

## K 1072 Condition Report

**Conservation Started:** 9/5/2011

**Conservation Finished:** 10/5/2011

**Conservator:** Cymbeline Storey

**Time Taken:** 6 hours

Including digital photography, report, conservation and packing.

**Dimensions:** (L) 51 mm (W) 8 mm (Th. sheet) <0.5mm

**Weight before:** 3.39g

**Weight after:** 2.59g

**Catalogue number:** 257

### **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:** BA 1971, SSH 09, 1001, M11, 164 (in a triangle), 30/7/09

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

Partial gold sword hilt plate with one cabochon garnet surrounded by two rows of ribbed filigree on one end. The other end is missing. The edges of the object are slightly lipped. The remainder of the gold is undecorated.

**Associated Objects:** None

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

The plate is bent and folded inward. It is ~75% covered with compact, sandy soil. There is no visible organic matter. One end of the plate is missing, and the break edges in this area are jagged. There is an additional break on one side. There is a small amount of orangeish tarnish and some superficial scratches on the gold.

**Treatment:** Carried out using a Meiji stereo microscope

**Purpose:** Analysis/Study; object is being cleaned to facilitate SEM/XRF analysis in Cardiff.

**Aim:** Partial 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.

An area of soil required consolidation; Paraloid B72 (ethyl methacrylate copolymer) 5% w/v in acetone was applied to soil near break area in the centre of the object.

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

A 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:**

Soil removal revealed two rows of ribbed filigree around the garnet. The garnet is purplish-red in colour. There are two empty rivet holes near the garnet and one additional soil-filled hole under the garnet. The holes were punched through from the top of the object.

During cleaning it became evident that the area of gold around the break on the side of the object was fragile and mobile. Cleaning was suspended so that the soil can act as a support in this area. The soil was consolidated with low-concentration Paraloid B72 to prevent movement/further damage.

There is a deliberate scratch very near the central hole on the bottom of the object that follows the contour of the hole. It appears to be a laying-out mark made by the craftsman to plan where to cut the central hole.

A few other abrasions, presumably from burial or excavation, are evident. See loan-out condition report for location. At the tip of the garnet end the filigree has been worn down so that the area is quite smooth.

The gold on the broken end is fragile. Object should be handled with care.

#### **Samples:**

1. Soil from exterior