

To: Administration & Finance Executive Committee

From: Tyler Moffitt, Fire Chief/CEMC

Date: February 13, 2019

Subject: 11-2 Pumper Fire Truck Maintenance Issues since 2008

Background

11-2 Pumper Fire Truck was originally manufactured in the United States and was a demo-unit. It was found and purchased over the internet without going through the proper tender process. This Furion Cab and Chassis was first introduced to the market in 2007 and production of this type of Cab and Chassis was halted in 2012. This Cab and Chassis was a completed failure.

11-2 Pumper Fire Truck Maintenance Issues since 2008

- Health and Safety issues in the past:
 - The 28-foot Boomer Water Tower has hit the cab numerous times early in the first couple of years.
 - There was an event where two firefighters were knocked to the ground after being hit by the Boomer Water Tower ... it would not stop moving.
 - We can never utilize the Boomer Water Towers hydraulic connections for extrication tools, as the Boomer Water Tower would be at the same level of our team members who are at ground level.
- We have had technical reps up from the United States over the years working on the Boomer Water Tower.
- 11-2 Pumper Truck has gone back to the South Dakota facility for repairs on the Boomer Water Tower and electrically system.
- This model has a History of Electronic Stability issues.
- The entire digital display board, which is used to control the pump pressure etc. has been replaced.
- Sometimes the pump does not throttle up; past practice is to shut-down the pump and truck and re-do all the steps.
- Sometimes the trucks engine will not throttle up in DRIVE; past practice is to shut-down the engine and re-start the engine before we can leave the fire hall.
- All parts in the manufacturing process were done cheaply; this type of truck was never made again.
- ***I have received all the maintenance history from Peterbilt, as a lot of the repairs were coded by the Operations and Facilities Division over the years.***
- ***As well, I have requested that all invoices going forward be sent to the Fort Frances Fire & Rescue Service.***

Maintenance on 11-2 Pumper Fire Truck

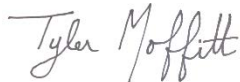
- 2008 June, Dependable Fire Trucks: **\$2,493.75.**
- 2008 June 18, Peterbilt: **\$226.12** Hydraulic leak on Boomer Water Tower.
- 2008 July 2, Peterbilt: Engine Oil Leak ... Claim made to Cummins Rapidsolve.
- 2008 July, Dependable Fire Trucks: **\$787.50.**
- 2009 May 29, Peterbilt: **\$293.95** Engine Light on ... loose wire on DPF Control.
- 2009 July 17, Peterbilt: Engine Light on ...replaced ECM with Recon ECM ... Claim made to Cummins Rapidsolve.
- 2009 November 11, Peterbilt: **\$113.06** Engine Light on ... engine Brake Solenoid Low Voltage.
- 2010 March, Peterbilt: **\$108.26.**
- 2012 April 4, Peterbilt: **\$213.82** Engine Light on ... update ECM Flash Filter and check fuel gauge as not accurate.
- 2012 August 13, Peterbilt **\$531.01** ... Regen required ... Catalyst plugged ... remove and clean Catalyst and re-assemble and complete Regen.
- 2013 June 13, Peterbilt **\$166.30** DPF won't Regen ... performed manual Regen.
- 2013 October 31, Peterbilt **\$123.74** DPF issues ... cleaned and serviced.
- 2013 October 31, Peterbilt: **\$973.71** Engine won't Regen ... lots of service work.
- 2013 November, Peterbilt: **\$406.24.**
- 2015 May 5, Peterbilt: **\$149.73** Regen required etc.
- 2015 October 28, Peterbilt: **\$136.11** ... performed a stationary Regen.
- 2016 January 26, Peterbilt: **\$1,350.52** ... Engine Light on ... seized EGR in open position ... drained coolant and replaced EGR valve and performed Regen.
- 2016 October 14, Peterbilt: **\$136.11** ... performed a stationary Regen.
- 2016 December, Fort Garry Fire Trucks, Winnipeg: **\$10,942** ... mechanical seals for pump needed replacing as water would spray drastically from under the pumper truck. **Note:** This had been an issue for some time before I became Fire Chief.
- 2017 March 24, Peterbilt: **\$990.55** ... truck won't Regen ECM plug pinned wrong ...still won't Regen ...found pin out at ECM connector on ECN ... multiple pins in wrong positions!
- 2017 May 31, Peterbilt: **\$138.47** ... Regen required.
- 2017 August 3, Peterbilt: **\$585.54** ... won't Regen ... cause: wiring issues with DPF disable circuit ... DPF disable switch not working ... open circuit found in wiring from switch to pin 7 at ECU ... found pin missing from cavity at 70 ... ran new wire from pin 70 to pin 7 ... Regen works.
- 2017 August 29, Peterbilt: **\$425.50** ... Pump won't idle up from remote control panel ... found open circuit from C1 connector.
- 2017 September 28 Peterbilt: **\$10,712.48** ... DPF was replaced; and rewired as wiring was incorrect; injectors were replaced; and solenoid for lifting cab was cracked; was replaced.

- 2017 October 31, 2017 Peterbilt: **\$746.62** ... Engine Light on ... replaced EGT sensors.
- March 22, 2018, Peterbilt: **\$927.46** ... Engine idles up automatically after releasing throttle ... disabled remote PTO function ... truck idles as it should.
- On January 27, 2019 11-2 was at a fire and had mechanical issues; it would not pump in pressure mode ... it had to be switched over to RPM Mode. On February 5, 2019 when bringing 11-2 back to the fire hall from Peterbilt, an engine light came on. 11-2 went back to Peterbilt.
 - **\$7,109.93** for the following:
 - Lines to engine heat exchanger ... both were ruptured ... had to get new lines made up and installed.
 - Engine not building up temperature. Highly recommended to install a winter front.
 - Inspected wiring/connector for EGR differential pressure sensor ... found wet build-up of soot.
 - EGR Cooler and lines needed replacing.
 - Cleaned intake manifold.

**SO FAR, THE TOWN HAS INCURRED EXPENDITURES TOTALLY NEARLY \$41,000
IN MAINTENANCE REPAIRS!**

- As well, the Boomer Water Tower Seals at the base are leaking hydraulic oil and have been for years. We currently utilize oil pads to prevent any dripping.
 - Apparently, the town has the first Boomer Water Tower ever manufactured in the world.
 - The process for repairs is to send 11-2 Pumper Fire Truck to Pennsylvania, which is the only authorized facility to take the Boomer Water Tower off. Then, it would be put in a crate and shipped to Florida, which is the location of the only authorized facility to complete the repairs. Price tag is **\$40,000** to **\$60,000 U.S.**

Respectfully submitted,



Tyler Moffitt,
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Fort Frances Fire & Rescue Service