

Haltwhistle  
March 5<sup>th</sup> 1855

Mess<sup>rs</sup>

Payne, Addison and Ford,  
Gentlemen,

Having received your further instructions to report on the minerals and mineral veins on Hartside and Glassonby Fells, more particularly with respect to those veins supposed to contain the ores of Copper, Lead & Barytes I proceeded, on the 3<sup>rd</sup> Inst. In company with Mr J C Cain, Mineral Surveyor of Alston, to view this property and we jointly beg to submit the following as our report thereon.

The geological features of Hartside and Glassonby Fells are similar to & identical with those of Alston Moor, being in the upper portion of the Carboniferous or Mountain Limestone formation.

From Hartside to Lugill, Ravensgill & Renwick there is a rapid descent, the drainage of the surface being effected by Ravensgill Burn, which, with its numerous tributaries, falls into the Eden below Hunwick.

Mr Little, the resident manager of the Great Northern Mining Co Works, accompanied us the whole of the day & rendered us every assistance we required of him.

No operations have been carried on in search of minerals on Glassonby Fell as far as we could ascertain except in opening out the vein of iron ore called 'Glassonby Fell Vein'. Opening and trial for minerals have been made on Hartside Fell, namely at Lugill Beck & at Ravensgill which we visited in the following order.

Leaving Hartside Fell Top, we proceeded in a Northerly direction about half a mile to Lugill Beck, when we found a level in actual operation. This level, we learnt, had been driven by a former company some years ago in a bed of argillaceous shale, lying below the Great Limestone, for a distance of about 50 fathoms in a southerly direction, and afterwards had been abandoned by them. In driving this distance, only one vein (an East and West one) was cut. The Great Northern Mining Co. resumed the working of at and West veins and it is now being continued on a North and South one which has been recently cut. None of the veins have been explored (except cutting through them by this level) but the fourth one which has been risen into the Great Limestone. These veins are chiefly composed of argillaceous substance, the prevailing mineral being sulphate of barytes of an inferior quality.

The character of these veins, so far as we had an opportunity of judging from the indications presented, are such as to lead to the conclusion that they are not at all likely to prove productive of minerals, so as to guide any reasons for the necessary outlay of capital.

It is proposed to continue this level about 15 fathoms further South where another East and West vein will be intersected. We carefully examined a considerable quantity of its produce on the surface, & judging from its appearance we consider its character to be similar to that of the veins already described.

Proceeding Northwards from Lugill Beck our attention was directed to 3 points (within the space of about 1000 yards) where sulphate of Barytes had been worked. Judging from its appearance, we are of the opinion that it is not of a quality to command a market at remunerative rates.

After leaving the Barytes workings, we visited the trial for Copper in Ravensgill, about 1 ½ miles further down the hill in a Northerly direction. A level has been driven from the side of the beck in a bed of argillaceous shale (lying below the Great Limestone) & a vein intersected at a distance of 10 fathoms. This vein is capacious being about 8ft in width. From 12 to 18 inches are in some places metalliferous. A bunch or pocket of Copper ore was met with near the point of intersection, which appears to be of good quality. Openings have been made in a North and South direction for a few fathoms but no traces of Copper present themselves in the foreheads of either. A sump has also been sunk down about 3 fathoms upon the vein – indications of Copper ore there continue, but they are not flattering in their appearance.

Judging from the indications seen at this trial, from our experience in this district, we are of the opinion that it will not prove a remunerative undertaking, though small pockets of Copper ore may occasionally be met with, & sufficiently tempting to lead to further outlay- Yet they would by no means be likely to yield any profitable returns for the capital invested.

A large volume of water was seen passing down into the sump from broken ground on the South side quite preventing the continuance of operations at present without the aid of powerful pumping apparatus.

In conclusion, we beg to say that, in our opinion, the property under consideration does not contain any mineral vein which presents indications such as to warrant the supposition that a profit would be derived from their extended working.

Signed  
R R Maddison  
J C Cain