- BUP's to be fluid operated. BUP's and all fittings must be in good condition 1. and rated at 3000 ps1 w.p. minimum. 2
- Equipment through which bit must pass shall be at least as large as casing size being drilled through. Upper kelly cock is required and shall be 3000 psi w.p. minimum. Lower kelly 3.
- cock is (required)(not required). hydril or comparable safety valve shall be available on rig floor with connec-4.
- tion or subs to fit any tool joint in the string. Valve to be full bore 5000 psi w.p. minimum. 5.
- Hydril or equivalent drill pipe back pressure valve is (required)(not required). G.
- All equipment upstream of chokes, including kill line equipment shall be All equipment upstream of chokes, including kill the equipment shall be flanged or clamped and of a test pressure no less than that of the blowout preventer. All valves upstream of choke shall be $(3^{"})$ $(4^{"})$ gate valves Cameron Type "F" or equivalent. All equipment downstream of chokes may be Lameron type "r" or equivalent. All equipment downstream or chokes may be flanged or screw end gate or plug. Line from spool to manifold cross to be a minimum of 3", straight and short as possible with minimum bends. Other lines may be 2", 3" or 4". Choke manifold, beyond second valve from cross, must be positioned outside of substructure. Manifold, header and all lines must be adequately supported and properly anchored. Two inch (2") lines and valves are negmitted on the kill line. All valves deringated for H S service valves are permitted on the kill line. All valves designated for H_2S service are (required) (not required).
- 7. Blowout preventer closing unit equipment to include accumulator capable of closing, opening and closing unit equipment to include accumulator capable of closing, opening and closing the bag and pipe rams with a minimum remaining pressure of 1200 psi. After closure, the remaining fluid volume will be at least 50 percent of original volume. Two independent sources of pump power are required on each closing unit installation and shall meet all IAOC speciare required on each closing unit installation and shall meet all HAUL spec fications. Uperating time for closing unit shall not be greater than one minute with charging pump shut down. Time test must be witnessed by Amoco Failure to meet these conditions will necessitate corrective action by con-fraction and retesting all at contractor's expense. The accumulator must be located at least 50 feet from the well. Blowout preventer controls must be premeriv labeled and located as close to griller
- 8. preventer controls must be properly labeled and located as close to drillers position as feasible. Floor control valves are (recuired)(not required).
- Fluid lines from accumulator to BUP's and all remote control fluid lines 9. shall be steel, and rated at or above maximum accumulator pressure. Lines shall be routed in bundles and adequately protected from damage.
- 10. Use rams in following positions:*

Upper ram	Drilling Urill pipe	Running Casing
Lower Ram	P14-4	Casing
*Amoco District Superintendent may	billing	6lind
and a service superintendent may	reverse location of	

11. Extensions and hand wheels to be installed and braced at all times.



