

CHECKLIST AND DRAWING  
MINIMUM CHOKE MANIFOLD EQUIPMENT REQUIREMENTS  
(ATTACHMENT NO.        TO BID SHEET AND WELL SPECIFICATIONS)

3000 PSI WORKING PRESSURE

TO BE INSTALLED AFTER SETTING 8 5/8 INCH CASING

Contractor or Pzl to furnish items checked (X). See attached drawing.

| No. | Item                                                            | Min.<br>Size | Type            | Press.<br>Rating | Furnished By |      |
|-----|-----------------------------------------------------------------|--------------|-----------------|------------------|--------------|------|
|     |                                                                 |              |                 |                  | Contr.       | Pzl. |
| 1.  | Choke Line from BOP stock (same as Item No. 13 on Attachment 2) | 2"           | Weld or Flanged | 3000             | X            |      |
| 2.  | 4 Way Cross, in. x in. x in. x in.                              | 2"           | Flanged         | 3000             | X            |      |
| 3.  | Gate Valve                                                      | 1 13/16"     | Flanged         | 3000             | X            |      |
| 4.  | Pressure Sensor                                                 |              |                 |                  |              |      |
| 5.  | Pressure Gauge                                                  | 1"           | Threaded        | 3000             | X            |      |
| 6.  | Gate Valve                                                      | 2"           | Flanged         | 3000             | X            |      |
| 7.  | Gate Valve                                                      | 2"           | Flanged         | 3000             | X            |      |
| 8.  | Gate Valve                                                      | 2"           | Flanged         | 3000             | X            |      |
| 9.  | Tee x in. x in. x in.                                           |              |                 |                  |              |      |
| 10. | Way Cross, in. x in. x in. x in.                                |              |                 |                  |              |      |
| 11. | Adjustable Choke                                                | 2"           | Flanged         | 3000             | X            |      |
| 12. | Positive Choke                                                  | 2"           | Flanged         | 3000             | X            |      |
| 13. | Hydraulically Operated Choke                                    |              |                 |                  |              |      |
| 14. | Forged Extension Spool                                          |              |                 |                  |              |      |
| 15. | Hydraulically Operated Gate Valve                               |              |                 |                  |              |      |
| 16. | Hydraulically Operated Gate Valve                               |              |                 |                  |              |      |
| 17. | Line to Low Pressure Header                                     | 2"           | Weld or Thread  | 1000             | X            |      |
| 18. | Line to Low Pressure Header                                     | 2"           | Weld or Thread  | 1000             | X            |      |
| 19. | Line to Burn Pit                                                | 2"           | Weld or Thread  | 1000             | X            |      |
| 20. | Line to Burn Pit                                                | 2"           | Weld or Thread  | 1000             | X            |      |
| 21. | Line to Reserve Pit                                             | 2"           | Weld or Thread  | 1000             | X            |      |
| 22. | Line to Mud Pit                                                 | 2"           | Weld or Thread  | 1000             | X            |      |
| 23. | Line to Mud/Gas Separator                                       |              |                 |                  |              |      |
| 24. | Header                                                          |              |                 |                  |              |      |
| 25. | Header                                                          |              |                 |                  |              |      |
| 26. | Gate Valve                                                      | 2"           | Flanged         | 1000             |              | X    |
| 27. | Gate Valve                                                      | 2"           | Flanged         | 1000             |              | X    |
| 28. | Gate Valve                                                      | 2"           | Flanged         | 1000             |              | X    |
| 29. | Gate Valve                                                      | 2"           | Flanged         | 1000             |              | X    |
| 30. | Gate Valve                                                      |              |                 |                  |              |      |
| 31. | Gate Valve                                                      |              |                 |                  |              |      |
| 32. | Base for Choke Manifold                                         |              |                 |                  |              |      |
| 33. | Block Tee, in. x in. x in. x                                    |              |                 |                  |              |      |
| 34. | Tee 2 in. x 2 in. x 2 in. x                                     | 2"           | Flanged         | 1000             |              | X    |
| 35. | Tee 2 in. x 2 in. x 2 in. x                                     | 2"           | Flanged         | 1000             |              | X    |
| 36. | Operating Consoles for Hydraulic Choke                          |              |                 |                  |              |      |
| 37. | Line to Low Pressure Header                                     |              |                 |                  |              |      |
| 38. | Line to Reserve Pit                                             |              |                 |                  |              |      |
| 39. | Line to Mud/Gas Separator                                       |              |                 |                  |              |      |
| 40. | Line to Mud/Gas Separator                                       |              |                 |                  |              |      |
| 41. | Line to Burn Pit                                                |              |                 |                  |              |      |
| 42. | Forged Extension Spool                                          |              |                 |                  |              |      |
| 43. | Way Cross, in. x in. x in. x in.                                |              |                 |                  |              |      |
| 44. | Gate Valve                                                      |              |                 |                  |              |      |
| 45. | Gate Valve                                                      |              |                 |                  |              |      |
| 46. | Gate Valve                                                      |              |                 |                  |              |      |

Line size to be inside diameter.

Valve, Spools and preventers to be bore dimension.

Header size to be outside diameter.