K1246 Condition Report

Conservation Started: 26/7/12 Conservation Finished: 3/7/12 Conservator: Deborah Magnoler

Time Taken: 7 hrs

Including digital photography, report, conservation and packing.

Dimensions: (L) 62.5 mm (W) 7.8mm (D) 2.9 mm

Weight before: 6.15g Weight after: 5.54g. Catalogue number: 506

Digital photography:

Taken with a Nikon Coolpix 4500 digital camera, under daylight or bulbs and Meiji Techno RZ Stereo microscope with an Infinity 1 camera (with analyses capture software) and fibre optic lights, 7-75x magnification. Taken before, during and after.

Annotation on any of the storage bags or boxes: none noted

Description: Visual and microscopic examination using Meiji stereo microscope 7-75x magnification

Gold and garnet cloisonné strip with a curve in the centre and stepped ends. The stepped ends are bordered by plain strips of gold that over-hang slightly off the ends to form flanges. Although the object has been stretched out of its original shape, it is unlikely that it was originally straight. The central curve indicates it may originally have been an open-ended oval. The garnet pattern is a geometric, simple one with only two main garnets shapes of central stepped rectangles flanked by two rows of stepped triangular shapes. There are two rivet holes at the back (one at each end), one is empty and the other contains soil and the highly corroded remains of a rivet (with green corrosion). The object has intentional incised marks at the back. As they do not appear recent, they may have been made during manufacture.

Associated Objects: K118 (stepped strip with the same cloisonné pattern

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

The strip was stretched out of its original shape. It has suffered much damage on one of the front halves, showing deep abrasion and cell destruction in this area (see images for details). Where this damage has occurred many of the cells have been totally flattened and broke, with subsequent loss of garnets and foils. Some of the garnets that have survived are highly fragmented or dislodged within their cells & at risk of loss. Many of the disrupted cells still contain remains of a green paste of cement, now mixed with soil. One of the end cells is completely empty end shown one of the rivet holes through it. The edges of the strip show small indentations & the outer walls have longitudinal scratches or use marks. None of this

damage appears to have occurred during excavation as it was hidden under the soil. Overall, the gold has a bright yellow colour with no considerable tarnish or discolouration.

Treatment: Carried out using a Meiji stereo microscope

Purpose: Display
Aim: Total cleaning

Materials: Soft natural/synthetic brushes, cotton swab, cocktail stick, thorn in pin

vice/holder, water on garnets, water/IMS on metals,

The granular soil on the exterior/interior surface 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.

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

A number of the fragmented, dislodged garnets required consolidation; Paraloid B72 (ethyl methacrylate copolymer) 10% w/v in acetone was applied.

The paper K number was adhered to the interior surface with HMG brand Paraloid B72 (ethyl methacrylate copolymer) from the tube, applied with a fine paint brush.

A new storage box padded with white polyethylene foam was constructed to house 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: One of the exposed backing foils has an irregular waffle pattern that is not in keep with the rest of the foils in the object (it appears to be less "well done"). There is a fragment of silver wedged inside one of the cells, but does not appear to obviously belong to this object.

Interesting making marks visible at the back. Fragile object.

Key Features: the object was not originally straight but may have been an open-ended oval. Stepped, flanged end, two rivet holes visible at the back. Simple geometric cloisonné pattern. Interesting making marks at the back.

Analysis Undertaken:

XRF analysis of the object was performed. See document 'K1246 XRF Report'.

Samples:

- 1. soil top surface, may be mixed with decomposed plant material
- 2. Au foil from 4th cell in, top row
- 3. garnet fragments mixed with soil from damaged area
- 4. Au foil from disrupted central area ("double" cell) ADDED TO SAMPLE 2
- 5. SOIL SAMPLE 5 ADDED TO 1