

Investigation report n° 28469

Bové RJM Overpelt, 28 feb 2016

Attn: Mr. Ralf Kotalla
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GERMANY

Object: Teapot with spider web design on green background.

Identification :

Description: Chinese teapot with a black spider web design on a green background



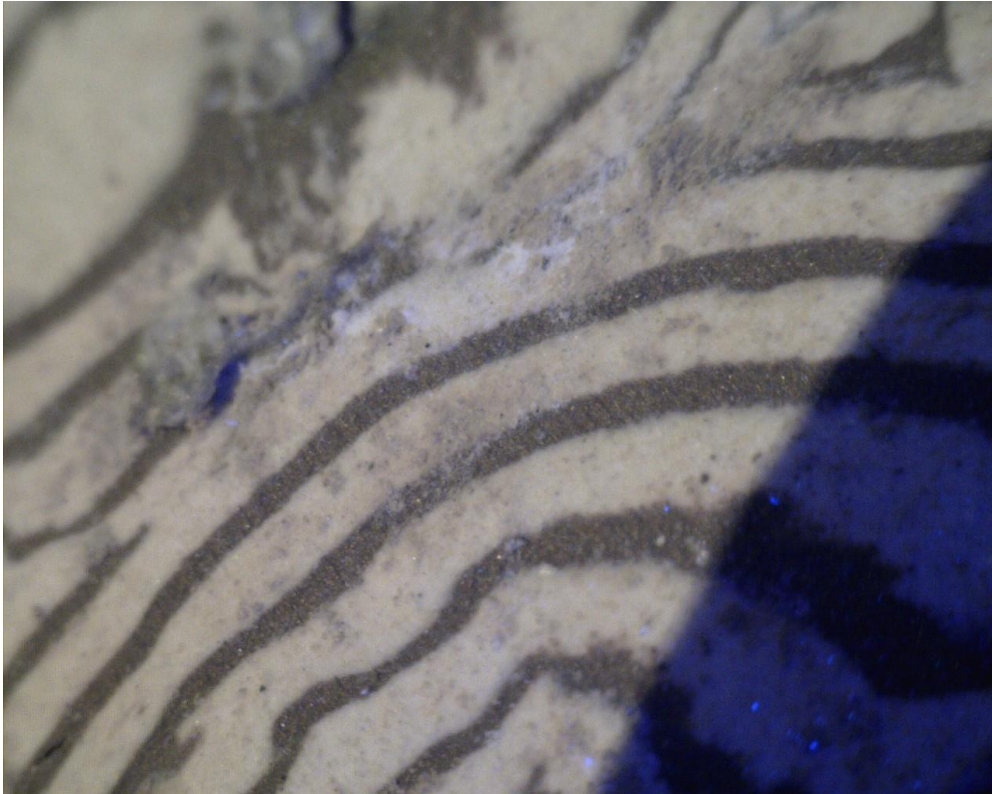
Observations:



Horizontal hand made manufacturing, assembled after painting the design but before applying the glaze.



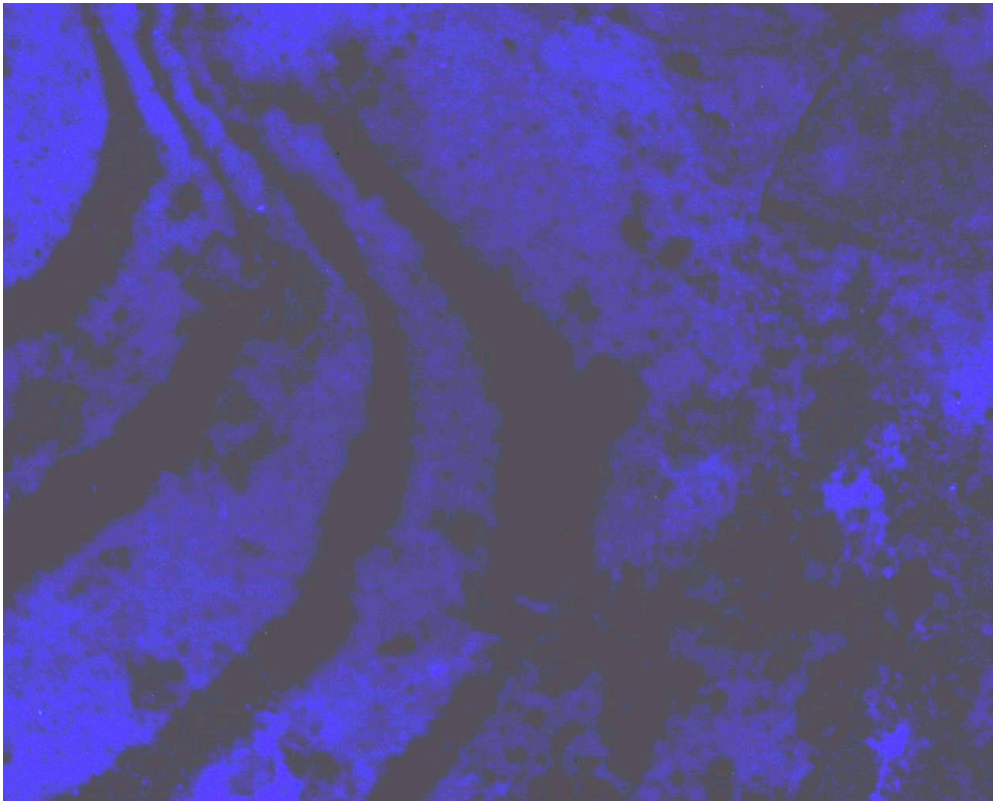
Impurities into the core material as into the glaze. Also typical cracks into the glaze (magn. x100)



Underglaze painting of the design. Few air bubbles into the glaze.



Core drilling hole (2mm). Impurities visual detectable.
The painting of the design is impregnated into the core (painted on the wet ceramic surface).
This is medieval way of manufacturing painted ceramics.



UV-absorbance of the litharge glaze: no fluorescence.

Core analysis by ICP-OES (fused dissolution HF HClO₄)

Ident	% SiO ₂	% Al ₂ O ₃	% Fe ₂ O ₃	% K ₂ O	% Na ₂ O	% CaO	% MgO
28465	77.0	16.8	0.73	2.44	1.88	0.84	0.31

References:

Period	% SiO ₂	% Al ₂ O ₃	% Fe ₂ O ₃	% K ₂ O	% Na ₂ O	% CaO	% MgO
Ming	71,6 - 76,0	18,3 - 21,2	0,7 - 1,6	2,8 - 4,2	0,15 - 2,0	0,3 - 1,2	0,15 - 0,3
Song	75 - 77,8	16,3 - 18,7	0,6 - 1,1	2,3 - 3,2	0,4 - 2,5	0,4 - 1,3	0,1 - 0,6
Qing	65,5 - 70,3	23 - 30	0,7 - 1,35	1,3 - 3,4	0,3 - 2,5	0,3 - 1,6	0,1 - 0,3

Remarks:

Stone ware for daily use with typical on wet surface painted design.
 Type, method of manufacture and painting style were in use in the Song dynasty(11th -13th century). Also confirmed by the chemical composition of the core material.

Overpelt, 25 feb 2016

