

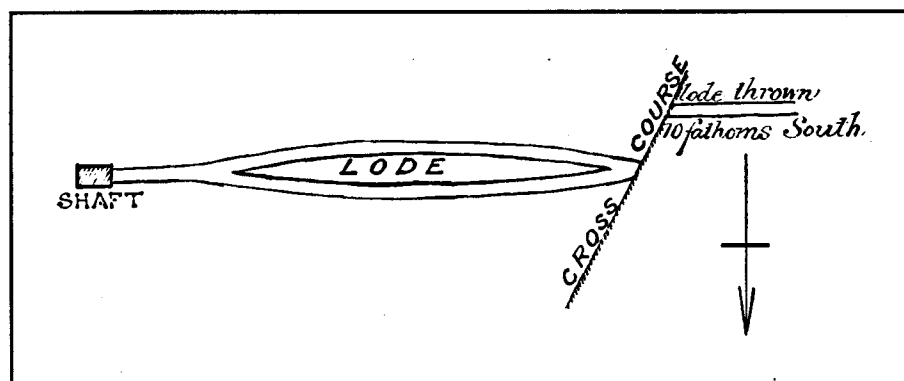
## LONG GARTH - A LITTLE KNOWN COPPER MINE IN THE LAKE DISTRICT

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On the western slopes of the Duddon Valley in the vicinity of Ulpha in Cumbria lies Long Garth Farm which was the site of some mining activity typical of many small-scale exploratory efforts undertaken in the second half of the last century. All that remains today is a depression in a field in line with the neighbouring Ulpha Mine copper lode also exploited further along at Logan Beck (SD 173917). No thorough search having so far been made, there is no way of knowing if the depression is in fact a collapsed adit.

Interest in the copper lode at Long Garth goes back to at least 1863 when according to a take-note (licence to prospect) dated 1st May, the trustees of the will of the late landowner James Pennington conferred the right to search "for copper ore, lead ore, slate, stone, coal and other metals and minerals under the estate of Long Garth and Frith Hall" to two grocers from Whitehaven.

At an unknown date the "Langarth Copper Mining Co." was formed, which contracted Wadham & Sarner, Civil and Mining Engineers, Barrow in Furness, to carry out a survey of the mine. This was delivered in writing on 22nd March 1971. The mine comprised three lodes bearing nearly east and west, and dipping about 14 inches in the yard. On the middle lode an adit had been driven in a westerly direction from the level of the river for upwards of 160 fathoms, and at a point about a third of that distance a shaft had been put down to a depth of 13 fathoms where it reached the adit. This was afterwards sunk to a further depth of 20 fathoms, but the influx of water combined with the inefficiency of the pumping machinery had caused its abandonment. At 43 fathoms west of the shaft the lode was thrown 10 fathoms south by a cross course, and between the shaft and this fault the lode was split as shown in the sketch.



In following the line of the cross-course in a southerly direction the south lode had been intersected and was proved west, but the ground did not appear promising. As it was only a few fathoms south of the middle lode, Wadham & Sarner did not see any use in its being carried forward; the lode could be proved more easily by cross-cutting from the main drift. Abandonment was advised.

The north lode had been opened up for a distance of about 20 fathoms in very tempting ground. Yet this was but a surface trial and insufficient to test its actual value. The

middle lode was by far the most promising. After a great deal of barren ground the forehead was now yielding about one ton of copper to the fathom. The shaft had been sunk on a bunch of ore producing two tons to the fathom, part of which had already been stoped out. The rest was estimated at 150 to 200 tons, and it was thought that at an increased depth, where the lode was presumed to re-unite, there was a reasonable chance of a bunch of ore to be met with. The advice was that the lode should be proved at this increased depth.

Wadham & Sarner recommended carrying forward the heading on the middle lode, sinking a shaft upon it in advance of the level of the adit, putting off drifts east and west, which would not only facilitate the work but also thoroughly ventilate the mine. Cross-cutting north and south would then prove the other lodes. This latter portion of the suggestions could be carried out without necessitating the erection of pumping or other expensive machinery, but to pump the water from the sump would entail the cost of a water wheel or turbine. It was advised to go on with the west headings and the new shaft and, if possible, erect the machinery required to prepare the ore for the market.

Between £1500 and £2000 worth of ore had been raised but disposal in its actual state would only be possible at a loss. Wadham & Sarner felt it wiser to put up the machinery at once in order to render the ore at bank marketable instead of awaiting the results of the exploration. The machinery could also be used for pumping purposes, there being an abundance of water that could be diverted at moderate cost.

The estimated total cost of a suitable plant and giving the mines a fair trial as suggested would be £3000 to £4000, three-quarters of which to be paid by the ore raised in the process and already at bank. The final conclusion was that the mine had not yet been thoroughly proved and, "although its further prosecution is a mere speculation, we should advise you to form a small Limited Liability Company for its working rather than abandon it."

It would appear that Edward Wadham was the mining expert of the firm of Wadham & Sarner. Hailing from Bristol he was mineral agent of the Manor of Plain Furness and also loomed large in the Furness haematite industry.

The report obviously did not inspire enough confidence and the required money could not be raised. The last word was the Mining Journal of 15th June 1872.

**T**O BE SOLD, a COPPER MINE, situated on the West Bank of the DUDDON RIVER, and known as the LONGGARTH MINE. The mine has been opened to some extent, and shows very promising. A considerable quantity of metal has been won, and is now on the surface.

For reports on the mine, section of works, particulars as to leases and royalties, and to inspect apply to S. HART JACKSON, Solicitor, Ulverston, who is empowered to treat for sale of same.

But this was apparently not the end yet. The Cumbria Record Office contains some correspondence on the topic. In a letter of 15th September 1877, Captain John L. Burn of Hodbarrow Mine (haematite) inquired about details of rent and leases of the Long Garth Copper Mine, proposing formation of a company. A similar request was made by him again on 19th June 1878 in addition to a request for a take-note for two years free of rent " before an influential man comes re company". Finally in 1889 Long Garth was incorporated in the Ulpha Copper Mining Co.

#### ACKNOWLEDGEMENTS

The Report dated 22-3-1871 of Wadham & Sarner is in the Iain Maci, Livingstone & Co., Solicitors, Ulverstone Collection in the Cumbria Record Office. Special thanks are due to Alen McFadzean for the local information and archival support.