

Mechanical Department Report

Board of Directors Meeting: March 11, 2022

DS ELEMS

Things are slowly gaining momentum around the museum. The weather is fairly typical for this time of year with wide swings in temperature, but again warming after the last storm blew through. As long as things hold, I'm optimistic we should be able to get things going such to be ready for opening next month. I have officially started Spring Break, and will be off work for a week; as is tradition this is the week I make up for all the delays during the winter and early spring.

There are no changes to my planned schedule from last month. If I can put in 80-100 hours of mechanical work between now and March 20, I expect to check off quite a few items from the list. The priority will be put of SP2873, the backhoe and the telehandler. If I can get some more people up this month we should also be able to take care to the tug (Kludge) and prep the some of the ancillary equipment such as the generators, light plants, air compressor, and the pump for our water tank trailer.

We've been working on the snow blowers off and on since last fall, and though we are getting to the time of year that they are less likely to be needed I'd still like to finally get them running before they get placed back in storage. For the two Sears track drive blowers I'm leaning towards just buying all new carburetors. The Toro needs the new belts installed, and everything properly tensioned.

Forklifts

The LiftAll (Big White) is up and running again, and seems to be doing fine and I don't expect any major issues in the short term. The new clutch master cylinder works great, though the clutch pedal rides a bit higher now. I still plan to pull it from service this summer for engine work, and while that is going on replace the rear tires and suspension, replace or repair the leaky steering cylinder, work on the brake system, and go through the hydraulic system to take care of any issues such as leaks or replace old hoses/lines.

Before Big White is pulled from service this summer we'll need to put the Yale back in service. As I've mentioned in the past this will at a minimum require the steering cylinder to be dealt with. There are some things I'd like to look over on the engine and hydraulic system as well.

Now that Big White is up and running my next project will be getting the Loed telehandler back in service. Other than the hydraulic lines that suddenly gave up the ghost last summer, there shouldn't be much work. Shortly before being pulled from service I did an oil change and replaced the fuel and oil filters, so a basic inspection after the hose replacement and it should be good to go.

Locomotives

I'm putting together a list of work items for SP2873. While I doubt it will be running at the end of the month, we should at least have all the small things taken care of by the end of next week and the remaining issues such as the water pumps dealt with by mid-April. The lube oil scavenging strainer should be replaced, and the right-bank water pump needs to be pulled off for repairs/replacement; these are the issues that are likely to take the longest time or present the longest delays while waiting for parts.

There are a lot of other things that need to be done on 2873, and can be completed over the course of the coming week. Primarily these are the Annual Inspection items and the remaining cleaning of the engine room, engine block and other parts of the locomotive. I'd also like to clean and reseal the sight gauges on the fuel tank but may need to pump some of the fuel out of the tank to complete that work; as such that work will likely get pushed back to later in the season likely at the same time we are dealing with the radiator work.

The minor repairs and Annual Inspection for WP1503 will happen in April, and should only take a week. Outside of the regular inspection items are replacement of the lube oil filters and cleaning/inspection of the oil strainers, replacement of the engine protection device, and repairs to the engine oil drain line. QRR1100 will get an annual inspection in June.

Once 1503 and 1100 are run through the shop, we'll start work on WP707 and WP805. Depending on possible issues with the air system 707 should be in service following the injector replacement and completion of an annual inspection. 805 may take most of this season depending on how the work on the air brakes progresses; we are looking to send all the valves and controls out for repair.

Once 707 is out of the shop its spot will be taken by WP2001 so we can start to deal with the major radiator problems as well as the basic seasonal inspections and work. There will also be ongoing work to WP165 as we finalize its restoration and move into operational status.

Upcoming Mechanical Work

The planned line-up for locomotive work is as follows:

- SP2873: Finish work on cooling and oil systems, remaining work items to complete annual inspection requirements. Radiator work may take place later in the season as other shop work is wrapped up.
- WP1503: Inspect oil drain line, repair as required. Change oil filters. Oil change is recommended. Annual inspection.
- WP707: Injector work in conjunction with annual inspection. Install new batteries. Replace missing shutter pistons.
- WP805-A: Annual inspection. Removal of automatic brake stand and valves for rework. Replace missing shutter pistons and cover panels.
- WP2001: Radiator work. Replace oil filters. Annual inspection.

Non rail equipment:

- Loed 534: Drain hydraulic system and replace rear motor directional controls and drain/return hoses. Fill with new hydraulic fluid and purge air from system.
- Case 580C: Change oil in diff/transaxle gearbox. Left inner transaxle seal leaks, parts are readily available but the required work will necessitate some planning and organization; it is possible that the entire rear end may need to be dropped.
- Kludge/tug: The usual preseason work.
- Club Car/golfcart: The usual preseason work.
- The Model T: Charlie Spikes has been heading up this particular project; those interested in working on it can be put in touch with him for the particulars on what needs to be done.

Some items may change status or priority as work progresses due to complications.