MINIMUM BLOWOUT PREVENTER JOUREMENTS

3,000 psl Working Pressure

3 MWP

STACK REQUIREMENTS

No.	Nem		Min. I.D.	Min. Nominal
	Flowline			
2	FIN up line		1	2-
3	Drilling nipple		1	
4	Annular preventer			
5	Two single or one dual hyd operated rams			
64	Drilling spool with 2" min. 3" min choke line outlets			
6 b	2" min. kill line and 3" min outlets in ram. (Alternate k			
7	Valve	Gale [3-1/8*	
8	Gate valve—power operated		3-1/8"	
9	Line to choke manifold			3.
10	Valves	Gale C	2-1/16*	
11	Check valve		2-1/16"	
12	Casing head			
13	Valve	Gale [] Plug []	1-13/16*	
14	Pressure gauge with needle	e valve		
15	Kill line to rig mud pump ma			2.

	ANNULAR PREVENTER LIND RAMS PIPE RAMS		
	SPOOL CASING MEAD	9 9	
•	CASING	(G)	e

CONFIGURATION A

ОРТЮ	NAL
16 Flanged valve	1-13/16"

CONTRACTOR'S OPTION TO FURNISH:

- 1.All equipment and connections above bradenhead or casinghead. Working pressure of preventers to be 3,000 psi, minimum.
- 2. Automatic accumulator (80 gation, minimum) capable of closing BOP in 30 seconds or less and, holding them closed against full rated working pressure.
- 3.BOP controls, to be located near drillers position.
- 4. Kelly equipped with Kelly cock.
- 5.Inside blowout prevventer or its equivalent on derrick floor at all times with proper threads to fit pipe being used.
- Kelly saver-sub equipped with rubber casing protector at all times.
- 7. Plug type blowout preventer tester.
- 8. Extra set pipe rams to fit drill pipe in use on location at all times.
- 9. Type RX ring gaskets in place of Type R.

MEC TO FURNISH:

- 1.Bradenhead or casinghead and side valves.
- 2. Wear bushing, if required.

GENERAL NOTES:

- Deviations from this drawing may be made only with the express permission of MEC's Drilling Manager.
- 2.All connections, valves, fittings, piping, etc., subject to well or pump pressure must be flanged (suitable clamp connections acceptable) and have minimum working pressure equal to rated working pressure of preventers up through chore. Valves must be full opening and suitable for high pressure mud service.
- Controls to be of standard design and each marked, showing opening and closing position.
- 4. Chokes will be positioned so as not to hamper or delay changing of choke beans. Replaceable parts for adjustable choke, other been sizes, retainers, and choke wrenches to be conveniently located for immediate use.
- All valves to be equipped with handwheels or handles ready for immediate use.
- 6. Choke lines must be suitably anchored.

- 7. Handwheels and extensions to be connected and ready for use.
- Valves adjacent to drilling spool to be kept open. Use outside valves except for emergency.
- 8.All seemiess steel central piping (3000 psi working pressure) to have flexible joints to avoid stress. Hosse will be permitted.
- Casinghead connections shall not be used except in case of emergency.
- 11.Do not use kill line for routine III-up operations.