

K1356 - Scientific analysis report, 1993

National Gallery of Art
Scientific Research Department

July 8, 1993

ANALYSIS REPORT

1993.5.8
Francesco di Giorgio Martini
God the Father Surrounded by Angels and Cherubim

We were asked to determine the paint recipe on three samples removed from this painting. The samples are described as follows:

1. from light blue layer adjacent to loss near blue angel (52.2 cm. from bottom edge of panel, 42.9 cm. from left edge). Sample removed by Suzanne Lonak.
2. from red section (19.4 cm. from bottom edge of panel, 9.3 cm. from left edge on curve). Sample removed by Suzanne Lonak.
3. sample of suspected copper resinata, from angel's robe. Sample removed by Barbara Harris.

All of the samples were extremely small, as the painting is in pristine condition following conservation treatment. The samples were hydrolyzed and esterified as described in Appendix 1. The gas chromatograms and mass spectra are appended. The three samples show the presence of methyl palmitate and acetyl stearate, and the absence of diethyl sebacate, supporting a proteinaceous medium, such as egg yolk or glue. A small amount of diterpene resin might be present in sample 1, although the mass spectrum is not conclusive. Diterpene components could not be positively identified in sample 3, which was suspected of being copper resinata. However, pigment analysis carried out by Barbara Harris suggests that synthetic lazurite and not a copper based pigment is responsible for the color in this sample.

submitted by:
7.8.93
Date

Barbara Harris
Suzanne Quillen Lonak
Organic Chemist

reviewed by:
7/12/93
Date

Paul de la Vie
Head of Scientific Research
Dept.

The data were saved under the filenames ST08G101, ST08G102 and Q108G103.

IDENTIFIER

DOC15336

ARCHIVAL ITEM TYPE

Conservation Report

CREATOR

National Gallery of Art, Washington, District of Columbia

DATE

1993

CITATION

National Gallery of Art, Painting Conservation Department Records

1 RELATED ART OBJECT



K1356

Francesco di Giorgio Martini

God the Father Surrounded by Angels and Cherubim

National Gallery of Art, Washington, District of Columbia

RECORD LINK

KRESS COLLECTION DIGITAL ARCHIVE

<https://kress.nga.gov/Detail/archival/DOC15336>