

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

Form C-101  
Revised October 18, 1994  
Instructions on back  
Submit to Appropriate District Office  
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OIL CONSERVATION DIVISION  
2040 South Pacheco  
Santa Fe, NM 87505

☐ AMENDED REPORT

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

<sup>1</sup> Operator name and Address Phillips Petroleum Company 5525 Highway 64, NBU 3004 Farmington, NM 87401		<sup>2</sup> OGRID Number 017654
<sup>4</sup> Property Code 009257	<sup>5</sup> Property Name San Juan 29-6 Unit	<sup>3</sup> API Number 39-26405
		<sup>6</sup> Well No. 93M

<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
0	16	29N	6W		310'	South	2044'	East	Rio Arriba

<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
0									

<sup>9</sup> Proposed Pool 1

Basin Dakota 71599

<sup>10</sup> Proposed Pool 2

Blanco Mesaverde 72319

<sup>11</sup> Work Type Code N	<sup>12</sup> Well Type Code M	<sup>13</sup> Cable/Rotary R	<sup>14</sup> Lease Type Code S	<sup>15</sup> Ground Level Elevation 6420'
<sup>16</sup> Multiple Y	<sup>17</sup> Proposed Depth 7792'	<sup>18</sup> Formation Daktoa	<sup>19</sup> Contractor 4CAT-Key Energy	<sup>20</sup> Spud Date 2nd Qtr 2000

<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"	9-5/8"	36#, J/K-55	320'*	159 sx Type 3	surface
8-3/4"	7"	20#, J/K-55	3722'	446 sx Type 3	
				50 sx Type 3	surface
6-1/4"	4-1/2"	11.6#, I-80	7792'	320 sx CL H	**

<sup>22</sup> 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 details for the cathodic protection for this well.

<sup>23</sup> 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 Rodahl

Date: 3/14/00

Title: Regulatory Assistant

Phone: 599-3480

OIL CONSERVATION DIVISION

Approved by: *Charlie T. Lerner*

Title: DEPUTY OIL & GAS INSPECTOR, DIST. #

Approval Date: MAR 16 2000

Expiration Date: MAR 16 2001

*Hold C104 for Dakota NSL*

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-102  
Revised February 21, 1994  
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☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

AFT Number 30-039-26405		Pool Code 71599	Pool Name Basin Dakota
Property Code 009257	Property Name SAN JUAN 29-6 UNIT		Well Number 93M
OGRID No. 017654	Operator Name PHILLIPS PETROLEUM COMPANY		Elevation 6420'

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
0	16	29N	6W		310'	SOUTH	2044'	EAST	RIO ARriba

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
0									

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
320 E/2	I	U	

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	5280.00'	N89°55'E	5281.32'	Section 16	E-289-46	720 acres	2044'	N89°54'E	310'	5278.68'	17 OPERATOR CERTIFICATION
											I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief  Monica D. Rodahl Signature Monica D. Rodahl Printed Name Regulatory Assistant Title March 6, 2000 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.  02/09/2000 Date of Survey Signature and Seal of Registered Surveyor: HENRY P. BROADBENT, JR. NEW MEXICO 11373 Certification Seal

District I  
O Box 1980, Hobbs, NM 88241-1980  
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☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-039-26405	Pool Code 72319	Pool Name Blanco Mesaverde
Property Code 009257	Property Name SAN JUAN 29-6 UNIT	Well Number 93M
OGRID No. 017654	Operator Name PHILLIPS PETROLEUM COMPANY	Elevation 6420'

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
0	16	29N	6W		310'	SOUTH	2044'	EAST	RIO ARriba

11 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
0									

12 Dedicated Acres 320 E/2	13 Joint or Infill I	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

16	N89°55'E	5281.32'	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief  Monica D. Rodahl Signature Monica D. Rodahl Printed Name Regulatory Assistant Title March 6, 2000 Date
5280.00'	Section 16	E-289-46	5280.00'
N00°01'E		720 acres	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.  02/09/2000 Date of Survey Signature and Seal of Surveyor: HENRY P. BROWN, JR. Professional Surveyor Certificate Number
	N89°54'E	310'	5278.68'

# PHILLIPS PETROLEUM COMPANY

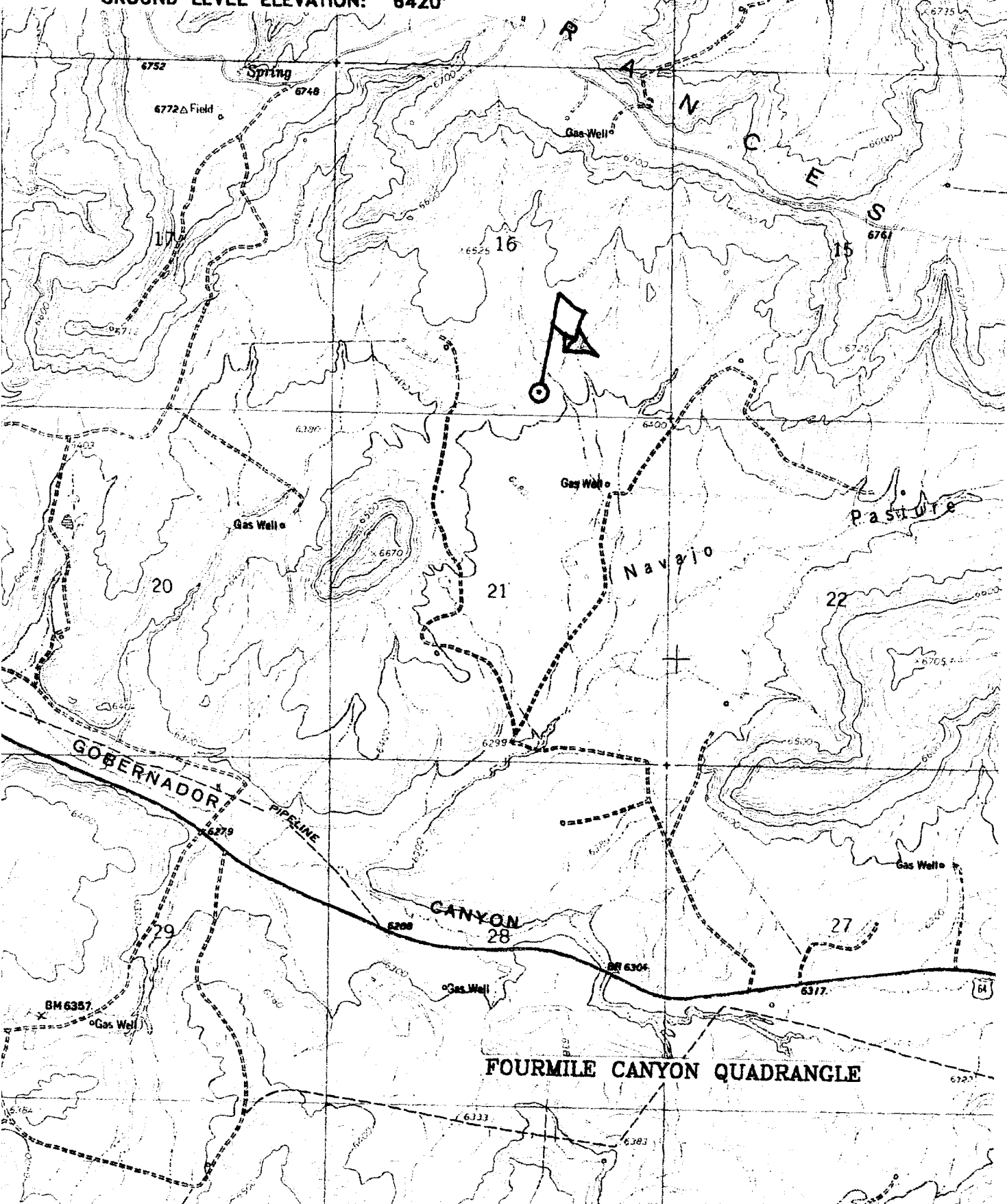
SAN JUAN 29-6 UNIT No. 93M

310' FSL, 2044' FEL

SE/4 SEC. 16, T-26-N, R-09-W, N.M.P.M.,

RIO ARRIBA COUNTY, NEW MEXICO

GROUND LEVEL ELEVATION: 6420'



**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
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<b>Cement Required</b>	<b>158.5 sx</b>
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<b>SHOE</b>	<b>320 ', 9.625 ", 36 ppf, J-55</b>
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**INTERMEDIATE CASING :**

Drill Bit Diameter	8.75 "	
Casing Outside Diameter	7 "	6.455
Casing Weight	20	ppf
Casing Grade	J-55	
Shoe Depth	3722 '	
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

<b>Lead Cement Required</b>	<b>446.0 sx</b>
<b>Tail Cement Required</b>	<b>50.0 sx</b>

<b>SHOE</b>	<b>3722 ', 7 ", 20 ppf, J-55</b>
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**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	3622 '	
Shoe Depth	7792 '	
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

<b>Cement Required</b>	<b>320.0 sx</b>
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<b>SHOE</b>	<b>7792 ', 4.5 ", 11.6 ppf, I-80</b>
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## **GEOLOGIC PROGNOSIS**

Company: **Phillips Petroleum Company**  
Project: **2000 Drilling Plan**  
Area: **San Juan 29-6 Unit**

Operator: **Phillips Petroleum Company**  
Well Name: **San Juan 29-6 Unit No. 93M (Kmv/Kd)**  
Location: **SWSE 16-29N-06W**  
Footage: **0310' FSL & 2044' FEL**  
County/State: **Rio Arriba/New Mexico**

Surveyed GL: **6420** Est (12') KB: **6432**

<b><u>Formation</u></b>	<b><u>Thickness</u></b>	<b><u>Depth</u></b>	<b><u>Struct. Elev.</u></b>
San Jose Fm.	1217	Surface	6420
Nacimiento Fm.	1190	1217	5215
Ojo Alamo Ss.	175	2407	4025
Kirtland Sh.	360	2582	3850
Fruitland Fm.	355	2942	3490
Pictured Cliffs Ss.	265	3297	3135
Lewis Sh.	160	3562	2870
<b><u>Int. Csg. Depth</u></b>	<b>1345</b>	<b>3722</b>	<b>2710</b>
Cliff House Ss.	90	5067	1365
Menefee Fm.	305	5157	1275
Point Lookout Ss.	335	5462	970
Mancos Sh.	925	5797	635
Gallup Ss.	730	6722	-290
Greenhorn Ls.	55	7452	-1020
Graneros Sh.	135	7507	-1075
Dakota Ss.	150	7642	-1210
<b><u>Total Depth</u></b>	<b>NA</b>	<b>7792</b>	<b>-1360</b>

**Mechanical Logs:** Cased hole logs only

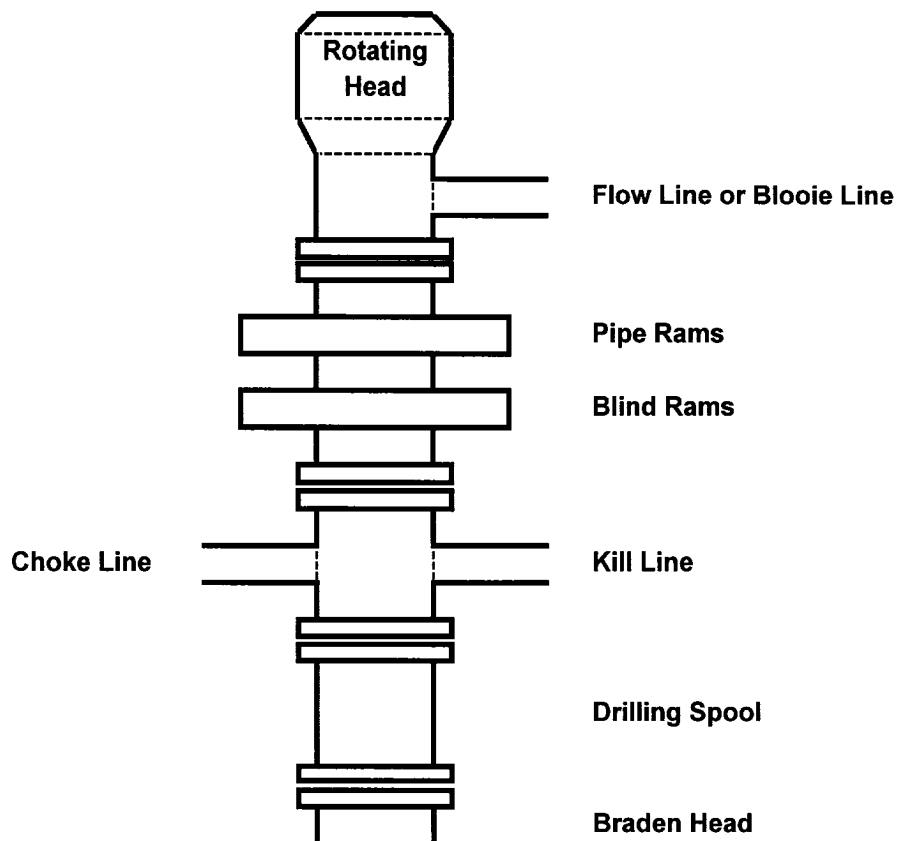
**Correlation Logs:** San Juan 29-6 Unit #94 (SWSW 16-29N-06W)  
San Juan 29-6 Unit #93 (NWNE 16-29N-06W)

**Estimated intervals of water, oil and gas:**

Water:	Ojo Alamo Ss.	2407-2582
Gas & Water:	Fruitland Fm.	2942-3297
Gas:	Mesaverde Gp.	5067-5797
	Dakota Ss.	7642-7792

**Notes:** Revised for location change

# 10" 3000 Psi BOP Stack for Gas Drilling



### **3M SYSTEM:**

2 hydr. rams (pipe & blind) or hydr. ram and annular with blind ram on bottom

Kill Line (2-inch minimum)

1 kill line valve (2-inch minimum)

1 choke line valve

2 chokes (refer to diagram in attachment 1) on choke manifold

Upper kelly cock valve in open position with handle available

Safety valve (in open position) and subs to fit all drill strings in use (with handle available)

Pressure gauged on choke manifold

2 inch minimum choke line

Fill-up line above the uppermost preventer

*The BOPs will be pressure tested according to Onshore Order #2 III, A 1 and 30% safety factor.*



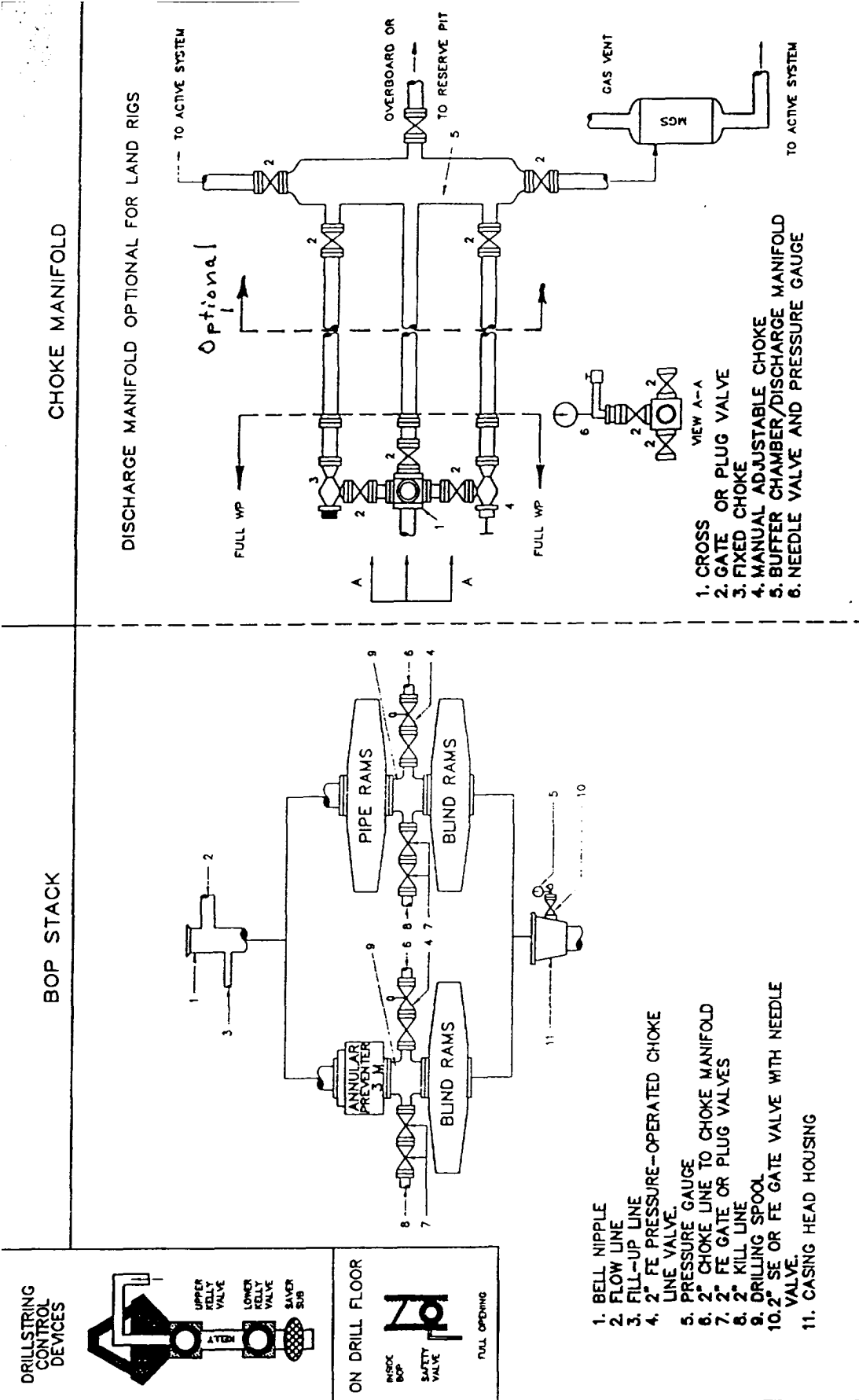


Fig. 2.4. Class 2 BOP and Choke Manifold.

**San Juan 29-6 Unit #93M  
E-289-46; Unit O, 310' FSL & 2044' FEL  
Section 16, T29N, R6W; Rio Arriba County, NM**

**Cathodic Protection**

Phillips proposes to drill a cathodic protection deep well groundbed for the subject well. Will drill a 6-7/8" hole to an anticipated minimum depth of 300' (maximum depth of 500'). Cement plugs will not be used unless more than one water zone is encountered. Prior drilling history for the area indicates only one zone to that depth. If more than one water zone is encountered, notification will be made and details of cement and casing will be provided.

All drilling activity will remain on existing well pad and a Farmington based company will be doing the drilling for Phillips.