EXCURSION

Holme Bank chert mine

16 June 2018

Leader: Paul Chandler

Eleven members of the Society gathered at the Deepdale Business park near Bakewell to be greeted by out leader from the Peak District Mines Historical Society. We then walked the short distance to the entrance to Holme Bank chert mine, one of the two major chert mines of the district. The mine started in the late 18th century as a quarry to serve the new pottery industry of Stoke on Trent. Chert was used to grind flint for making the fine white slurry or 'slip' which was added to the pottery clay as a whitening agent. It was worked from beds of the shallow-dipping Monsal Dale Limestone, where complex processes of dissolution and precipitation during diagenesis resulted in the movement of silica and its concentration in certain horizons as beds of chert up to 3 m thick. The Bakewell area is particularly noted for the thickness and purity of the chert horizons.

The mine was developed along a face by undercutting the chert bed by drilling and blasting out the softer limestone underneath. The chert bed was then supported by limestone pillars or sprags. When a suitable joint was found in the massive chert the sprags were blasted, bringing down blocks of chert up to several tons in weight. These were broken up in situ to more manageable sizes, which were then hauled onto wagons by a windlass and transported out of the mine. This process generated a large amount of waste rock, both limestone and chert fragments. These were used as supporting walls as the face moved updip.

Paul led us through the numerous passages between the carefully constructed walls of waste chert pointing out the boundary between the mineral rights of the Holme Hall estate and Duke of Devonshire's Holme Bank mine. The group stopped at numerous places to inspect the massive, mottled 'throslebreast' chert beds and discuss the origins of the deposit. A large collection of shoes in the depths of the mine could not be explained! The visit had an interesting conclusion when the combination padlock at the exit refused to open due to its confined position. It took an interesting 15 minutes before it was persuaded to unlock and we could walk back to the cars, just as a torrential rainstorm started. Paul was thanked for a fascinating tour of a hidden geological and historical site.

Tim Colman

A roof support made of stacked limestone and chert waste in the Holme Bank mine.

Undercutting of limestone beneath the chert bed in the Holme Bank mine, in the remains of a working face that was simply abandoned when the mine ceased operation.