

# **RRCPC Newsletter**

## **Volume 38 Number 2 Article 7**

### **May 2001**

## **Borrowdale Wad Mine**

"Wad" is the local name for a mineral also known as "Black Cawke", "Black Lead", or "Plumbago". If you are still no wiser, it is graphite - a form of pure carbon comprising layers of platelets that easily rub off, giving it a greasy touch. (To add to the confusion, it is also the name of a completely different mineral consisting mainly of hydrated manganese dioxide.)

High quality Wad deposits are rare; so rare in fact that there is only one of significance in Britain, located beneath Seatoller Common, NW of Seathwaite at the head of Borrowdale in Cumbria. It occurs in vertical or steeply sloping pipes that reach the surface at only two points. The distribution is random, making mining difficult.

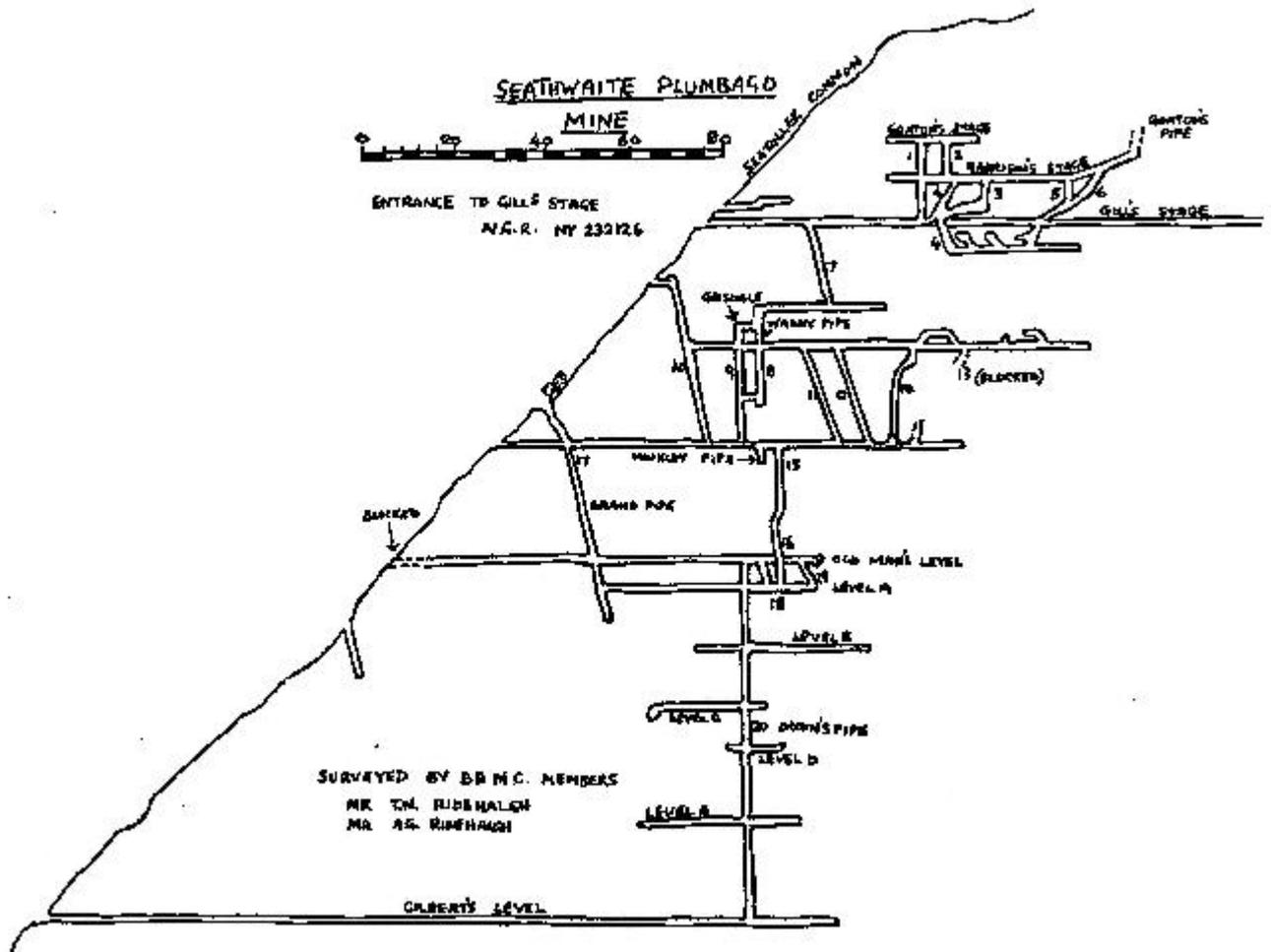
Commercial mining operations began at the end of the 16th century. It was used to mark sheep, for rust-proofing stoves and, mixed with ale or wine, as a "cure" for a wide range of ailments. (Poisonous metallic compounds present as impurities probably did more harm than good!)

However, its principal use was military; the coating of moulds for cannon balls. The price was soon set at £100 per ton, but this rose to £1300 by the end of the 18th century, at to £5000 by 1830. Such was its value and strategic importance that guard lodges were built at several entrances, both to protect the mine and to search the workers when leaving. In 1752, after an armed raid, an Act of Parliament made it an offence to steal Wad, punishable by up to seven years transportation. This must not have been entirely effective as there are report of black market operations and continuing attacks up to 1771.

In 1790 it also gave birth to the famous Keswick pencil industry.

The development of techniques using inferior quality Wad from Europe ultimately made the difficult working conditions at Borrowdale uneconomic, and mining finally ceased in 1891.

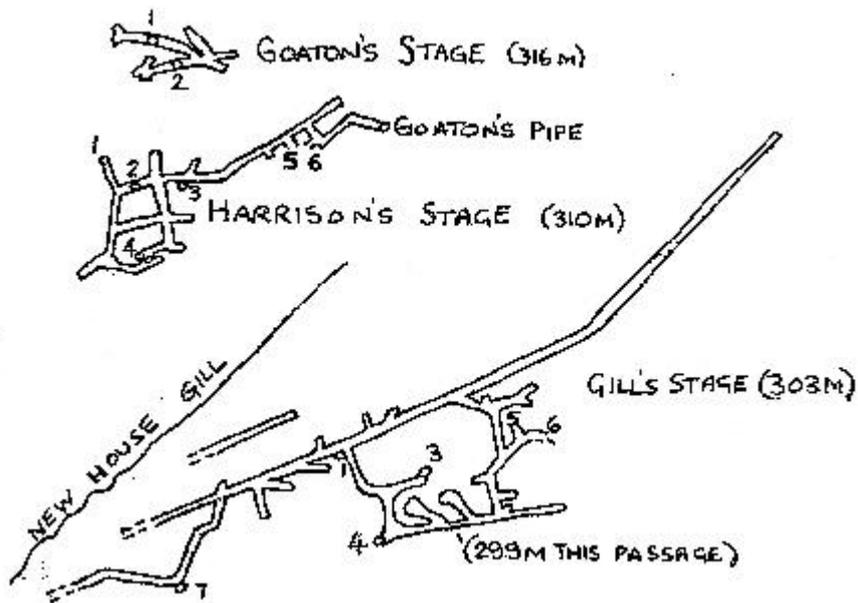
For more details of the geology and mining history, see the references at the end of this article. Now to the more interesting bits for cavers...



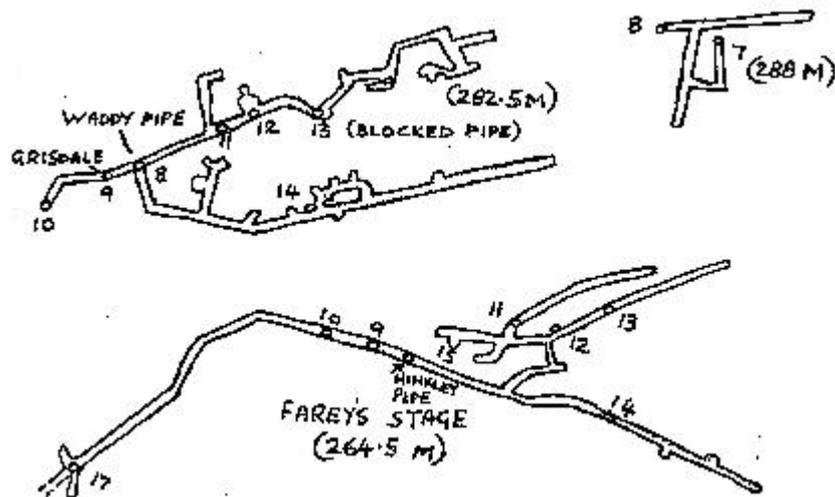
The mine is owned by the National Trust and there are no access restrictions, (unless you have commercial interests in "outdoor activities"). Park at Seathwaite and walk west through an arch in the farm buildings. Cross the River Derwent footbridge and turn right. The lowest workings, (largely flooded), are in the wood to your left. After a gate, and at the corner of the wood, cross Newhouse Gill and follow the vague path which zig-zags up the steep hill. The first obvious working, on your right, is Gilbert's Level, with the remains of a guard lodge. If you do the full through tip, this is your exit.

Continue up the hill, past Farey's Level, (a walk-in size passage with a deep hole in the floor a few metres in), until you reach the Gills Stage. There are two entrances at this level, the one you want is round the corner in the side of Newhouse Gill gully.

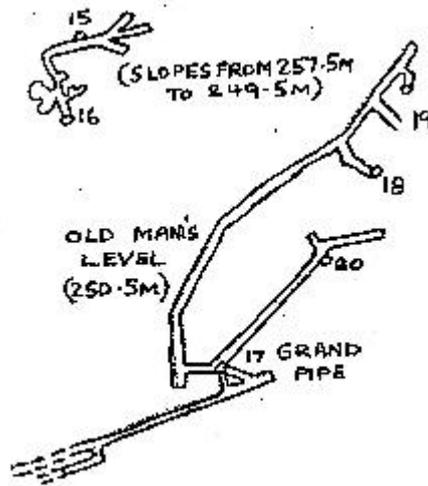
From the second Gills Stage entrance the first junction on the right leads to pitch 1, (7). However, it's worth exploring the 310m (Harrison's) and 299m levels, known collectively as the "Labyrinth". Continue to the third major right-hand junction where a hands-and-knees crawl leads to the climb up or down. In wet weather there is an active stream here, which ultimately flows down Dixon's Pipe and gives this region a very "natural" feel. Up is an easy slab with a small hole at the top, returning the same way. Down provides a circular route back to the main adit.



The first pitch, (11m with 2 resin bolts), screws clockwise but is not difficult to pull-through. The second pitch (8) follows after only a few metres. Again, there are resin bolts. Descend 6m to the next level, which is more extensive and still has railways lines in place. The third pitch is along the left branch (11) and is 18m to Farey's Stage.

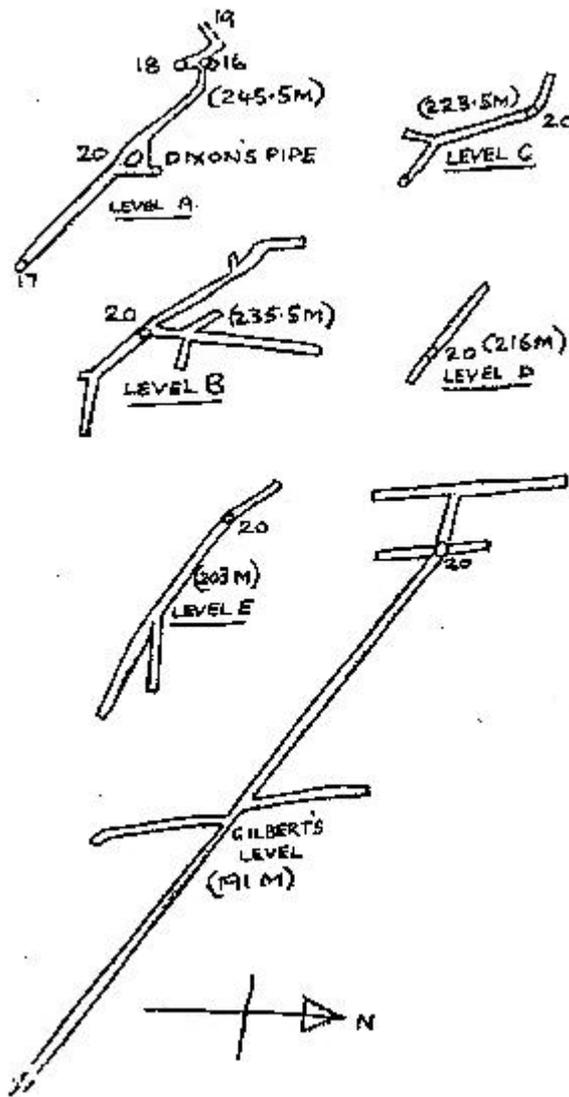


Exiting along the adit, you reach the top of the Grand Pipe a few metres before the exit. This drops almost 30m at 45° and requires care to cross! Rigging is from two resin bolts on the in-bound side, and you descend to the obvious landing at "Old Man's Level" after 14m. This is the usual name given to early workings. Have a look at the out-bound passage - the exit is blocked, but it is a fine example of a "coffin" level; narrow at the bottom and wide at the shoulders in order to remove the minimum amount of rock.



Inbye, the way to Dixon's Pipe is through a window on the right (19) and down an unstable spoil heap to "Level A". There are white markers leading the way.

At the time of my last visit, the resin bolts gave way to rusty tat at the top of Dixon's Pipe - just what you need for a 55m drop! If you don't fancy this, then obviously you need to be able to return by SRT to Farey's Stage. The descent is in three stages, 10m to Level B, 32m to Level E, (a small square hole with bolts in place), and 12m to the bottom. Parts of this shaft are reported to be unstable, and it can be wet near the bottom.



This is an enjoyable excursion, even without the dubious descent of Dixon's Pipe. Your ropes will come out grey and very fast due to the graphite! The one thing you wont find is any Wad - it's all gone!

*Samuel Carradice*

**References:**

"Mines of the Lake District Fells",  
 John Adams, Dalesman, 1995,  
 ISBN 0 85206 931 6

"Beneath the Lakeland Fells", Chpt 2,  
 David Bridge, Red Earth, 1992,  
 ISBN 0 9512946 3 6

"Seathwaite Wad",  
 Ian Tyler, Blue Rock, 1995,  
 ISBN 0 9523028 1 0