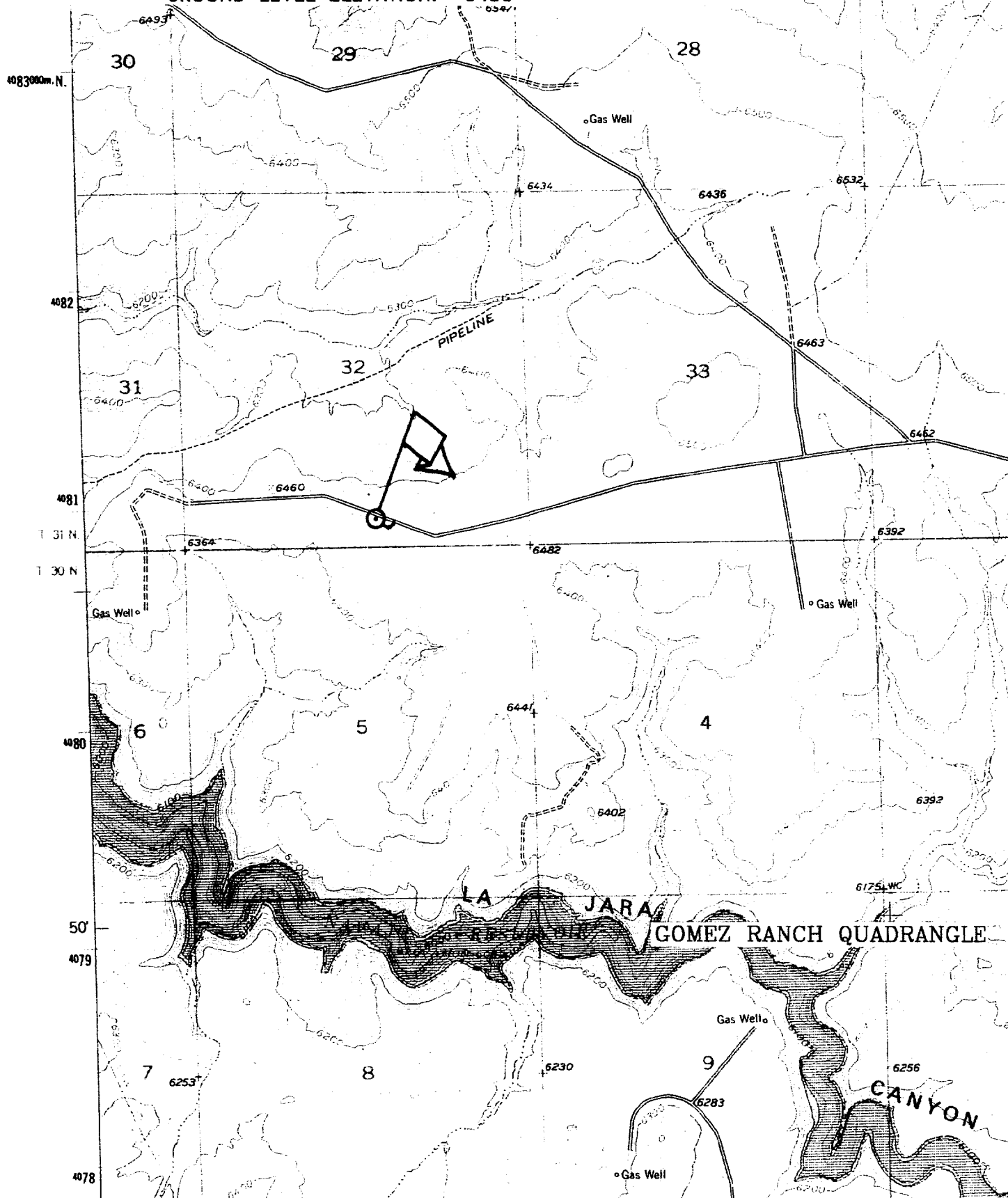
SAN JUAN 31-6 UNIT No. 46M

425' FSL, 2325' FEL

SE/4 SEC. 32, T-31-N, R-06-W, N.M.P.M.,

RIO ARriba COUNTY, NEW MEXICO

GROUND LEVEL ELEVATION: 6450'



San Juan 31-6 Unit #46M (DK/MV)

SURFACE CASING :

Drill Bit Diameter	12.25 "	
Casing Outside Diameter	9.625 "	8.913
Casing Weight	36 ppf	
Casing Grade	J-55	
Shoe Depth	320 '	
Cement Yield	1.41 cuft/sk	
Excess Cement	110 %	

Hole / Casing Annulus Capacity 0.0558 bbl/f 0.3132 cuft/ft

Cement Required 158.5 sx

SHOE 320 ', 9.625 ", 36 ppf, J-55

INTERMEDIATE CASING :

Drill Bit Diameter	8.75 "	
Casing Outside Diameter	7 "	6.455
Casing Weight	20 ppf	
Casing Grade	J-55	
Shoe Depth	3747 '	
Lead Cement Yield	2.37 cuft/sk	
Lead Cement Excess	110 %	
Tail Cement Length	221.6 '	
Tail Cement Yield	1.4 cuft/sk	
Tail Cement Excess	110 %	

Casing / Casing Annulus Capacity 0.0296 bbl/f 0.1660 cuft/ft

Hole / Casing Annulus Capacity 0.0268 bbl/f 0.1503 cuft/ft

Casing Capacity 0.0405 bbl/f 0.2272 cuft/ft

Lead Cement Required 449.3 sx

Tail Cement Required 50.0 sx

SHOE 3747 ', 7 ", 20 ppf, J-55

PRODUCTION CASING :

Drill Bit Diameter	6.25 "	
Casing Outside Diameter	4.5 "	4.000
Casing Weight	11.6 ppf	
Casing Grade	I-80	
Top of Cement	3647 '	100' within intermediate shoe
Shoe Depth	8007 '	
Cement Yield	2.13 cuft/sk	
Cement Excess	60 %	

Casing / Casing Annulus Capacity 0.0208 bbl/f 0.1168 cuft/ft

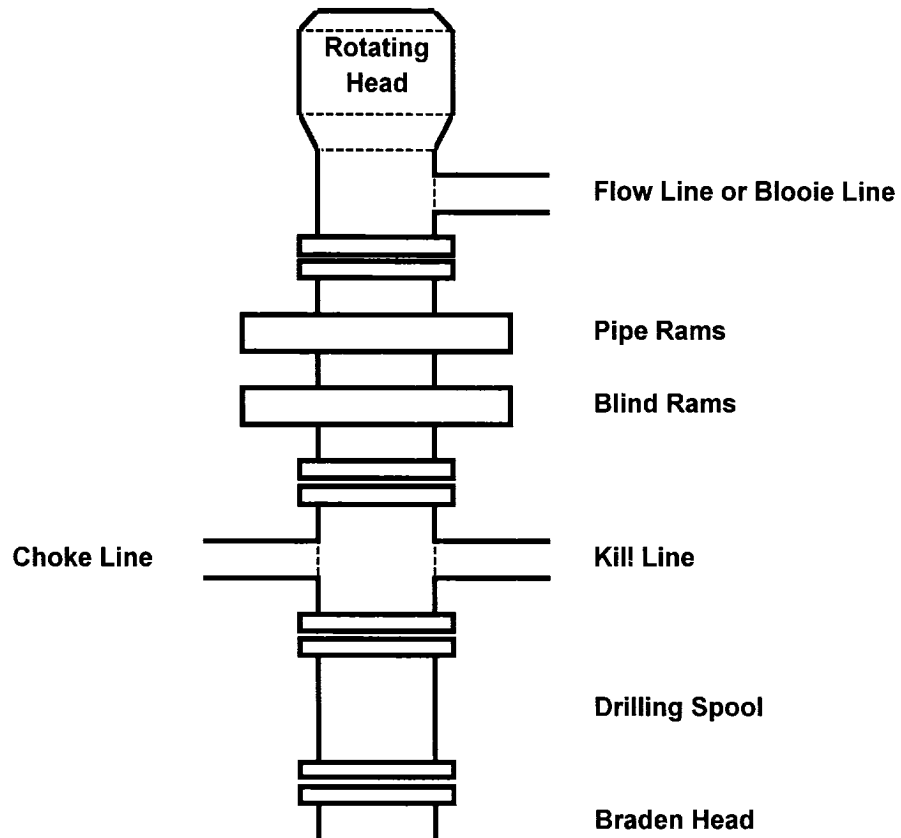
Hole / Casing Annulus Capacity 0.0183 bbl/f 0.1026 cuft/ft

Casing Capacity 0.0155 bbl/f 0.0872 cuft/ft

Cement Required 334.6 sx

SHOE 8007 ', 4.5 ", 11.6 ppf, I-80

10" 3000 Psi BOP Stack for Gas Drilling



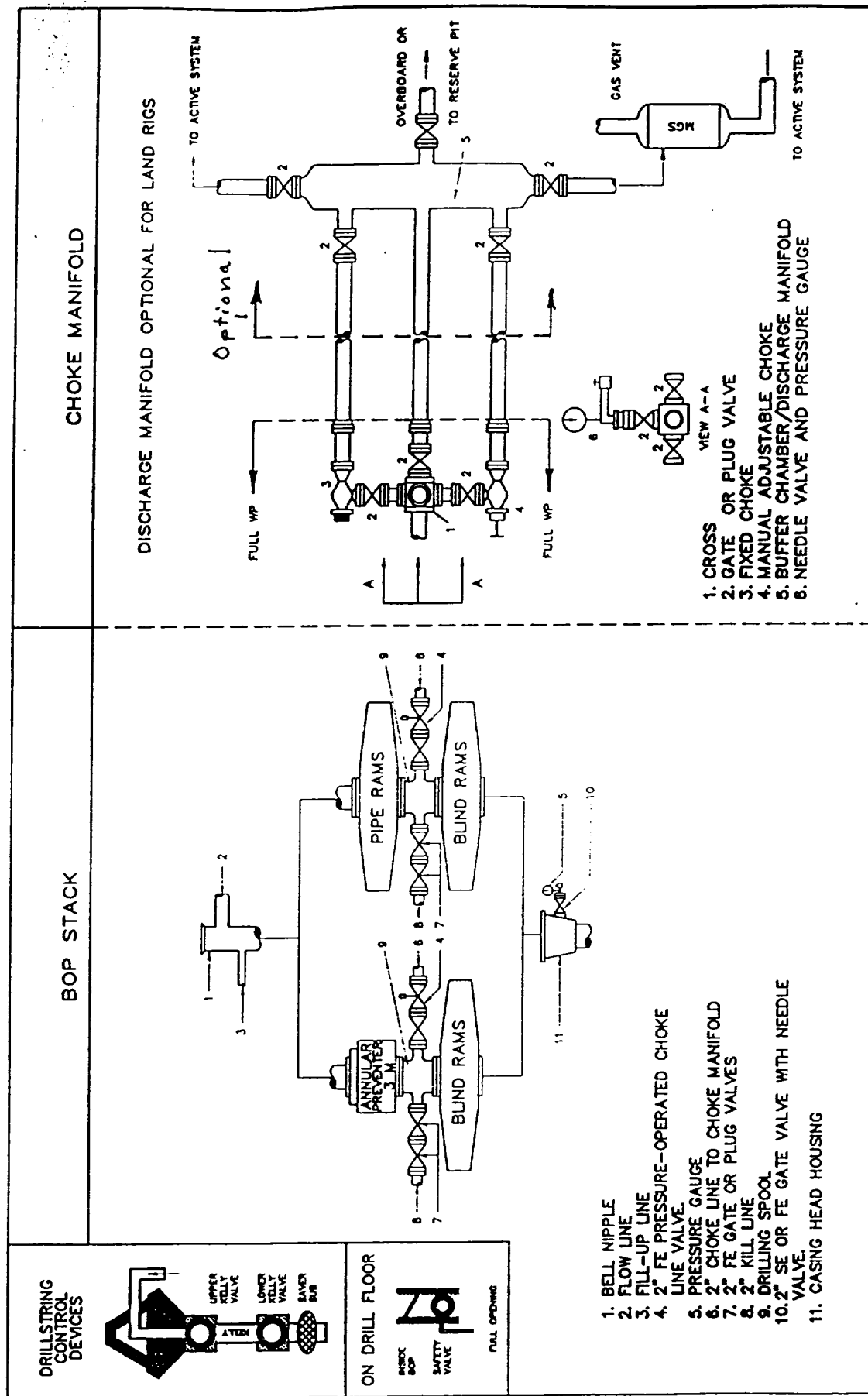


Fig. 2.4. Class 2 BOP and Choke Manifold.