

nirrogen precharge pressure to its rated pressure within _____minutes. Also, the pumps are to be connected to the hydraulic operating system which is to be a closed system. (2) Accumulators with a precharge of nitrogen of not less than 750 PSI and connected so as to receive the dorementioned fluid charge. With the charging pumps shut down, the pressurized fluid volume stored in the accumulators must be sufficient to close all the pressure-operated devices simultancously within ______ seconds; after closure, the thematining accumulator pressure shall be not less than 1000 PSI with the remaining accumulator fluid volume at least ______ percent of the original. (3) <u>When requested</u>, on additional source of power, remote and equivalent, is to be available to aperate the above pumps in the community when in the community of the close of the source of the original. the remaining accumulator pressure shall be not less than 1000 PSI with the remaining accumulator fluid volume at least _____ percent of the original. (3) When requested, an additional source of power, remote and equivalent, is to be available to operate the above pumps; or there shall be additional pumps operated by separate power and equal in performance capabilities. Minimum operating equipment for the preventers 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

BLOWOUT PREVENTER HOOK-UP

The closing monifold and remate closing manifold shall have a separate control for each pressure-operated device. Controls are to be labeled, with control handles indicating open and closed positions. A pressure reducer and regulator must be provided for operating the Hydril proventer. When requested, a second pressure reducer shall be available to limit operating fluid pressures to rom preventer. Gulf Legion No. 38 hydraulic oil, an equivalent or better, is to be used as the fluid to preate the hydraulic equipment.

The choice monifold, choke flow line, relief line, and choke lines are to be supported by metal stands and adequately anchared. The choke flow line, relief line, and choke lines shall be constructed as straight as possible and without sharp bends. Easy and safe access is to be maintained to the choke manifold. If deamed necessary, walkways and stairways shall be cracted in and around the choke manifold. All valves are to be selected for operation in the presence of oil, gas, and disling fluids. The choke flow line valves and relief line valves connected to the drilling spool and all ram type preventers must be equipped with stem extensions, universal joints if needed, and hand wheels which are to extend beyond the edge of the derick substructure. All other valves are to be equipped with handles.

* To include derrick floor mounted controls.



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