

Mechanical Department Report

September 11, 2020

Acting CMO DS Elems

I hope everyone is doing well and staying safe with all the uncertainty and the myriad of issues we are seeing throughout this year. While we started this season off with major changes due to the issues surrounding SARS-CoV-2 and Covid-19 which we continue to face, we've been thrown some new problems to worry about with the wild fires. Despite these concerns we are continuing to do our best to keep up with the day to day chores around the museum, fix equipment while we have time, and to improve both the workability and safety of the museum. Admittedly I've been letting the maintenance side of things take the back burner while we've worked to rearrange the yard, clean the shop, make improvements to lighting and most importantly work on fire prevention around the site by clearing brush and keeping the grass down.

Now that we've pretty well gotten the yard and equipment staged I hope to get back to finishing my shop cleaning list for this year, and most of all return to working on locomotive maintenance so we'll have our usual fleet ready to go when we finally reopen.

Locomotive Maintenance

I've continued to pare my list back for this year as the maintenance chores have been delayed, but I think I've set up a manageable plan that will get us started next year in good shape. I still plan to replace the injectors in WP707 before the year is out, but have bushed back the work on WP512 to the late fall or next spring in favor work on WP2001 and SP2873.

SP2873 has sat untouched since April with some of the water system parts removed while I spent my time working on WP1503, QRR1100 and WP2001 well into the summer to keep them operating while we worked on our "big move" rearranging the yard. Sometime around June I started toying with the idea of trying to deal with the leaky radiator on it this year, and I've finally decided that this is the time to get it done. We have two sets of assemblies that are the right size (six-tube, three core assembly) that were brought up to Portola by Roger Stabler, and both seem to be in good condition; once tested in-shop I'll take the best set to A-1 Radiator for a good cleaning and once-over so we have some piece of mind and optimal performance.

In addition to being a boon to the operation of 2873 and meaning that we won't have to water it up every few days while running it, this will also serve as a starting point for the radiator issues that have long plagued WP2001. The largest leak on 2001 is the radiator assembly just behind the left side of the cab. It is a six-tube, double core assembly which makes it a prime candidate for replacement with the radiator I plan to pull from 2873; two of the three of those cores are good and better yet are adjacent. It should be a simple matter of separating the leaking core and installing the headers from 2001, at which point it should drop right in; again I plan to take the assembly to A-1 for a thorough cleaning which is outside our capabilities to do inhouse.

Non Locomotive Work

Work has continued on our so-called “rubber tire fleet” over the summer. The brown Ford is running (more or less), and we continue to work on the forklifts as the need arises. We did have an odd turn of events with the Kludge (propane tug), and since I’m not sure if it will be brought up in another report I’ll leave it at this: Charlie Spikes put a new ignition switch on it, and it is now parked in its usual spot again with the fuel tank removed so it won’t wind up in the picnic grounds again. Ethan and Bil have done a spectacular job working on the Backhoe, which now has not only a new outrigger ram but two new clamshell rams as well; their next task is to find and fix the leaks in the hoe arm.

I found the electric forklift (Cat F30) with an empty brake system this Wednesday and a large oil puddle under the front end that smelled of DOT3 fluid; this ends the mystery oil leak that we’ve spent seven years trying to solve. Why the brakes suddenly drained the fluid so fast is beyond me, but the lift has sat for a couple of weeks and has been leaving ever increasingly large puddles over the last couple of years, so I expect things finally just gave out where it sat. I managed to get it over to the charger, and will work with Bil this Saturday to get things fixed. Purging the air and recharging the system has proven to be a bit of a pain, and I still haven’t found exactly where it is leaking; at least we now know where to look though.

The green Dodge has sat waiting for its turn to be wrenched on, and I hope to schedule that for when work is completed on the backhoe. The new power steering hose I bought last fall is still under the front seat awaiting installation, and we still need to figure out the fuel system issues beyond the inability to maintain prime for more than a few hours.

This Month & Beyond

We have another work session coming up for WP165 at the end of October. I expect it to be an epochal moment for the locomotive and the Rail Society if we can get everything completed that Roger has outlined for the session. Other than the maintenance work outlined above I don’t really have much planned, as we are continuing to take things as they come this year. I’d like to eventually do a once-over and fire up the Rotary Plow set before winter comes, and since we did all that work last year and this spring and never used it I expect things to go smoothly and quickly; consequently I’m in no rush to do that work until things look to start properly cooling off.

Outside the realm of equipment maintenance, we will continue to work on facility maintenance such as the ever continuing brush clearing and fire prevention which is likely to be ongoing will into the end of the year as long as conditions allow. In the meantime, we hope everyone stays safe and healthy and look forward to when things open up again.