K1745 Condition Report

Conservation Started: 28/5/13 Conservation Finished: 29/5/13 Conservator: Deborah Magnoler Time Taken: 1 hr Including digital photography, report, conservation and packing.

Dimensions: (L) 21 mm (W) 6 mm (T) 1 mm Weight before: 0.47 g Weight after: 0.46g

Digital photography:

Taken with a Canon EOS digital camera under daylight bulbs and Photomicrographs taken using Keyence VHX-1000 3D digital microscope with LED and/or fibre optic lights, 20-200x magnification. **X-ray:** L93

Description: Visual and microscopic examination using Meiji stereo microscope 7-75x magnification. A plain rectangular fragment of silver gilt, possibly part of a sword hilt. This object is featureless but interesting from the point of view of the gilding deterioration (see photomicrographs); the gilding has bubbled in some areas, or has been pushed back to reveal the substrate. The underside is plain.

Pre-Conservation Condition: Visual and microscopic examination using Meiji stereo microscope 7-75x magnification.

Minimal amount of soil. The surface is dulled by a dark, iridescent form of discolouration. Three sides are broken and one is complete. The grain of the silver can be seen on the broken edges and the metal is probably quite brittle. The gilding does not seem to have successfully adhered closely to the whole of the substrate, and this may have created air pockets or bubbles that have now broken to create craters and superficial imperfections. There are visible deposits of a green encrustation, possibly copper corrosion, on both sides.

Treatment: Carried out using a Meiji stereo microscope
Purpose: Study
Aim: Total cleaning
Materials: Soft natural/synthetic brushes, thorn in pin vice/holder, IMS on metals, 50:50 water/IMS on metals, water on garnets, cotton wool swabs, cocktail stick, Paraloid B72

The granular soil on the front and back was mechanically removed or reduced where possible using a fine thorn tip secured in a pin vice and a small pure bristle brush. IMS or water was used to soften the soil to facilitate removal. Loose particles of soil were then removed with a small swab of IMS.

Possible corrosion products were left in situ; corrosion was not active and can be further cleaned or stabilised at a later date.

The paper K number was adhered to the back with HMG brand Paraloid B72 (ethyl methacrylate copolymer) from the tube, applied with a cocktail stick.

A storage box padded with white polyethylene foam was made for housing the object. A strip of Tyvek (spun bound polyethylene fibres) was used as a cushion for the object and to help lift it out of the foam.

Post-Conservation Condition/Findings: see pre-conservation reports.

Samples: None – insufficient soil.