

## **Croesor Mine Trip Report**

**9 September 2010**

The aim of the trip was to dive the haulage shaft from the marshalling yard to establish if it remains open and if so to what depth, and whether there are any tunnels linking the access shaft to other chambers.

From the previous trip reports of the Croesor to Rhosydd traverse I had assumed that the Tanygrisiau path was the only option. This made the logistics challenging and involved carrying a total of four loads, each weighing between 20-30 kg. Subsequently I discovered the excellent access track from Croesor village and the farmer was very happy to allow me to drive up this to the mine's entrance for the return trip.

As it wasn't entirely clear what the conditions inside the flooded sections would be like I planned for a maximum depth of 60 metres and a total penetration of 250 metres. This required a bottom mix of 2x12 litre trimix 18/36 and 11 litres nitrox 50% for deco, all sidemounted. The plan was to spend a maximum 25 minutes at depth on a straight dive down the shaft, possibly using the deco time to look at the side tunnels if they looked worthwhile.

My only real concern was about the mine's potential instability, as previous reports suggested that the upper levels are somewhat shattered. In fact the lower levels are quite well preserved and the structure appears quite sound.

I descended to the first landing (B?) at about 15 metres, which has railings intact around the shaft's continuation and tunnels lead off it to left and right. For reasons I will explain shortly, I chose not to continue down the shaft, but instead to explore the right hand tunnel. Adjacent to the landing is a very well preserved brick hut and the tunnel is more quite spacious. After about 20 metres the tunnel opens into a very large chamber (C?) with a mass of large fallen blocks sloping steeply down the right hand wall.

After this I saw nothing else for the rest of the dive. My decision not to descend deeper was due to the instantly deteriorating visibility which I was already aware of in the shaft and at the landing. Every surface of the mine is covered in the thickest layers of talc-like silt I have ever seen, which are easily disturbed either by air movement or bubbles (the walls and ceiling are covered too) and which reduces the visibility to zero. Losing the line or becoming entangled in this situation can be fatal and my exit was a case of following the line hand over hand – at best I could see half a metre. This is difficult enough to deal with in relatively shallow water, but at depth and especially if the diver is affected by narcosis or already low on air, the situation rapidly becomes serious.

I have dived several mines in the UK and am used to the poor visibility in natural caves in the Yorkshire Dales, but Croesor is undoubtedly the most hazardous dive site I have ever encountered. In this case the potential interest is outweighed by the risk.