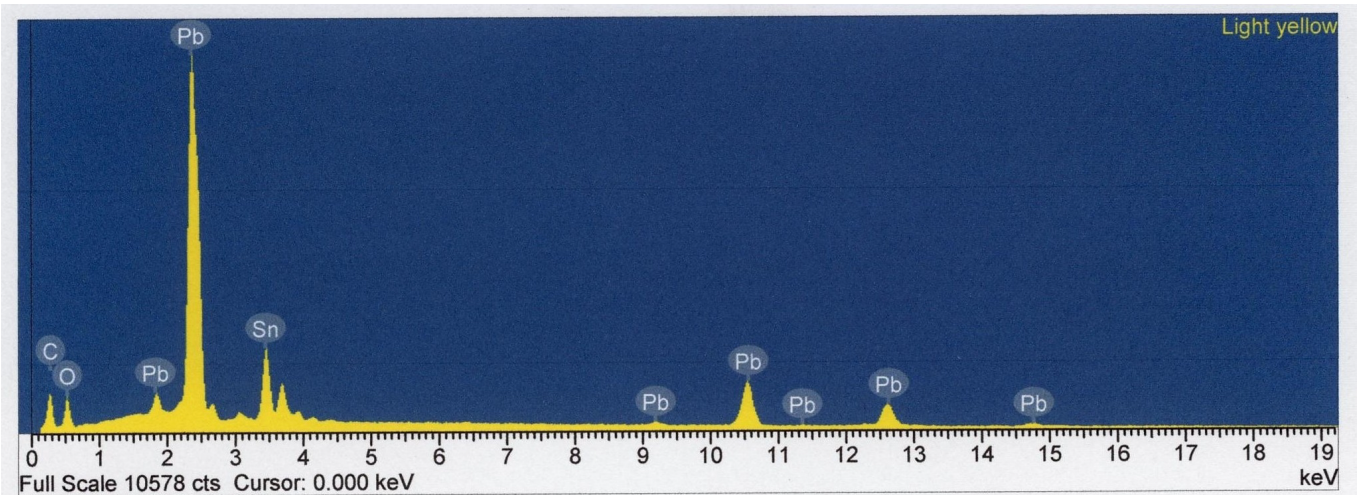


Sample 1 Yellow

EDS



Elements detected:

C - Carbon
O - Oxygen
Sn - Tin
Pb - Lead

Pigments identified:

Lead tin yellow - Pb_2SnO_4
Lead white - $2\text{PbCO}_3 \cdot \text{Pb}(\text{OH})_2$
Vermilion - HgS

This color sample was taken from the base of the monstrance in San Francisco de Borja's hand. Lead tin yellow highlighted with lead white is the primary color, although there are also traces of vermilion. Lead tin yellow is a compound of lead oxide and tin oxide created by heating them to between 1200 and 1475 degrees Fahrenheit. A lower temperature creates a more orange hue while a higher one results in a more lemon-colored pigment. This is a late use of lead tin yellow. Employed extensively as early as the fourteenth century, it was slowly replaced by a synthetically produced pigment called Naples yellow during Lorente Germán's lifetime.