K1221 Condition Report

Conservation Started: 17/5/11 Conservation Finished: 18/5/11 Conservator: Deborah Magnoler

Time Taken: 4 hrs

Including digital photography, report, conservation and packing.

Dimensions: (L) 44 mm (W) 26 mm (D) 12 mm (Th. edge) 1mm (Diam. Holes) 1.5mm

Weight before: 8.62g Weight after: 5.46g Catalogue number: 313

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: SSH09 BA1971 NII 1001 sf 330 4/8/09

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

A gold sword plate, broken and distorted but appearing to be whole. The object has an oblong elliptical shape with narrow rounded ends. The main body is made of a sheet of thin metal, surrounded by a thicker border with an almost square cross section, measuring approximately mm on each side; this border appears to be attached only to one side of the object (side 1). The centre features a rectangular cut slot. As observed from side 1 the plate features a group of 4 rivet holes on the left end and a group of 3 rivet holes on the right end. The arrangement of the holes in very similar on both sides and it appears that the odd hole on the left may be a later repair. Side 2, or the underside, features a number of use or makers marks, including an X produced presumably with a fine tipped hard object. As viewed form side 2, it may appear as if the holes were punched form side 1; however, viewed from side 2, the group of 4 holes features round depressions stained with a dark tarnish around the each main hole, indicating the presence of river heads.

Associated Objects: none noted

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

The object is heavily covered in compact soil with a coarse, quartz-rich matrix. The quality of the soil appears to change as it is excavated nearer the surface of the object, featuring small pieces of what appears as a white lime plaster or similar material 9now sampled). Very small patches of red staining in the soil are also visible, suggesting the presence of iron corrosion.

Although appearing whole, with the exception of any rivets, the object has been twisted and torn and has lost much of its original shape.

There are scratches and dents on the surface, but there does not appear to be any considerable recent damage.

Treatment: Carried out using a Meiji stereo microscope

Purpose: Analysis **Aim:** Total cleaning

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

vice/holder, water on garnets, water/IMS on metals, other - specify

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 interior surface with 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: residues of a white, plaster-like material within the soil. An X mark on side 2. marks left by rivet heads on side 2.

XRF analysis of the object will be performed at the Cardiff laboratories.

Samples:

- 1. Top layer of soil from side 2 (underside)
- 2. Lower layer of soil (near Au surface) from side 2 ADDED TO SAMPLE 1
- 3. Residues of a white, plaster-like material, found in soil on side 2
- 4. Dark material (metal?) from inside a rivet hole (group of 3)