

Annual Fire Pump Flow Test

National Fire Protection, LLC

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A Rommel Company

Customer	Inspection Location
RWD Consulting	Cardoza High School 7 8 5 9 2 3
1300 Clifton Ave NW	1300 Clifton Ave NW
Washington, DC	Washington, DC
Phone: Fax:	Phone: Fax:
Inspection Date: 12/14/2023	

Flow Test Results

Basement Fire Pump Room	The results of the fire pump test indicate pump is within 5% of the rated PSI/GPM readings from the original pump curve or fire pump nameplate.
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Inspection performed in accordance with
NFPA 25 Standard for Inspection, Test, and Maintenance of Water-Based Fire Protection Systems 2014 ed.

Fire Pump System

Fire Pump House/Room

Basement Fire Pump Room

Ventilating louvers free to operate, no excessive water collecting on floor. (8.2.2)	Pass
Coupling guard in place. (8.2.2)	Pass

Supervisory Devices

Fire Pump Phase Reversal

Basement Fire Pump Room

Visual inspection verifying unit was free of physical damage. (13.2.8.1)	Pass
Pump Phase Reversal annunciated properly when tested. (13.2.8.2)	Pass

Fire Pump Power

Basement Fire Pump Room

Visual inspection verifying unit was free of physical damage. (13.2.8.1)	Pass
Fire Pump Power supervision annunciated properly when tested. (13.2.8.2)	Pass

Fire Pump Running

Basement Fire Pump Room

Visual inspection verifying unit was free of physical damage. (13.2.8.1)	Pass
Fire Pump Running supervision annunciated properly when tested. (13.2.8.2)	Pass

Fire Pump Supervision

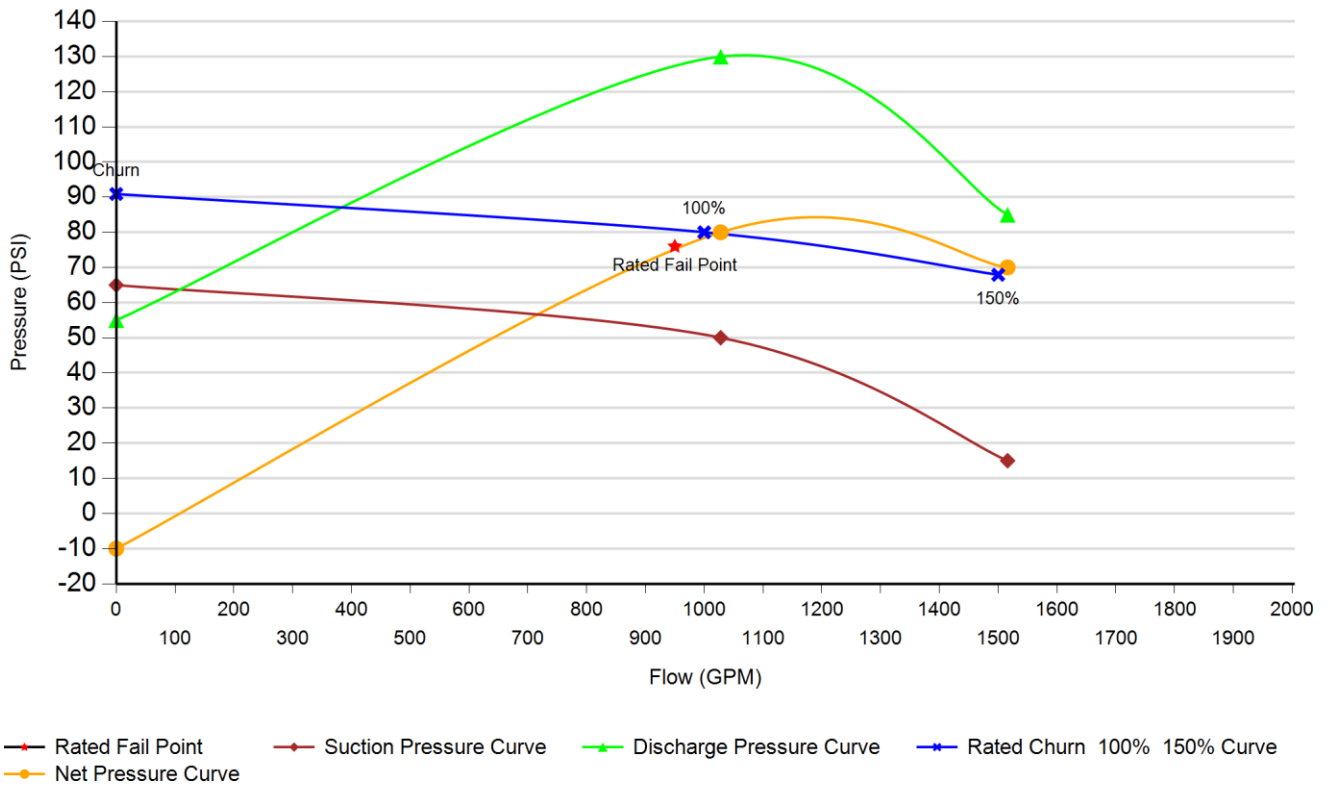
Basement Fire Pump Room

Visual inspection verifying unit was free of physical damage. (13.2.8.1)	Pass
Fire Pump supervision annunciated properly when tested. (13.2.8.2)	Pass

Electric Pump Inspection	
Pump suction, discharge and by-pass control valves fully open, and piping free of leaks. (8.2.2(2))	Pass
Suction line pressure gauge reading is within acceptable range. (8.2.2(2c))	Pass
System line pressure gauge reading is within acceptable range. (8.2.2(2d))	Pass
Suction reservoir has required water level & wet pit suction screen in place and unobstructed. (8.2.2(2))	N/A
Waterflow valve in closed position, hose connection valve closed, test valve line free of water. (8.2.2(2))	Pass
Controller pilot light (power on) illuminated (8.2.2(3))	Pass
Oil level in vertical motor sight glass, if available, within acceptable range. (8.2.2(3))	N/A
Power to Jockey pump is provided, if applicable. (8.2.2(3))	Pass
Record pump starting pressure. (8.3.2.9(1a))	130
Record the system suction pressure gauge readings with pump running. (8.3.2.9(1b))	Pass
Time (sec) controller is on first step. (8.3.2.9(2))	2
Time (sec.) for driver to accelerate to full speed. (8.3.2.9(2))	3
Record time pump runs after starting (for auto stop controller). (8.3.2.9(2))	10
Record the discharge pressure gauge readings with pump running. (8.3.2.9(1b))	155
With pump running, check for slight discharge from packing glands; Pump free from any unusual noise or vibration. (8.3.2.9(1))	Pass
Packing boxes, bearing, or pump casing maintain an acceptable temperature during the test. (8.3.2.9(1))	Pass
Pump run minimum 10 minutes. (8.3.2.3)	Pass
Fire pump alarm conditions and supervisory sensors operate when tested through simulation. (8.3.3.10)	Pass
Parallel and angular alignment of pump and driver without any misalignments. (8.3.6.4)	Pass
Suction screens inspected and cleaned after water flow. (8.3.3.12)	N/A
Pressure gauge and sensors, when compared to a calibrated gauge, is less than 5% calibration or have been recalibrated or replaced. (8.1.1.2.21)	Yes

Nameplate Information													
Rated GPM 1000				Rated PSI 80				Rated RPM 1770					
Max PSI 90.9				150% PSI 67.9				150% GPM 1500					
Churn													
Suction			Discharge				Net PSI			Speed			
65			55				-10			1798			
			L1:				L2:			L3:			
Volts			468				468			471			
Amps			41				41			42			
Test Point 1													
Flow Test Point %: 102.8		Measured Flow: 1028			Adj. Flow 1014			Measured Press: 80			Adj. Press.: 78		Press. Test Point %: 98%
Outlet Size	1.75	1.75	1.75	1.75									
Coefficient		1.15	1.15	1.15									
Pitot	6	6	6	6									
Flow	257	257	257	257									
Suction			Discharge				Net PSI			Speed			
50			130				80			1794			
			L1:				L2:			L3:			
Volts			467				467			470			
Amps			45				46			47			
Test Point 2													
Flow Test Point %: 151.6		Measured Flow: 1516			Adj. Flow 1502			Measured Press: 70			Adj. Press.: 69		Press. Test Point %: 102%
Outlet Size	1.75	1.75	1.75	1.75									
Coefficient	1.15	1.15	1.15	1.15									
Pitot	13	13	13	13									
Flow	379	379	379	379									
Suction			Discharge				Net PSI			Speed			
15			85				70			1787			
			L1:				L2:			L3:			
Volts			465				465			466			
Amps			53				54			54			

Pressure Vs. Flow Fire Pump Test Curves



RPM Corrected Fire Pump Test Curves

