

## Green samples

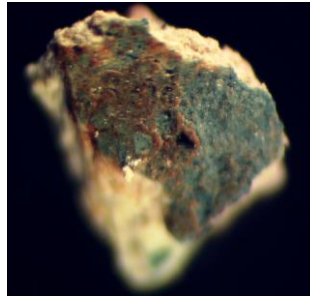
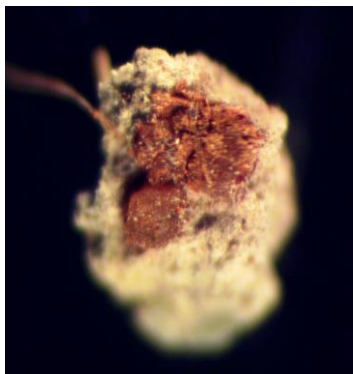
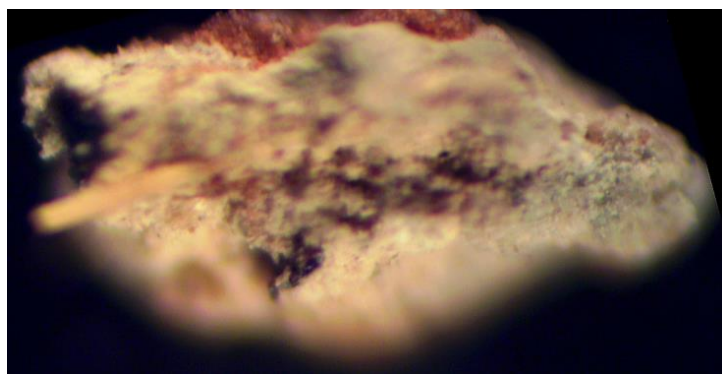


Fig. 6 Dark grey-green sample with surface deposition, probably dust accumulation through long time.



(a)



(b)

Fig. 7 Back-side of a grey-green sample that shows the mud-preparation that serves to attach the painting to the sandstone support and the white preparatory layer based on gesso (a). The cross-section orientation showing partly the different layers is depicted in (b). The images are taken during cross-sectioned sample preparations.

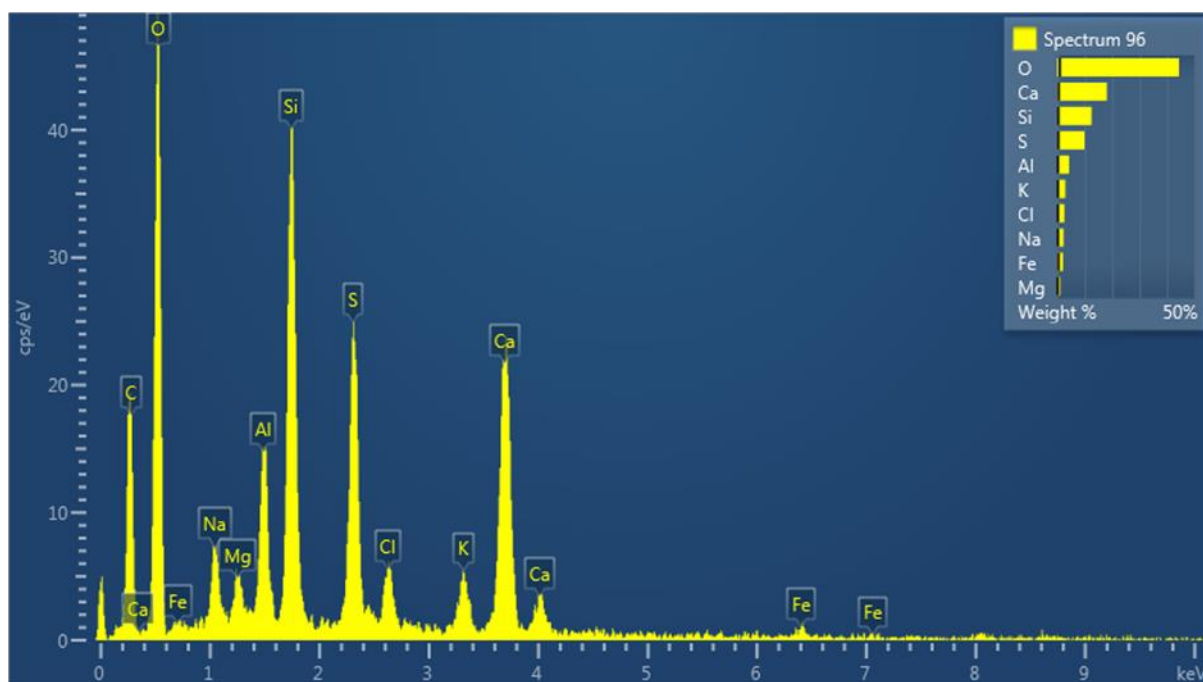
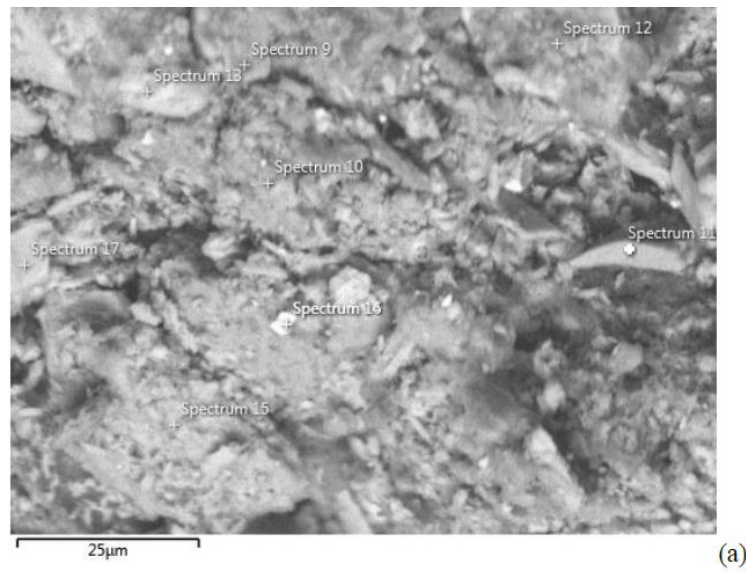
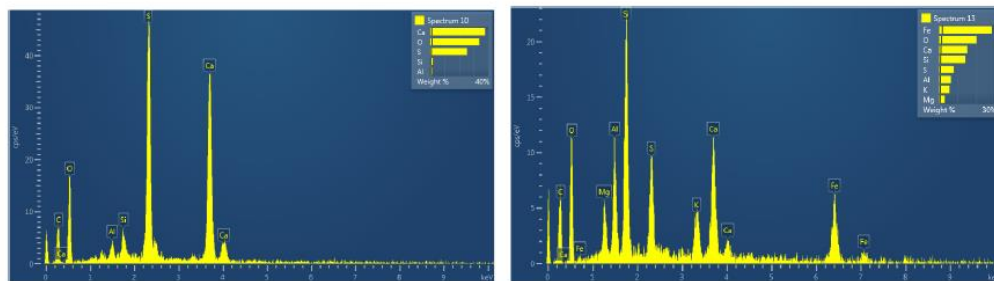


Fig. 8 SEM-EDS spectrum from a grain in a grey green sample. Possible existence of gypsum, calcite and components of green earth are inferred. It is consistent with the composition indicated by the result of on-site analysis with pXRF. Grains of calcite and gypsum\anhydrite were identically identified in the SEM-EDS analyses. A SR-XRD analyses of green samples in cross-sections have shown the use of calcite and anhydrite as preparatory layer component and green earth as colorant.



(a)



(b)

Fig. 9 BSE image from an un-embedded dark grey green sample surface (a). Spot analyses showing the possible used of green earth, most probably celadonite,  $K(Mg,Fe^{2+})(Fe^{3+},Al)[Si_4O_{10}](OH)_2$  based, and gypsum/anhydrite from the ground preparation mixed with the colourant applied on the surface (b) Spot 11 in (a) is quartz grain, spot 10, 15 and 17 are gypsum/anhydrite rich whereas 9, 12, 13, 14, 16 are green earth rich.

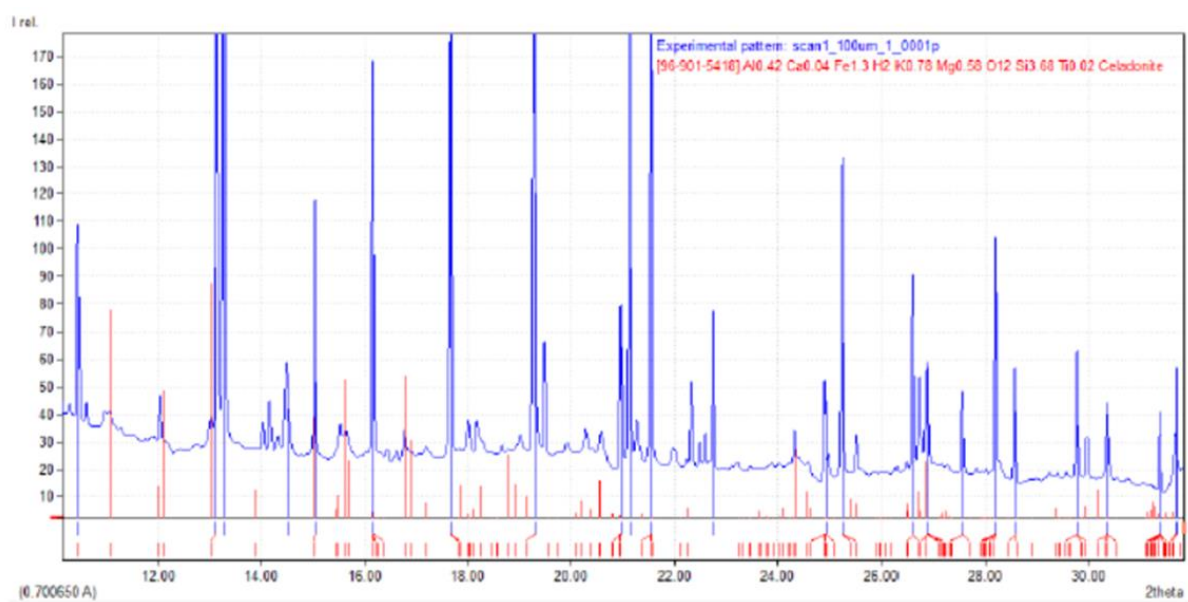


Fig. 10 SR-XRD pattern of green sample indicating the possible use of celadonite based green earth