

Mechanical Department Report

March 8, 2019

Acting CMO DS Elems

I have less of an update this month than the last. The constant barrage of weather in conjunction with my work and schooling has kept my in Reno up until today (3/8) and the snow that is still on the ground will continue to make things difficult to work in to get things set up for the spring mechanical work. I've been getting updates from Ethan Doty on the goings on around the museum including this past weeks work on the rotary in preps for *possible* operation; more on that later. I'll put the planned work lineup at the end of the report.

Being stuck in Reno hasn't been all uneventful though. I've continued to scheme plan the departments work line up once the shop gets put in order, as well as continuing to get more tooling plans and designs drawn up and prepped for fabrication.

Last months BoD meeting also saw me leave Woodland with some old GP radiator, thanks to Director Stabler and the short line. While unfortunately they turned out to be smaller four inch (four tube) cores and wont fit in either the WP1503, SP2873 or WP 2001 they will work just fine in the WP917 or 921, or any other equipment with that size of radiator. At the moment, I'm leaning towards taking the good twenty-seven inch long core from the left bank of 1503 and putting it in 2873, which will be the first locomotive through the shop for annual inspections. With both bad cores out of their respective locomotives they will hopefully be easier to repair, if not by us then possibly A-1 in Sparks.

In light of the plans for the *possible* rotary operation, inspections and lubrication has been going on for the past week or so by Ethan Doty who's been keeping updated almost daily. I'm happy with the amount of work that has managed to go on, as well as the condition that everything has thus far been found. Hopefully inspection and pre-lube for the snail will be completed by the end of Saturday (3/9). I don't plan on going full out on the annual form since the units got a good inspection at the end of 2017 and only got enough use for the two media events. The rotary snail will receive a full topside and electrical inspection and pre-lubrication. 2873 will receive a full block inspection as well as anything that can be inspected from the frame up in accordance the annual inspection. Once the shop is cleared out the rest of the inspection items and maintenance will be completed. I understand that there is some push back to getting the set worked on, but it would eventually need to be done anyways and we can start the annual inspection on the 2873 where it sits. As to positioning everything for any type of event I'm inclined to agree that we should make sure it is worth our while before we get too far into shuffling around the yard. At the moment there has been enough snow that clearing the shop hasn't been a priority but things are warming up and the season is rapidly approaching.

In non-locomotive related news, the Loed material handler quit running today. It fired right off after priming the fuel system as usual but died after a couple of minutes while warming up. I suspect air in the fuel lines, though there is plenty of fuel in the tank yet. Some prodding on the fuel system got it to start up and run for another three five seconds or so but I gave up after that since I didn't want to press my luck. I'll be consulting with the maintenance manual and Bil Jackson on what I've done so far and what else should be looked for. At the moment it isn't needed for anything but I'd certainly like to have it operable once we start out mechanical work. In addition to the possible fuel issue, I'll also be spending some time this coming week should work allow to finish the installation of the new hydraulic lines and the annual work. It will also be getting some upgrades.

On the topic of forklifts and upgrades, I hope to get all the necessary ancillary safety equipment installed on our forklifts ahead of the season and training. Big White's horn seems to have given up the ghost again and I haven't checked on the Yale since it was made operable again to see what it needs. In short I'll be looking to make sure all lifts have at least the following: flashing amber light, spot/headlight(s), backup alarm, horn, and a fire extinguisher. The Loed will need either new gauges or repair lines to the ammeter, oil gauges, horn button, backup alarm, and water temperature gauge; it will likely be getting a battery switch as well. I'll cover more in the Safety Report.

Lastly, in preparation for this seasons mechanical work and the overhaul on WP917D I've been working on acquiring a few items that would have otherwise been disposed of at work in addition some stuff my instructor was wanting to clean out of his garage. A granite surface/inspection plate formerly of Grade A rating, some heavy duty rolling carts/racks and some heavy duty shop bench frames with drawers.

Planned Work Lineup

(No times or dates are listed due to uncertainties in future scheduling)

1. Pull diner & baggage cars and clean shop
2. Spot McCloud boxcar over pit
3. Clean & Inventory the Tool Room (peg board, shelving and electrical locker)
 - Empty Tool Room
 - Sort out broken & damaged tooling
 - Clean, inventory & sort good tooling and items
 - Clean/sweep out Tool Room
 - Replace appropriate items back in the Tool Room
 - 1) Organize storage locations
 - 2) Label storage locations
 - 3) Restock items in proper locations
4. Clean & Inventory Machinery Bay
 - Similar to steps listed above
 - Secure all Mechanical Department and Machinists tooling in lockers equipped with [black] Machinist's Locks
5. Clean and Inventory Welding Bay
 - Dispose of remaining old/bad electrodes and find temporary storage for good electrodes, brazing rod etc.
 - Put old Lincoln welder in storage (Katy or McCloud cars) for later evaluation
 - Put old VIA water dispenser in storage
 - Put electrical accessories in electrical room
 - Disassemble shelving from walls
 - Measure bay and evaluate placement of fuel pump/injection tester and parts washers
6. Pull picnic tables from McCloud car and sort contents
 - Place D78 tractions motors from north side of shop in car
 - Spot car outside shop when finished
7. RAL Locomotive Inspections & Maintenance
 - 1) SP2873
 - 2) QRR1100
8. Other Locomotive Inspection & Maintenance
 - 1) WP707
 - 2) WP2001
 - 3) WP805*
 - 4) WP925*
 - 5) USA1857**
 - 6) WP512**
9. WP917-D Work Project

Items 2 through 6 can happen in no particular order or concurrently

*Pending discussion

**Pending inspection and evaluation for return to service