

Report of Inspection, Testing & Maintenance of Fire Pump Assemblies

Report Of Inspection Of Water Based Fire Protection Systems



Inspecting Agency: Urban Fire Protection, Inc. Inspector: Mark Evans Inspection Contract # 9605DP
 Date of This Inspection: 5-16-15 Completed by:
 Occupant Business Name: VAMC
 Street Address: 601 Highway 6 West
 City: Iowa City State: IA Zip:
 Phone: 688-3529 or 631-3741 Fax:
 Contact Person Name: Stacy or Mark
 Position: Authority To Approve Work?

yes	n/a	no
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 Name of Property Owner:
 Property Owner's Address:
 City: State: Zip:
 Phone: Fax:
 Responsible Party name: Position:
 Name of Supervisory Alarm Company: Phone:
 Date of Last Inspection: 4/26/14 Prior Inspector's Name: Mark Evans

Owner's Section

1. Is the building occupied?	yes	no
2. Has the occupancy classification and hazard of contents remained the same since the last inspection?	yes	no
3. Are all water based fire protection systems in service?	yes	no
4. Has the system remained in service without modifications since the last inspection?	yes	no
5. Was the system free of actuation of devices or alarms since the last inspection?	yes	no

X MARK BEDELL
Owner or representative (print name)

X Mark E Bedell
Signature and Date

Comments:

The owner and/or designated representative acknowledges the responsibility of the operating condition of the component parts at the time of this inspection. It is agreed that the inspection service provided by the contractor as prescribed herein is limited to performing a visual inspection and/or routine testing, and any investigation or unscheduled testing, modification, maintenance, repair, etc., of the component parts is not included as part of the inspection work performed. It is further understood that all information contained herein is provided to the best of the knowledge of the party providing such information.

OWNER/DESIGNATED REPRESENTATIVE: X Mark E Bedell

INSPECTOR'S SIGNATURE:

Mark Evans, FPMI-094

DATE:

DATE:

Vrban Fire Protection, Inc.

Report Of Inspection, Testing & Maintenance Of Dry Pipe Fire Sprinkler Systems

Inspecting Firm: Vrban Fire Protection, Inc.

Inspection Contract #: 9605DP

Name of Inspected Property: VAMC - front entrance

Inspector Name: Mark Evans

Date: 5/28/15

Inspection Frequency:

☐

Monthly

☐

Quarterly

☒

Annually

☐

Other

INITIAL INSPECTION OF DRY SPRINKLER RISER ASSEMBLY

	Y	N/A	N
1 System in service on inspection	Y		
2 Supply (water) gauge pressure	Y		
3 System (air) gauge pressure		105	psi
4 Quick opening device gauge pressure		44	psi
5 Gauge near compressor			psi
6 Gauge pressures are normal		95	psi
7 Control valves in normal open or closed position	Y		
8 Control valves properly locked or <u>supervised</u>	X		
9 Control valves accessible	Y		
10 Control valves provided with appropriate wrenches	Y		
11 Control valves free from external leaks		X	
12 Control valves identification signs in place	Y		
13 System control valve sign indicates area served	X		
14 Backflow prevention assembly valves are locked or <u>electrically supervised in open position</u>	Y		
15 Reduced pressure backflow prevention assembly not in continuous discharge	Y		
16 Dry pipe valve free of physical damage		X	
17 Dry pipe valve trim valves are in appropriate open or closed position	X		
18 Dry pipe valve intermediate chamber not leaking	Y		

FIRE DEPARTMENT CONNECTION

	Y	N/A	N
19 System in service on inspection	X		
20 Hydraulic nameplate attached and legible	X		
21 Alarm device free from physical damage	X		
22 FDC is visible	X		
23 FDC is accessible	X		
24 FDC swivels/couplings undamaged/rotate smoothly	X		
25 FDC plugs/caps in place/undamaged	X		
26 FDC gaskets in place and in good condition	X		
27 FDC identification sign in place	X		
28 FDC check valve not leaking	X		
29 FDC automatic drain valve in place and operating properly	X		
30 FDC clapper is in place and operating properly	X		
31 FDC interior inspected where caps missing		X	
32 FDC obstructions removed as necessary		X	
33 Pressure reducing control valves (PRV) indicate open		Y	
34 PRV not leaking		X	
35 PRV maintaining downstream pressure per design		X	
36 PRV in good condition		X	
37 PRV hand wheel installed and not broken		X	
38 Alarm panel clear	X		

Report of Inspection, Testing & Maintenance of Dry Pipe Fire Sprinkler Systems...continued

Inspecting Firm: **Vrban Fire Protection, Inc.**

Inspection Contract #: **9605DP**

Name of Inspected Property: **VAMC - front entrance**

Inspector Name: **Mark Evans**

Inspection Frequency:

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Monthly

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Quarterly

☒

Annually

☐

Other

Date: **5-22-15**

ANNUAL - ALARM, LOW AIR, DRAIN & TRIP TESTS

	Y	N/A	N
39 Water flow alarm tested and is operational			
40 Test conducted with inspector's test connection	X		
41 Test conducted with bypass connection (freezing weather)	X		
42 Test conducted per manufacturer's instructions		X	
43 Alarm devices appear free of physical damage		X	
44 Supervisory switch initiates distinct signal during 1st two hand wheel revolutions or before valve stem moved one-fifth from normal position (semi-annual)	X		
45 Signal restored only when valve returned to normal position (semi-annual)	X		
46 One main drain test conducted downstream from backflow preventer	X		
47 One main drain test conducted downstream from pressure reducing valve	X		
48 Priming water level tested		X	
49 Quick opening device(s) (QOD) tested		X	
50 Low pressure alarm tested 34 at psi		X	
	X		

SPRINKLERS - PIPING - HANGERS

	Y	N/A	N
51 System in service on inspection	X		
52 Hangers and seismic bracing appears undamaged and tightly attached	X		
53 Piping appears free of mechanical damage	X		
54 Piping appears free of leakage	X		
55 Piping appears free of corrosion	X		
56 Piping appears properly aligned	X		
57 Piping appears free of external loading	X		
58 Sprinklers appear free of leakage	X		
59 Sprinklers appear free of corrosion	X		
60 Sprinklers appear free of foreign materials	X		
61 Sprinklers appear free of paint	X		
62 Sprinklers appear free of physical damage	X		
63 Sprinklers appear properly oriented	X		
64 Sprinkler spray patterns appear free of unacceptable obstructions	X		
65 Glass bulbs appear full of liquid	X		
66 Spare sprinklers are of proper number (at least 6), type and temperature rating	X		
67 Spare sprinklers stored where temperature maximum is 100° F	X		
68 Wrench available for each type of sprinkler	X		
69 Dry pipe valve in good condition internally (check at trip test)	X		
PRIOR TO FREEZING WEATHER	X		
70 Building is secure such as not to expose piping to freezing conditions			
71 Adequate heat is provided maintaining temperature at 40° F or higher - Vrban Fire Protection, Inc. not responsible	X		

ANNUAL MAINTENANCE FOR DRY PIPE SPRINKLER SYSTEM

	Y	N/A	N
72 System in service before conducting maintenance	X		
73 Pertinent parties notified before conducting maintenance	X		
74 Valve completely closed and reopened	X		
75 Leaks resulting in air pressure losses greater than 10 psi/week located and repaired	X		
76 Dry pipe valve interior thoroughly cleaned and parts replaced/repairs as necessary		X	
77 Grease or other sealing materials not applied to seating surfaces of dry pipe valve	X		
78 Dry pipe system low points drained after operation and before onset of freezing weather conditions	X		

Inspection Contract #: 9605DP

Name of Inspected Property: **VAMC - front entrance**

Inspector Name: Mark Evans

Date: 5/22/15

Inspection Frequency:

☐ Monthly

Quarterly

☒ Annually☐ Other

ANNUAL TESTING FOR DRY PIPE SPRINKLER SYSTEMS

[illegible]

TRIP TEST TABLE

TRIP TEST TABLE																		
Dry System #		Serving: <u>Vestibule</u>			Drain Test: Static <u>165</u>		Residual <u>135</u>											
Dry Pipe Operating Test	Dry Valve		Size: <u>2.5</u> Year: <u>2010</u>		QOD		Year											
	Make		Model		Serial #		Make		Model		Serial #							
	<u>TYCO</u>		<u>DPV-7</u>															
			Time to Trip Thru Test Pipe		Water Pressure		Air Pressure		Trip Point Air Pressure		Time Water Reached Test Outlet		Alarm Operated					
			Min		Sec		PSI		PSI		Min		Sec		Yes		No	
	Without QOD				<u>:03</u>		<u>165</u>		<u>44</u>		<u>35</u>				<u>:06</u>		<u>X</u>	
With QOD																		

Report of Inspection, Testing & Maintenance of Fire Pump Assemblies

ALL QUESTIONS ARE TO BE ANSWERED AND ALL BLANKS TO BE FILLED
(Weekly inspection tasks are NOT included in this report)



Inspecting Firm: Urban Fire Protection, Inc.

Inspection Contract# 9605DP

Name of Inspected Property: VAMC

Inspector Name: Mark Evans

Date: 5-16-15

Inspection Frequency: ☐ Monthly☐ Quarterly☒ Annually☐ Other

*Items necessary only in the absence of manufacturer's recommendations

Monthly Inspection, Testing and Maintenance for Fire Pump Assemblies

	Y	N/A	N		Y	N/A	N
A.1.0 System in service before conducting tasks	X			A.4.2 *Battery case exterior cleaned and dried		X	
A.1.1 Pertinent parties notified before conducting tasks	X			A.4.3 *Battery case changed as necessary	X		
A.2.0 Control valves in normal open or closed position	X			A.4.4 *Battery system tested for specific gravity or state of charge	X		
A.2.1 Control valves properly locked or supervised	X			A.4.5 *Battery system charger and charge rate operational, normal, and equalized	X		
A.2.2 Control valves accessible	X			A.4.6 *Circuit breakers or fuses checked		X	
A.2.3 Control valves provided with appropriate wrenches		X		A.5.0 *Isolating switch exercised		X	
A.2.4 Control valves free from external leaks	X			A.5.1 *Circuit breaker exercised		X	
A.2.5 Control valve identification signs in place	X			A.6.0 Fire pump assembly maintenance performed in accordance with mfg. recommendations			
A.2.6 Control valve sign indicates area served	X			A.7.0 Pertinent parties notified of completion of tasks	X		
A.3.0 Backflow prevention assembly valves are locked or electrically supervised in open position	X			A.8.0 ALARM PANEL CLEAR	X		
A.3.1 Reduced pressure backflow prevention assembly not in continuous discharge		X		A.9.0 SYSTEM RETURNED TO SERVICE	X		
A.4.0 *Battery case visually inspected	X			A.10.0 COMMENTS:			
A.4.1 *Battery case corrosion removed		X					

Quarterly Inspection for Fire Pump Assemblies

B.1.0 System in service on inspection	X		
B.2.0 FDC is visible	X		
B.2.1 FDC is accessible	X		
B.2.2 FDC swivels/couplings undamaged/rotate smoothly	X		
B.2.3 FDC plugs/caps in place/undamaged	X		
B.2.4 FDC gaskets in place and in good condition	X		
B.2.5 FDC identification sign in place	X		
B.2.6 FDC check valve not leaking	X		
B.2.7 FDC automatic drain valve in place and operating properly	X		
B.2.8 FDC clapper is in place and operating properly	X		
B.2.9 FDC interior inspected where caps missing	X		
B.2.10 FDC obstructions removed as necessary	X		
B.3.0 Pressure control valve (PRV) not leaking	X		
B.3.1 Pressure control valve maintaining downstream pressure per design	X		
B.3.2 Pressure control valve in good condition			
B.4.0 *Crankcase breather inspected and in good condition	X		
B.4.1 *Engine exhaust system insulation in place	X		
B.4.2 *Engine exhaust system fire hazard safeguards in place	X		
B.4.3 *Battery system terminals clean and tight	X		
B.4.4 *Electrical wiring subject to movement free from chafing		X	
B.5.0 Fire pump assembly maintenance performed in accordance with mfg. recommendations	X		
B.6.0 ALARM PANEL CLEAR	X		
B.7.0 COMMENTS:			

Quarterly Testing and Maintenance for Fire Pump Assemblies

C.1.0 System in service before conducting tasks	X		
C.1.1 Pertinent parties notified before conducting tasks	X		
C.2.0 Adequate drainage provided before flow testing	X		
C.2.1 One main drain test conducted downstream from backflow preventer	X		
C.2.2 One main drain test conducted downstream from pressure reducing valve		X	
C.2.2 Supply water gauge reading before flow (static)	90	psi	
C.2.3 Gauge reading during stable flow (residual)	80	psi	
C.2.4 Time for supply pressure to return to normal	05	sec	
C.3.0 *Strainer, filter, or dirt leg (or combination thereof) cleaned			
C.3.1 *Crankcase breather cleaned (as necessary)	X		
C.3.2 *Crankcase breather changed (as necessary)	X		
C.3.3 *Water strainer cleaned	X		
C.4.0 Fire pump assembly maintenance performed in accordance with mfg. recommendations	X		
C.5.0 Pertinent parties notified of task conclusion	X		
C.6.0 ALARM PANEL CLEAR	X		
C.7.0 SYSTEM RETURNED TO SERVICE	X		
C.8.0 COMMENTS:			

INSPECTOR'S INITIAL

(All "NO" answers to be explained.)

OWNER/DESIGNATED REP. INITIAL

DATE

(AFSA Form 110A)

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Report of Inspection, Testing & Maintenance of Fire Pump Assemblies...continued

Inspecting Firm: Vrbn Fire Protection, Inc.

Inspection Contract# 9605DP

Name of Inspected Property: VAMC

Inspector Name: Mark Evans

Date: 5-16-15

Inspection Frequency: ☐ Monthly☐ Quarterly☒ Annually☐ Other

*Items necessary only in the absence of manufacturer's recommendations

Semi-Annual Inspection, Testing and Maintenance for Fire Pump Assemblies

	Y	N/A	N
D.1.0 System in service before conducting tasks	X		
D.1.1 Pertinent parties notified before conducting tasks	X		
D.2.0 Control valve supervisory switches initiate distinct signal during first two hand wheel revolutions or before valve stem moved one-fifth from normal position	X		
D.2.1 Signal restored only when valve returned to normal position	X		
D.3.0 Adequate drainage provided before flow testing	X		
D.3.1 Main drain test conducted	X		
D.3.2 Supply water gauge reading before flow (static)	90	psi	
D.3.3 Gauge reading during stable flow (residual)	80	psi	
D.3.4 Time for supply pressure to return to normal	:05	sec	
D.4.0 *Flexible exhaust section inspected and in good condition	X		

	Y	N/A	N
D.4.1 *Manual starting means of electrically driven pumps operated	X		
D.4.2 *Antifreeze protection level tested and adjusted as necessary	X		
D.4.3 *Electrical system safeties and alarms operated		X	
D.4.4 *Electrical system boxes, panels, and cabinets cleaned		X	
D.5.0 Fire pump assembly maintenance performed in accordance with mfg. recommendations	X		
D.6.0 Pertinent parties notified of task conclusion	X		
D.7.0 ALARM PANEL CLEAR	X		
D.8.0 SYSTEM RETURNED TO SERVICE	X		
D.9.0 COMMENTS:			

Annual Inspection for Fire Pump Assemblies

	Y	N/A	N
E.1.0 System in service on inspection	X		
E.2.0 Hangers and seismic bracing appear undamaged and tightly attached	X		
E.3.0 Piping appears free of mechanical damage	X		
E.3.1 Piping appears free of leakage	X		
E.3.2 Piping appears free of corrosion	X		
E.3.3 Piping appears properly aligned	X		
E.3.4 Piping appears free of external loading	X		
E.4.0 Building is secure such as not to expose piping to freezing conditions (prior to freezing weather)	X		
E.4.1 Adequate heat is provided maintaining temperatures at 40°F or higher (prior to freezing weather)	X		
E.5.0 *Pump shaft end play within specified tolerances	X		
E.5.1 *Pressure gauge and sensor accuracy verified to be within 5%	X		
E.5.2 *Pump coupling alignment within specified tolerances	X		
E.5.3 *Electrical connections tightened as necessary		X	
E.5.4 *Mechanical moving parts lubrication verified (excluding starters and relays)	X		
E.5.5 *Pressure switch setting calibration verified	X		
E.5.6 *Fuel tank vents and overflow piping free from obstructions	X		
E.5.7 *Fuel piping in good condition	X		
E.5.8 *Combustion air ductwork and louvers in good condition	X		
E.5.9 *Exhaust system hangers and supports in place and in good condition	X		
E.5.10 *Electrical control and power wiring connections checked for tightness	X		
E.6.0 Fire pump assembly maintenance performed in accordance with mfg. recommendations	X		
E.7.0 ALARM PANEL CLEAR	X		
E.8.0 COMMENTS:			

Annual Maintenance for Fire Pump Assemblies

	Y	N/A	N
F.1.0 System in service before conducting maintenance	X		
F.2.0 Pertinent parties notified before conducting maintenance	X		
F.3.0 Operating stems of OS&Y (including backflow) valves lubricated	X		
F.3.1 Valve completely closed and reopened	X		
F.4.0 Adequate drainage provided before flow testing	X		
F.4.1 Main drain test conducted	X		
F.4.2 Supply water gauge reading before flow (static)	90	psi	
F.4.3 Gauge reading during stable flow (residual)	80	psi	
F.4.4 Time for supply pressure to return to normal	:01	sec	
F.5.0 Fire pump assembly maintenance performed in accordance with mfg. recommendations	X		
F.5.1 *Pump bearing lubricated	X		
F.5.2 *Gauges recalibrated or changed (when 5% or more out of calibration)	X		
F.5.3 *Wet pit suction screens checked (cleaned as necessary) after every operation		X	
F.5.4 *Mechanical transmission coupling lubricated	X		
F.5.5 *Mechanical transmission right-angle gear drive lubricated	X		
F.5.6 *Electric drive motor bearings lubricated		X	
F.5.7 *Fuel tank voided of water and foreign material	X		
F.5.8 *Diesel engine lubrication system oil and filter changed (or 50 hrs whichever comes first)	X		
F.5.9 *Diesel engine cooling system antifreeze changed	X		
F.5.10 *Diesel engine cooling system heat exchanger rodged out		X	
F.5.11 *Electrical system circuit breakers or fuses changed (every 2 years)	X		
F.6.0 Pertinent parties notified after conclusion of maintenance	X		
F.7.0 ALARM PANEL CLEAR	X		
F.8.0 SYSTEM RETURNED TO SERVICE	X		
F.9.0 COMMENTS:			

INSPECTOR'S INITIAL _____

(All "NO" answers to be explained.)

OWNER/DESIGNATED REP. INITIAL _____

DATE _____

(AFSA Form 110A)

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Report of Inspection, Testing & Maintenance of Fire Pump Assemblies...continued

Inspecting Firm: Urban Fire Protection, Inc.

Inspection Contract# 9605DP

Name of Inspected Property: VAMC

Inspector Name: Mark Evans

Date: 5-16-15

Inspection Frequency: ☐ Monthly☐ Quarterly☒ Annually☐ Other

*Items necessary only in the absence of manufacturer's recommendations

Annual Testing for Fire Pump Assemblies

	Y	N/A	N
G.1.0 System in service before testing	X		
G.1.1 Pertinent parties notified before testing	X		
G.1.2 Adequate drainage provided before flow testing	X		
G.2.0 Main drain test conducted	X		
G.2.1 Supply water gauge reading before flow (static)	90	psi	
G.2.2 Gauge reading during stable flow (residual)	80	psi	
G.2.3 Time for supply pressure to return to normal	:05	sec	
G.3.0 Control valves (including backflow and PIVs) operated through full range and returned to normal position	X		
G.3.1 PIVs opened until spring or torsion felt in rod	X		
G.3.2 PIVs and OS&Ys backed 1/4 turn from full open	X		
G.3.3 Main drain test conducted	Y		

	Y	N/A	N
G.5.6 Pump suction and discharge pressures and flow measurements at each hose stream used to determine total pump output where hose streams used in testing (must be conducted every 3 years at minimum)	X		
G.5.7 Pump suction and discharge pressures and flowmeter measurements used to determine total pump output where flowmeter used in testing (not to exceed 2 consecutive annual tests)		X	
G.5.8 Flow meter adjusted immediately prior to testing in accordance with mfg. inst.		X	
G.5.9 Test results using flow meter consistent with previous annual test results (if "no" - complete flow test using hose streams OR calibrate flow meter)		X	

WHILE PUMP IS RUNNING:

G.3.4 Supply water gauge reading before flow (static)	90	psi	
G.3.5 Gauge reading during stable flow (residual)	80	psi	
G.3.6 Time for supply pressure to return to normal	:05	sec	
G.4.0 Backflow prevention assembly forward flow test conducted		X	
G.4.1 System demand flow was achieved through the device		X	
G.4.2 Forward flow test conducted at maximum rate possible (only where connections do not permit full flow test)		X	
G.4.3 Forward flow test conducted without measuring flow (device <= 2" and outlet sized to flow system demand)		Y	
G.4.4 Backflow prevention assembly internal inspection conducted (where shortages last more than 1 year and rationing enforced by AHJ)		X	
G.4.5 Forward flow test satisfied by annual fire pump flow test	X		
G.4.6 Backflow prevention assembly performance test conducted as required by the AHJ	Y		

FLOW TEST:

G.5.0 Care taken to prevent water damage by verifying adequate drainage	X		
G.5.1 Flow test conducted under minimum, rated, and peak fire pump flows	X		
G.5.2 Flow test conducted by controlling quantity of water discharged through test devices	X		
G.5.3 Fire pump operated at maximum allowable discharge (where available suction supplies do not allow flowing of 150 percent of rated pump capacity)		Y	
G.5.4 Fire pump suction supply provided required flow at 0 psi or higher gauge pressure at pump suction flange (except installations where NFPA 20 permitted negative suction gauge pressures)	X		
G.5.5 Electric fire pump driver did not overload beyond rating (including service factor allowance) while delivering necessary brake horsepower		Y	

G.6.0 At churn, circulation relief valve checked for operation and water discharge		X	
G.6.1 At churn, pressure relief valve checked for proper operation		X	
G.6.2 At churn, pressure control valve checked for proper operation		X	
G.6.3 At churn, test continued for minimum of 1/2 hour	X		
G.6.4 At each flow condition, electric motor voltage and current in all lines recorded (see appropriate section on page 5)		X	
G.6.5 At each flow condition, pump speed recorded (see appropriate section on page 5)	X		
G.6.6 At each flow condition, simultaneous readings of pump suction and discharge pressures and pump discharge flow recorded (see appropriate section on page 5)	X		
G.6.7 Pressure relief valve closely observed during each flow condition		X	
G.6.8 Pressure control valve closely observed during each flow condition		X	
G.6.9 Pressure relief valve functioning properly (pump discharge pressure did not exceed normal operating pressure rating of system components)		X	
G.6.10 Pressure control valve functioning properly (system not exposed to pressures higher than rating)		X	
G.6.11 Pressure relief valve observed closing at proper pressure		X	
G.6.12 Pressure control valve observed closing at proper pressure (suction or discharge)		X	
G.6.13 Pressure relief valve closed by pilot adjustment during flow conditions (as necessary to achieve minimum rated pump characteristics)		X	
G.6.14 Pressure relief valve reset to normal position at pump test conclusion		X	

SYSTEMS EQUIPPED WITH AUTOMATIC TRANSFER SWITCH:

G.7.0 Power failure condition simulated while pump operating at peak load		X	
G.7.1 Transfer switch transfer of power to alternate power source verified		X	

Annual Testing Tasks for Fire Pump Assemblies continued on page 4

 INSPECTOR'S INITIAL _____ (All "NO" answers to be explained.)
 OWNER/DESIGNATED REP. INITIAL _____ DATE _____
(AFSA Form 110A)
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REV. 3/03

Report of Inspection, Testing & Maintenance of Fire Pump Assemblies...continued

Inspecting Firm: Urban Fire Protection, Inc.

Inspection Contract# 9605DP

Name of Inspected Property: VAMC

Inspector Name: Mark Evans

Date:

Inspection Frequency: ☐ Monthly☐ Quarterly☐ Annually☐ Other

*Items necessary only in the absence of manufacturer's recommendations

Annual Testing for Fire Pump Assemblies continued from page 3

	Y	N/A	N
G.7.2 Pump maintenance of peak load performance verified	X		
G.7.3 Power failure condition removed	X		
G.7.4 Pump reconnected to normal power source after a time delay		X	
G.8.0 Alarm conditions simulated	X		
G.8.1 Local or remote alarm indicating devices (visual and audible) observed for operation	X		
G.8.2 Legally required safety precautions taken during inspecting, testing, and maintaining electric controllers	X		
G.8.3 After water-flow portions of annual testing or fire protection system activations, suction screens inspected and cleared of debris or obstructions	X		
G.8.4 Engine generator sets supplying emergency or standby power to fire pump assemblies tested in accordance with NFPA 110		X	
G.8.5 Automatic transfer switches tested in accordance with NFPA 110		X	
G.8.6 Pump room environmental heating equipment automatic operation verified	X		
G.8.7 Pump room environmental illumination equipment manual operation verified	X		
G.8.8 Pump room environmental ventilation equipment automatic operation verified	X		
G.8.9 Parallel and angular alignment of pump and driver checked	X		
G.8.10 Parallel and angular misalignment corrected		X	

TEST RESULTS AND EVALUATION:

G.9.0 Theoretical rated speed correction factors not applied to determine pump compliance per testing		X	
G.9.1 Engine speed not increased beyond pump speed rating at rated condition to achieve rated pump performance	X		
G.9.2 Fire pump assembly considered acceptable because test matches initial unadjusted field acceptance test curve		X	
G.9.3 Fire pump assembly considered acceptable because test performance matches performance characteristics on nameplate	X		
G.9.4 Investigation initiated where degradation in excess of 5 percent of initial acceptance test pressure or nameplate pressure		X	
G.9.5 Voltage readings at motor within 5 percent below or 10 percent above rated voltage		X	
G.9.6 Abnormalities observed during inspection, testing, and maintenance promptly reported to responsible party	X		
G.10.0 Circulation relief valve verified to close in accordance with mfg. spec.	X		
G.11.0 Fire pump assembly maintenance performed in accordance with mfg. recommendations	X		
G.11.1 *Circuit breaker tripped (if provided)		X	

G.11.2 *Operate emergency manual starting means (without primary power)

G.11.3 *Exhaust system tested for excessive back pressure

G.12.0 Pertinent parties notified of test conclusion

G.13.0 ALARM PANEL CLEAR

G.14.0 SYSTEM RETURNED TO SERVICE

G.15.0 COMMENTS:

Five-Year Items for Fire Pump Assemblies

H.1.0 System in service before conducting tasks			
H.2.0 Pertinent parties notified before conducting tasks			
H.3.0 Check valves internally inspected			
H.3.1 Check valve internal components operate correctly			
H.3.2 Check valve internal components move freely			
H.3.3 Check valve internal components in good condition			
H.3.4 Check valve internal components cleaned/repaired/replaced as necessary			
H.3.5 Check valve internal inspection/maintenance date:			
H.4.0 Adequate drainage provided before flow testing			
H.4.1 Pressure control valves full flow tested			
H.4.2 Supply side static pressure			psi
H.4.3 System side static pressure			psi
H.4.4 Supply side residual pressure			psi
H.4.5 System side residual pressure			psi
H.4.6 Results compared to previous full flow test			
H.4.7 Adjustments made as necessary			
H.5.0 Fire pump assembly maintenance performed in accordance with mfg. recommendations			
H.6.0 Obstruction investigation conducted (required at 5 year intervals regardless of obstruction evidence) (see AFSA Form 114A)			
H.7.0 Pertinent parties notified after conclusion of tasks			
H.8.0 ALARM PANEL CLEAR			
H.9.0 SYSTEM RETURNED TO SERVICE			
H.10.0 COMMENTS:			

INSPECTOR'S INITIAL

(All "NO" answers to be explained.)

OWNER/DESIGNATED REP. INITIAL

DATE

(AFSA Form 110A)
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Report of Inspection, Testing, and Maintenance of Fire Pump

Pump ID: VA diesel

Building Name: VA Hospital

Job Site: 601 Hyw 6 West
Iowa City, Ia 52246

Date of Test: 2015-05-16

Type of Test: Fire Pump Test

Testing Firm: Vrbn Fire Protection, Inc.

Testing Firm Cindy Kreutz

Contact: cindy@tvrban.com
319-338-7343

Customer Information

Company Name: VA Hospital

Full Name: Stacy Speas

Phone Number: 319-688-3529

Email: Stacy.Speas@va.gov

Address: 601 Hyw 6 West
Iowa City, Ia 52246

Fire Pump	
Pump ID:	VA diesel
Pump Type (check one):	<input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical In-Line <input type="checkbox"/> Vertical Turbine <input type="checkbox"/> End-Suction
Manufacturer:	Fairbanks-Morse
Model:	5" 1823 CF
Serial Number:	09-1795321
Rated Capacity (GPM):	750
Total Dynamic Head (ft):	
Head at Churn 0% (PSI):	72
Head at Rated 100% (PSI):	65
Head at Overload 150% (PSI):	59
Rated Speed (RPM):	1750
Pump Rotation:	<input checked="" type="checkbox"/> Clockwise <input type="checkbox"/> Counterclockwise
Suction From:	City
Impeller Diameter (In):	0
Right Angle Gear	
Gear Ratio:	0
Fire Pump Driver	
Type:	<input checked="" type="checkbox"/> Diesel Engine <input type="checkbox"/> Electric Motor <input type="checkbox"/> Other _____
Manufacturer:	John Deere- Clarke
Model:	JU4H-UF20
Serial Number:	PE4045D761669
Rated HP:	60
Rated Speed (RPM):	1750
Fire Pump Controller	
Type:	Diesel
Manufacturer:	Cutler- Hammer
Model:	FD-100-12L-N-A-L1-C6,C8,S1,R3,E1,LO+
Serial Number:	16BG675D
Cycles (Hz):	0
Rated Voltage:	0
On PSI:	135
Off PSI:	140
Type of Start:	on
Run Timer Setting (min):	0
Jockey Pump	
Manufacturer:	Grundfos
Model:	CR-10-6
Rated Speed (RPM):	0
Rated Flow (GPM):	0
Rated Pressure (PSI):	0
Phase:	0
Cycles (Hz):	0
Rated Voltage:	0

Rated Amps:	0
Jockey Pump Controller	
Phase:	0
Cycles (Hz):	0
Rated Voltage:	0
On PSI:	145
Off PSI:	165

Report generated by Fire Pump Tester Software TM by Hydro Flow Products, Inc.

Inspection: Weekly				
	Y	N	N/A	Notes
Heat in pump room is 40°F or higher.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Intake air louvers in pump room appear operational.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Pump suction, discharge, and bypass valves are open.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
No piping or hoses leak.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Fire pump leaking one drop of water per second at seals.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Suction line pressure is normal.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
System line pressure is normal.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Diesel fuel tank is at least 2/3 full.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Controller selector switch is in "auto" position.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Voltage readings for batteries (2) are normal.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Charging current readings are normal for batteries.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Record engine running time from meter: _____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Crankcase oil level is normal.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cooling water level is normal.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Electrolyte level in batteries is normal.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Battery terminals are free of corrosion.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

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Date of Test:	2015-05-16
Type:	Fire Pump Test
Building Representative Attendee:	Mark Bedell
Testing Firm Attendee:	Mark Evans
Flow Device Used:	1 3/4" Pitotless Nozzle + Little Hose Monster

		Pressures			Streams					Total Flow			Corrected	
	RPM	Disch.	Suct.	Net	Flow	1	2	3	Flow GPM	% Rated Capacity	Volts	Amps	Flow %	Press.
1	1858	159	80	79	Flow Device	PN1.75-HML	-	-	0		0	0		70.1
					PSI	0		0						
					GPM	0		0						
								0						
2	1804	132	61	71	Flow Device	PN1.75-HML	PN1.75-HML	-	755	100.7	0	0	97.7	66.8
					PSI	13	13	0						
					GPM	377.5	377.5	0						
								0						
3	1782	106	46	60	Flow Device	PN1.75-HML	PN1.75-HML	PN1.75-HML	1132.5	151	0	0	148.3	57.9
					PSI	13	13	13						
					GPM	377.5	377.5	377.5						
								0						

Pump ID: VA diesel
Date of Test: 2015-05-16

