K1163 Condition Report

Conservation Started: 12/5/2011 Conservation Finished: 13/5/2011 Conservator: Cymbeline Storey Time Taken: 4.5 hours Including digital photography, report, conservation and packing.

Dimensions: (L) 40 mm (W) 10 mm (D) 3 mm Weight before: 2.73g Weight after: 1.43g Catalogue number: 343

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: SSH 09, 1971, 416 (in a triangle), 1001, 013, 7/8/09

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

Partial gold strip with one bevelled edge.

Associated Objects: None

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

About 50% of the surface of the object is obscured by compact, sandy soil with a small amount of plant matter embedded within it. The band is jagged/broken at both ends (ie, there are no finished ends) and the object is bent. There is one angled fold. The visible gold surface has some superficial scratches. Soil removal is necessary to adequately assess the condition of the object.

Treatment: Carried out using a Meiji stereo microscope
Purpose: Analysis/Study; object is being cleaned to facilitate SEM/XRF analysis in Cardiff
Aim: Total cleaning
Materials: Soft natural/synthetic brushes, cotton swab, cocktail stick, thorn in pin vice/holder, 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.

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 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:

Three glossy, black inclusions were found in the soil during cleaning. They were retained in sample vial 2. In addition, cleaning revealed a dark residue nestled in the slight lip of the bevelled edge on the back of the object. Soil was left in this area.

On the back of the object the gold is delaminating in several places at both the edges and in the centre of the strip (see loan-out condition report), showing that the object is constructed of at least 2 layers of gold. The decision was taken not to consolidate these areas because 1) it may interfere with analysis, and 2) the object is not for display, so it is not expected to be handled/moved regularly after return from Cardiff, and 3) the lifting gold layer is fairly thick and should not detach with careful handling.

There is a closed crack at one end and two open cracks at the fold point. The gold surface has patches of orangeish tarnish, a dent, and several pronounced scratches. See loan-out condition report for details.

The object is fragile and should be handled with care.

Samples:

- 1. Soil from exterior
- 2. Three glossy, black inclusions found in soil on back of object