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Dr D F Williams April 1980

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Petrological examination of
Early Saxon pottery from
Heworth, Yorkshire

PETROLOGICAL EXAMINATION OF EARLY SAXON

Saxon pottery.
from Humberdale

POTTERY FROM HEWORTH, YORKSHIRE

D.F. Williams, Ph.D.,

(DOE Ceramic Petrology Project)

Department of Archaeology, University of Southampton

Much of the pottery was examined in the hand-specimen, and six sherds were thin sectioned and studied under the petrological microscope, one of these was also subjected to a heavy mineral separation.

Broadly speaking, the majority of the pottery examined appears to have been made from a fairly similar range of raw materials. The commonest fabric present tends to be moderately hard, dark reddish-brown to dark grey throughout, and contains frequent visible inclusions of quartz, quartzite and rock fragments. Some of the sherds are coarse in texture (e.g. 328b, 426x, 224c, 567a, L, N, plus much unmarked pottery), while others are slightly finer, usually receiving a light burnishing (e.g. 2, 187e, 621f, 459d, 415p, 602y, M, S, T, XX, and some unmarked sherds). Golden plates of mica, in greater or lesser amounts, appear on a number of sherds (e.g. 324b, 464g, 600w, 4017, K, U, and on a few unmarked sherds).

Two of the sherds, 4018 and J, are in a finer sandy fabric than the above group.

Thin sectioning of samples 324b, 2 and four unmarked sherds reveals frequent large discrete grains of quartz (up to 2.5mm across) and quartzite, with occasional large grains of feldspar, biotite and iron ore. Also present in some of the samples are fragments of coarse sandstone, and in one instance a small piece of biotite-granite. A heavy mineral separation of one of the unmarked sherds

produced an assemblage characterized by a high content of apatite, a mineral which has been found in large numbers in the Triassic rocks of Yorkshire (Smithson, 1931). Taken together, the thin sectioning and heavy mineral results indicate an origin in an area of Triassic sandstones with outcrops of biotite-granite nearby. The area around Heworth itself would appear to fit this description, for it lies within the region of Bunter/Keuper sandstones, with Boulder Clay deposits close at hand which are known to contain erratics of Shap Fell biotite-granite. On this evidence there seems at present no reason to suspect anything other than a fairly local origin for the bulk of the pottery at Heworth, particularly as there seems to be no apparent differences in fabric between decorated and undecorated sherds. However, it would be useful at some stage to sample comparative pottery from other early Saxon sites in the region, more especially those vessels with similar schemes of decoration.

Smithson, F. (1931) 'The Triassic Sandstones of Yorkshire and Durham. Their petrography and their relation to the Trias of other parts of the British Isles', P.G.A., 42(1931), 125-156.