

BLOWOUT PREVENTER HOOK-UP 5000 PSI WORKING PRESSURE

The blowout preventer assembly sholl consist of one single type blind ram preventer and one single type pipe ram preventer, both hydraulically operated; a Hydril "GK" preventer; a rotaling blowout preventer; valves; chokes and connections, as illustrated. If a tapeted drill string is used, a ram preventer must be provided for each size

Minimum operating equipment for the preventers and hydraulically operated valves shall be as follows: (1) Multiple of drill pipe. Casing and tubing roms to fit the preventers are to be available as needed. If correct in size, the pumps, driven by a continuous source of power, capable of fluid charging the total accumulator voluma from the I.D. ralief lina, except when air or gas drilling. All proventer connections are to be open-face flonged. flanged outlets of the ram preventer may be used for connecting to the 4-inch I.D. choke flow line and 4-inch

introgen precharge pressure to its rated pressure within minutes. Also, the pumps are to be connected to the hydroulic 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 aforementioned fluid charge. With the charging pumps shut down, the pressure stored fluid volume stored in the accumulators must be sufficient to close all the pressure-operated devices simultaneously within seconds; after closure, 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, remate 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.

The closing manifold and remote 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 preventer. When requested, a second pressure radicer shall be available to limit operating fluid pressures to ram preventen. Gulf Legion No. 38 hydraulic oil, an equivalent or batter, is to be used as the fluid to operate the hydraulic equipment.

as straight as possible and without sharp bands. Easy and safe access is to be maintained to the choke monifold. If deamed nacessary, walkways and stairways shall be erected in and around the choke manifold. All valves are to be safected for operation in the presence of oil, gas, and drilling fluids. The choke flow line valves and ralief 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 derrick substructure. All other valves are to be equipped preventers must be equipped with stem extensions, universal joints if needed, The choke manifold, choke 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 lines shall be constructed

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