

**5000 PSI WORKING PRESSURE
 SLOWOUT PREVENTER HOOK-UP**

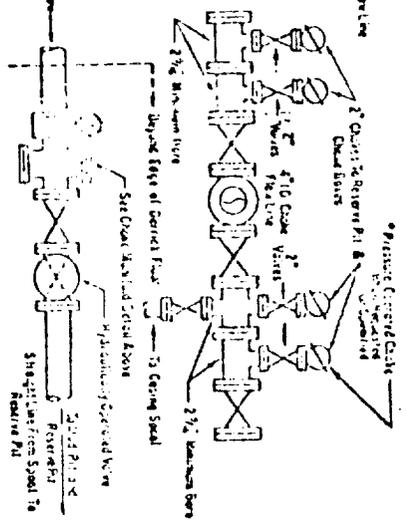
By suitable operating system which is to be selected, (2) Accumulators with a precharge of nitrogen of not less than 750 PSI and connected as to receive the aforementioned fluid charge. With the operating accumulator pressure shall be not less than 1000 PSI with the remaining accumulator fluid volume at least _____ percent of the or 200 _____ gallons after closure of the pump, remote and equivalent. It is to be available to operate the above pump, or there shall be additional pumps operated by separate power and equal in performance capabilities.

The electric controller and remote closing manifold shall have a separate control for each pressure-actuated device. Controls are to be labeled, with control handles including own and closed positions. A separate _____ pressure regulator must be provided for operating the hydraulic preventer. When required, a second pressure reducer shall be provided to limit operating fluid pressures to ram prevention. Cuff regions may be hydraulic oil, an equivalent or better, it is to be used as the fluid to operate the hydraulic equipment.

The choke manifold, when flow line, relief line, and choke lines are to be supported by metal stands and adequately anchored. The choke flow line, relief line, and choke line shall be constructed as though as possible and without stress lines. Lay and safe access is to be maintained to the choke manifold. If deemed necessary, walkways and stairs shall be erected in and around the choke manifold. All valves are to be selected for operation in the presence of oil, gas, and drilling fluids. The choke flow line valves and relief line valves connected to the drilling fluid and air line type preventers must be equipped with stem extensions, universal joints if needed, and hand wheels which are to extend beyond the edge of the derrick structure. All other valves are to be equipped with handwheels.

* To include electric floor-mounted controls.

CHOKER MANIFOLD DETAIL



The blowout preventer assembly shall consist of one single type blind ram, one center end and one single type pipe ram preventer, both hydraulically operated, a hydraulic O.K. preventer, a ram, a slowout preventer, valves, chokes and connections, as illustrated. If a tapered drill string is used, a ram preventer must be provided for each size of drill pipe. Coiling and tubing runs to fit the preventer are to be available or needed. If earned in size, the flanged outlets of the ram preventer may be used for connecting to the 4-inch I.D. choke flow line end which I.D. relief line, except when air or gas drilling. All preventer connections are to be gasket-face flanged.

Minimum operating equipment for the prevention and hydraulically operated valves shall be as follows: (1) Multiple pumps, driven by a continuous source of power, capable of fluid charging the total accumulator volume from the accumulator precharge pressure to its rated pressure within _____ minutes. Also, the pumps are to be connected to the nitrogen precharge pressure of not less than 750 PSI and connected as to receive the aforementioned fluid charge. With the operating accumulator pressure shall be not less than 1000 PSI with the remaining accumulator fluid volume at least _____ percent of the or 200 _____ gallons after closure of the pump, remote and equivalent. It is to be available to operate the above pump, or there shall be additional pumps operated by separate power and equal in performance capabilities.

**ADDITIONS-DELETIONS-CHANGES
 SPECIFY**
