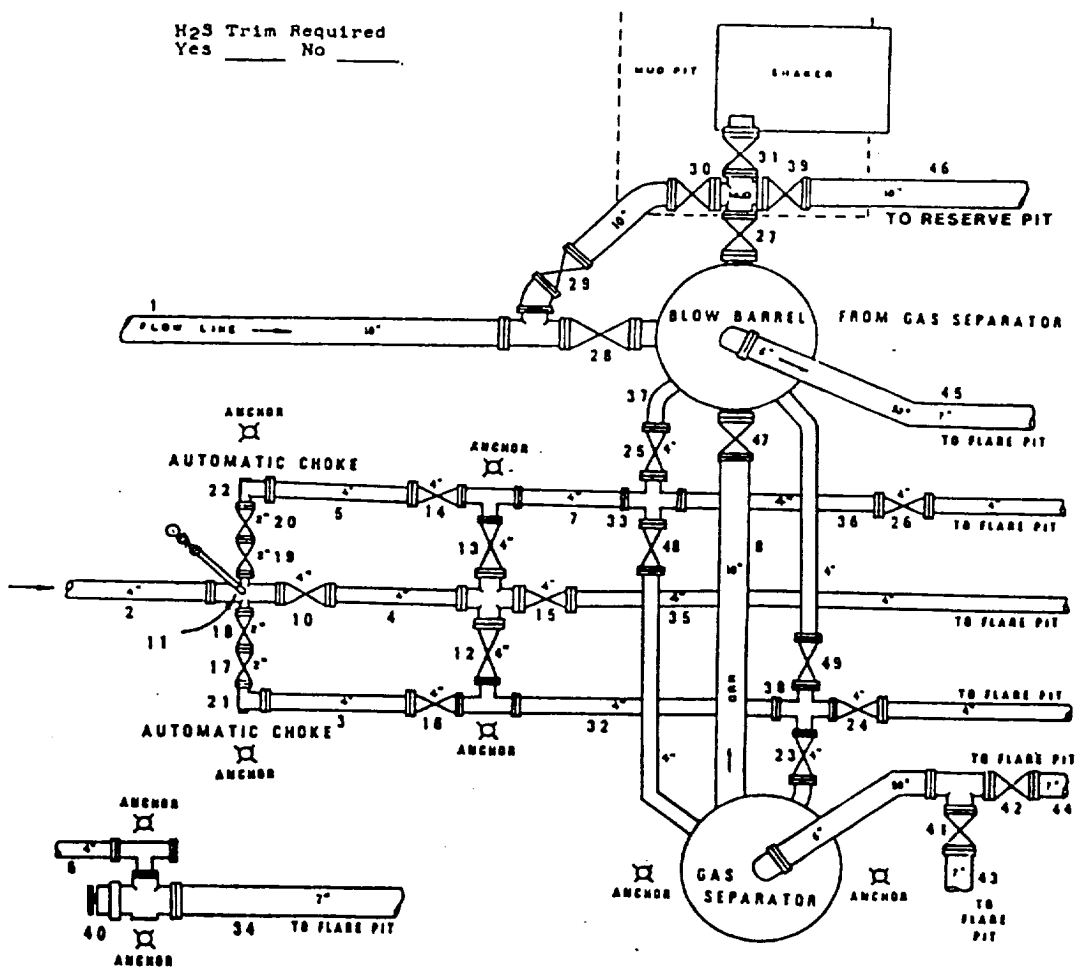


SUPPLEMENTAL MANIFOLD FOR DRILLING CONTROL **CONDITION IV AND V-B 5000 AND 10,000 PSI WP**

H₂S Trim Required
 Yes _____ No _____



- 1,8 10" steel flow line
- 2,3,4,5,6 4" minimum 10,000# WP 4130 mechanical tubing with flanged ends or equivalent
- 11 2" minimum X 4" minimum 10,000# WP flanged cross with 10,000# WP needle valve and gauge
- 10 4" minimum 10,000# WP flanged full opening steel gate valve
- 12,13,14,15,16 4" minimum 5000# WP flanged full opening steel gate valve
- 17,18,19,20 2" minimum 10,000# WP flanged full opening steel gate valve, or Halliburton Lo Torq Plug Valve
- 21,22 2" minimum 10,000# WP automatic choke
- 23,24,25,26,48,49 4" minimum 5000# WP flanged or threaded full opening steel mud valves
- 27,28,29,30,31,39,47 10" minimum Low pressure butterfly valves
- 7,32,33,35,36,37,38 4" minimum flanged or threaded schedule 80 tubing
- 40 2" minimum 10,000# WP flanged adjustable or automatic choke with carbide trim
- 41,42 7" minimum low pressure butterfly valve
- 34,43,44 7" minimum anchored steel flowline
- 46 10" minimum PVC flowline

SCALE:	DATE	EST. NO.	DRG. NO.
DRAWN BY:			
CHECKED BY:			
APPROVED BY:			

EXHIBIT E