

# *Big Water Fire Apparatus LLC*

## *Annual Fire Pump Maintenance & Certification*

*The Mechanic that still makes house calls.*

Cell 715-292-0499 Home 715-682-6100

<http://www.bigwaterfireapparatus.com>

Ashland, Wisconsin

Est. 2000

September 1, 2022

Apparatus: 7-91 Alexis/Ford/Darley Engine #2  
Fire Pump: # 78014 1000 GPM Darley tested @ 1250  
Mileage: 20,429.4  
Hours: 1,072.3  
VIN: 1FDYR82AXMVA36456



Chassis Maintenance started on August 15, 2022.

### **Maintenance and Inspection completed:**

Tires: Unknown possibly original to the Apparatus 31 years old. DOT ID# are letters, which, indicates they are more than 20 years old.

Tire Pressures: Streetside Front 50 psi Streetside Rear Inside Dual 80 psi Outside Dual 90 psi  
Curbside Front 80 psi Curbside Rear Inside Dual 80 psi Outside Dual 75 psi

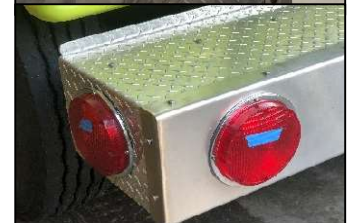
**All Tires have been adjusted to manufactures specs 120 psi**

- \* Windshield Washer Fluid low- **Fluid topped off**
- \* Anti-Freeze Fluid- **Full**
- \* Engine Oil- **Proper level**
- \* Chassis was visually inspected **All appeared in good working order.**
- \* Front Suspension was inspected **All appeared in good working order.**
- \* Exhaust System was visually inspected **Appears to be in good condition.**
- \* Adjusted Front Brakes
- \* Front Slack Adjusted Pins Frozen- **Pins were freed up Pins move easily now.**
- \* Adjusted Rear Brakes
- \* Rear Slack Adjusters Pins Frozen- **Pins were freed up Pins move easily now.**
- \* Front-end tight no excessive play noted- **Needs greasing**
- \* Rear Springs- **Overload Spring are touching the overload Brackets future replacement required.**

- \* Battery System Manufacture Date Unknown Rated 850 CCA Tested #1 **Failed** #2 650 CCA  
**Ordered and Replaced Both Batteries the next morning.**
- \* Fuel Injector Cleaner- **Added**
- \* Added Shoreline Air Shut-off
- \* Numerous Warning Lights nonoperative



- \* Rear Scene and Hose Bed Lighting nonoperative
- \* Troubleshoot Battery and Maintainer repair
- \* Rewired Battery Maintainer - **Battery Maintainer was wired into the Apparatus incorrectly and Safety features were added to wiring.**
- \* Front Bumper both sides Intersection Warning Lighting nonoperative
- \* Replaced 3/4" Suction Drain Plumbing-**Frozen**



Ball Valve Overhauled

### Fire Pump Inspection:

- \* Primer System Tested X1 Primer pulled 16.00 inches of Vacuum
- \* Vacuum lost after 5 minutes 9.0 inches Vacuum Test **Failed**
- \* Overhauled two 2.5" Ball Valves
- \* Primer System Tested X2 Primer pulled 15.50 inches of Vacuum



- \* Vacuum lost after 5 minutes 1.5 inches Vacuum Test **Passed Vacuum Test Failed Volume**
- \* Primer System Tested X3 Primer pulled 15.00 inches of Vacuum
- \* Vacuum lost after 5 minutes 1.5 inches Vacuum Test **Volume Failed**  
**~ No Change with new Batteries. Normal range for Primer is from 16 inches to 24 inches of Vacuum. Any value below 16 inches is required to be replaced. Primer should not lose more than 5 inches of Vacuum in 5 minutes.**



- \* Adjusted Packing to specs.
- \* Inboard Slinger Ring is Loose- **An indication the Pump was Overheat at some point. Monitor Gear Box Lubricant and Packing Drip Rate closely.**

### Future Repairs:

- \* Annual Chassis Maintenance (oil and oil filter, fuel filters, chassis grease)
- \* Rear Springs- **Overload Springs are touching the overload Bracket future replacement required. Normal for the age of the Apparatus.**

- \* Tire Replacement
- \* Annual Fire Pump Maintenance and Recertificating
- \* Fire Pump Primer Replacement Required (***Failed Volume Test***)
- \* Rear Springs- ***Overload Spring is touching the overload Bracket future replacement required.***

**End of this Report.**