

Mechanical Department Report
April 12, 2019
Acting CMO DS Elems

Not much to report this month other than the progress on SP2873 and the change in plans on dealing with the radiators in it and 1503. The post rotary reports are encouraging, and everything seems to have operated as best as could have been expected especially after Ethan Doty's finding of the hung-up relay under the plow's cab floor. QRR1100 has weak batteries that could cause some issues with releasing it to operable status later this month when the annual inspections on it will be wrapping up; assuming the mechanical inspections go well of course. I've been dealing with water contamination in the fuel tank of the Loed material handler.

SP2873 was released for limited use so it could be operated Sunday April 14 for a couple of rentals. After the rental are completed it will be back out of service so the radiators can be dealt with. As of now the current plan is to pull the rear-right section of cores and run a "bypass" line; basically we will be straight piping that section which will result in a 30% reduction of the cooling capacity. This has been discussed to some length with various people in and out of the museum that have mechanical experience and it shouldn't cause any problems. The locomotive rarely gets up to elevated temperatures (beyond 175° F) even during hard usage in the hottest months of the year. The reaming sections will each have to take on an additional 10% or so of the cooling, depending on the section. The good cores being pulled will still be joined with the good core being pulled from WP1503, except we now hope to drop al the good cores into 1503, putting it back into operation. Should the bad cores from each locomotive be easily fixable they will be assembled together as originally planned, and put away for later placement back into 1503 when time allows.

The timeline for getting WP1503 operable will de dependent on time and logistics (shop use and or availability of support equipment) following the removal of the radiators from SP2873. The priority will be getting the cores pulled from 2873 and the new line installed in their place so the locomotive can be but back in service with all possible haste. Once the cooling system on 1503 is good to go the engine will need to have the injectors and fuel rack setting checked/adjusted. We will also be starting on the annual inspection for QRR1100.

QRR1100 will be a mixed bag this season. There are air problems under the cab causing new and exciting complications to those already experienced with the brake stand, and like all the other issues with the locomotive they are just as sporadic and unpredictable on when they will crop up. There is also the issue of the weak batteries. As the weather warms up hopefully the failure to start the locomotive that we had this winter will no longer be as big of an issue if we can keep the batteries charged up. Should the batteries cause issues we have a possible plan for rotating things around in the various pieces of equipment but our preference would be to avoid that.

Inspection & Service Schedule

The current rotation of locomotives through annual inspections and return to service in order is as follows, effective dates are non-projectable:

1. SP2873: In temporary RAL service until April 15, projected return to service is April 27 or sooner. Needs radiator work and final annual inspections.
2. QRR1100: Needs full annual inspection.
3. WP2001: Needs full annual inspection.
4. WP707: Needs injectors replaced and associated work, full annual inspection.
5. WP1503: Needs radiators replaced, full annual inspection, fuel injectors and rack adjusted.