K1704 Condition Report

Conservation Started: 18/02/2013 Conservation Finished: 22/02/2013 Conservator: Ciarán Lavelle Time Taken: 2.5 hours Including digital photography, report, conservation and packing.

Dimensions of Largest Fragment: (W). 6.5mm; (H). 3mm (Diam) hole in paste 1mm (Th) <0.5mm

Weight before: 0.16g Weight after: 0.14g Catalogue number: 669

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: K1704, Rivet Head, X-Ray: L46

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

Silver-alloy Rivet head/boss.

Associated Objects:

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

The object a silver alloy metal rivet head with visible surface loss on the top and side of the domed surface of the rivet head. There is approximately 50% surface loss on the dome of the rivet with CuA interior in the surface, highly corroded and crumbling. The CuA corroded interior surface is also visible at the base of the rivet head (a possible washer), with a hole filled with soil in the centre of the CuA interior, which is also visible through missing section on the top of the rivet head. The visible surface appears to contain silver tarnish and corrosion products. The object is covered in a light layer of loose and compact soil. The sides of the silver rivet head, where it is damaged, is warped and torn in appearance.

Treatment: Carried out using a Meiji stereo microscope
Purpose: Display / Study / Analysis
Aim: Total cleaning / Stabilisation
Materials: Soft natural/synthetic brushes, thorn in pin vice/holder, IMS on metals, 50:50 water/IMS on metals, cotton wool swabs, cocktail stick, Paraloid B72

The granular soil on the front/back 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 to the back with HMG brand Paraloid B72 (ethyl methacrylate copolymer) from the tube, 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.

Post-Conservation Condition/Findings:

The object is a silver alloy metal rivet with a domed surface and with approximately 50% surface loss on the dome through which the CuA interior is visible. The CuA interior is visible both through the damaged section on the dome and on the base of the object. The CuA on the base may be a washer. In the centre of the CuA interior there is a cylindrical cavity where the shaft of the rivet used to be attached to the base of the dome. The rivet is now missing with the cavity now empty of the soil. The CuA is highly corroded, brittle and crumbling in appearance. There are some soil and insoluble crustations on and within the CuA that was left in-situ due to the fragile nature of the CuA surface. The silver alloy surface is tarnished, dented in appearance with nicks, scratches and impressions visible on the surface. The surface loss can be seen on the surface. The silver-alloy domes surface is highly damaged and corroded with possible signs of gilt visible on the surface.

Key Features:

- Silver alloy rivet with CuA interior.
- Visible hole in the CuA interior where the original rivet shaft originally sat.
- Silver alloy corrosion products and insoluble crustations visible on the surface.

Analysis Undertaken:

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

Samples: Not enough for a viable sample. References: