

## Long Meg Shunting historical background

### History of the Long Meg mine

The Long Meg Plaster Company Ltd was established in 1880, driving an underground drift upon which operations commenced in 1885. In 1886 a standard gauge extension line was connected to the site from the Settle–Carlisle Railway, a distance of around 350m.

After closure as a gypsum mine in 1914/15, the mine was reopened in 1922 for the milling of anhydrite by the Long Meg Plaster and Mineral Company Ltd. This was purchased in 1939 by the British Plaster Board Ltd (now known as British Gypsum). Until its closure in January 1976 its workforce fluctuated between 12 and 29.

### Gypsum and Anhydrite

Mined gypsum (hydrated calcium sulphate) is ground to a powder and heated to evaporate water. This was done at the Long Meg mine. Heating to approximately 160°C drives off a limited amount of water and Plaster of Paris is produced. The most important use of this type of gypsum is in the production of plaster and plasterboard. Heating to above 200°C drives off all the water to produce the anhydrite which is used in the production of sulphuric acid and cement.

### Transporting Long Meg Anhydrite

The bulk of the anhydrite from the mine in the mid 1950s and 1960s was shipped south to Widnes (12 miles east of Liverpool), and north-east to Prudhoe (12 miles west of Newcastle). Some also may have gone west to Marchon Products near Whitehaven on the west coast, about 40 miles south-west of Carlisle. Marchon was sitting on top of its own gypsum mine, so transfers from Long Meg would have been only occasional to meet unanticipated peak demand. Such an occasional transfer is shown in the S&C session “Anhydrite for Marchon”. It is doubtful whether the mine continued to supply gypsum to Kirkby Thore plasterboard factory, as other closer gypsum sources were available in this time period.

### Mine locomotives

The mine owned several locomotives used to shunt carts between the mine, the plaster mill, and the Settle–Carlisle Railway junction. A 0-4-0 Barclay locomotive named “W.S.T.” (after the plaster company’s deputy chairman William Stuart Trimble) was delivered to the site on the 10th June 1954. It was transferred, in 1969, to the Bowes Railway in Tyne and Wear.

### Movements on the S&C to service Long Meg mine in the early 1960s

The 1961 timetable shows the following movements associated with the Long Meg mine on weekdays (Monday to Saturday). Times vary somewhat from day to day but these times are typical for Friday afternoons and Saturday mornings.

#### Friday Afternoon (times are at Long Meg)

1250	Up	Light engine—Kingmoor Shed to Langwathby (arr. 1255)
1408	Down	Light engine from Langwathby arrives at Long Meg with empties
1510	Up	Anhydrite train departs for Adlington—for Widnes
1736	Down	Anhydrite empties arrive at Langwathby from Widnes
1835	Down	Light engine—Langwathby to Kingmoor Shed

#### Saturday Morning

0645	Down	Anhydrite empties arrive at Langwathby from Widnes
0725	Down	Light engine from Langwathby to Kingmoor Shed (dep. Langwathby 0720)
0730	Up	Light engine—Kingmoor Shed to Langwathby (arr. 0734)
0833	Down	Light engine from Langwathby arrives at Long Meg with empties
0900	Up	Anhydrite train departs for Walton—for Widnes
1040 *	Up	Anhydrite empties arrive from Durran Hill (dep. 0955)
1110 *	Down	Anhydrite to Carlisle—London Rd

\* These trains, which move the wagons for Prudhoe, operate on Saturday and Monday only.

This timetable shows two loaded anhydrite trains each day departing Long Meg for Widnes; one at 0900, and one at 1510. The engines working these trains come from Kingmoor Shed, just north of Carlisle. They proceed past Long Meg to Langwathby, to pick up the empties from Widnes that have been left there at 1736 the previous evening and at 0645 in the morning. They are left there to avoid congestion and delay at the mine sidings.

On Saturdays and Mondays another train brings empties from Carlisle (Durrans Hill sidings) to Long Meg. These empties come from Prudhoe. It returns with loaded wagons to Carlisle (London Road sidings), to be later taken on to Prudhoe.

From the mid-1950s until the end of steam in 1968, The Long Meg anhydrite trains usually were hauled by 9F locomotives, because of the heavy load and the difficult climb from Ormside to Ais Gill. The sight of a 9F working hard at the head of a Long Meg anhydrite train is one of the classic memories of the Settle and Carlisle line in this period.

## References

1. <http://www.visitcumbria.com/gypsum.htm>
2. [http://en.wikipedia.org/wiki/Long\\_Meg\\_Mine](http://en.wikipedia.org/wiki/Long_Meg_Mine)
3. [http://www.bowesrailway.co.uk/locosandstock/steam\\_wst.html](http://www.bowesrailway.co.uk/locosandstock/steam_wst.html)
4. <http://steverabone.com/Hellifield%20Website/index.html>
5. <http://www.cumbria-industries.org.uk/chemicals.htm>

## Long Meg Shunting session overview

This session represents the afternoon portion of the timetable shown above. Times have been adjusted to permit operations to be completed in a reasonable time—about one hour—but the structure of the session follows the prototype closely.

You will see a 9F pass, light engine, for Langwathby and return with a rake of empties.

You will assemble the afternoon train for Widnes and get the hoppers loaded and positioned for the train to Carlisle and Marchon the next morning.

You will also see the 9F, which has deposited the afternoon empties at Langwathby, pass in a hurry on its way back to Kingmoor Shed after a long day's work for its crew.

As well as the anhydrite trains, you will see, or at least hear if you are busy shunting, the following trains from the timetable which would have passed Long Meg sidings during, or close to, the time period covered by the session:

1430	Down	Freight to Carlisle—London Road sidings
1440	Up	Freight to Stourton
1450	Down	Express Passenger to Edinburgh—"The Waverley"
1510	Down	Freight to Kingmoor

## Long Meg Shunting session instructions

It's Friday afternoon at Long Meg mine, and you have some shunting to do. You will be preparing two consists of anhydrite hoppers, one bound for Widnes, and one for Whitehaven.

Your first task is to assemble a consist of 20 full hoppers in reception siding 2 from the two strings of 10 that you loaded earlier. Place a guard's van at the north end, as this load will be heading up to Widnes. The locomotive for the Widnes run will be arriving around 1445, bringing with it the 20 empty hoppers that spent the night in the Langwathby down refuge. It will couple to the loaded consist, and is due to depart at 1500.

Your next task, meanwhile, is to take 14 of the empty hoppers through the anhydrite loaders. Assemble these in the mine sidings with a guard's van at the south end. Once the Widnes train has departed, move the consist into reception siding 2 ready for the run to Whitehaven tomorrow morning.

[Note: If you are playing in DCC mode, you may have a long wait for the Widnes train to leave. If you don't want to wait until 1500, you can let the Widnes train go early. Fortunately, the up traffic is fairly light this afternoon.]

Your final task is to move the empty hoppers out from reception siding 1. Bring them out in two strings of 10, putting one lot in mine siding 4 and the other lot in mine siding 5. Put the guard's van in mine siding 1.

That's your work done for today, so the only thing left to do is to park the shunter in the engine shed in siding 7.

