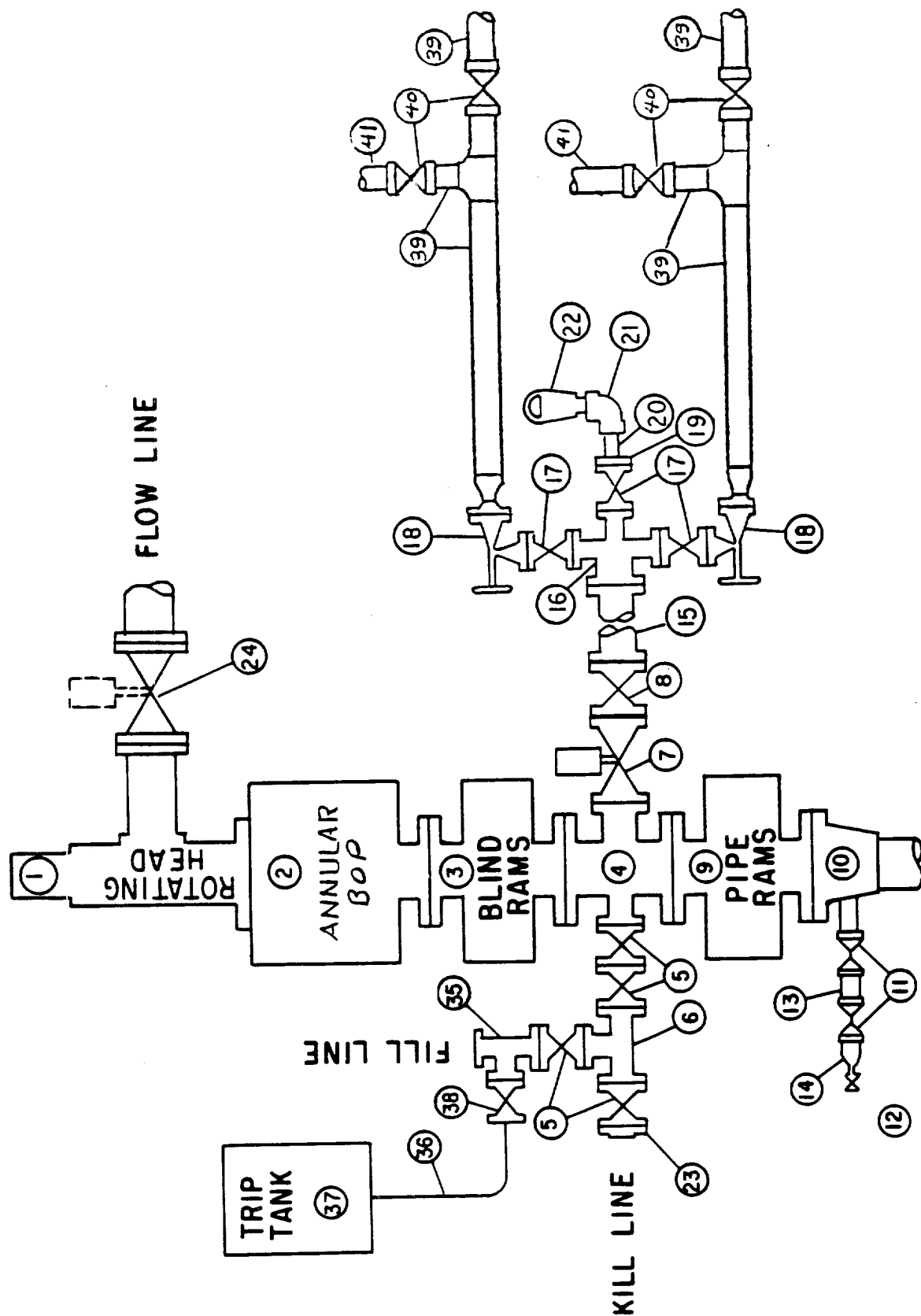


MIDLAND DRILLING ORGANIZATION
BLOWOUT PREVENTER SPECIFICATION
 TYPE II - B



BLOWOUT PREVENTER SPECIFICATION
EQUIPMENT DESCRIPTION

TYPE II-B

All equipment should be at least 2000 psi WP or higher unless otherwise specified.

1. Rotating BOP.
2. Hydril or Shaffer bag type preventer.
3. Ram type pressure operated blowout preventer with blind rams.
4. Flanged spool with one 4-inch and one 2-inch (minimum) outlet.
5. 2-inch (minimum) flanged plug or gate valve.
6. 2-inch by 2-inch by 2-inch (minimum) flanged tee.
7. 4-inch pressure operated gate valve.
8. 4-inch flanged gate or plug valve.
9. Ram type pressure operated blowout preventer with pipe rams.
10. Flanged type casing head with one side outlet (furnished by Exxon).
11. 2-inch threaded (or flanged) plug or gate valve (furnished by Exxon).
Flanged on 5000# WP, threaded on 3000# WP or less.
12. Needle valve (furnished by Exxon).
13. 2-inch nipple (furnished by Exxon).
14. Tapped bull plug (furnished by Exxon).
15. 4-inch flanged spacer spool.
16. 4-inch by 2-inch by 2-inch by 2-inch flanged cross.
17. 2-inch flanged plug or gate valve.
18. 2-inch flanged adjustable choke.
19. 2-inch threaded flange.
20. 2-inch XXH nipple.
21. 2-inch forged steel 90° Ell.
22. Cameron (or equal.) threaded pressure gage.
23. Threaded flange.
24. 6-inch manual or pressure operated gate valve.
35. 2-inch flanged tee.
36. 3-inch (minimum) hose. (Furnished by Exxon).
37. Trip tank. (Furnished by Exxon).
38. 2-inch flanged plug or gate valve.
39. 2-1/2-inch pipe, 300' to pit, anchored.
40. 2-1/2-inch SE valve.
41. 2-1/2-inch line to steel pit or separator.

NOTES:

1. Items 3, 4 and 9 may be replaced with double ram type preventer with side outlets between the rams.
2. The two valves next to the stack on the fill and kill line to be closed unless drill sting is being pulled.
3. Kill line is for emergency use only. This connection shall not be used for filling.
4. Replacement pipe rams and blind rams shall be on location at all times.
5. Only type U, LWS and QRC ram type preventers with secondary seals are acceptable for 5000 psi WP and higher BOP stacks.
6. Type E ram-type BOP's with factory modified side outlets may be used on 3000 psi and lower WP BOP stacks.