
57 Seathwaite

Theme: Heritage and mining

Location

57 Seathwaite — graphite. There is parking on the roadside at Seathwaite and it is a 2 kilometre steep return hike to the mines [NY 232 127].

Description

High up the western valley side are a line of waste heaps from mines that once produced one of the rarest minerals in the world: graphite.

Graphite is a form of pure carbon and because of its uses in the aerospace, nuclear, and motor industries, it is regarded as a 'critical raw material'. When the mines at Seathwaite were operating between the late 16th and mid-19th centuries, graphite was equally valued. It was first used for marking sheep, but as it behaves like Teflon its main use was for making moulds for cannon balls and coins. It also provided the raw material for the Keswick pencil factory. Such was its purity and value that the mines had armed guards to stop smuggling. The British blockade of France during the Napoleonic Wars meant the French army had to invent a substitute from graphite powder and clay.

The graphite can be in fine flakes, or in lumps. Both occur in veins and especially where the veins cross. Precisely how it formed is still debated but it probably involved high temperature, carbon-rich fluids infilling cracks in the volcanic rock which was being changed by heat and pressure (metamorphism). Graphite has been known by different names — wad, black lead and plumbago — because it was initially thought to be a form of lead. Pencils have never contained lead but we still call them lead pencils.

Photographs

(Photo 57-1) 57 Looking down on Seathwaite from the graphite mines.

(Photo 57-2) 57 Seathwaite.



(Photo 57-1) Looking down on Seathwaite from the graphite mines.



(Photo 57-2) Seathwaite.