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Analyses of further crucible fragments from Caistor by Yarmouth, Norfolk

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A number of crucible fragments had already been analysed (AML Report No 4150) when a further five groups (AM 857497-501) were recovered from the pottery. The pieces were all examined under a low power microscope and the metal-rich deposits on them analysed qualitatively by energy dispersive X-ray fluorescence (XRF).

Three different fabrics appeared to be represented by the crucible sherds. First were two sherds in a fairly soft dark grey fabric which contained fine quartz grains and a little vegetable temper. XRF analysis detected copper and a trace of lead on AM 857497 but silver with minor amounts of copper and zinc on AM 857499. This fabric must be more refractory than it looks as there is little sign of vitrification despite the high temperatures to which it must have been exposed. The sherds are around 10 mm thick and AM 857499 was from a vessel with an external diameter of about 6 cm. Neither sherd appears wheel thrown.

The second fabric, which is represented by AM 857498, is harder and mid grey in colour with abundant fairly coarse quartz grains and occasional flint fragments too. The fabric is very refractory and there was only slight vitrification of the surface. XRF detected strong signals for copper and zinc, and on some sherds some tin too. The fragments may all be from one ? wheel-thrown vessel.

The final crucible sherd (AM 857500) was deeply vitrified, completely masking the original structure of the fabric. Analysis detected copper and zinc suggesting brass was melted in it.

The other sample (AM 857501) was not a crucible but a small piece of stone with a vitrified surface. No traces of non-ferrous metals were detected on it.

These fragments are rather different from those seen earlier although once again both silver and copper alloy melting are represented. None of the second group of sherds have an added extra outer layer of less refractory clay and they certainly look less typically Roman.