

**Gold enrichment in Staffordshire Hoard K454: results of SEM-EDX analysis**

Object Type Mount  
Date 625-650

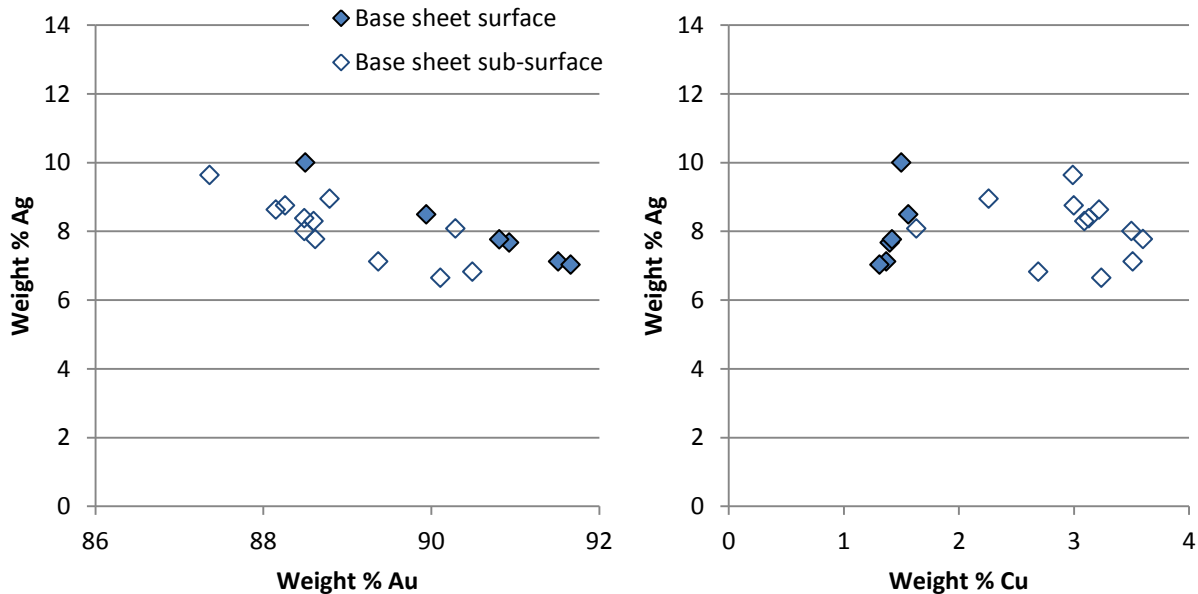
Decoration Filigree  Glass   
Garnet  Other



SEM-EDX analysis was undertaken on the base sheet to which the filigree wires were attached.

Area analysed	No of analyses		Wt% Au	Wt% Ag	Wt% Cu
Surface	6	Average	90.6	8.0	1.4
		Standard Deviation	1.18	1.11	0.09
Sub-surface	12	Average	88.9	8.1	3.0
		Standard Deviation	0.95	0.89	0.57

SEM-EDX surface and sub-surface compositions (the results are normalised)



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 88-89 wt% gold, 7-9 wt% silver, the rest being copper. The analysis revealed a loss of copper and only a small loss of silver from the surface, most likely indicative of corrosion that can occur during burial which results in natural surface enrichment.

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