



**B. J. MUIRHEAD CO., INC.**

*Est. 1949*

## BOILER INSPECTION

### HIGH PRESSURE POWER BOILER LOG

Please specify which log and how many copies per log.

SEND ADDITIONAL LOG REQUESTS TO:  
Buffalo Office:  
115 Mid County Drive  
Orchard Park, New York 14127  
Phone: (716) 667-7100  
Fax: (716) 667-7104

Rochester Office:  
705 Maple Street  
Rochester, New York 14611  
Phone: (585) 742-2731

**NOTE:**

In addition to the checks and tests listed here, the Check List for High Pressure Boilers (on reverse side must be completed as well)

MANUFACTURER											BOILER NUMBER			LOCATION			WEEK BEGINNING			
CHECK OR TEST RECORD TWICE DAILY	DAY AND TIME	WATER								PRESSURE			TEMPERATURE			Burner	Water Treatment	Boiler Blow Down	Operator On Duty	Remarks
		Observe Water Level	Low Water Cut-Off	Aux Low Water Cut-off	Verify Level Control Operation	Blow Down Water Column	Drain Gage Glass	Feed Pump	Condensate Tank Level	Steam	Feed Pump	Fuel Supply	Feed Water	Condensate	Flue Gas					
	MON	A.M.																		
		P.M.																		
	TUES	A.M.																		
		P.M.																		
	WED	A.M.																		
		P.M.																		
	THUR	A.M.																		
		P.M.																		
FRI	A.M.																			
	P.M.																			
SAT	A.M.																			
	P.M.																			
SUN	A.M.																			
	P.M.																			

Instructions	Continued safe operation of a boiler depends on regular maintenance and testing of the boiler and its operating and protective controls. The tests and checks outlined above are designed to determine whether or not the boiler and controls are in good operating condition.	Should any check or test conclude that the device being tested or observed is not in good operating condition, it should be repaired immediately. Record repairs or changes under "Remarks" so that a complete record will be available for review at any time.	LOG REVIEWED BY	DATE
			COMMENTS	
Testing	WATER COLUMN AND GAGE GLASS - open drain valve quickly and flush water from glass and column. When drain is closed, water level should recover promptly.		LOW WATER FUEL CUT-OFF AND WATER LEVEL CONTROL- drain float chamber when firing equipment is operating. Proper operation of the control should shut off the firing equipment and start feed pump. If controls are of probe or other type that require lowering of water level in boiler to test, DO NOT lower level to point below bottom of gage glass.	



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### CHECKLIST FOR HIGH PRESSURE BOILERS

#### INSTRUCTIONS:

1. In addition to the checks and tests listed on the daily log sheets, the following checks should be made on a periodic basis. More frequent checks and tests may be required according to the particular conditions noted.
2. Enter date when the test or maintenance procedure detailed below, has been completed.

MANUFACTURER		BOILER NUMBER	LOCATION
DATE PROCEDURE COMPLETED	DESCRIPTION OF PROCEDURE	DATE PROCEDURE COMPLETED	DESCRIPTION OF PROCEDURE
	<b>SAFETY VALVE</b> (During Annual Inspection) Replace or Recertify Safety Valve during annual boiler inspection. Lift testing safety valves is not advised. Many companies have 2 sets of valves to swap at annual inspection		<b>CHECK BOILER and SYSTEM for LEAKAGE or DEFECTS</b> (semiannually) The boiler and its entire system should be given a careful and complete check at regular intervals for leakage or other defects at pipe connections, flanges, traps, and valves. In the interest of safe and reliable service, any unsatisfactory condition should be noted and corrected.
	<b>DISMANTLE LOW WATER FUEL CUT-OFF</b> (During Annual Inspection) The low water fuel cut-off should be dismantled for complete overhaul at regular intervals, and all the internal and external mechanism (including linkage, contacts, mercury bulbs, floats, and wiring) should be carefully checked for defects. See manufacturer's instructions and recommendations.		<b>Fuel Train Test</b> (at Least Annually) Bubble Test fuel train to ensure seat tightness of fuel safety shut-off valves.
	<b>CHECK LOW WATER FUEL CUT-OFF</b> (Daily) All low water fuel cut-offs should be checked daily by actually lowering the water level in the water column to simulate a low water condition. Should cut-off not function properly under this test, it must be immediately overhauled and placed in operating condition. Operating with malfunctioning low water cut off is extremely dangerous.		<b>Fuel Train</b> (at Least Semi-Annually) Verify setpoints and operation of all burner and boiler High and Low limits on Gas, Steam, and Air.
	<b>CLEAN FIRE SIDE OF BOILER</b> (During Annual Inspection) The fire side of the boiler should be cleaned at least annually. At the time of this cleaning, all brick work and refractory should be checked and repaired as needed.		<b>Slow Drain or Boil Off Test</b> (At Least Semi-annually) Have a qualified technician slowly drain or boil off water in the boiler to verify that all low water safety devices will trip appropriately in an operating scenario. <b>Caution! Do not lower water level below bottom of water gauge glass.</b> Should cut off not function properly under this test, it must be immediately overhauled and placed in operating condition. Operating with a malfunctioning low water cut-off is extremely dangerous.
	<b>WASH OUT BOILER</b> (During Annual Inspection) The internal surfaces of the boiler should be checked at regular intervals to determine if scale or corrosion is present. Contact your boiler inspector if any unusual condition is noted. Length of time between washouts should be varied in accordance with conditions noted at time of washout.		<b>Fuel/Air Ratio</b> (Quarterly) Have a qualified technician tune the fuel-to-air ratio on your burners quarterly for the highest efficiency and safety.
COMMENTS			