



Bluelight Software

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FIRE PUMP INSPECTION

Customer Address:

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Customer #: 111

Contract #: 5233

Job Status: Archived

Job Name: NFPA25_05 Sample Report

Site Address:

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Contact: Al Riggs

Site #: 352

Inspection Date: 2/12/2007

FIRE PUMP DIESEL ENGINE DRIVEN	
Floor 05 Hallway	
Are pump suction, discharge and by-pass control valves fully open (8.2.2)?	Yes
Are pump suction, discharge and by-pass valves equipped with either: a tamper switch connected to an alarm system, a lock and chain or a seal (8.1.1)?	Yes
Visually inspect - Is fire pump suction and discharge piping in good condition and not leaking (8.2.2)?	Yes
Record pressure (psi) shown on the Suction side pressure gauge.	78
Record pressure (psi) shown on the Discharge side pressure gauge.	78

Visually Inspect - Is suction reservoir full (8.2.2)?	Yes
Visually Inspect - Is fuel tank at least two-thirds full, and strainer, filter & dirt leg cleaned, and system checked for water entrapment (8.2.2)?	Yes
Visually Inspect - Is controller selector switch in AUTO position (8.2.2)?	Yes
Visually Inspect - Are the batteries (2) voltage readings normal (8.2.2)?	Yes
Visually Inspect - Are battery bank A charging current readings normal (8.2.2)?	Yes
Visually Inspect - Are battery bank B charging current readings normal (8.2.2)?	Yes
Visually Inspect - Are batteries (2) pilot lights ON or batteries failure (2) pilot lights OFF (8.2.2)?	Yes
Visually Inspect - Are all alarm pilot lights OFF (8.2.2)?	Yes
Record engine running time meter reading (hours) (8.2.2)?	2
Are the crankcase oil level and cooling water level normal and water-jacket heater operating and water strainer cleaned (8.2.2)?	Yes
Are electrolyte level in batteries normal and terminals free from corrosion (8.2.2)?	Yes
Did the pump start by reducing pressure in the pump controller pressure sensing line (8.3.2.2)?	Yes
Record the pressure sensing line pressure (psi) when the pump started (8.3.2.2).	78
Observe and record time (sec) for engine to crank (8.3.2.2).	5
Observe and record time (sec) for engine to reach running speed (8.3.2.2).	5
Visually Inspect - With pump running is there a slight discharge of water from both pump packing glands (8.3.2.2) ?	Yes
Is pump free from any unusual noise or vibration when running (8.3.2.2) ?	Yes
Did the packing boxes, bearing, or pump casing maintain an acceptable temperature during the test (8.3.2.2) ?	Yes
Were engine oil pressure, speed indicator, water and oil temperatures indicator readings normal during test (8.3.2.2)?	Yes
Was cooling water flowing from the heat exchanger during test (8.3.2.2)?	Yes
Is the exhaust system in good condition and not leaking, and was condensate trap drained (8.3.2.2)?	Yes
Was pump operated and tested for 30 minutes (8.3.1.3)?	Yes
Under churn (no flow) test condition does circulation relief valve operate and discharge water (8.3.3.2)?	Yes
Under churn test condition does pressure relief valve operate properly (8.3.3.2)?	Yes
Were churn test conditions maintained for 30 minutes (8.3.3.2)?	Yes
Did all fire pump controller alarm conditions and supervisory sensors operate when tested through simulation (8.3.3.3)?	Yes
Did everything appear normal during the test (8.3.3.2)?	Yes
Is pump controller pressure sensing within calibration (8.3.3.2)?	Yes
Were pump and engine maintenance performed in accordance with the manufacturer's recommendations and schedule (8.5.1)?	Yes
Test Gauges on valve by comparison to a calibrated gauge to within 3% of full scale. Is error less than 3% of full scale or have gauges been replaced (5.3.2)?	Yes

FIRE PUMP ELECTRIC MOTOR DRIVEN

Floor 05 Hallway

Are pump suction, discharge and by-pass control valves fully open (8.2.2)?	Yes
Are pump suction, discharge and by-pass valves equipped with either: a tamper switch connected to an alarm system, a lock and chain or a seal (8.1.1)?	Yes
Visually inspect - Is fire pump suction and discharge piping in good condition and not leaking (8.2.2)?	No
Record pressure (psi) shown on the Suction side pressure gauge.	78
Record pressure (psi) shown on the Discharge side pressure gauge.	78
Visually Inspect - Is suction reservoir full (8.2.2)?	Yes
Visually Inspect - Is controller pilot light (power on) illuminated (8.2.2)?	Yes
Visually Inspect - Is the reverse phase alarm pilot light off, or normal phase rotation pilot light on (8.2.2)?	Yes
Did the pump start by reducing pressure in the pump controller pressure sensing line (8.3.2.2)?	Yes
Record the pressure sensing line pressure (psi) when the pump started (8.3.2.2)	78
Observe and record time (sec) for driver to accelerate to full speed (8.3.2.2).	5
Visually Inspect - With pump running is there a slight discharge of water from both pump packing glands (8.3.2.2)?	Yes
Is the pump free from any unusual noise or vibration when running (8.3.2.2)?	Yes
Did the packing boxes, bearing, or pump casing maintain an acceptable temperature during the test (8.3.2)?	Yes
Were churn test conditions maintained for 10 minutes (8.3.1.2)?	Yes
Under churn (no flow) test condition does circulation relief valve operate and discharge water (8.3.3.2)?	Yes
Under churn test condition does pressure relief valve operate properly (8.3.3.2)?	Yes
Were churn test conditions maintained for 30 minutes (8.3.3.2)?	Yes
Did all fire pump controller alarm conditions and supervisory sensors operate when tested through simulation (8.3.3.5)?	Yes
Did everything appear normal during the test (8.3.3.2)?	Yes
Is pump controller pressure sensing within calibration (8.3.3.2)?	Yes
Were pump and motor maintenance performed in accordance with the manufacturer's recommendations and schedule (8.5.1)?	Yes
Test Gauges on valve by comparison to a calibrated gauge to within 3% of full scale. Is error less than 3% of full scale or have gauges been replaced (5.3.2)?	Yes

FIRE PUMP STEAM TURBINE DRIVEN

Floor 05 Hallway

Are pump suction, discharge and by-pass control valves fully open (8.2.2)? Yes

Are pump suction, discharge and by-pass valves equipped with either: a tamper switch connected to an alarm system, a lock and chain or a seal (8.1.1)? Yes

Visually inspect - Is fire pump suction and discharge piping in good condition and not leaking (8.2.2)? Yes

Record pressure (psi) shown on the Suction side pressure gauge. 78

Record pressure (psi) shown on the Discharge side pressure gauge. 78

Visually Inspect - Is suction reservoir full (8.2.2)? Yes

Visually Inspect - Is steam pressure gauge reading normal (8.2.2)? Yes

Record steam pressure gauge reading (psi) (8.3.2.2). 78

Observe and record time (sec) for driver to accelerate to full speed (8.3.2.2). 5

Visually Inspect - With pump running is there a slight discharge of water from both pump packing glands (8.3.2.2)? Yes

Is the pump free from any unusual noise or vibration when running (8.3.2.2)? Yes

Did the packing boxes, bearing, or pump casing maintain an acceptable temperature during the test (8.3.2.2)? Yes

Under churn (no flow) test condition does circulation relief valve operate and discharge water (8.3.3.2)? Yes

Under churn test condition does pressure relief valve operate properly (8.3.3.2)? Yes

Was churn test conditions maintained for 30 minutes (8.3.3.2)? Yes

Did all fire pump controller alarm conditions and supervisory sensors operate when tested through simulation (8.3.3.5)? Yes

Did everything appear normal during the test (8.3.3.2)? Yes

Is pump controller pressure sensing within calibration (8.3.3.2)? Yes

Was pump and driver maintenance performed in accordance with the manufacturer's recommendations and schedule (8.5.1)? Yes

Test Gauges on valve by comparison to a calibrated gauge to within 3% of full scale. Is error less than 3% of full scale or have gauges been replaced (5.3.2)? Yes

FIRE PUMP HOUSE

Floor 05 Hallway

Is the temperature of the pump house maintained at 40° F at all times (8.2.2)? Yes

Are the ventilating louvers free to operate (8.2.2)? Yes

FIRE PUMP HOUSE DIESEL ENGINE W/O HEATER

Floor 05 Hallway

Is the temperature of the pump house maintained at 70° F at all times (8.2.2)? Yes

Are the ventilating louvers free to operate (8.2.2)? Yes

LOW PRESSURE SUCTION CONTROL DEVICE

Floor 05 Hallway

During fire pump flow at rated conditions was low suction pressure simulated (NFPA20)?	Yes
During low suction pressure simulation did throttling action fail to produce any abnormality (cavitation, pressure surges, failure to throttle) (NFPA20)?	Yes
After ending simulation did throttling action fail to produce any abnormality as pump returned to rated flow (cavitation, pressure surges, failure to throttle) (NFPA20)?	Yes
Was transfer switch and alternative power source tested and exercised in accordance with NFPA 110 (8.3.4.1 and 8.3.4.2)?	Yes

AUTOMATIC TRANSFER SWITCH FIRE PUMP ELECTRIC

Floor 05 Hallway

During fire pump test at peak power output conditions was power failure simulated (8.3.3.4)	Yes
Upon power failure simulation did switch transfer to alternate power source (8.3.3.4)?	Yes
After ending simulation did switch transfer back to normal power source (8.3.3.4)?	Yes
Was device maintenance performed in accordance with the manufacturer's recommendations and schedule (8.5.1)?	Yes
Was maintenance performed in accordance with the manufacturer's recommendations and schedule (8.5.1)?	Yes

CONTROLLER AUTOMATIC STOP FIRE PUMP

Floor 05 Hallway

Record the time (sec) the pump runs after starting (8.3.2.2).	5
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RIGHT ANGLE GEAR DRIVE

Floor 05 Hallway

Is oil level normal (8.2.2)?	Yes
During weekly pump test was the right angle gear drive free from any abnormality (8.5.1)?	Yes
Was right angle gear drive maintenance performed in accordance with manufacturer's recommendations and schedule (8.5.1)?	Yes

ELECTRIC MOTOR VERTICAL SIGHT GLASS

Floor 05 Hallway

Is oil level normal (8.2.2)?	Yes
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BYPASS FLOW METER CLOSED LOOP

Floor 05 Hallway

Was flow meter calibrated and maintenance performed in accordance with the manufacturer's recommendations and schedule (8.5.1)?	Yes
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CHECK VALVE

Floor 05 Hallway

Internally inspect. Does check valve operate properly, move freely and is it in good condition (12.4.2)?

Yes

FIRE DEPARTMENT CONNECTION

Floor 05 Hallway

Is the fire department connection visible and accessible (12.7.1)?

Yes

Are the fire department connection couplings and swivels free from damage and do they rotate smoothly (12.7.1)?

Yes

Are the fire department connection caps and plugs in place and free from damage (12.7.1)?

Yes

Are the fire department connection gaskets in place and free of damage (12.7.1)?

Yes

Are the fire department connection identification signs in place and free of damage (12.7.1)?

Yes

Visually Inspect the fire department connection check valve. Is check valve clapper free from leakage (12.7.1)?

Yes

Visually Inspect. Is the automatic drain valve on fire department connection piping operating properly (12.7.1)?

Yes

Has an internal inspection and maintenance of check valve been completed within the last five years (12.4.2.1)?

Yes

FIRE PUMP CIRCULATION RELIEF VALVE

Floor 05 Hallway

Verify - Does sufficient water flow through valve with pump operating at shutoff pressure to prevent pump from overheating (8.3.3.2)?

Yes

Visually inspect - Is the pump circulation relief valve in good condition and not leaking (8.1.1)?

Yes

Under test condition does pump circulation relief valve close in accordance with manufacturer's specifications (8.3.3.3.1)?

Yes

Was relief valve maintenance performed in accordance with the manufacturer's recommendations and schedule (8.5.1)?

Yes

FIRE PUMP PRESSURE RELIEF VALVE

Floor 05 Hallway

Is pressure downstream of pump pressure relief valve in accordance with sprinkler system components pressure rating (8.3.3.2)?

Yes

Visually inspect - Is pump pressure relief valve in good condition and not leaking (8.1.1)?

Yes

Under test condition does pump pressure relief valve operate and relieve at appropriate pressure (8.3.3.2)?

Yes

Under test condition does pressure relief valve close at appropriate pressure (8.3.3.2)?

Yes

Did everything appear normal during the test (8.3.3.2)?

Yes

Was relief valve maintenance performed in accordance with the manufacturer's recommendations and schedule (8.5.1)?

Yes

SPRINKLER SYSTEM PRESSURE REGULATING VALVE

Floor 05 Hallway

Is pressure downstream of pressure regulating valve in accordance with sprinkler system design criteria (12.5.1.1)?	Yes
Visually inspect. Is pressure regulating valve in good condition, not leaking and with handwheel installed (12.5.1.1)?	Yes
Record the pressure (psi) shown on Inlet side pressure gauge.	78
Record the pressure (psi) shown on Outlet side pressure gauge.	78
Was a partial test conducted which was adequate to move the valve clapper from its seat (12.5.1.3)?	Yes
Under test condition does pressure regulating valve operate and maintain pressure at design flow (12.5.1.2)?	Yes
Under test condition does pressure regulating valve close and maintain appropriate pressure under no flow conditions (12.5.1.2)?	Yes
Did everything appear normal during the test (12.5.1.2)?	Yes
Were all necessary regulating valve adjustments performed in accordance with manufacturer's recommendations and schedule (12.5.1.2.1)?	Yes

BACKFLOW PREVENTION ASSEMBLIES

Floor 05 Hallway

Inspect - Are OS&Y isolation valves open (12.6.1.1)?	Yes
Inspect - Is the differential-sensing valve relief port not continuously discharging water (12.6.1.2)?	Yes
Did backflow pass forward flow test at the designed flow rate including the hose stream demand where hydrants or hose stations are downstream of backflow device (12.6.2.1 and 12.6.2.2)?	Yes
Was backflow performance test, as required by AHJ, satisfactorily conducted at completion of forward flow test (12.6.2.1)?	Yes
Have rubber parts been replaced in accordance with the frequency required by the AHJ and the manufacturer's instructions (12.6.3.2)?	Yes

SUPERVISORY AIR PRESSURE SWITCH

Floor 05 Hallway

Did the switch pass a visual inspection conducted in accordance with manufacturer's requirements?	Yes
Did the switch pass operational tests when pressure is increased or decreased 10 psi from the required pressure setting?	Yes

SUPERVISORY TAMPER SWITCH

Floor 05 Hallway

Did the switch pass a visual inspection conducted in accordance with manufacturer's requirements? (12.3.3.5.1)	Yes
Did the switch pass operational tests conducted in accordance with manufacturer's requirements? (12.3.3.5.1)	Yes

WATER PRESSURE SWITCH

Floor 05 Hallway

Did the switch pass a visual inspection conducted in accordance with manufacturer's requirements? Yes

Did the switch pass operational tests when pressure is increased? Yes

JOCKEY PUMP AND CONTROLLER

Floor 05 Hallway

Has the jockey pump and its controller been maintained in accordance with manufacturer's requirements? (8.5.1). Yes

Test Gauges on valve by comparison to a calibrated gauge to within 3% of full scale. Is error less than 3% of full scale or have gauges been replaced (5.3.2)? Yes

OMEGA SPRINKLERS

Is this property free of Omega Sprinklers? Yes

INTERNAL PIPE INVESTIGATION

Internal pipe exam – Was system free of evidence of foreign organic and inorganic material that needs to be removed for proper operation of sprinkler system? Internal exam should check each of the following points: 1) system valve; 2) riser; 3) cross main; and 4) branch line. Note: alternate nondestructive examination methods shall be accepted. Yes

Internally inspect – Is piping in Dry Pipe or Preaction sprinkler system that protects or passes through freezers or cold storage rooms free from ice obstructions at the point where the piping enters the refrigerated area? Note: alternate nondestructive examination methods shall be accepted. Yes

BUILDING OWNER/REPRESENTATIVE

Is the building currently occupied? Yes

Has the building occupancy and hazard of contents remained the same since last inspection? Yes

Are all fire protection systems in service? Yes

Has the system(s) remained in service without modification since the last inspection? Yes

Was the system free of actuations or alarms since last inspection? Yes

9/29/2006

Customer: Jim Beam

9/29/2006

Inspection Technician: Sam Adams