

## Locomotive Report: Much Maintenance in the Works

February has been unseasonably warm. In fact, this time last year we were suffering the effects of the "Beast from the East" but fortunately there has been no snow this year, which has meant 2019, and in particular our half-term service, has got off to a great start. The S15 has been the loco taking care of our core passenger trains while the H class has been in charge of our other services, such as the Wealden Rambler.

Since services finished at the very beginning of January to enable the infrastructure works to take place, the Locomotive Works has focused on maintenance activities to the running fleet, plus preparing BR Standard 4 Tank No. 80151 for its boiler exams.

The key focus in the Works has been the completion of mechanical maintenance to Q class No. 30541. Work has centred around re-metalling and machining the 6 no. axleboxes and 12 no. horn guide faces on the driving wheels, machining new spring hangers, machining the journals on the driving axle, and re-metalling the eccentrics. The cross-head slippers have been re-metaled, the leading axle has had new springs fitted, and all the spring buckle hangers have had new bushes fitted.

In addition to this work, the opportunity was taken to complete a piston and valve exam (P&V), where a new set of rings were fitted. Unusually for a piston-valved locomotive, the Q class has "outside admission". That is, the high pressure live steam is admitted at either end of the valve chest and exhausted at lower pressure between the valve faces (the more usual arrangement is the other way round). This system makes the glands subject to full steam pressure and therefore especially prone to leakage, so the opportunity was taken to also machine the valve rod spindles and re-pack the glands.

Many other smaller items also have been renewed or replaced, including fitting new brass drain cocks under the cylinders, a new brake adjuster, fitting additional drains and new oil pads in the oil trays under each locomotive axle, and inspection of the oil pads in the tender and maintenance to the steam reverser. The locomotive is now out of the works and successfully passed part two of its annual boiler exam on the 7 March, 2019, so she is now released back to traffic.

No sooner had the Q class been shunted into the loco yard, than BR Standard class 5MT No. 73082 "Camelot" entered the Works. The BR Standard 5 has a loose manganese horn guide liner on the trailing wheelset, which has now been removed from the frames using our wheel drop. While out of traffic, the opportunity will be taken to re-metal some of the bushes on the motion and undertake the annual boiler exam which is due in May.

Alongside all the maintenance work to the running fleet, excellent progress has been made on the two loco overhauls, on nos. 80151 and 34059 "Sir Archibald Sinclair". Work on No. 80151 has focused on the boiler, and I'm pleased to say the boiler has passed part 1 (hydraulic exam) and part 2 (Steam Test). Work will now proceed on completing the locomotive prior to final painting and testing. There are at least two months' work before final painting, and this includes fitting all the auxiliary boiler

equipment such as injectors, delivery pipes, gauges, etc., and then connecting the boiler to the chassis elements.

No. 34059's boiler has moved inside the Works to a permanent position, and measuring for the stays has been completed. An order for the first 600 stays has been placed, and we're in discussions with suppliers for flue and smoke tubes. Once No. 80151 is complete, our attention will turn to No. 34059, and work will begin on completing the boiler and attending to some items on the chassis.

Our Wainwright P class No. 323 "Bluebell" has been in regular use throughout January and early February as the locomotive used for Footplate Taster courses that ran every Saturday and Sunday during the close-down period.

While preparing the locomotive for its annual boiler exam, areas of deterioration in the firebox outer wrapper plates and around the backhead corners were noted, and although a repair is possible, it could not be completed without substantial disassembly of the locomotive. So, given the length of time No. 323 has already spent in traffic (eight years), it is not considered economical to carry out repairs for a relatively short further period in use. Therefore, I'm sad to say the locomotive has been withdrawn from traffic for a well-earned rest and will now join the queue for overhaul.

Outside in the yard, work has progressed well on the ASH Maintenance Shed, with the steel frame now erected, both east and west walls clad, and work proceeding on cladding the roof. Once complete, the maintenance shed will provide much needed additional cover for our locomotives and allow maintenance tasks, such as boiler washouts, spring changes, gland packing, etc. to be carried out in dry and warm conditions.

Our Branch Line Weekend is now less than a week away, and I'm pleased to say we have the NRM's LSWR Beattie Well Tank and the Isle of Wight's LSWR O2 "Calbourne" visiting. The gala line up is looking very positive, and I hope to see as many of you as possible at our first event of 2019, which will see the largest gathering of ex-LSWR locomotives in preservation.

By Christopher Hunford, Locomotive Director