

OBJECT RESEARCH



Alfred Stieglitz (American, 1864–1946)

Georgia O'Keeffe—Hands

1920/22

Palladium print

Alfred Stieglitz Collection

AIC accession number: 1949.752

Stieglitz Estate number: OK 12C

Inscriptions: Inscribed recto, on hinged mat, lower left, in graphite: "Treated by Steichen - 2/1950"; inscribed verso of print, lower center, in graphite: "Ch / OK 12C"; verso of print, lower left, in graphite: "X"

Dimensions: 19.3 x 24.5 cm (image); 20.1 x 25.3 cm (paper); 52 x 39.7 cm (hinged mat)

Print thickness: 0.287 mm

Mount: Original; with original presentation window mat

X-ray fluorescence (XRF) spectrometry:
See below

X-RAY FLUORESCENCE (XRF) SPECTROMETRY

XRF spectral readings were taken from the recto of the work and from the mount when available. The elements listed below have been positively identified in the work; elements in bold have been attributed to the processing of the print.

Print: Fe, Pd

Mount: Ca, Ti, Mn, Fe, Ni, Cu, Zn, Sr, Pb

The graph below shows XRF spectra for three distinct measurement areas on the print: the darkest, maximum-density image area (Dmax, purple); the lightest, minimum-density image area (Dmin, green); and the mount, when available (orange). The background spectrum (gray) represents the characteristic contribution of the instrument itself as measured on a Teflon reference and is included in order to discount irrelevant elements from the print's signature. Elements were identified based on the presence of their characteristic peaks. Analysis was performed with a Bruker ARTAX air-path portable micro-XRF system equipped with a laser pointer, an integrated camera system, a Mo 12.5µm filter, and a Mo tube. Measurements were taken for 250 LT at 50 kV and 800 µA. The spectrum below illustrates the significant peaks for this print in the energy range from 3 to 15 keV.

Figure 1. (right)
Locations of XRF measurements



Figure 2. (below)
XRF spectra from the Dmax, Dmin, mount, and background signal produced by the analyzer.

