

Llanberis Copper Mine. Explorations by Eldon Pothole Club, Journal No 9 Vol 3, 1983

The following is the only complete exploration account I have been able to discover and is of considerable interest, unfortunately it is written in 'cavers speak' and by someone who obviously knows nothing at all about mining. The whole text is seeded with reference to "avens" and other nonsense, they even re-name the mine! This is especially unfortunate as the explorers show a considerable amount of courage in their somewhat hairy exploration, and its therefore unlikely that the ground that they covered will ever be explored again. So much about this interesting mine could be discovered if this were possible by knowledgeable people.

So that the following text does not read as pure nonsense I have inserted some notes of explanation in red.

Roy Fellows 2007

DRAGON MINE, N. WALES.

On the southern hillside between Nant Peris and Llanberis in Snowdonia, there is evidence of quite considerable mining activity in pursuit of copper. During a particularly hot summer Mike Migley and myself decided to "have a look" at the old remains. It appeared that there were relics of at least six levels but only three appeared to be passable for more than a few feet. Two of the three were at the level of Llyn Peris and appeared to have been used for drainage and haulage. The remaining open level was some 300 feet above these. All three showed very considerable draughts. Also we found an open working type of shaft (**gunnis**) some 500 feet up the hill from Llyn Peris, the surface dimensions of which were some 200 ft. x 20 ft. The depth seemed something in excess of 300 ft.

For no particular reason we decided to ignore the three levels and have a go at the fearsome pit. We lowered 300 ft. of ladder into the steaming hole and I descended. The ladder proved to be free hanging for 110 ft. to a ledge in the bed of the copper vein (**footwall**) where 190 ft. of ladder piled up nearly prevented access!

However the shaft continued on the same large scale as above. The next 150 ft. or so was down the southern side of the roughly east – west vein and eventually after passing a level, landed on a steeply inclined boulder slope.

This spot was still reasonably well illuminated by daylight. The obvious way on was down the boulder slope which was at this point about 30 ft. wide. The roof was too distant to be seen clearly with a normal caving lamp. I put the ladder down the slope and after some 40 ft. reached a drop of about 10 ft. where the boulders had keyed themselves across a narrowing in the passage. On touching these they immediately slumped 6 inches dropping some of their number onto the slope below which could be seen continuing for some distance.

I returned from the edge of this, by now 9 ft 6 inch precipice with a cut hand and Eldon Pothole Club suffering a loss of only one ladder surprisingly. However on returning up the boulder slope the ladder displaced a pile of deads from some great height.

I ran for cover, the deads landed, and Eldon Pothole Club gained another squashed ladder! I decided to be beaten by the 9 ft. 6" drop and go out examining the side levels noticed on the way in. The first one was only some 15 ft. above the boulder floor i.e. some 235 ft. below surface. It was on the southern side of the vein and after about 200 ft. divided. The left branch contained gradually deepening water. As the water reached chest height a total blockage was encountered. However a cool draught and slight daylight coming through the collapse indicated that the surface was not far away. (**Must have been heading outbye, the direction of drainage**) The right branch led directly to the head of a pitch. This pitch appeared to be in such a position as to bypass the 9 ft. 6 inch drop. I returned to the ladder and climbed it uneventfully to a hole on the north side, some 90 feet below surface. This I followed to the head of a narrow and apparently deep pitch, (South Shaft). Surface was reached without any more ado and a welcome cigarette from Mike. Mike then descended to the head of the boulder slope at 250 ft. and came out somewhat overheated. At this point we came to the conclusion that the mines temperature was higher than the summer's day temperature at surface! We then duly named the hole "Dragon Mine 1" (**Why?**) We vowed to return.

The next weekend saw us both in the 235 ft. level armed with ladders and ropes and a bolting kit. I placed a bolt and descended the pitch at the end of the level. It proved to be 80 ft. or so deep, and divided into two stages by an enormous perched block behind which was a curious level merely oxbowing (**presumably in English means doubling back**) back into the main vein. The base of the pitch was found to be about 30 ft. below the foot of the 9 ft. 6 inch drop. However the way on was down a short climb to the head of a 25-ft. pitch. The passage here had narrowed (at least it had at floor level) to about four feet wide. I drilled a hole for a bolt belay at the head of the pitch and then proceeded to throw the rest of the kit down. Without sprouting wings nothing could be done and so we were forced to retreat. Later we returned with another bolt kit which we did not use! We belayed a ladder instead to a piece of scaffolding which we jammed across a convenient side passage. The pitch was duly descended into a dramatic widening of the passage to its original dimensions, i.e. huge, with the roof out of sight. The floor was composed of a boulder slope of dubious stability. We followed the right (north) wall down and eventually came to a chamber with a 10 foot square shaft, flooded some 15 feet below us.

There were several large diameter timbers jammed across the chamber and a large pipe breaking the water in the shaft. (Rising Main to people with intelligence. It sounds like an engine winze, wonder how it was pumped?) The way on appeared to be to descend by ladder to water level and then stride into an obvious passage. However we had no rope and without a lifeline the heavy timbers suddenly looked very frail and we psyched out! However at the far side of the chamber where the rift passage (my best translation is a drive along a stoped vein) we had been following started to rise up another loose slope, we found a small draughting hole in the floor. This was quickly dug out and a 15 foot pitch discovered. Whilst Mike belayed the ladder to himself, I descended to find a junction of three passages. One led quickly to the flooded shaft, whilst the other had a spot of daylight at the end of a long tunnel. I rushed towards the light, in deepening water, to find that only about fifteen minutes digging was required to reach surface very close to Llyn Peris. Returning to the junction the third passage was explored and found to terminate after two flooded shafts and a ten foot climb up an ore chute which appeared to require a shoulder for aid. I retreated to Mike and we de-tackled the mine.

Some time later we returned via the lake level and climbed the chute. It led into only a short passage in the vein ending in a very high aven (stope?) with many wooden platforms above us. We also climbed the loose slope above the 10' square shaft but found that after 150 feet it came to the head of a pitch that dropped into a known section of the mine.

We now decided to concentrate our efforts on the draughting level some 300 feet above the lake. This we followed for about 200 feet to a worked out vein again heading roughly cast-west. To the right, a few easy climbs led to a high draughting aven.

To the left however, a 30' pitch presented itself; we placed a bolt and descended. In one direction was a level which we entered and after about 400 feet ended in a choke, whilst in the other direction we encountered a deep pitch. There were considerable quantities of wood in this mine compared with Dragon 1. We put 150 feet of ladder down the shaft from a bolt. I tied on a lifeline and fell down the first 10 feet of shaft in company with a few stemples. The pitch was then descended without any more trouble and found to be 110 feet deep. Mike joined me and we explored the level at the bottom. After some deep mud and a wet aven a 25' pitch was discovered and named Malachite Falls because of the spectacular deposits on the walls.

Above the pitch an aven issued quite a large stream making the falls somewhat wet but a bolt was inserted and the pitch descended. A few feet on however, a deep shaft took the stream, both sides of the shaft bearing copious quantities of deads on rotten stemples, the floor upon which we stood appearing to be composed of the same material. We retreated scared! On the way out I investigated a side level about 30 feet below the top of the 110 foot pitch but found it to be choked and probably close to the surface.

A few days later I was to be found well lifelined and standing on the edge of the wet pitch trying to insert a bolt and testifying that the edge of the pitch was indeed as bad as we had imagined. Eventually the bolt was placed and 150 feet of ladder put down the very wet pitch which I descended some 15 feet to find a level leading off to the east. The continuation of the ladder was in contact with some very unstable looking deads. I explored the level and found that it ended in a short pitch taking another stream. Back at the ladder, the only way to make it hang clear of the deads was to place another bolt to pull the ladder to one side. This done the pitch was found to bottom 140 feet down at a landing in a well-watered level with a flooded shaft. Daylight was visible so I followed this to emerge as expected in the Central Electricity Generating Board security compound! (This is the level currently fitted with an iron grill in the 'park' through the gate from the lay-by)

Returning along the level, a branch to the left was followed and found to end at the base of a wet aven, probably corresponding with the stream pitch found from the level part way down the first pitch. The main level itself however continued to the north passing into flooded vein workings with more dubious looking wood. This I crossed to find only a short blind heading. Ascending the 140 foot pitch with some difficulty, I found a wet Mike muttering something about being cold which I couldn't understand since he had only been in the water for some two hours! We named the mine "Dragon 2" and visited all the pubs in Llanberis.

Some time later I investigated the surface more closely. I managed to penetrate a strongly draughting, collapsed level for some 40 feet or so until the way became too dangerous. This would almost certainly lead into an unknown part of the mine if it could be forced. I also dived a flooded working to find that it ended suddenly at about 25 feet.

On a later trip an extension was found by digging in the main level of Dragon 1. It gave 200 feet or so of damp passage containing children's handprints and shoes; the whole mine complex; in fact, contains many of these interesting finds.

At present there is no known connection between Dragons 1 and 2 although they appear to be on the same vein. There are two possibilities for a connection, only one of which is above water level. This would involve some pendulum movements on the 110 footpitch in Dragon 2 or some hairy climbing at the end of Dragon 1.

The lower levels may eventually be lost to cavers due to the C.E.G.B. pump storage scheme. This would be a great loss as these two through trips are certainly very well worth doing. Dragon 1 in, in fact quite a simple and fairly dry trip and well within the abilities of any normal caving party, Dragon 2 however demands more expertise.

Reference:

"The Copper Mines of Llanberis and Clogwyn Goch" by Peter Crew. (Reprinted from Caernarvonshire Historical Society, transactions Vol. 379 1976.)

Positions of entrance:-,:

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| Dragon 1 main shaft entrance. | SH 593 587 |
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| Dragon 1 lake level | SH 596 589 |
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| Dragon 2 upper level entrance | SH 597 586 |
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| Dragon 2 lake level | SH 601 585 |
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