

K1240 Condition Report

Conservation Started: 25-2-2013

Conservation Finished: 25-2-2013

Conservator: Suzanne van Leeuwen

Time Taken: 3 hours, including digital photography, report, conservation and packing.

Dimensions: Gold: L. 18 mm; W. 14.4 mm; garnet: L. 4.2 mm; gold foil: L. .4 mm

Weight before: 1.59 grams

Weight after: Gold: 0.88 grams; garnet: 0.02 grams, gold foil: 0.01 grams

Catalogue number: 349

(K1240b Garnet renumbered to K1962 catalogue number 693)

X-ray: L63

Digital photography: Taken with a Canon EOS 1100D digital camera, under daylight and with a Keyence VH-Z20R Digital Microscope, under artificial light. Taken before and after.

Annotation on any of the storage bags or boxes:

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Description: *Gold, fragment of hilt-plate of sheet-metal, with flanges around the edges. Misshaped, covered in soil, one visible rivet hole, part of aperture remains.* (Description SvL)

Associated Objects:

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Pre-Conservation Condition: Visual and microscopic examination using Meiji BM 47941 stereo microscope 2-10x magnification. Object covered in soil, only small portion of surface is visible, looks plain.

A loose garnet with its own backing foil was found within the soil. This has now been re-numbered as K1962. The total mass of garnet and foil is 0.08g.

Treatment: Carried out using a Meiji BM 46941 stereo microscope 2-10x magnification.

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. A mixture of 50% IMS and 50% water was used to soften the soil to facilitate removal. Loose particles of soil were then removed with a small swab of the IMS/water mixture. A swab of IMS was used to neutralise the surface.

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 a mixture of 30% HMG brand Paraloid B72 (ethyl methacrylate copolymer) and 70% acetone, 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.

Purpose: Study / Analysis

Aim: Total cleaning

Materials: Soft natural/synthetic brushes, thorn in pin vice/holder, 50:50 water/IMS on metals, cotton wool swabs, cocktail stick, IMS, 30:70 Paraloid B72/acetone

Post-Conservation Condition/Findings: In the soil on the back of the fragment was a loose, triangular red/purple garnet with matching, stamped backing foil (now re-accessioned as K1962, weight: 0.08g). The foil came loose of the garnet during cleaning (already no longer attached to each other) where a white/green substance became visible on the inside of the foil. The green colour might be caused by migrated copper in the surrounding area (used in cloisonné for example – comments Chris Fern) or maybe copper was part of the original substance on the foil. The white material may originally be translucent (a glue perhaps?) and turned milky white in the soil. The garnet seems to have no direct relationship with the hilt fragment; it does not fit anywhere in this fragment so it seems likely that the garnet was part of another object.

The gold of the hilt fragment was slightly brittle in some places, some tarnishing on the surface.

Key Features: Gold, sheet-metal, garnet, gold foil

Analysis Undertaken: X-ray: L63

Samples: Two samples were taken, marked:

- K1240-soil sample front
- K1240-soil sample back

References:

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