

Item	Furnished By	
	Contr.	Pzl
Automatic Accumulator and Master Control. See below for details.	X	
Remote set of closing unit controls with <u>2</u> stations.	X	
Bag Preventer Pressure Regulating Control Valve on remote station	X	
Kelly Cocks: Upper - Make _____ Press. Rating <u>3000 Full Opening</u>	X	
Lower - Make _____ Press. Rating <u>3000 Full Opening</u>	X	
Inside Blowout Preventer: Gray/Shaffer _____ PSI WP		
Drop-In(Hydrill) _____ PSI WP		
Full Opening Ball Valve for each size drill pipe in use (Extra Lower Kelly Valves) <u>3000</u> PSI WP (Full Opening).	X	
Circulating Head for each type and size of tool joint in use		
_____ Ft. of 2 in. steel hose (Chickson) _____ PSI WP		
Blind/Shear Rams		

**ACCUMULATOR AND MASTER CONTROL  
SPECIFICATIONS**

REQUIREMENTS CHECKED (X) SHALL APPLY:

X	Item
X	Accumulator Volume <u>80</u> gal., <u>3000</u> PSI WP Unit
X	Power for Pumps: Air X Air and Electric
X	Sufficient Capacity to Recharge Complete Unit in 6 Minutes Pumps Capacity _____ Gal/Min. at _____ PSI
X	Number of Control Valves Required (at least <u>3</u> for rig floor and remote units)
X	Pressure Regulator Valve to control pressure on bag preventer
X	Control Valves on both Master and Remote Control properly labeled with name of respective function and open and closed clearly marked.
X	Blind Ram control on both Master and Remote Control protected to avoid accidental activation. These control handles are not to be locked in position, however, as this could prevent activation from the remote station.
X	Hydraulic Lines from Accumulator to Hydraulic Device to be <u>0.9</u> in. minimum ID and have <u>3000</u> PSI minimum working pressure.
X	Pressure Gauges showing accumulator pressure, manifold pressure, pressure on bag preventer and air supply pressure on both master and remote control stations.
	-Bottled Nitrogen _____ Bottles _____ ft. each at _____ PSI manifold to bypass accumulator and operate BOP directly.