K1398 Five loose garnets

Table: description & notes on inclusions

Object: 1398 /	Size (mm) & weight (g)	Inclusions	Notes	
x20	L: 5.72 W: 2.72 D: 0.8	Needle – Visible from x20 magnification	Under polarised light microscope (x4/.10 & up) the depth and 3D structure of the needle inclusions is evident, especially if viewed from the back	
x25	L: 3.65 W: 4.02 D: 1	No evident needles	Under magnification this garnet showed no considerable flaws	
x25	L: 4.34 W: 2.68 D:1.1	No needles But crystals and bubble-like inclusions	Micro-pictures of inclusions and fractures available on V:\COLLECTION CARE\Images\Hoard\K1398 T50\K1398.3	
x40	L:2.34 W:2.11 D:0.9	No needles	Virtually flawless	
x50	L:1.25 W:2.58 D: 0.4	No needles Iridescent concentric tidal inclusion visible under PLM (x 4/.10) but not under stereo microscope	Virtually flawless, very transparent Micro-picture of inclusion on V:\COLLECTION CARE\Images\Hoard\K1398 T50\K1398.5	

Conservation started: 02/12/2010 Conservation finished: 02/12/2010

Time: 6.5 hours

Conservator's initials: DLM

Dimensions

a) L. 6mm; W. 3mm; Th. 1mm b) L. 4mm; W. 3.5mm; Th. 1mm c) L. 4mm; W. 2.5mm; Th. 1mm d) L. 2.5mm; W. 2mm; Th. 1mm e) L. 2.5mm; W. 1mm; Th. 0.5mm

Combined Weight: 0.13g Catalogue number: 693

Digital photography

The digital photos were taken under a Meiji Techno RZ stereo microscope with fibre optic lights and 7.5 -75 X magnification, equipped with a camera and Infinity Analyze software. The polarized microscope pictures were taken under a Meiji MX equipped with the same camera and software.

Weighing: weighing scales: Bonso model 337, capacity 200g, graduation 0.01g

Description

Five loose garnets of varying sizes and shapes.1398/1 is the only garnet in this group with needle inclusions. 1398/3 is the only garnet in this group featuring considerable crystal inclusions. An iridescent effect has been noted in 1398/5 under PLM. 1398/3 & 5 look unfinished or severely damaged, as their edges are very irregular. 1398/4 has a triangular cross-section with a marked distinction between the unpolished surface of the end faces and the polished front and back.

Condition

Visual examination using a Meiji stereo microscope with fibre optic lights and 7.5 - 75 X magnification.

Light soiling.

The damage on these objects mainly consists of concoidal fractures and dents on the edges of the stones; these are particularly apparent in 1398/3 & 5. Stable, but should be handle with care to avoid crushing or loosing.

Treatment

Purpose: Display, analysis, study

Aim: Total cleaning

Materials: soft brush, cotton swabs

Method: Standard wet (H₂O): loose soil particles were lifted by brush; adhered soil

was removed with a lightly moistened cotton swab

Samples taken: none