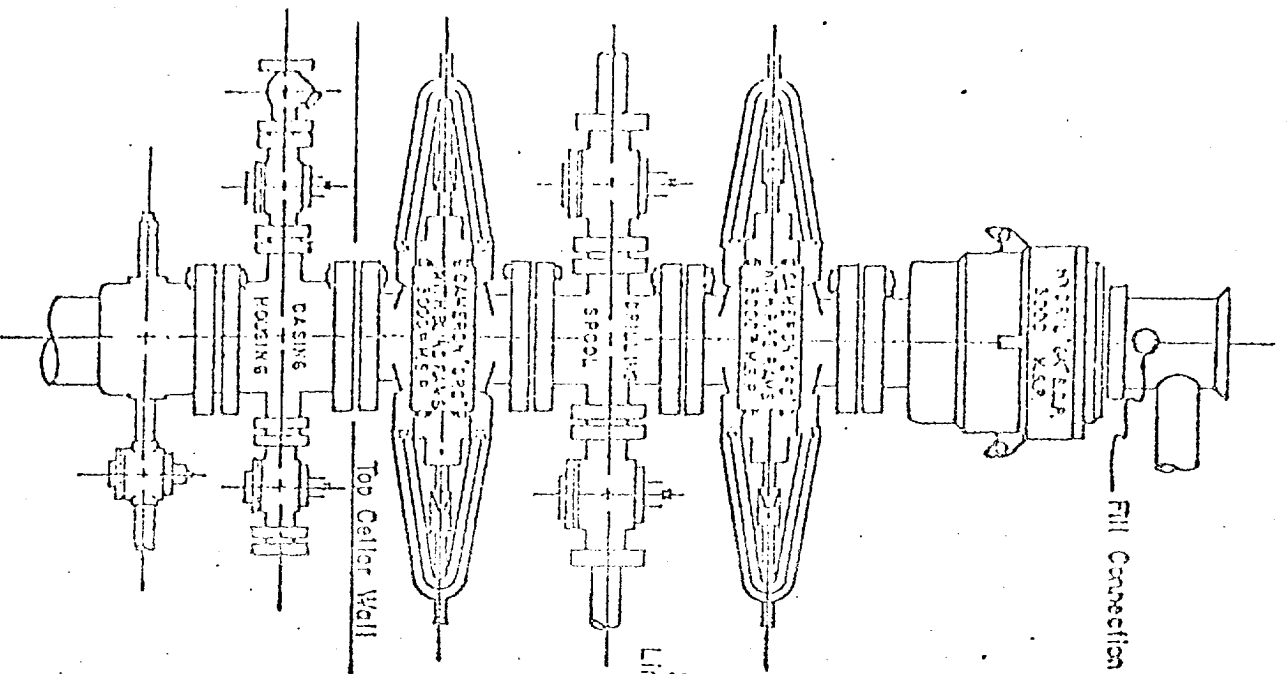
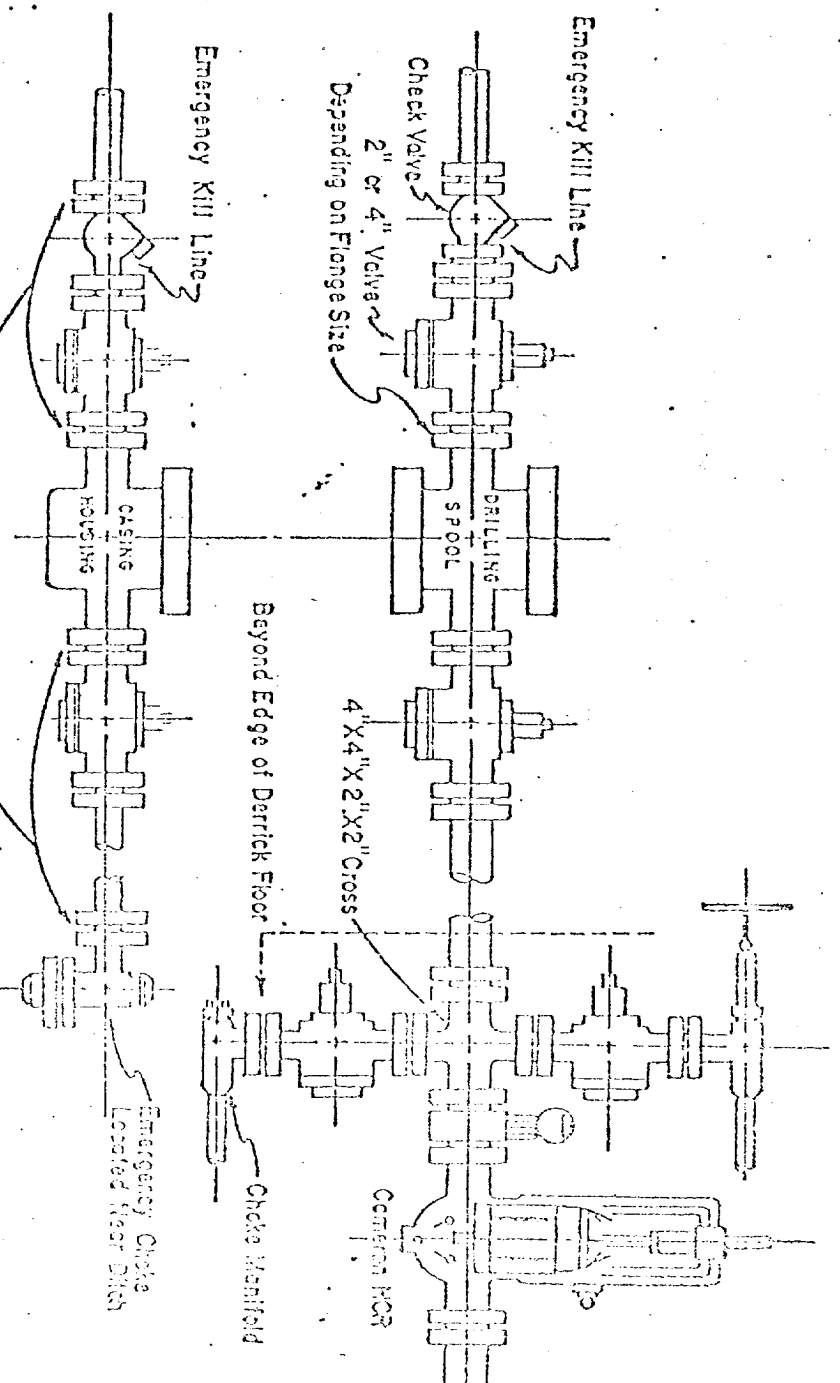




See Detail of 4" Flow Line and Choke Assembly



3,000 PSI WORKING PRESSURE KILL, CHOKE, AND FILL CONNECTIONS

API Series 900 Flanges or Better

DETAIL OF 4" FLOW LINE CHOKE ASSEMBLY

Minimum assembly for 3000 PSI working pressure will consist of three preventers. The bottom and middle preventers ORC, Cameron Type F single or Sheffer Hydraulic single, and the upper will be Hydril GK. In flow of the drilling spool, the fill from the Cameron Type F single open face flanged preventer, provided the outlets are the correct size, may be used for flow line and the two-inch kill line.

Size 12-inch preventers may be used for work down through 8-5/8-inch casing. Size 10-inch preventers may be used for through 7-3/8-inch casing. Size six-inch preventers are to be used for work through 7-inch and 5-1/2-inch casings.

Minimum operating equipment for the preventers will be: (1) An air operated pump and (2) An accumulator(s) with some ing a fluid charge. A closed fluid system is recommended. The closing manifold and remote closing manifold will have a valve for each pressure operated device and a Hydril regulator will be provided. Sufficient fluid capacity in the accumulator cable to close all the pressure operated devices at the same time with 25 percent reserve. Gulf No. 551 hydraulic oil shall be used as the oil. The four-inch flow line from the preventers shall be supported by a metal stand or reinforced concrete. All valves and assembly shall be selected for operation in both gas and fluids.

The ram type preventers and the Cameron HCR valve will be provided with stem extensions, universal joints, if

3,000 PSI WORKING PRESSURE BLOWOUT PREVENTER HOOK-UP

Series 900 Flanges, or Better