K1457 Condition Report

Conservation Started: 20/02/13
Conservation Finished: 20/02/13
Conservator: Natalie Harding
Time Taken: 2hours 30minutes
Including digital photography, report, conservation and packing.

Dimensions:

A.	(L) 5.5mm -	**Weight before:** 0.02grams	**No change to weights after**
B.	(L) 5.5mm (Th. shank) 1.5mm	**Weight before:** 0.05grams	"
C.	(L) 15mm (Head W) 2mm	**Weight before:** 0.15grams	"
D.	(L) 1mm (Head W) 2mm	**Weight before:** 0.17rams	"

After renumbering by C. fern the group was renumbered as follows:

K1457 C &D are now separate and kept the same accession number, catalogue number 673.
K 1457 A is now K2009, catalogue number 674.
K1457 B is now K2010, catalogue number 675.

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: n/a

Description: Visual and microscopic examination using Meiji stereo microscope 7-75x magnification
Rivets in four individual gelatine capsules. Small to large = A – D

- **A.** Silver alloy pin or rivet shaft. Slightly faceted cylindrical shape,one end pointed one end slithly flattened.
- **B.** Silver alloy rivet with square-like shaft and square shaped flattened head. Split down the full length of the shaft.
- **C.** Silver alloy rivet. Circular domed head with cylindrical facetted shaft that tapers down into a point. Shaft is bent and curved in an elongated 'S' shape.
- **D.** Silver alloy rivet. Circular domed head with cylindrical faceted shaft. Bend in shaft on lower quarter.

Associated Objects: K1457: A, B, C, D.

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

A. Green copper alloy corrosion product at the top flat part. Here there is also a small chip missing from the shaft. Silver black tarnish covers the surface.

B. Silver black tarnish and silver corrosion nodules cover the surface. Silver corrosion nodules also found within the split in the shaft.

C. Silver nodular corrosion product covering most of the surface.

D. Silver black tarnish and silver corrosion nodules cover the surface.

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

The soil covering the rivets 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.

As these pieces are so small, the paper K number was not adhered to the individual rivets.

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:
Pieces A through to D required limited intervention. Excess soil was removed where possible.
All pieces have a covering of black silver tarnish. Rivets B, C and D are covered in the nodular silver corrosion product.

A.	(L) 5.5mm	-	**Weight before:** 0.02grams	**No change to weights after**
B.	(L) 5.5mm	-	**Weight before:** 0.05grams	"
C.	(L) 15mm	(Head W) 2mm	**Weight before:** 0.15grams	"
D.	(L) 1mm	(Head W) 2mm	**Weight before:** 0.17rams	"

Key Features:
- Rivets with faceted shafts.
- Rounded rivet heads.

Analysis Undertaken: n/a

Samples:
Not enough soil to obtain a significant sample size.

References: n/a