MINIMUM BLOWOUT PREVENTER REQ

3.000 psi Working Pressure

EXHIBIT 1

3 MWP

No.	Hem		Min LD	Min. Nominal
1	Flowline			
2	Fill up ime			2-
J	Drilling mpple			
4	Annular preventer			
5	Two single or one dual hydraulically operated rams			
64	Drilling spool with 2° min. kill line and 3° min choke line outlets			
6 b	2° min. kill kine and 3° min. choke kine outlets in ram. (Allernate to 6a above.)			
7	Vaive	Gale D Piug D	3-1/8*	
8	Gale valve-power operated		3-1/8*	
9	Line to choke manifold			3.
10	Valves	Gale C Plug C	2-1/16"	
11	Check valve		2-1/16-	
12	Casing head			
13	Valve	Gate D Plug D	1-13/16*	
14	Pressure gauge with needle valve			
15	Kill line to rig mud pump manifold			2'

STACK REQUIREMENTS



the second se	PTICHAL
16 Flanged valve	1-13/16*

CONTRACTOR'S OPTION TO FURNISH:

- All equipment and connections above bradenhead or casinghead. Working pressure of preventers to be 3,000 psl, minimum.
- 2.Automatic accumulator (80 galion, 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 proceeding 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 fit drill pipe in use on location at all times.
- 8. Type RX ring gaskets in place of Type R.

MEC TO FURNISH:

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

GENERAL NOTES:

- 1.Deviations from this drawing may be made only with the express permission of MEC's Dritting Manager.
- 2. All connections, valves, fittings, piping, stc., 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 bean 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 dritting spool to be kept open. Use outside valves except for emergency.
- All seamless steel control piping (3000 psi working pressure) to have Rexible joints to avoid stress. Hoses will be permitted.
- 10.Casinghead connections shall not be used except in case of emergency.
- 11.Do not use kill line for routine fill-up operations

Attachment to Exhibit #1 NOTES REGARDING BLOWOUT PREVENTORS Devon Energy Corporation (Nevada) Hondo Federal #4 330' FNL & 2210' FEL Section 4-T18S-R27E, Lot 6 Eddy County, New Mexico

- 1. Drilling nipple will be constructed so it can be removed mechanically without the aid of a welder. The minimum internal diameter will equal BOP bore.
- 2. Wear ring will be properly installed in head.
- 3. Blowout preventor and all associated fittings will be in operable condition to withstand a minimum 3000 psi working pressure.
- 4. All fittings will be flanged.
- 5. A full bore safety valve tested to a minimum 3000 psi WP with proper thread connections will be available on the rotary rig floor at all times.
- 6. All choke lines will be anchored to prevent movement.
- 7. All BOP equipment will be equal to or larger in bore than the internal diameter of the last casing string.
- 8. Will maintain a kelly cock attached to the kelly.
- 9. Hand wheels and wrenches will be properly installed and tested for safe operation.
- 10. Hydraulic floor control for blowout preventor will be located as near in proximity to driller's controls as possible.
- 11. All BOP equipment will meet API standards and include a minimum 40 gallon accumulator having two independent means of power to initiate closing operation.

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