

Nacrite from Groby, Leicestershire.

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IN the summer of 1951 Mr. R. J. King of Leicester collected from the shatter zone of the main fault in Sheet Hedges Wood quarry, Groby, Leicestershire, specimens of slickensided syenite with quartz veins which contained a creamy white, soapy or powdery material in small cavities in the quartz and on surfaces of movement. The mineral was found from X-ray powder photographs to be the rare clay mineral nacrite. Subsequent searching by Mr. King this year has failed to produce more than a very few grams, mostly on one specimen. The mineral seems to be confined to the region of the main fault and has not been seen in any other part of the quarry.

Microscopically the material is a fine-grained aggregate of irregular and roughly equidimensional crystals mostly in the range 0.001 to 0.01 cm. diameter with an average of about 0.003 cm. Extinction is undulose especially in the larger units. The mean refractive index is about 1.560.

The X-ray powder pattern (table I) of Groby nacrite may be compared with the data given in the preceding paper for nacrite from other localities. Several lines marked 'broad' or 'band' in table III (p. 971) are here resolved into distinct doublets.

TABLE I. X-Ray powder data for nacrite from Groby, Leicestershire.
(Cu- $K\alpha$ radiation; camera diameter 6 cm.).

<i>I.</i>	<i>d</i> (Å.)						
vs	7.23	m	2.43	vvw	1.772	vvw	1.417
ms	4.38	vvw	2.34	vvw	1.735	w	1.369
m	4.12	vvw	2.29	vw	1.685	vvw	1.340
vvw	3.96	vvw	2.26	vvw	1.660	vvw	1.312
s	3.59	vwb	2.09	vwb	1.619	vw	1.283
vwb	3.44	vw	1.95	vwvb	1.584	mw	1.268
w	3.07	vw	1.93	s	1.489	vwb	1.237
vvw	2.93	vvw	1.897	mw	1.463	vw	1.210
vw	2.59	vvw	1.800	vw	1.435	vw	1.195
w	2.52						

This appears to be the first record of the occurrence in Britain of nacrite as a distinct mineral species.