



Not long after her steam test, it was decided to take the plunge and give her a train to play with. On the 29th April we put her on a train to Bethal from Germiston.

After much deliberation it was decided that 15F 3016 would also be steamed up and taken along just in case, and in addition, these two locomotives had never run together before and would provide for some interesting new material for photographers. Not surprisingly, we had never used both these engines together as their combined weight of 400 tons, was a little excessive for a mere train of 360 tons never mind the amount of coal and water required! Both engines were steamed up on Friday and made the trip through to Boksburg station siding after everything checked out OK, so that they would be ready for an early start on Saturday.

After collecting the passengers in Boksburg and picking up a few more in Springs we were on our way with the 25NC in front doing the work which she did with the greatest of ease. While collecting passengers in Springs a quick check was performed on all the components, making sure that those that were supposed to be cold (bearings) were exactly that, and that nothing had fallen off on the way there! The only problem that was immediately evident was that the lubricator was a little bit shy on oil delivery to the cylinders, however the lubricator was functioning as a whole so we carried on. The lubricator had been stripped and cleaned during restoration and reset to South African Railways specifications for this engine with the exception of changing the ratchet drive since the original was worn. It was later found that the keyway in the new ratchet was worn, allowing the ratchet to advance two notches, but given the back pressure from the lubricator pistons, would retard the shaft itself by a notch. This has since been fixed.

The 25NC ran beautifully, irrespective of gradient, the boiler steaming perfectly and absolutely no strain being experienced with the 360 ton train behind excluding the 15F which was simply tagging along. Arriving at Bethal however, we realised why she had been going so well. The regulator had kept sticking in the open position at times. After pulling into the station, the engines were taken for water and fire cleaning, and at this point it became impossible to close the regulator completely at all. Despite all the tricks anyone could come up with, she remained in that condition. It was decided that she had indeed failed and that we would have her fire dropped completely, towing her back with the 15F 3016 who did a splendid job much to the delight of photographers along the way.

So, what had we done wrong?

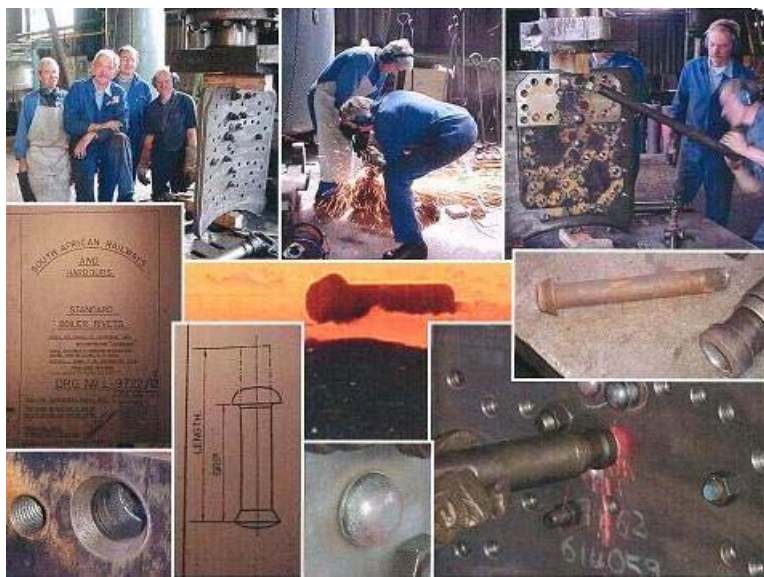
The regulator had been stripped and the valves and seats reground to achieve a good hydraulic test on the boiler. The 25 is fitted with a multiport regulator made by Molesco, so she has one pilot valve and four main valves, which open sequentially to let steam into the cylinders. After opening up the regulator, a 1" threading tap was found stuck across the pilot port. This was and still is a complete mystery as there are no 1" threads anywhere in the vicinity of the casting - the only tool being used during the restoration being a 1 1/8" die nut for the cover studs.

In any case she is now fully functional and performed a splendid job during the Drakensburg tour, detailed in another story on this site.

Thats it for now

Andrew King

PS: Due to the positive response - especially from our overseas visitors, Ed van der Heefer provided some more photos of the boiler restoration work in the following collages:



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