

OBJECT RESEARCH



Alfred Stieglitz (American, 1864–1946)

Georgia O'Keeffe

1918

Palladium print

Alfred Stieglitz Collection

AIC accession number: 1949.759

Stieglitz Estate number: OK 24E

Inscriptions: Inscribed recto, lower center, below image, in graphite: "B4 [four perpendicular lines]"; recto, lower left, left of image, in graphite: "[four diagonal lines]"; inscribed verso, lower center, in graphite: "L / OK24E"

Dimensions: 24.3 x 19.4 (image); 25.1 x 20.2 cm (paper)

Print thickness: 0.359 mm

Mount: Unmounted

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**, Hg, Pb

Mount: Ca, Ti, Mn, Fe, Co, Cu, Zn

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 13 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.

