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## HOUSTON REGION DRAWING NO. 2

## 3000 **#** WORKING PRESSURE



connections, as illustrated. If a tapered drill string is used, a ram preventer must be provided for each size of drill pipe. Casing and tubing rams to rotating blowout preventer. the ram preventer may be used for connecting to the t-inch choke flow lines and kill line. The substructure height shall be sufficient to install a fit the preventers are to be available as needed. The ram preventer may be two singles or a double type. If correct in size, the flanged outlets of The blowout preventer assembly shall consist of one blind ram preventer and one pipe ram preventer, both hydraulically operated; valves; choices and

operated devices simultaneously within second; 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, remote and equal in equivalent, is to be available to operate the above pump(s) or there shall be an additional pump(s) operated by separate power and equal in When requested, accumulators with a precharge of nitrogen of not less than 730 PSI and connected so as to receive a fluid charge from the above pump(s). With the charging pump(s) shut down, the pressurized fluid volume stored in the accumulators must be sufficient to close all the pressure-performance capabilities.

The 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 if an Annular preventer is used. Hydraulic oil will be used to operate hydraulic equipment.

are to be selected for operation in the presence of oil, gas, and drilling that. The choice flow line valve connected to the drilling spool and all ram type preventers must be equipped with stem extendions, universal joints, if naeded, and hand wheels which are to extend beyond the edge of the lines shall be constructed as straight as possible and without sharp bends. Easy and sale access is to be maintained to the choke manifid. All valves The choke manifold, choke flow line, and choke lines are to be supported by metal stands and adequately anchored. The choke flow line and choke

