

Gold enrichment in Staffordshire Hoard K816: results of SEM-EDX analysis

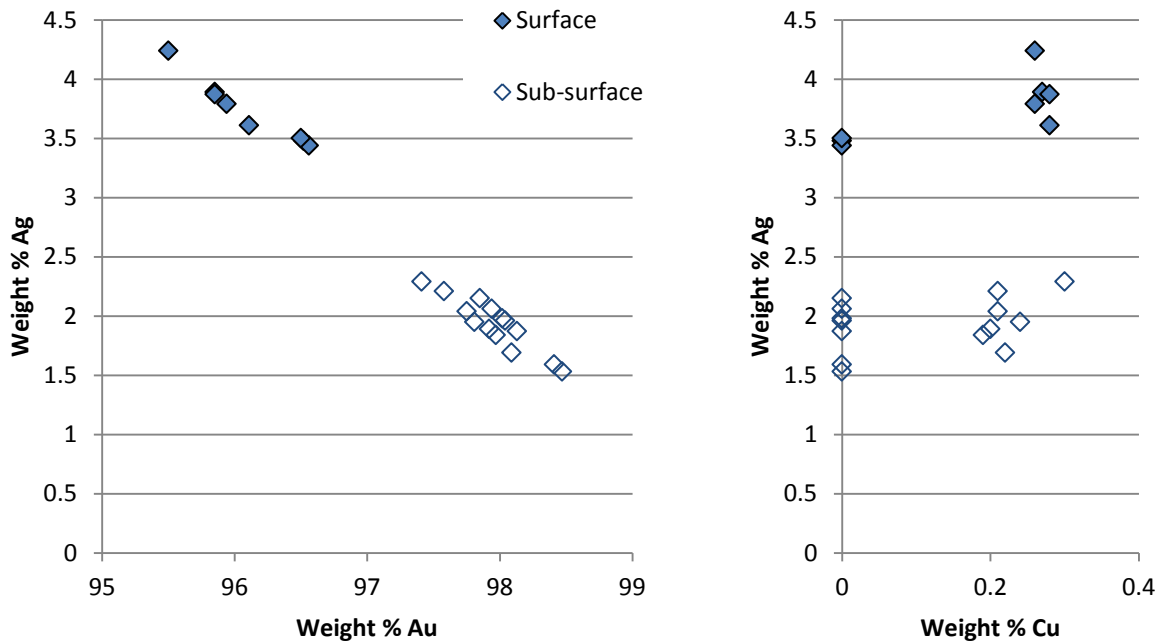
Object Type Serpent mount  
 Date 620-650  
 Decoration Filigree  Glass   
 Garnet  Other



SEM-EDX analysis was undertaken on the body of the serpent.

Area analysed	No. of analyses		Wt% Au	Wt% Ag	Wt% Cu
Surface	8	Average	96.1	3.7	0.2
		Standard Deviation	0.39	0.27	0.14
Sub-surface	14	Average	98.0	1.9	0.1
		Standard Deviation	0.28	0.22	0.12

SEM-EDX surface and sub-surface compositions (the results are normalised). This analysis was carried out as part of the gold enrichment study. For full details of methodology and associated results see report PR07444-10 and PR07444-15



Plots of gold vs silver and copper vs silver contents, based on SEM-EDX analysis, showing the differences between the sub-surface and surface analyses.

SEM-EDX analysis of the sub-surface indicated a composition of approximately 97.5-98.5 wt% gold, 1.5-2.5 wt% silver, the rest being copper. There was a small increase in silver at the surface which is most likely from close contact to corroding silver objects in the burial environment.

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 Analysed January 2014

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