

EXCURSION TO THE GYPSUM DEPOSITS OF NOTTINGHAMSHIRE

Leader: Dr. J.H. James

Sunday, 7th September, 1969

Members of the Society left Nottingham at 9.30 and travelled via Bottesford to Hawton, just south of Newark. At the Jericho Quarry of British Gypsum Limited (grid reference 480710 339120), an introduction to the succession was given. This was followed by a description of the methods of working by Mr. J. Alker, the Quarry Manager.

The party then made their way via the Hawton Works (480150 350580), where members were able to collect specimens of blue Anhydrite, to Hawton Quarry (479650 348680). Here the party were able to examine the Upper Gypsum beds and collect specimens of satin spar and massive gypsum. Attention was paid to the main divisions of the succession, in particular the nodular masses of gypsum set on blocky green and red marls, associated with numerous satin spars. Further, that this was constantly underlain by approximately twenty feet of blocky red marl with an almost absence of satin spar veining, but containing four recognisable gypsum horizons. It was further pointed out that while these four gypsum horizons varied in thickness from point to point, they would be readily recognisable in the quarries we visited later in the day.

The above horizons are underlain by other gypsum-bearing marls, which in general, in the next ten to twelve feet below, contain well developed green "fish-eyes" or spots. It was at this point that some discussion was held on the question of the coloration of the marls. We also took the opportunity for Mr. A.Z. Aljubouri, a research student at Nottingham University, to demonstrate the presence of Uranium minerals coating some of the gypsum nodules.

The next quarry to be visited was the Staunton Quarry of Bellrock Gypsum Industries Limited (480150 344640). Here the change of distribution of the green marls, normally associated with some of the upper gypsum beds, was pointed out and examination was made of large gypsum blocks to show the dendritic inclusions of red and green marl within the larger masses. The party was able to observe in this quarry water coming upwards from the base of the gypsum layers, after having made its way down dip.

The next stop was at the Manor Arms Hotel for lunch. In the afternoon, the party proceeded to Cropwell Bishop to a British Gypsum Quarry (467465 336090), where the various layers of gypsum were discussed and the opportunity was taken to point out the changes in quarrymen's names for similar beds within the Vale of Belvoir. In this quarry, a short time was devoted to discussing what was likely to be the mode of origin of the gypsum, in particular whether the sabhka concept of D.J. Shearman could be applied to this type of deposit.

The party then left the Vale of Belvoir and proceeded to Bunny on the Nottingham-Loughborough road (458110 328600), where, by kind permission of H. Baldwins, we took the opportunity of looking at gypsum exposed just above the working Tutbury horizon of the East Leake/Gotham areas. However, time was short and the party proceeded to Gotham, where Mr. J. French, the Mine Manager, had arranged to escort the party down the Glebe Mine (4353870 328955). During the visit to the mine, the mode of occurrence of the gypsum in this horizon was demonstrated. The effect of faulting on mine workings was shown and the method of working was explained by Mr. French.

A vote of thanks was given by Dr. R.J. Firman to the leader and to Mr. M.J. Evans and Miss L.M. Bates, who assisted with the excursion.

J.H.J.