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(847) 434-0101

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The Hose Monster Company

1330 Ensell rd, Lake Zurich, Illinois, 60047, Company Lic#:

Annual Test

10-23-2024

Job Site Info:

JOB SITE: **H-100**
STREET: **Wallops Base**
CITY & STATE: **Wallops Island, Virginia**
SITE CONTACT:
PHONE:
EMAIL:

Customer Info:

CUSTOMER: **NASA Wallops**
STREET: **100 Atlantic Rd**
CITY & STATE: **Wallops Island, Virginia**
CUSTOMER CONTACT:
PHONE:
EMAIL:

Inspection Crew:
Inspector: Patrick Spillane

Rated (GPM)	Rated RPM	Net Pressures:		
		100% (PSI)	150% (PSI)	Churn (PSI)
500.0	3550	80.0	57.0	99.0

Fire Pump Details

Pump Name: Pump 1
Motor: Electric
Manufacturer: ITT Industrial Products
Annual Month: October
Testing Frequency: Annually
Report Notes:

Header Size: 4"
Hose Outlets: 2
Length: 25
Size of Hoses: 2.5
Location: Near Bay Door

Fire Pump Component Details

Fire Pump	
Pump ID:	Pump 1
Pump Type (check one):	☐ Horizontal ☑ Vertical In-Line ☐ Vertical Turbine ☐ End-Suction
Manufacturer:	ITT Industrial Products
Model:	4x4x9.5p
Serial:	06-044901-01-01/qka522
Listed (check all that apply):	☑ FM ☑ UL ☐ ULC
Rated Capacity (GPM):	500.0
Total Dynamic Head (ft):	184.0
Head at Churn 0% (PSI):	99.0
Head at Rated 100% (PSI):	80.0
Head at Overload 150% (PSI):	57.0
Rated Speed (RPM):	3550
Pump Rotation:	☑ Clockwise ☐ Counterclockwise
Suction From:	City
Impeller Diameter (In):	7.35

Fire Pump Controller	
Manufacturer:	Eaton Cutler-Hammer
Model:	FT90-40D-LMR-L1-X1-E1-R4
Serial:	16E9210E
Listed (check all that apply):	☑ FM ☑ UL ☐ ULC
Rated HP:	40.0
Rated RPM:	
Phase:	
Cycles (Hz):	60
Rated Voltage:	460
On (PSI):	155.0
Off (PSI):	165.0
Type of Start:	Automatic
Run Timer Setting (min):	10

Fire Pump Driver	
Type:	☐ Diesel Engine ☑ Electric Motor ☐ Other _____
Manufacturer:	US General
Model:	AD27
Serial:	H08 208214 UP H-012
Rated Speed (RPM):	3525
Frame Size:	
Motor Enclosure Type:	ODP - Open Drip Proof
Rated Voltage:	230-460
Rated Full Load Amps:	47
Phase:	3
Cycles (Hz):	60
Service Factor:	1.15

Jockey Pump	
Manufacturer:	Grundfos
Model:	AX-322
Serial:	546987ASD
Rated Flow (GPM):	11.0
Rated Pressure (PSI):	0.0
Rated HP:	2.0

Jockey Pump Controller	
Manufacturer:	Eaton Cutler-Hammer
Model:	FT90-40D-LMR-L1-X1-E1-R4
Serial:	16E9210J
Listed (check all that apply):	☑ FM ☑ UL ☑ ULC
Phase:	3
Cycles (Hz):	60
Rated Voltage:	230-460
On (PSI):	165.0
Off (PSI):	175.0

Fire Pump Checklist

Electrical Systems				
	Y	N	N/A	Notes
Is the Controller pilot light (power on) illuminated?	☑	☐	☐	
Is the Transfer switch normal power light illuminated?	☑	☐	☐	
Is the Transfer switch operating properly during the test?	☑	☐	☐	
Is the isolating switch for standby power closed?	☑	☐	☐	
Is the Reverse-phase alarm light not illuminated?	☐	☑	☐	Reverse Phase Light is activated
Is the Normal-phase rotation light illuminated?	☑	☐	☐	
Is the Oil level in vertical motor sight glass within acceptable range?	☑	☐	☐	
Are the electronic pressure sensors in the controller comparable to the annalog gauges on the system?	☑	☐	☐	

Fire Alarm Report				
	Y	N	N/A	Notes
Fire Alarm Received transmitted	☐	☑	☐	No Signal to FACP
Fire Pump Running	☑	☐	☐	
AC Power Loss	☑	☐	☐	
Phase Reversal	☑	☐	☐	

Fire pump control log (if equipped)				
	Y	N	N/A	Notes
Highest Discharge Pressure 0.0 psi	☐	☐	☑	
Lowest Discharge Pressure 0.0 psi	☐	☐	☑	

Jockey Pump System				
	Y	N	N/A	Notes
Does the Jockey pump have power?	☑	☐	☐	
Is the Jockey Pump operating properly?	☑	☐	☐	

Pump House				
	Y	N	N/A	Notes
Is the temperature in the pump room at 40°F (4°C) or higher?	☑	☐	☐	
Are the Ventilation louvers free to operate	☑	☐	☐	
Is the floor free from water?	☑	☐	☐	
Is the temperature in the pump room at 70°F (21°C) for diesel engine pump without engine heater?	☑	☐	☐	
Is the FACP and Control panel free of Fire Pump alarms?	☑	☐	☐	

Pump Systems				
	Y	N	N/A	Notes

Is the Pump suction, discharge, and bypass valves in the open position?	☑ ☐ ☐	
Is the Test Header Control Valve in the closed position?	☑ ☐ ☐	
Are the Test Header Hose Valves and piping free of water?	☐ ☑ ☐	Test header is Leaking
Is the fire pump piping free from leaks or corrosion?	☑ ☐ ☐	
Is the coupling guard in place?	☑ ☐ ☐	
Is the fire pump packing dripping at one drop of water per second?	☑ ☐ ☐	
Are the packing cups clear of debris and are draining properly?	☐ ☑ ☐	Packing Leaking
Is the Suction reservoir or Water Tank full?	☑ ☐ ☐	
Are the Wet pit suction screens unobstructed and in place?	☑ ☐ ☐	
Are the Supply and Discharge Gauges accurate and free of leaks and damage?	☑ ☐ ☐	
Is the coupling and shaft in correct allignment?	☑ ☐ ☐	
Have the bearings been lubricated?	☑ ☐ ☐	

Deficiencies				
	Y	N	N/A	Notes
Fire Alarm Received transmitted	☐	☑	☐	No Signal to FACP
Is the Reverse-phase alarm light not illuminated?	☐	☑	☐	Reverse Phase Light is activated
Are the Test Header Hose Valves and piping free of water?	☐	☑	☐	Test header is Leaking
Are the packing cups clear of debris and are draining properly?	☐	☑	☐	Packing Leaking

Reverse Phase Light Is Activated

Test Header Is Leaking

Packing Leaking

Flow Test Data

Pump Overview

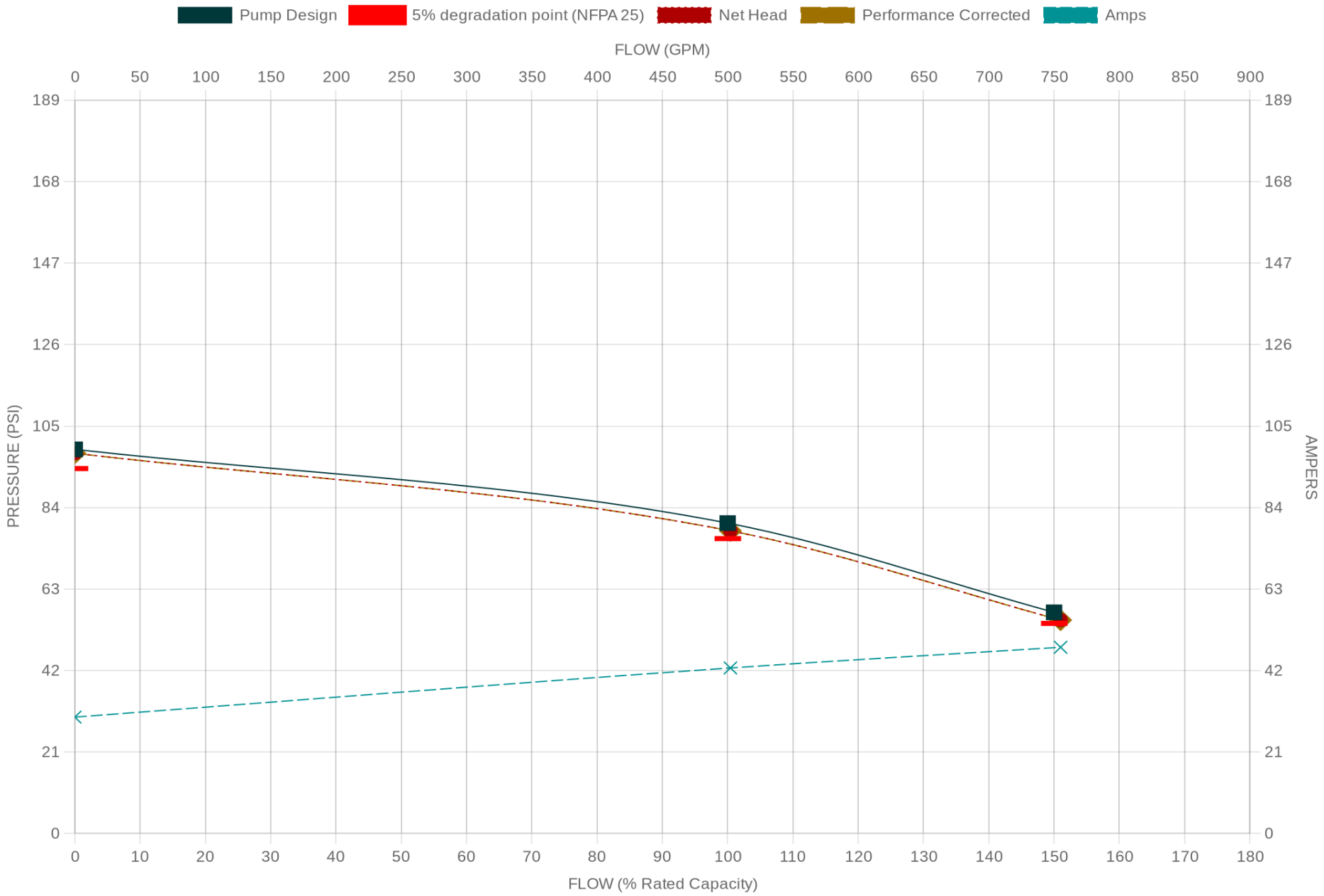
Rated (GPM)	Rated RPM	Net Pressures:		
		100% (PSI)	150% (PSI)	Churn (PSI)
500.0	3550	80.0	57.0	99.0

Streams For Peak Flow: 2
Length Of Hoses: 25

		Pressure			Streams			Total Flow				Corrected	
	RPM	Disch.	Suct	Net	Flow	1	2	Flow (GPM)	% Rated Capacity	Volts	Amps	Flow %	Press
1	3550	153.0	55.0	98.0	Flow Device	PN1.75 - HML	PN1.75 - HML	0.0	0.0	0 0 0	30 30 30	0.0	98.0
					(PSI)	0.0	0.0						
					(GPM)	0.0	0.0						
2	3550	108.0	30.0	78.0	Flow Device	PN1.75 - HML	PN1.75 - HML	502.12	100.4	468 468 471	42 44 42	100.42	78.0
					(PSI)	23.0	0.0						
					(GPM)	502.1	0.0						
3	3550	55.0	0.0	55.0	Flow Device	PN1.75 - HML	PN1.75 - HML	755.0	151.0	470 470 470	48 48 48	151.0	55.0
					(PSI)	13.0	13.0						
					(GPM)	377.5	377.5						

Fire Pump Performance Chart

Pump ID: Pump 1
Date of Test: 10-23-2024

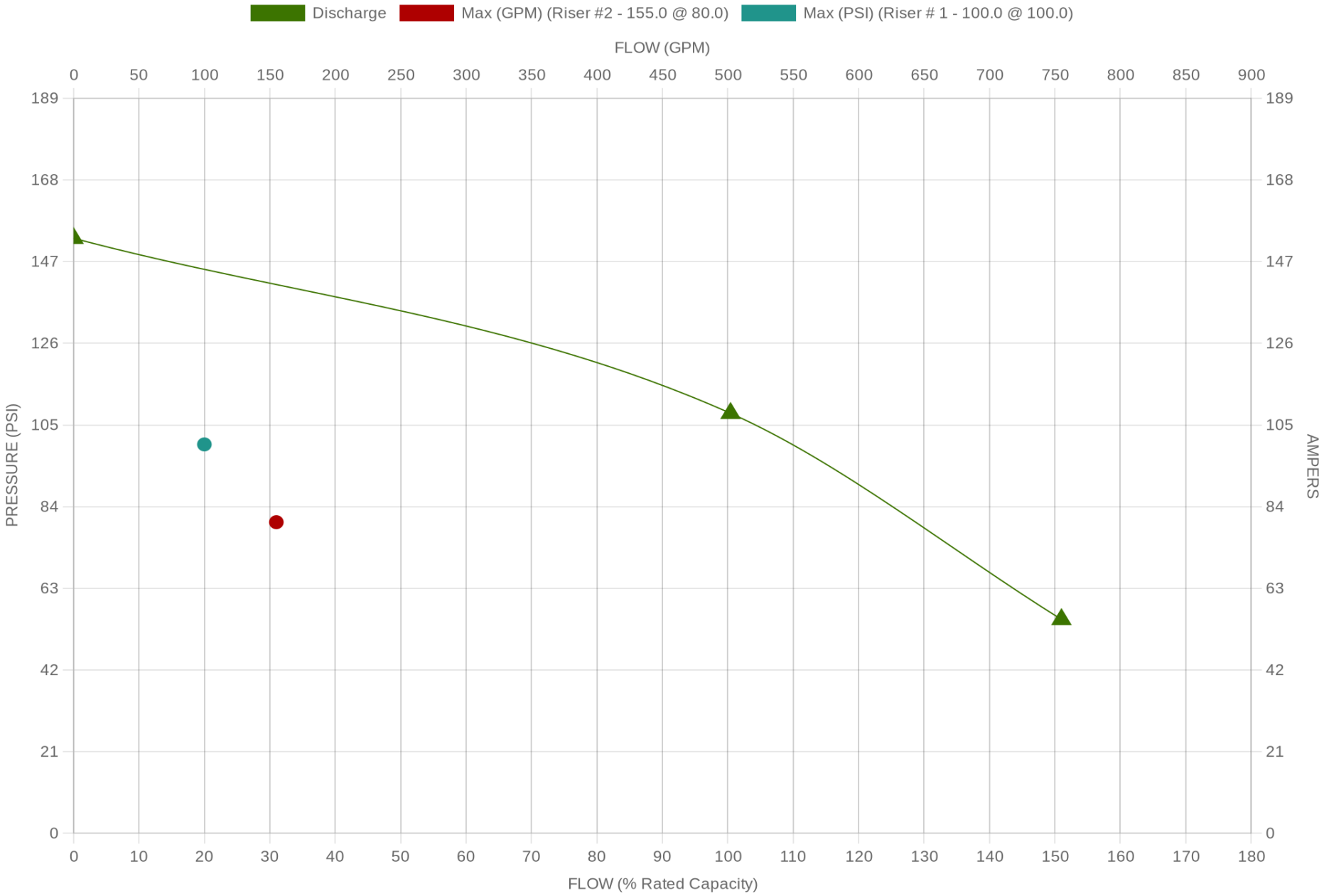


HOSE MONSTER COMPANY

October 23, 2024

Discharge with System Demand

Pump ID: Pump 1
Date of Test: 10-23-2024



October 23, 2024

Annual Fire Pump ITM Summary

Inspection Summary

Deficiencies Noted during inspection. Refer to Deficiencies report

Testing Summary Per NFPA 25-8.3.7.2.3 (2023 edition)

Fire pump meets the flow and pressure requirements of the most demanding system(s)

The Fire pump can meet/exceed a discharge pressure of 144.04 (PSI) while flowing the required demand of 100.0 (GPM) (highest (PSI) demand placard)

The Fire pump can meet/exceed a discharge pressure of 139.11 (PSI) while flowing the required demand of 155.0 (GPM) (highest (GPM) demand placard)

Fire pump supplies 100 percent of rated flow

The fire pump was able to flow greater than the fire pump rated flow of 500.0 (GPM). The max flow measured was 755.0 (GPM).

Net pressure at each flow point is at least 95 percent from test curve generated from the fire pump nameplate

note: within, meets or exceeds 95% is acceptable

At churn test point, net pressure of 98.0 (PSI) is within 95% of 99.0 (PSI) (max rated pressure)

At 100% test point, net pressure of 78.0 (PSI) is within 95% of 80.0 (PSI) (100 rated pressure)

At peak flow test point, net pressure of 55.0 (PSI) is within 95% of 57.0 (PSI) (150% rated pressure)

Flow Test Result: Acceptable

Checklist Results: Deficiencies Found, See Report

Customer Name: Patrick Spillane

Customer Signature: