

3. MINIMUM SPECS FOR PRESSURE CONTROL (CONTINUED):

d. The BOP Equipment (Continued):

- vi. A gas buster will be installed, after the 9-5/8" Intermediate Casing is set and cemented to surface, in order to de-gas fluid returns during drilling/well control operations and to return de-gassed fluid to the mud pits and to convey gas to a flare pit.
- vii. A 5000 psi WP(min) FO safety valve and a 5000 psi WP(min) dart valve, with drill pipe threads and subs to meet other drill string threads, will be kept on the drill floor after the 13-3/8" surface casing is set. A 5000 psi(min) WP Upper Kelly valve and a 5000 psi WP(min) Lower Kelly valve will be kept on the kelly throughout drilling operations. All valves, and the wrenches to operate these valves, will be maintained on the floor in good order throughout drilling operations.
- viii. An accumulator with sufficient capacity to operate the BOPE against a 3500 psi well pressure(min) will be used to operate the BOP system. It shall contain the fluid capacity calculated to open and close the Hydraulic inside master valve, pipe rams, and annular preventer 1 time each, and then to close the pipe rams and annular preventer 1 additional time(min) and retain accumulator pressure at 200 psig over the pre-charge pressure **OR THE MINIMUM CAPACITY OF WORKING FLUID REQUIRED BY ON-SHORE ORDER NO. 2** - whichever is the lesser. The accumulator working pressure shall be 1,500 psi(minimum) with a pre-charge pressure between 900 - 1,200 psi(minimum). A Nitrogen bottle system shall provide independent (reserve) power to operate the system in the event rig motors must be shut down.
- ix. The kill-side manifold will consist of 2:2" 5000 psi WP(min) FO FE master valves with an outside 2" 5000 psi(min) FO FE check valve. The inside valve will be kept in the closed position. The outside 2" master valve will be kept in the open position. The kill line will be connected to the stand-pipe by a 2" 5000 psi WP(min) welded or co-flexip type kill line.
THE KILL LINE WILL IN NO CASE BE USED FOR THE FILL-UP LINE.