Access notes and risk assessment for Hendre Ddu Slate Mine

Hendre Ddu Slate Mine lies within the Dovey Forest north of the minor road which runs between the villages of Aberllefenni and Aberangell. The mine area is traversed with a series of forest roads, however these are gated thus there is no normal vehicular access. There is suitable parking on the aforementioned minor road near a mobile radio mast at SH81101060 and from here a surfaced forest track winds around the head of the valleys and down towards Hendre-ddu cottages.

The mine covers several areas within the forest, there being two main areas of interest as well as numerous trials. Access to many areas is difficult due to the tree cover and an understorey of brambles, bracken and scrub which makes progress tedious in the extreme. Mobile phone signals are very unreliable – expect to have to get out of the valley to cancel rescue call-outs.

a) The main workings

The main underground workings lie to the south-west of the Hendre-ddu cottages; a minor track runs west from the cottage parking area and after a hundred yards a small overgrown path heads west along the valley floor towards the main adit which drains the mine with a stream flowing down the valley. The water depth at the entrance is about 10"-12", but will be deeper in winter and after heavy rain. The adit leads into a long tunnel which provides access to several chambers and side passages. Proceeding along the tunnel leads to a small blind chamber off the RHS and a little further there is a massive chamber on the RHS, before it continues on a north-west heading to other side passages and further chambers. The massive chamber slopes upwards at an angle of about 30 degrees over very broken ground to reach an upper tunnel network which is parallel, but disjoint from the adit tunnel. At the extremities of this upper network are two vertical shafts which connect to the lower workings and there is also the remains of a rise which might have reached the surface or possibly some of the quarry mine workings.

There are no practical ways out from these workings apart from the entrance adit, however it was noted that there is a horizontal tunnel which enters the massive chamber high up on the eastern wall. opposite the slope leading to the upper tunnels. This feature is difficult to see, but from a specific vantage point it is possible to see daylight coming in from the far end of the tunnel. At some point in the past this tunnel may well have connected to the upper tunnel network, but removal of slate from the chamber has left the tunnel orphaned and inaccessible from the inside. The upper part of the chamber is very shattered and it looks like there may have been connection(s) to the surface which have collapsed long ago.

b) The quarry workings

Access to the upper quarry workings involves traversing extremely overgrown and steep rocky slopes which would deter even the most ardent mine explorers. It is possible to abseil from a location close to a forestry road, the main difficulty being to find good rope anchors and organising re-belays to prevent rope rub. Once down in the quarry it is possible to enter the quarry tunnel via one of many openings. There is no connection obvious between the quarry tunnels and the main workings.

c) Minor workings

There are several trial levels which are blind, some of these are waist deep in water and so are unlikely to be very appealing...

d) Risk assessment

Hazard	Description	Mitigation
Surface hazards	The surface terrain can be very challenging as a mix of bramble, bracken and moss making walking difficult. Some of the area is wet and boggy and other parts has piles of slippery slate waste.	Wear suitable clothing and take your time. Some of the fallen timber is rotten and may collapse if stood on. Be especially careful on rock piles where it would be easy to break an ankle in hidden holes.
Underground trip hazards	Uneven floors with strewn rocks as usually encountered underground. Floors may be covered with pools of water or streams of flowing water	Wear sturdy boots or wellies. A helmet mounted light (with a known backup) together with strong gloves are essential. Look ahead and choose a safe route.
Unstable rock piles in chambers	Most of the chambers are floored with a mix of sharp slate fragments and larger blocks which slope up to the back of the chambers. The piles are not consolidated and may move under gravity with foot traffic causing rocks to roll or slide down.	Generally keep to the side of chambers when climbing up, there are often ad-hoc paths made by previous explorers which are less likely to move. Keep a good distance from people above you to minimise the risk of being struck by falling debris. Move slowly and purposefully to avoid disturbing loose material. Be careful moving between larger blocks as these may move and crush you.
Falling rocks	Some of the chambers are very wide and it is not clear how the roof stays up! In some areas it has failed and both small and large (20+ ton) pieces have fallen and litter the floor. Avoid standing under rises to upper tunnels/chambers.	Visitors need to exercise their own judgment on whether it is safe to venture into dubious locations. Evidence of recent roof falls (clean bare rock exposures) may suggest areas best avoided. Heavy rain over a period of time may percolate and loosen roof structures so exploration in dry conditions is recommended.
Getting lost	Some chambers are large, convoluted and lacking good markers. Inexperience and poor navigation may make it difficult to locate the original entry point.	Do not go alone and keep in contact with your buddies. Waste slate deadens sound very effectively so you may not be able to hear your companions in large chambers if you lose visual contact. If lost then following a wall down will generally get you out, but be aware that you may end up in a dip and have to climb up to carry on.
Underground Shafts	The upper tunnels lead to shafts dropping into the lower chambers. There are no barriers and a fall down a shaft would almost certainly be fatal	Be very cautious approaching possible drops and do not get close to the edge. Do not throw stones.