

MINIMUM BLOWOUT PREVENTER EQUIPMENT REQUIREMENTS
(ATTACHMENT NO. _____ TO BID SHEET AND WELL SPECIFICATIONS)

3000 PSI WORKING PRESSURE

TO BE INSTALLED AFTER SETTING 13 3/8 INCH CASING

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

No.	Item	Min. Size	Type	Press. Rating	Furnished By	
					Contr.	Pzl.
1.	Flow Line	8"	Weld	125	X	
2.	Fill Up Line	2"	Thd or Weld	125	X	
3.	Ball Nipple	12"	Weld	125	X	
4.	Rotating Head					
5.	Hydraulically Operated Gate Valve					
6.	Bleed Line					
7.	Bag Preventer	12"	Flanged	3000	X	
8.	Hydraulically Operated Ram Preventer					
9.	Drilling Spool with <u>2</u> in. and <u>2</u> in. Side Outlets	12"	Flanged	3000	X	
10.	Preventers Side Outlets <u> </u> in. and <u> </u> in. Use as alternate to No. 9 above.					
11.	Gate Valve	2"	Flanged	3000	X	
12.	Hydraulically Operated Gate Valve (HCR Valve)					
13.	Line to Choke Manifold	2"	Flanged	3000	X	
14.	Gate Valve	2"	Flanged	3000	X	
15.	Hydraulically Operated Gate Valve					
16.	Check Valve					
17.	Drilling Spool with <u> </u> in. and <u> </u> in. Side outlets					
18.	Preventer Side Outlets <u> </u> in. and <u> </u> in.					
19.	Gate Valve					
20.	Hydraulically Operated Gate Valve					
21.	Relief Line					
22.	Wear Flange or Bushing					
23.	Kill Line to accessible location approx. <u> </u> ft. from rig. (MINIMUM DISTANCE)					
24.	Gate Valve					
25.	Kill Line to rig pump manifold	2"	Flanged	3000	X	
26.	<u> </u> Way Cross, <u> </u> in. x <u> </u> in. x <u> </u> in. x <u> </u> in.					
27.	Tee, <u> </u> in. x <u> </u> in. x <u> </u> in.					
28.	Bull Plug					
29.	Casing Spool					
30.	Gate Valve					
31.	Casing Spool					
32.	Gate Valve					
33.	Pressure Gauge					
34.	Casing Head					
35.	Gate Valve					
36.	Gate Valve					

Line sizes to be inside diameter.

Valves, spools and preventers sizes to be bore dimension.

EXHIBIT F