Ancient Monuments Laboratory Report 15/90

ANALYSIS OF SAMPLES ASSOCIATED WITH POND LANE KILN, CANTERBURY.

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Summary

Samples from a twelfth century kiln were analysed in an attempt to link the kiln with the production of lead glazed ceramics. None of the analysed samples of kiln furniture contained any significant traces of lead, hence it was not possible to confirm that the kiln was used to fire lead glazed wares.

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ANALYSIS OF SAMPLES ASSOCIATED WITH POUND LANE KILN, CANTERBURY, KENT

Samples were taken for analysis from a twelfth century kiln from Pound Lane, Canterbury. The kiln is believed to have been operated by a French potter and its distinctive products were copied by local potters at Tyler Hill to the north of Canterbury. It is the first medieval kiln to be found in Canterbury and the earliest Kentish kiln to produce evidence of glazed wares (John Cotter pers comm).

There was some doubt as to whether lead glazed wares were fired in the kiln or whether a small proportion of glazed sherds were dumped from a nearby glazing kiln. Samples were therefore taken from the kiln furniture and, together with some glazed ceramic sherds and associated slag, were analysed using qualitative X-ray fluorescence.

The fired daub samples, which were classified into three different types (AML nos 900571-3, 900575-7), had no traces of any non-ferrous metal on the surface. It therefore seems unlikely that any of the examples of daub were exposed to the lead-rich atmosphere that would have existed in a kiln where lead glazes were matured. They may, however, have come from the fire chamber or other parts of the kiln where lead would not have been present in quantity. One daub sample (AML 900573), a soft oxidised daub which may have formed part of the kiln wall, had a black surface layer which contained minor traces of copper, zinc and lead, but not at significant levels.

Two ceramic sherds had lead glazes (AML nos 900578 and 900580), and the other ceramic sherds were covered with lead rich encrustations (AML nos 900579-81) which suggests they were associated with lead glazing, though not necessarily in the Pound Lane kiln.

Two other samples analysed are unlikely to be associated with the technological processes undertaken in the kiln. A sample of iron smithing slag/cinder was found in the stokehole of the kiln (AML no 900574) and another fragment of cinder (AML no 900582) was also found associated with the kiln. These may have been associated with earlier iron-working activity and used in the construction of the kiln.

It is not possible to prove from the samples analysed that the kiln was used for the production of lead glazed wares.

900571 12g Daub (no traces of metal) 900572 12 Daub (no traces of metal) 900573 12g Daub (minor traces of Cu, Zn, Pb)	
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900574 00 Smithing slag / cinder	
900575 12 Daub (no traces of metal)	
900576 12c Daub (no traces of metal)	
900577 12b Daub (no traces of metal)	
900578 12e Lead glaze drips	
900579 47 Sherd with lead rich encrustations	
900580 28 Sherd with lead glaze & lead rich encrustation	ns
900581 54 Sherd with lead rich encrustations & Pb pellet	ts
900582 47 Cinder	