ANCIENT MONUMENTS LABORATORY

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TITLE

Analysis of a sample of 'Fullers Earth' from Dyer's Lane, Beverley, Yorkshire

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November 1984

A small amount of soil (AM841056) was analysed using X-ray diffraction to determine whether it was Fuller's Earth, which consists essentially of calcium montmorillonite (Dr. Whiting, Fuller's Earth Works, Redhill, personnal communication). One sample of the soil was analysed in the as-received condition and one sample was analysed after treatment with dilute hydrochloric acid to remove any calcium carbonate present. Calcite (calcium carbonate) was the major mineral detected in the as-received sample, although some quartz (probably in the form of sand grains) was also present. Only quartz could be positively identified in the acid treated sample, although a few additional lines were present. These were probably due to silicates in the soil, but they could not be identified with confidence. These lines did not correspond to those expected from calcium montmorillonite.

In conclusion, the samples did not contain calcium montmorillonite at a detectable level, and therefore the material examined was not Fuller's Earth. It consisted of soil with a considerable amount of calcite and some quartz.