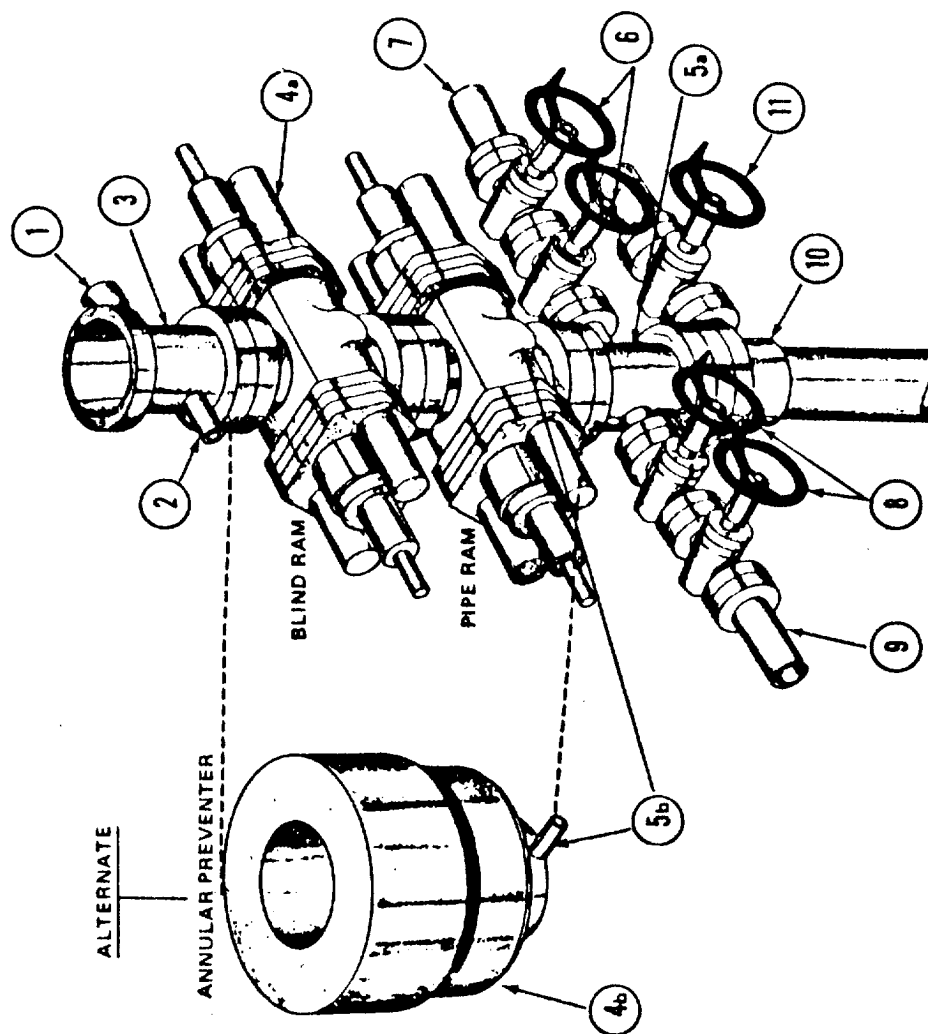




DRAWING & CHECK LIST 102
SHELL CLASS 2M
SURFACE INSTALLATIONS NORMAL



NOTE: Second wing valve on choke (6) and kill (8) lines not mandatory unless drilling below 2,000'.

SHELL MINIMUM BOP STACK REQUIREMENTS			
No.	Item	Min. I.D.	Min. Nominal
1	Flowline	8 5/8"	
2	Fill up line	2"	2"
3	Drilling nipple	1 1/2"	
4a	Two single or one dual hydraulically operated rams*	10"	
4b	Annular Preventer	Not Reg'd	
5a	Drilling spool with 2" and 2" outlets		
5b	2" outlets in ram or annular preventer. Run kill line and choke line from these outlets. (Alternate to 5a above.)		
6	Gate Valves	2-1/16"	
7	Line to choke manifold	2-1/16"	2"
8	Gate Valves	2-1/16"	
9	Line to rig mud pump manifold	2"	2"
10	Casing spool	10"	
11	Gate Valve	1-13/16"	

OPTIONAL	
12	Wear flange or bore protector

* For well servicing - not mandatory to be hydraulically operated.