

### **K133 Condition Report**

**Conservation Started:** 04/10/2011

**Conservation Finished:** 13/10/2011

**Conservator:** Cymbeline Storey

**Time Taken:** 6 hours

Including digital photography, report, conservation and packing.

**Dimensions:** (L) 49.5 mm (W) 46.5 mm (D) 13mm (H) flange 3mm

**Weight before:** 10.58g

**Weight after:** 7.58g

**Catalogue number:** 335

**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:** One small plastic bag with red dot sticker and K133 written on it in black pen.

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

Object is a gold hilt plate, apparently plain/undecorated and with bevelled edges.

**Associated Objects:** None known at present

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

Provided by PMAG on 22 September 2011: very bent and twisted, soil encrusted and cracking. Vulnerable at the mid point and springy, pin in situ in soil, deposits in soil, also vulnerable at one end where there is a sharp edge.

The object is folded/bent, though it is unclear if it is intentional or incidental damage. The object is ~80% covered with soil in which a great deal of green deposit and some plant matter is visible. Visible gold is tarnished and has many scratches. There are multiple open cracks in the gold along the edges. One rivet hole containing the head of a rivet is visible.

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

**Purpose:** Analysis/Study

**Aim:** Partial cleaning

**Materials:** Soft natural/synthetic brushes, cotton swab, cocktail stick, thorn in pin vice/holder, water/IMS on metals

The 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.

The paper K number was adhered 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.

#### **Post-Conservation Condition/Findings:**

The goal of cleaning was to reveal as much of the gold surface as possible for analysis in Cardiff while retaining as much of the green residue in situ. Cleaning revealed a heavily tarnished surface with many superficial scratches and a few deeper scratches. There are several open cracks in the gold along the edges.

Both of the rivet holes appear to have been punched through from the bottom. One rivet hole contains a rivet head in situ and the other rivet hole appears to contain only soil.

The green residue is present on both sides of the object, though there is far more on the bottom. It is milky green in colour, fairly compact, and appears to have a roughly consistent thickness. There is also a small area of bright orange deposit (see loan-out report for location).

During cleaning a piece of this green layer detached from the back, revealing a thin, black, possibly organic layer of material between the green deposit and the gold. This was retained in sample vial 6.

#### **Analysis undertaken**

XRF analysis of the object was performed. See document 'K133 XRF Report'.

#### **Samples:**

1. Soil from top
2. Soil from bottom
3. Green material from bottom
4. Green material from top
5. Plant matter in soil - top **DISPOSED**
6. Unknown (organic?) dark material from underneath green material - bottom
7. Plant matter in soil - bottom **DISPOSED**

8. Unknown black object from inside bend