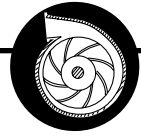




Fire Pumps Annual Inspection

Date: _____ **Inspector:** _____ **System:** _____
Location: _____

Y = Satisfactory	N = Unsatisfactory (explain below)	N/A = Not applicable
All Pumps—Hydraulic System		
	Suction pressure gauge: _____ psi (bar).	
	Discharge pressure gauge: _____ psi (bar).	
	Pump starting pressure from pressure switch in controller: _____ psi (bar).	
	Pump run time from controller: _____ minutes.	
	Suction line control valves are sealed open.	
	Discharge line control valves are sealed open.	
	Bypass line control valves are sealed open.	
	All control valves are accessible.	
	Suction reservoir is full.	
	Pump shaft seals dripping water (1 drop per second).	
	System is free of vibration or unusual noise when running.	
	Packing boxes, bearings, and pump casing are free of overheating.	
Electric Fire Pumps Only		
	Isolating switch is monitoring abnormal power.	
	Normal-phase rotation pilot light is "on."	
	Reverse-phase pilot light is "off."	
	Oil level in vertical motor sight glass is in normal range.	
Steam Fire Pumps Only		
	Steam pressure gauge reading normal: _____ psi (bar).	
	Record time to reach running speed: _____ min, _____ sec.	
Diesel Fire Pumps Only		
	Diesel tank is $\frac{2}{3}$ full.	
	Batteries are fully charged.	
	Battery charger is operating properly.	
	Battery terminals are clean.	
	Battery state of charge is checked.	
	Battery pilot lights are "on."	
	Battery-failure pilot lights are "off."	
	Engine-running-time meter is recording pump operation properly.	
	Oil level in right-angle gear drive is normal.	
	Diesel engine oil level is full.	



Fire Pumps Annual Inspection *(cont.)*

Diesel Fire Pumps Only	
Diesel engine water level is full.	
Water-jacket heater appears to be working properly.	
Water-jacket piping is drip tight.	
Diesel engine water hose is in good condition.	
Coolant antifreeze protection is adequate.	
Cooling line strainer is clean.	
Solenoid valve is operating correctly.	
Bearings and valves are lubricated.	
All pumps—controls	
Casing relief valve is free of damage.	
Pressure-relief valve is free of damage.	
All valves, fittings, and pipe are leak tight.	
Condensate drain trap is clean.	
Fire pump controller power is "on."	
Transfer-switch normal pilot light is "on."	
Jockey pump is operational.	
Jockey pump controller power is "on."	
Jockey pump controller is set on "auto."	
Fire pump shaft coupling appears properly aligned.	
Packing glands appear properly adjusted.	
Test header control valve is closed.	
Test header is in good condition.	
Test header valves and caps are in good condition.	
Test header valve handles are in good condition.	
Test header valve swivel rotation is nonbinding.	
Bypass control valves are open.	
Control valves are sealed/not tampered.	
Control valves are locked/tampered.	
Control valves are properly tagged and identified.	
Flow meter control valves are closed.	
Relief valve and cone are operational.	
Relief-valve pressure appears properly adjusted.	

Notes _____

Continue on reverse if necessary.



Fire Pumps (Diesel Only) Quarterly and Semi-Annual Maintenance

This form covers a 1-year period.

Year: _____ **System:** _____
Location: _____

Y = Satisfactory N = Unsatisfactory (explain below) N/A = Not applicable

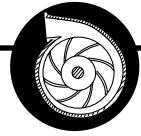
Quarterly

Date				
Inspector				
Clean strainer.				
Clean filter.				
Clean dirt leg.				
Clean crankcase breather.				
Clean water strainer of cooling system.				
Examine wire insulation for breaks or cracks.				

Semi-Annually

Date				
Inspector				
Test antifreeze level.				
Clean boxes, panels, and cabinets.				
Test all safeties and alarms for proper operation.				

Notes _____

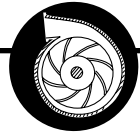


Fire Pumps Annual Maintenance

Date: _____ **Inspector:** _____ **System:** _____
Location: _____

Y = Satisfactory N = Unsatisfactory (explain below)	
Lubricate pump bearings.	
Lubricate coupling.	
Lubricate right-angle gear drive.	
Grease motor bearings.	
Replace flexible hoses and connector.	
Replace oil at 50 hours or annually.	
Replace oil filter at 50 hours or annually.	
Calibrate pressure switch settings.	
Check accuracy of pressure sensors.	
Clean pump room louvers.	
Replace circuit breakers or fuses (every 2 years or as needed).	
Remove water and foreign material from diesel fuel tank.	
Rod out the heat exchanger or cooling system.	
Fire pump controller in service.	
Jockey pump controller in service.	
Fire alarm panel "normal."	

Notes _____



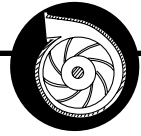
Fire Pumps Weekly Operating Tests

This form covers a 1-month period.

Year: _____ **System:** _____
Location: _____

Y = Satisfactory N = Unsatisfactory (explain on reverse) N/A = Not applicable

Date					
Inspector					
Operate fire pump for 10 minutes (30 minutes for diesel pump).					
Check packing gland tightness (slight leak at no flow).					
Record suction pressure from gauge in psi (bar).					
Record discharge pressure from gauge in psi (bar).					
Adjust gland nuts if necessary.					
Check for unusual noise or vibration.					
Check packing boxes, bearings, or pump casing for overheating.					
Record pump starting pressure.					
Observe time for motor to accelerate to full speed (diesel and steam pumps).					
For reduced-voltage or reduced-current starting, record time controller is on first step.					
Record time pump runs after starting for pumps having automatic stop feature.					
Record time for diesel engine to crank.					
Record time for diesel engine to reach running speed.					
Check oil pressure gauge, speed indicator, water and oil temperatures while engine is running.					
Check heat exchanger for cooling water flow.					
Record steam pressure for steam-operated pumps.					
Check water tank float switch.					
Check solenoids for proper operation.					
Operate speed governor (internal combustion engine only).					
Check steam trap (steam turbine only).					
Check steam relief valve (steam turbine only).					
Check controller alarms.					
Record any notes that the inspector believes to be significant. Place a number in the block and number the corresponding note on the reverse of this form.					



Fire Pumps Monthly and Semi-Annual Tests

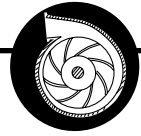
This form covers a 1-year period.

Year: _____ **System:** _____
Location: _____

Y = Satisfactory N = Unsatisfactory (explain below) N/A = Not applicable

Monthly												
Date												
Inspector												
Exercise isolating switch and circuit breaker.												
Test antifreeze to determine protection level.												
Test batteries for specific gravity or state of charge.												
Test circuit breakers and fuses for proper operation.												
Semi-Annually												
Date												
Inspector												
Operate manual starting means.												
Operate safety devices and alarms.												

Notes _____



Fire Pumps Annual Performance Tests

Date: _____ **Inspector:** _____ **System:** _____
Location: _____

Y = Satisfactory N = Unsatisfactory (explain below)

Pump manufacturer and model: _____

Type: Centrifugal Turbine

Controller manufacturer and model: _____

Rated capacity: _____ gpm (L/min)

Water supply source: _____

Rated pressure: _____ psi (bar) Rated speed: _____ rpm

Power: Electric Diesel Steam

Automatic starts performed 6 times.		Timer indicates total run time: _____ min.	
Automatic start functions properly.		Timer reset and graph paper changed?	
Automatic stop functions properly.		Test data and flow charts completed. (Attach all water-flow charts, electrical power charts, performance curves, etc.)	
Automatic start: _____ psi (bar)			
Automatic stop: _____ psi (bar)		Fire pump electrical power readings recorded at each flow condition?	
Manual starts performed 6 times.		Fire pump motor speed: _____ rpm	
Manual start functions properly.		Fire pump discharge flow: _____ gpm (L/min)	
Manual stop functions properly.		Jockey pump operational.	
Manual start: _____ psi (bar)		Jockey pump appears properly aligned.	
Manual stop: _____ psi (bar)		Jockey pump valves open.	
Remote start functions properly.		Jockey pump "turn-on": _____ psi (bar)	
Remote stop functions properly.		Jockey pump "turn-off": _____ psi (bar)	
Remote start: _____ psi (bar)			
Remote stop: _____ psi (bar)			

Notes _____

Continue on reverse if necessary.



FORM 8-K

Fire Pumps

Flow and Pressure Record

Date: _____ Inspector: _____ System: _____ Location: _____

