EXHIBIT #1

MINIMUM BLOWOUT PREVENTER JUREMENTS

3,000 pel Working Pressure

3 MWP

STACK REOUREMENTS

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No.	Nem		Min. i.D.	Min. Nominal
1	Flowline			
2	Fill up line		[2.
3	Drilling nipple			
4	Annular preventer		1	
5	Two single or one dual hydraulically operated rams			
64	Drilling spool with 2° min 3° min choile line eutlets	. till line and		
6 b	2" min. till line and 3" min. choke line outlets in ram. (Alternate to Ga above.)			
7	Valve	Gale D Plug D	3-1/8*	
8	Gate valve—power operated		3-1/8"	
9	Line to choke manifold			3"
10	Valves	Gale D Plug D	2-1/16-	
11	Check valve		2-1/18-	
12	Casing head			
13	Valve	Gale D Plug D	1-13/16*	
14	Pressure gauge with need	ie velve		
15	Kill line to rig mud pump a			2"



091	IONAL
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 (20 gallon, 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 en derrick licer at all times with proper threads to lit pipe being used.
- 6.Kelly saver-sub equipped with rubber casing protector at all times.
- 7.Plug type blowout preventer tester.
- 8.Extra set pipe rams to lit drill pipe in use on location at all times.
- S.Type RX ring gaskets in place of Type R.

MEC TO FURNISH:

- 1.Bradenhead or casinghead and side values.
- 2.Wear bushing, # required.

GENERAL NOTES:

- 1.Deviations from this drawing may be made only with the express permission of MEC's Drilling Manager.
- 2. All connections, velves, 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.
- 3. Controls to be of standard design and each marked, showing apening and closing position.
- 4. Chokes will be positioned so as not to hamper or delay changing of choke beens. Repiscaable parts for adjustable choke, other been sizes, retainers, and choke wrenches to be conveniently located for immediate use.
- All values 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 adjecent to drilling epool to be kept open. Use outside valves except for emergency.
- All seemices else centrel piping (3000 pel working pressure) to have flexible joints to avoid stress. Hosee will be permitted.
- 18. Casinghead connections shall not be used except in case of emergency.
- 11.Do not use kill line for routine ill-up operations.