

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0136
Expires: November 30, 2000

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. SF-080179	
1b. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name	
2. Name of Operator Phillips Petroleum Company		7. Unit or CA Agreement Name and No. San Juan 29-5 Unit	
3a. Address 5525 Highway 64, NBU 3004, Farmington, NM 87401		8. Lease Name and Well No. SJ 29-5 Unit #49A	
3b. Phone No. (include area code) 505-599-3454		9. API Well No. 30-C39-26542	
4. Location of Well (Report location clearly and in accordance with any State requirements)* At surface Unit F, 1850' FNL & 1450' FWL At proposed prod. zone same as above		10. Field and Pool, or Exploratory Section 9, T29N, R5W	
11. Sec., T., R., M., or Blk. and Survey or Area Section 9, T29N, R5W		12. County or Parish Rio Arriba	
13. State NM		14. Distance in miles and direction from nearest town or post office* 30 miles from Blanco, NM	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) 1450'		16. No. of Acres in lease 640 acres	
17. Spacing Unit dedicated to this well 320 W/2		18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	
19. Proposed Depth 6159'		20. BLM/BIA Bond No. on file ES0048	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6817' GL		22. Approximate date work will start* 4th Qtr 2000	
23. Estimated duration 20 days		24. Attachments	

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification.
- Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature <i>Patsy Clugston</i>	Name (Printed/Typed) Patsy Clugston	Date 10/30/00
Title Sr. Regulatory/Proration Clerk		
Approved by (Signature) <i>/s/ Jim Lovato</i>	Name (Printed/Typed)	Date
Title	Office	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*(Instructions on Reverse)

This action is subject to hydraulic fracturing and
procedural review pursuant to 43 CFR 3165.3
and appeal pursuant to 43 CFR 3165.4.

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO THE FOLLOWING ATTACHED
"GENERAL REQUIREMENTS"

District I
P.O. Box 1980, Hobbs, NM 88241-1980
District II
Rt 11 South First, Artesia, NM 88210
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-102
Revised October 18, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

* Well Number 30-039-26542		* Pool Code 72319	* Pool Name Blanco Mesaverde
* Property Code 009256	* Property Name SAN JUAN 29-5 UNIT		* Well Number 49A
* GRID No. 017654	* Operator Name PHILLIPS PETROLEUM CO.		* Elevation 6817

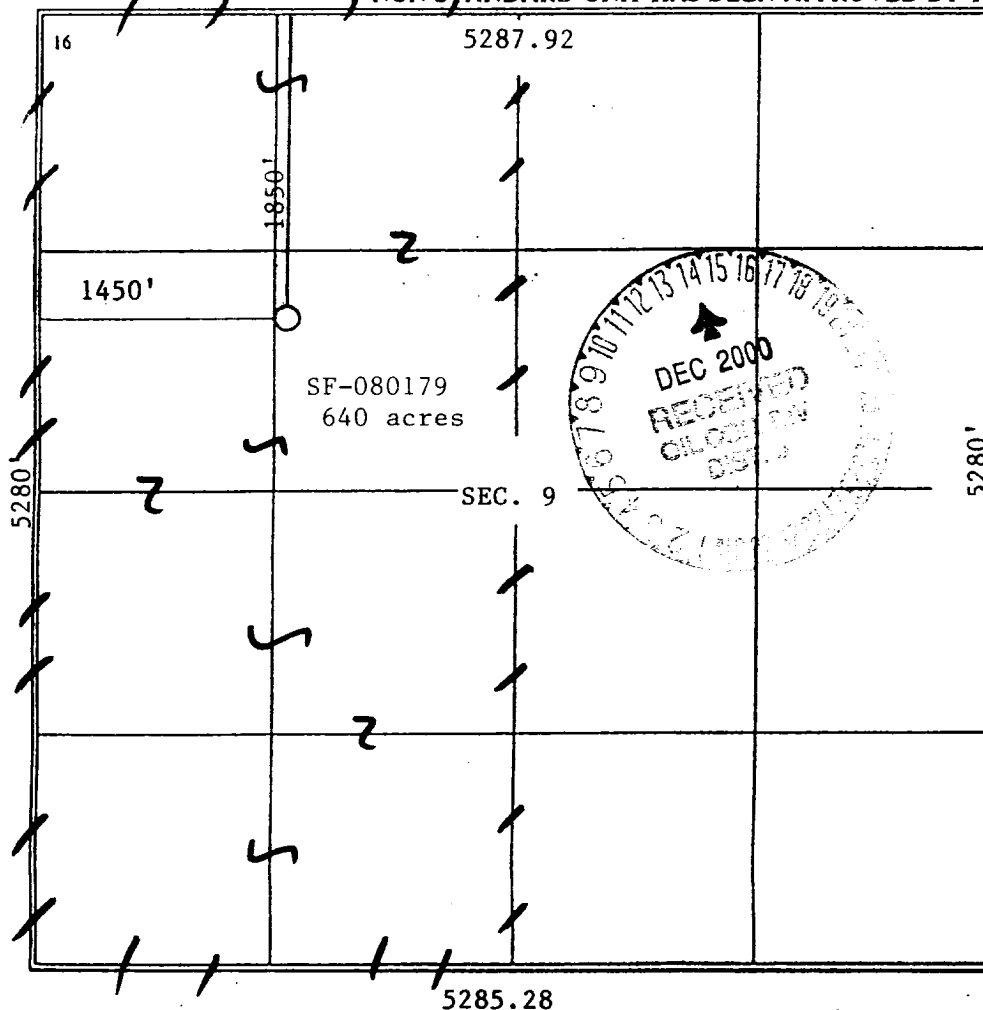
10 Surface Location

UL, or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	9	29N	5W		1850	NORTH	1450	WEST	RIO ARRIBA

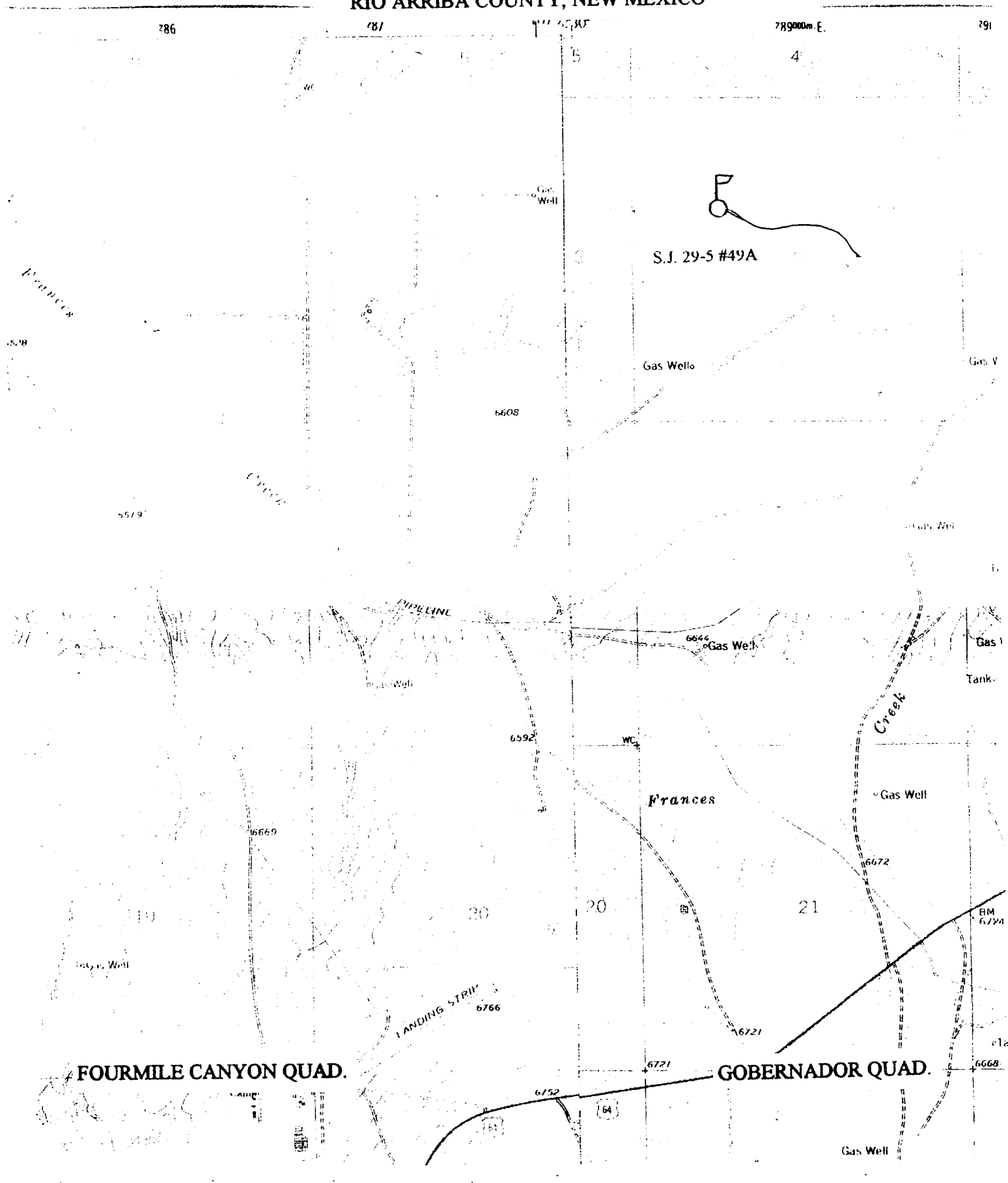
11 Bottom Hole Location If Different From Surface

UL, or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F									
12 Dedicated Acres 320 W/2		13 Joint or Infill Y		14 Consolidation Code U		15 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

	<p>16</p> <p>5287.92</p> <p>1450'</p> <p>SF-080179 640 acres</p> <p>SEC. 9</p> <p>5280'</p> <p>5285.28</p>	<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>Patsy Clugston</i></p> <p>Signature Patsy Clugston</p> <p>Printed Name Sr. Regulatory/Proration Clerk</p> <p>Title 10-30-00</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>11-10-97</p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyer:</p> <p><i>Henry P. Broadhurst</i></p> <p>Professional Surveyor</p>	

PHILLIPS PETROLEUM CO.
SAN JUAN 29-5 UNIT #49A
SE/4 NW/4 SEC.9, T.29 N., R.5 W., N.M.P.M.,
RIO ARriba COUNTY, NEW MEXICO



PHILLIPS PETROLEUM COMPANY

WELL NAME: San Juan 29-5 #49A MV

DRILLING PROGNOSIS

1. Location of Proposed Well: Unit F, 1850' FNL & 1450' FWL
Section 9, T29N, R5W

2. Unprepared Ground Elevation: @ 6817 (unprepared)

3. The geological name of the surface formation is San Jose.

4. Type of drilling tools will be rotary.

5. Proposed drilling depth is 6159 '.

6. The estimated tops of important geologic markers are as follows:

<u>Nacimiento - 1254'</u>	<u>Lewis Shale - 3826'</u>
<u>Ojo Alamo - 2983'</u>	<u>Cliff House Ss - 5424'</u>
<u>Kirtland Sh - 3100'</u>	<u>Menefee Fm. - 3951'</u>
<u>Fruitland Fm. - 3432'</u>	<u>Pt. Lookout - 5930'</u>
<u>Pictured Cliffs - 3767'</u>	<u>Mancos Sh - 6039'</u>

7. The estimated depths at which anticipated water, oil, gas or other mineral bearing formations are expected to be encountered are as follows:

Water:	<u>Ojo Alamo - 2983' - 3100'</u>
Gas & Water:	<u>Fruitland - 3432' - 3767'</u>
Gas:	<u>Mesaverde - 5624' - 5930'</u>

8. The proposed casing program is as follows:

Surface String: 9-5/8", 32.3#, H-40 @ 320'
Intermediate String: 7", 20#, J/K-55 @ 3951'
Production String : 4-1/2", 11.6#, N-80 @ 6159' (TD) —

9. Cement Program:

Surface String: 158.5 sx Type III cement with 2% bwoc CaCl₂ + 1/4#/sx Cello-flake mixed at 14.5 ppg with a 1.41 ft³/sx yield w/46.5% H₂O or sufficient to circulate to surface - 223 cf.

Note: Cement slurry calculations based on cement to surface with 140% excess hole volume.

Intermediate String: **Lead Cement:** 477.5 sx Type III cement (35:65) POZ with 5#/sx Gilsonite, ¼#/sx Cello-flake, 6% bwoc gel (bentonite), 10#/sx CSE, 3% bwow KCL, 0.4% bwoc FL-25 mixed and 0.02#/sx Static Free mixed at 12.0 ppg with a yield of 2.37 ft³/sx – 1131 cf.

Tail Cement: 50 sx – Type III cement with ¼#/sx Cello-flake and 1% CaCl₂ mixed at 14.5 ppg with a 140. Ft³/sx yield (70 cf).

In the event we encounter fluid loss during drilling operations, a contingency plan for cementing the intermediate casing may require a stage collar. Phillips cannot predict exact volumes. However the 1st stage will be CI H cement w/5#/sx Gilsonite, 0.25#/sx Cello-flake, 0.3% FL-25 & 2% CaCl₂ mixed at 15.2 ppg 1.28 yield. Stage 2 - lead slurry: 65 % Class H & 35% POZ w/6% Bentonite mixed at 12.6 ppg 1.79 cf/sx Tail Slurry - Class H w/2% CaCl₂ mixed at 15.6 ppg 1.20 yield. All attempt to be circulated to surface.

Production String

Lead: 155.2 sx Type III (35/65 POZ (Fly Ash) with 6% bwoc Bentonite, 10#/sx CSE, 0.2#/sx Static Free, 1% bwoc FL-52, 0.3% bwoc CD-32, 0.3% bwoc R-3 & 0.25#/sx Cello-Flake mixed at 12.3 ppg w/yield of 2.23 ft³/sx – 334 cf.

Note: The Production String casing cement is designed to cover openhole section (with 40% excess) and 100' inside the 7" shoe.

Note: Phillips Petroleum continually works to improve the cement slurries on our wells. BJ Services is currently trying to improve what we are using now and before we would use a new cement program it would have to have stronger properties than we are currently using.

Centralizer Program:

Surface: Total four (4) 1 @ 10' above shoe & top of 2nd, 4th & 6th joint

Intermediate: Total seven (7) – 10' above shoe, top of 1st, 2nd, 4th, 6th, & 8th jts & 1 jt. Above surface casing.

Production: None planned.

Turbulators: Total Three (3) – on intermediate casing at 1st jt. Below the Ojo Alamo and next 2 jts up.

10. The minimum specifications for pressure control equipment which are to be used, a schematic diagram thereof showing sizes, pressure ratings (or) API series and the testing procedure and testing frequency are enclosed within the APD packet.

ATTACHMENT 1

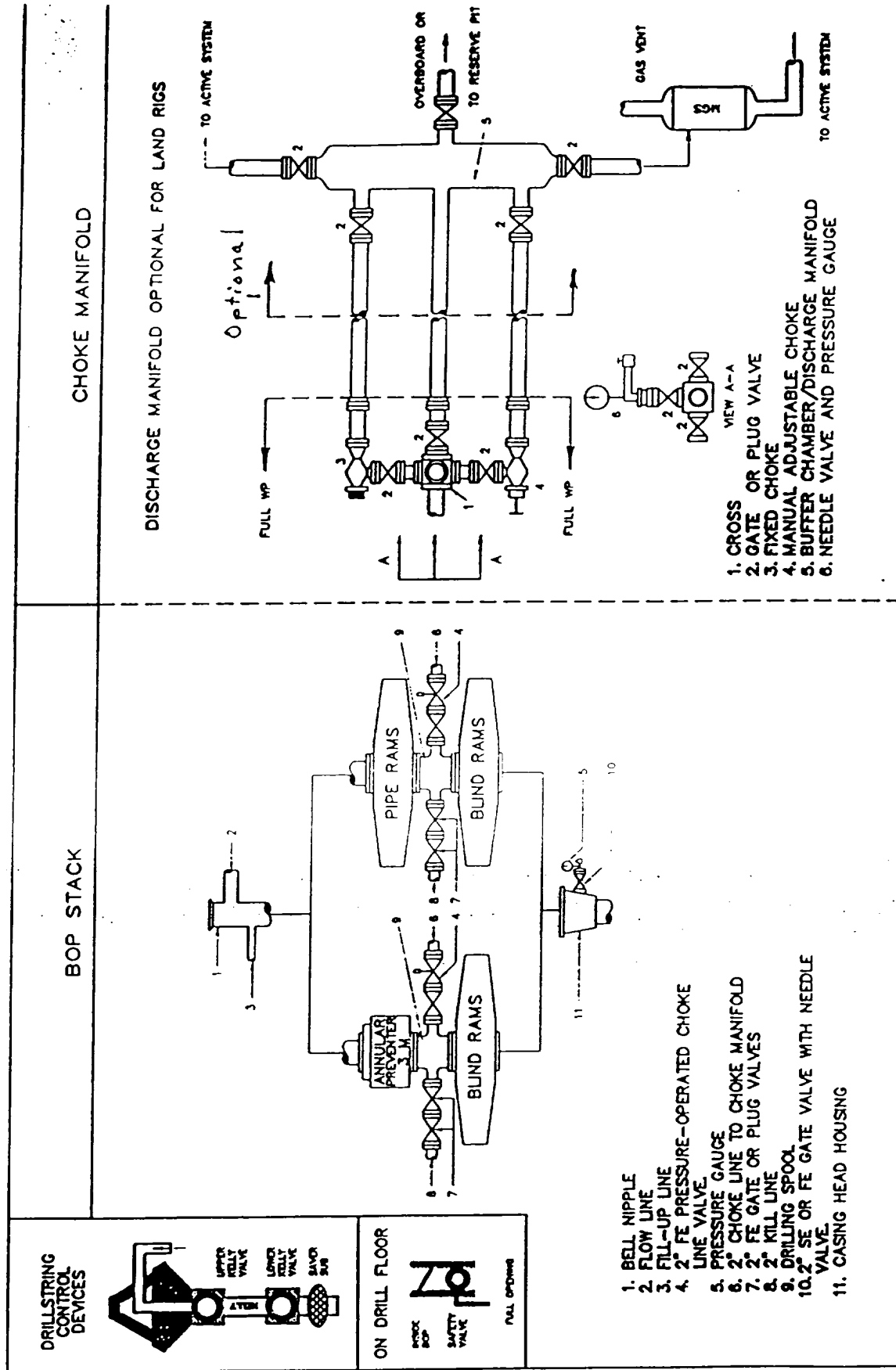


Fig. 2.4. Class 2 BOP and Choke Manifold.