




Circle of Sandro Botticelli (Master of the Campana Panels?) (Italian, 1444/1445–1510), *Madonna and Child with St. John the Baptist*, about 1500, tempera and oil on poplar panel, approximately 80 cm, front, visible light, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2014.85.

 TECHNICAL EXAMINATION REPORT

**Madonna and Child with St. John the Baptist**

about 1500

**Circle of Sandro Botticelli (Master of the Campana Panels?)**

Italian, 1445–1510

egg tempera and oil on poplar panel

Diameter of tondo: approximately 31-1/2 in (80 cm)

*The Clowes Collection*

2014.85

## Overview

**Identification number:** 2014.85

**Artist:** Circle of Sandro Botticelli (Master of the Campana Panels?)

**Title:** *Madonna and Child with St. John the Baptist*

**Date of creation:** About 1500

**Previous number/accession number:** CI0029

**Dimensions:** 71 × 86 cm (varies slightly)

**Conservator/examiner:** [Roxane Sperber](#) with contributions from [Fiona Beckett](#)

**Examination completed:** 2014, revised 2021

### DISTINGUISHING MARKS:

#### Front:

None

#### Back:

Item 1. [Abraded](#) red circular seal, back, upper half of the [tondo](#), third plank from the right, "DOGANA DI MILANO" surrounding a crest

Item 2. Red circular seal, back, upper half of the tondo, third plank from the left (tech. fig. 2)



**Technical Figure 2:** Seal, visible light. Circle of Sandro Botticelli, *Madonna and Child with St. John the Baptist*, about 1500, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2014.85.

Item 3. Illegible label, back, upper-left area of panel, "...GES...H.M..."

### SUMMARY OF TREATMENT HISTORY

The painting was thoroughly examined in 1939 by George Stout, which included a detailed description, and samples taken and analyzed. The painting was also previously cleaned several times, including partial [varnish](#) removal, as consistent with George Stout's analysis.

Documentation suggests a series of condition assessments and treatments were carried out on the collection about the time the works were moved from the Clowes residence to the IMA in 1971. A condition report by Paul Spheeris in October of that year, likely carried out before the paintings were relocated, described the painting as not in need of treatment, although some lifting was noted on the frame.<sup>1</sup>

A second condition assessment was carried out upon arrival of the paintings at the IMA. This assessment described the work as being in good condition, and no work was deemed necessary.<sup>2</sup> In 1996, a memorandum was written summarizing treatment and examination of the Clowes Collection since the time it entered the museum. This document noted that the painting underwent a minor treatment in 1981.<sup>3</sup> This treatment included the setting down of flaking paint with gelatin and tissue paper, [retouching](#) of disturbed areas with matte [Soluvar](#), [inpainting](#) with dry [pigments](#) in [AYAB](#), spray varnish with Acryloid B-67 in xylene, a wax coating with Renaissance Wax, and reframing.

The painting underwent a full treatment in 2020/2021 that included varnish and retouching removal, application of a new varnish, and [filling](#) and inpainting losses.<sup>4</sup>

The condition of the painting was recorded in the Clowes Collection annual survey from 2011 to 2020.

### CURRENT CONDITION SUMMARY

After the 2021 treatment, the painting is in a good aesthetic condition. The varnish is clear, and the inpainting is well matched. The treatment revealed a severely damaged paint layer, but there are many well preserved areas that the treatment also revealed. The painting is structurally sound, with previous structural interventions intact.

### METHODS OF EXAMINATION, IMAGING AND ANALYSIS

Examination/Imaging	Analysis (no sample required)	Analysis (sample required)
<input checked="" type="checkbox"/> Unaided eye	<input type="checkbox"/> Dendrochronology	<input type="checkbox"/> Microchemical analysis
<input checked="" type="checkbox"/> Optical microscopy	<input checked="" type="checkbox"/> Wood identification	<input type="checkbox"/> Fiber ID
<input checked="" type="checkbox"/> Incident light	<input type="checkbox"/> Microchemical analysis	<input checked="" type="checkbox"/> Cross-section sampling
<input checked="" type="checkbox"/> Raking light	<input type="checkbox"/> Thread count analysis	<input type="checkbox"/> Dispersed pigment sample
<input type="checkbox"/> Reflected/specular light	<input checked="" type="checkbox"/> X-ray fluorescence spectroscopy (XRF)	<input type="checkbox"/> Fourier-transform infrared spectroscopy (FTIR)
<input type="checkbox"/> Transmitted light	<input type="checkbox"/> Macro X-ray fluorescence scanning (MA-XRF)	<input type="checkbox"/> Raman microspectroscopy
<input checked="" type="checkbox"/> Ultraviolet-induced visible fluorescence (UV)		
<input checked="" type="checkbox"/> Infrared reflectography (IRR)		<input type="checkbox"/> Gas chromatography—mass spectrometry (GC-MS)
<input type="checkbox"/> Infrared transmittography (IRT)		<input checked="" type="checkbox"/> Scanning electron microscope -energy dispersive X-ray spectroscopy (SEM-EDS)
<input type="checkbox"/> Infrared luminescence		<input type="checkbox"/> Other:
<input checked="" type="checkbox"/> X-radiography		

## Technical Examination

### DESCRIPTION OF SUPPORT

Analyzed  Observed



**Technical Figure 5:** X-radiography. Circle of Sandro Botticelli, *Madonna and Child with St. John the Baptist*, about 1500, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2014.85.

#### Material (fabric, wood, metal, dendrochronology results, fiber ID information, etc.):

The painting is executed on a wood panel with vertical grain and all members cut in slightly varying tangential orientations (tech. fig. 5).<sup>5</sup> Three of the planks were sampled for wood identification, and all were identified as willow/poplar (*Salicaceae* spp.).<sup>6</sup>

#### Characteristics of Construction / Fabrication (cupping, beveled edges of panels, seams, joins, battens):

The panel is constructed from seven vertically oriented planks that are butt-joined with glue. Strips of canvas were applied over the joints on the back to reinforce them. The back of the panel shows marks consistent with hand-tooling. The edges of the panel are not beveled. There are a few small knots in the wood that are visible from the back of the panels.

The panel has a cross-batten attached via a dove-tailed slot. The batten was likely part of the original construction of the panel (tech. fig. 6). This is consistent with late fifteenth- and early sixteenth-century Italian constructions where dovetailed cross-battens were often used.<sup>7</sup>



**Technical Figure 6:** Back showing the horizontal batten. Circle of Sandro Botticelli, *Madonna and Child with St. John the Baptist*, about 1500, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2014.85.

#### Thickness (for panels or boards):

Approximately 2.5 cm thick (~3.5 cm with batten)

**Production/Dealer's Marks:**

Two red seals are visible on back (see [Distinguishing Marks](#))

**Auxiliary Support:**

Original  Not original  Not able to discern  None

**CONDITION OF SUPPORT**

The panel is currently in stable condition and remains relatively in plane with a slightly convex warp. Some insect channeling is visible from the back as well as in the X-radiograph. The panel maintains its original thickness. There is slight wear along all edges of the panel.

**DESCRIPTION OF GROUND**

Analyzed  Observed

**Materials/Binding Medium:**

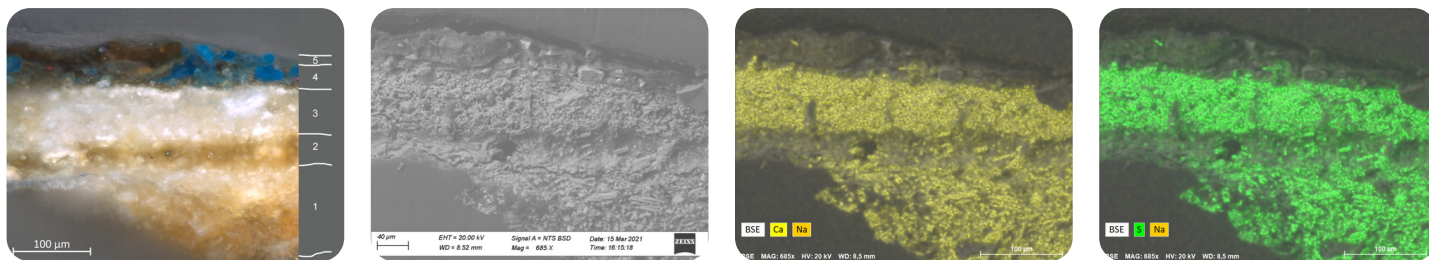
The ground layer is composed of two layers of calcium sulfate (*gesso*). The ground layer was first analyzed in Stout's 1939 analysis and found to be anhydrous calcium sulphate, a composition typical of fifteenth- and sixteenth-century Italian panel paintings.<sup>8</sup> The calcium sulphate ground was confirmed during the 2021 treatment with EDS analysis (tech. figs. 9, 10).

**Color:**

The ground appears as an off-white color, slightly yellowed over time.

**Application:**

The ground was applied in two layers, likely with a large brush. The layers are separated by what appears to be a glue *size* layer (tech. fig. 7, layer 2). SEM of the [cross section](#) reveals the first layer to be quite similar in texture to the second layer, suggesting a system of applying a *gesso grosso* and *gesso sottile* was not used. Rather, the same gesso was used in both layers with a layer of glue in between.



**Technical Figures 7–10:** Cross section 1 in visible light and BSE with elemental distribution of calcium (yellow), sulfur (bright green). Circle of Sandro Botticelli, *Madonna and Child with St. John the Baptist*, about 1500, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2014.85.

**Thickness:**

The gesso is approximately 200 µm thick. The first layer of gesso (layer 1) is approximately 100 µm thick and the second layer of gesso (layer 3) is approximately 100 µm thick (see tech. fig. 8).

**Sizing:**

Animal-glue size was applied to the panel before the application of the ground layer and a slightly yellowed area of the cross section is visible at the bottom. A second layer of size was applied in between layer of ground (layer 2).

**Character and Appearance (Does texture of support remain detectable / prominent?):**

The wood grain remains slightly visible through the ground and paint layers when viewed in raking light.

**CONDITION OF GROUND**

The ground is in stable condition. There is a network of age *crackle* over the surface of the paint layer that is consistent with the wooden support. Losses are present around the wood joints and the edges. These have been filled and retouched. However, much of the damage to the paint layer does not extend to the ground.

**DESCRIPTION OF COMPOSITION PLANNING**

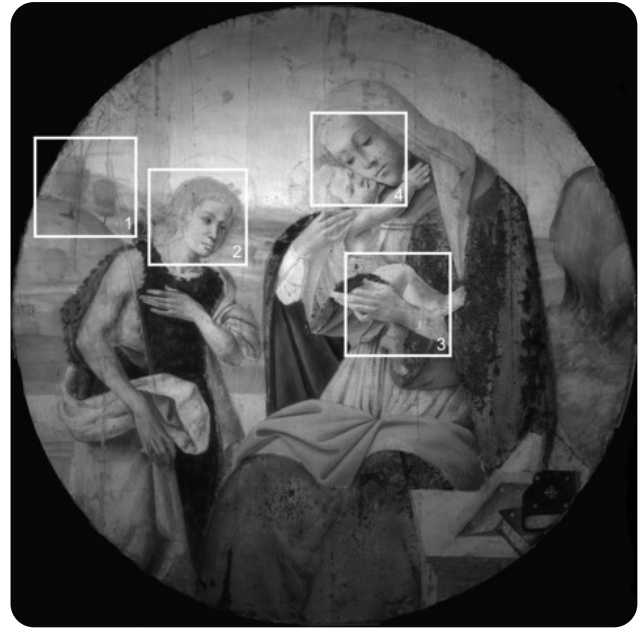
**Methods of Analysis:**

- Surface observation (unaided or with magnification)
- Infrared reflectography (IRR)
- X-radiography

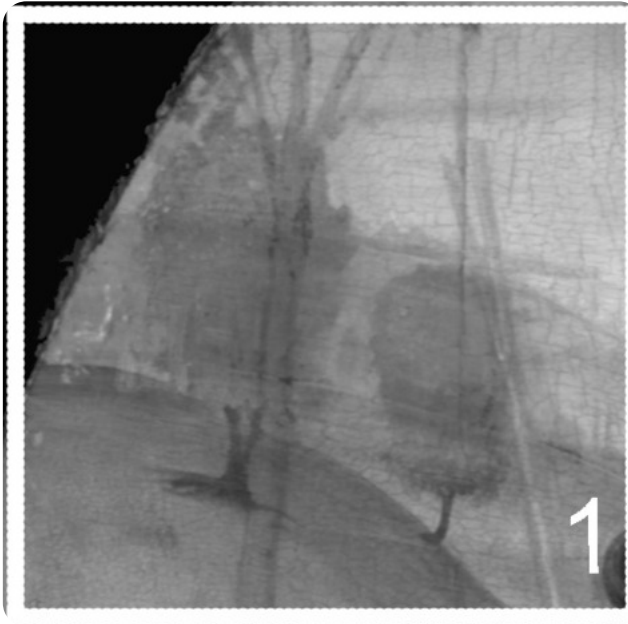
**Analysis Parameters:**

X-radiography equipment	GE Inspection Technologies Type: ERESKO 200MFR 3.1, Tube S/N: MIR 201E 58-2812, EN I2543: 1.0mm, Filter: 0.8mm Be + 2mm Al
KV:	20
mA:	3.0
Exposure time (s)	150
Distance from X-ray tube:	36"
IRR equipment and wavelength	Opus Instruments Osiris AI infrared camera with InGaAs array detector operating at a wavelength of 0.9–1.7µm.

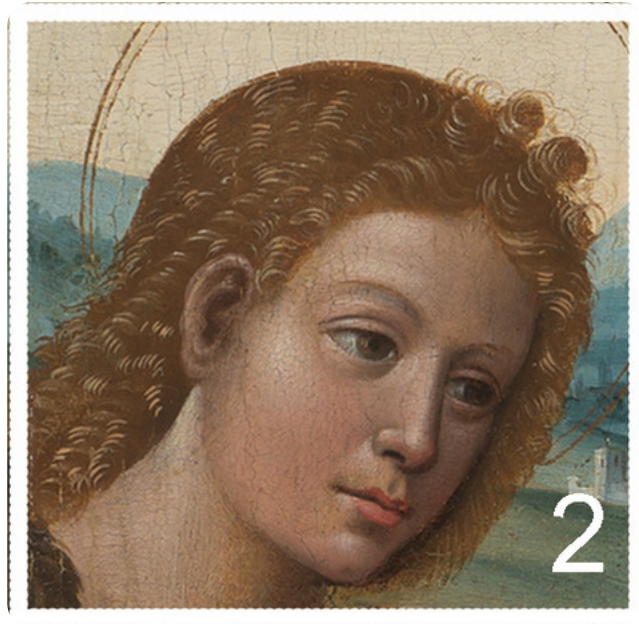




**Technical Figure 11:** Infrared reflectogram showing areas of compositional changes and planning: 1. Previous rounded trees later removed; 2. Adjustments to St. John's face and hair; 3, 4. Defined outlining in Madonna's hand and cheek. Circle of Sandro Botticelli, *Madonna and Child with St. John the Baptist*, about 1500, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2014.85.



**Technical Figures 12, 13:** Detail from the IRR and visible light image showing bushy trees in the planning stage of the painting that were later painted out. Circle of Sandro Botticelli, *Madonna and Child with St. John the Baptist*, about 1500, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2014.85.



Technical Figures 14, 15: Detail from the IRR and visible light image showing changes to the facial shape and hair of St. John. Circle of Sandro Botticelli, *Madonna and Child with St. John the Baptist*, about 1500, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2014.85.



Technical Figures 16, 17: Detail from the IRR and visible light image showing outlining in the Madonna's hand. Circle of Sandro Botticelli, *Madonna and Child with St. John the Baptist*, about 1500, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2014.85.



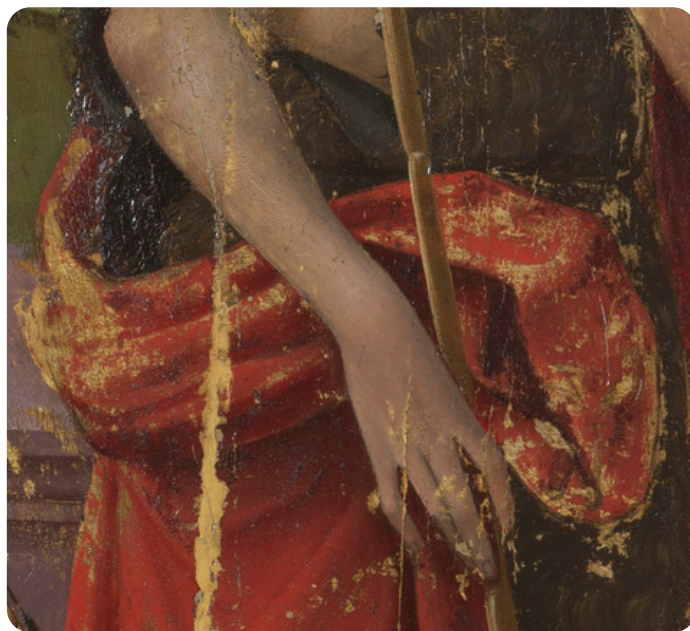


**Technical Figures 18, 19:** Detail from the IRR and visible light image showing outlining in the Madonna's face. Circle of Sandro Botticelli, *Madonna and Child with St. John the Baptist*, about 1500, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2014.85.

**Medium/Technique:**

Liquid medium, possibly ink

Underdrawing is visible in the infrared reflectogram (tech. fig. 11) and in areas of abraded paint that were visible during treatment when inpainting was removed (see tech. fig. 20). In some areas, such as the figure of St. John and the trees, the underdrawing has been applied with a brush using a wet medium and seems to have been painted freehand (tech. figs. 12, 14).



**Technical Figure 20:** Detail from the robe of St. John during treatment where underdrawing in a liquid medium was visible in areas of damage. Circle of Sandro Botticelli, *Madonna and Child with St. John the Baptist*, about 1500, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2014.85.

In the figures of the Madonna and Christ child, underdrawing appears as bolder lines around the contours of the figures (tech. figs. 16–19). These lines are more hesitantly articulated, suggesting they may have been traced. Given that an identical composition of the Christ child and Madonna appears on a tondo that is now in the São Paulo Museum of Art, it is likely that this area of the composition was traced from a cartoon.

**Pentimenti:**

The figure of St. John the Baptist has significant underdrawing in the face, where adjustments and changes have altered the size and placement of features. For example, the face was enlarged and rounded, and the placement of the eye was adjusted to reflect the new dimensions (tech. figs. 14, 15). The hairline was initially drawn further into the face with loose brushstrokes. Additionally, some of the landscape elements of the painting have been adjusted. For example, larger, rounder trees were initially painted to the left of St. John's head and later removed from the composition during the painting phase (tech. figs. 12, 13).

**DESCRIPTION OF PAINT**

Analyzed  Observed

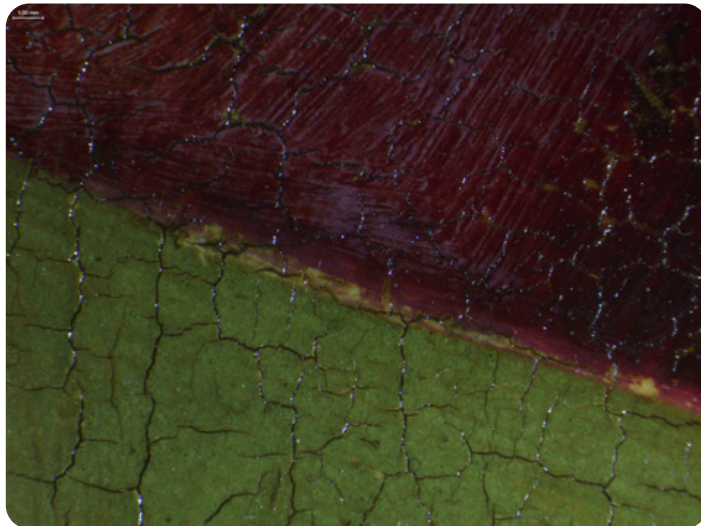
**Application and Technique:**



The painting technique exemplifies that of a period of transition from egg tempera to oil paint. Although binding media was not confirmed using analysis, the technique suggests the work contains both egg and oil.

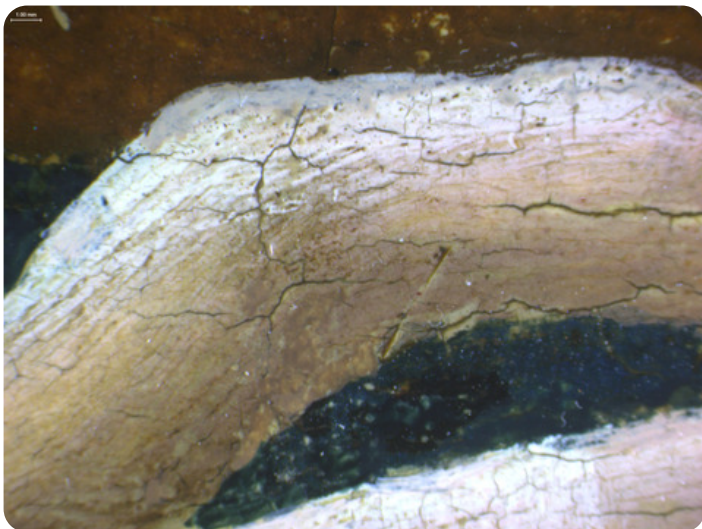
The paint was applied over the planned composition. The sky was painted first with rough reserves for the figures of St. John and the Madonna. The X-radiograph shows that the horizon line was originally lower and a slightly different shape with a steeper hill on the left side of the painting. The mountains in the distance were painted over the sky in shades of blue, transitioning to the greens in the middle ground and foreground.

The robes were painted using large, sweeping brushstrokes and blending that is suggestive of an oil medium. Form in the drapery was created using three tones: highlights, midtones, and shadows that were blended to create seamless transitions of form. In some areas, such as St. John's red robe and the green lining of the Madonna's green robe, glazes were used in the shadows. The midtone for each area of drapery was laid in separately with little overlap of the colors (tech. fig. 21). In the robes of the baby, however, individual strokes are visible in the highlights, and less blending is present. This technique is more suggestive of that of medieval Italian artists who worked in egg tempera.



**Technical Figure 21:** Photomicrograph from the Madonna's robe showing a sliver of ground in between areas of color. Circle of Sandro Botticelli, *Madonna and Child with St. John the Baptist*, about 1500, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2014.85.

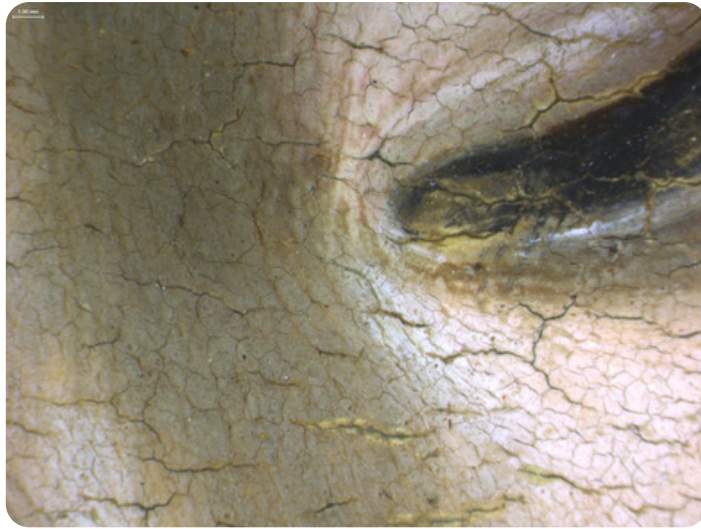
The flesh painting is carried out in long, linear brushstrokes using a much smaller brush (tech. fig. 22). Form is created through the application of warm pink midtones over which bright white highlights are applied. Cool gray and deep red shadows are applied in the deepest areas of shadows (tech. fig. 23). Unlike medieval Italian painters who applied a green or brown underlayer (verdaccio) to create the areas of shadow, the artist of this painting mixed and applied the shadows directly (tech. fig. 24). Similar to egg tempera technique, however, small, distinct brushstrokes are visible with very little blending. The application of light highlights over the dark shadows creates a cool transition from one area to another (tech. figs. 22–24).



**Technical Figure 22:** Photomicrograph from the Madonna's finger showing long, linear brushstrokes with a small brush. Circle of Sandro Botticelli, *Madonna and Child with St. John the Baptist*, about 1500, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2014.85.

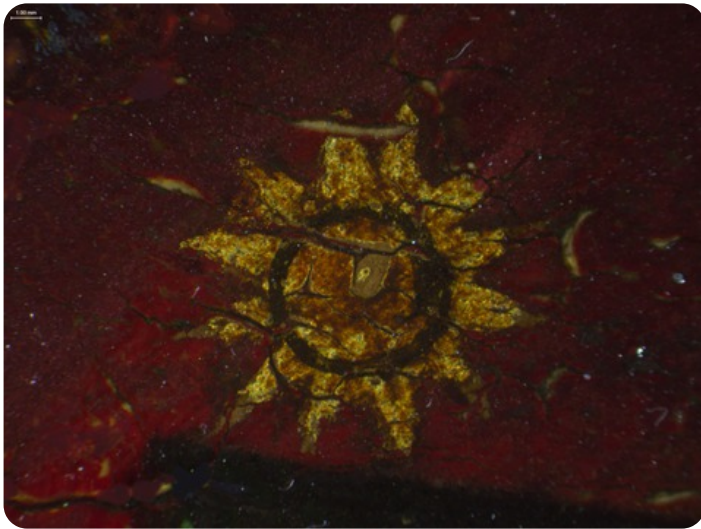


**Technical Figure 23:** Photomicrograph of St. John's nose showing the application of midtones, highlights, and shadows. Circle of Sandro Botticelli, *Madonna and Child with St. John the Baptist*, about 1500, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2014.85.

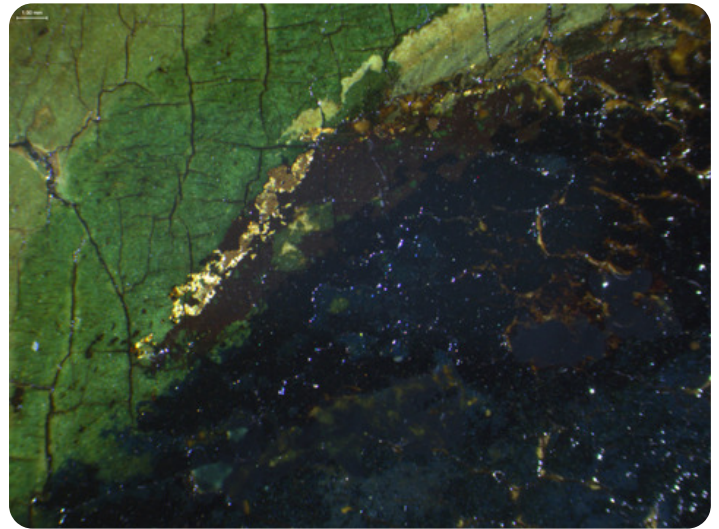


**Technical Figure 24:** Photomicrograph of the Madonna's eye showing the transition from highlights to shadows and the absence of a *verdaccio* layer. Circle of Sandro Botticelli, *Madonna and Child with St. John the Baptist*, about 1500, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2014.85.

Details, including trees, distant figures, and St. John's staff, were painted last. Glazes were used to paint the foliage in the background. Shell gold was also applied as decoration in the book, halos, and along the edges of the robes (tech. figs. 25, 26).



**Technical Figure 25:** Photomicrograph of shell gold in the decoration on the book. Circle of Sandro Botticelli, *Madonna and Child with St. John the Baptist*, about 1500, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2014.85.



**Technical Figure 26:** Photomicrograph of shell gold along the edge of the Madonna's robe. Circle of Sandro Botticelli, *Madonna and Child with St. John the Baptist*, about 1500, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2014.85.

**Painting Tools:**

Brushes of varying sizes; no evidence of palette knife or other hard-edged tools. Gold leaf and shell gold paint applied in the uppermost layers.

**Binding Media:**

Oil (untested)

**Color Palette:**

The pigments as analyzed by XRF elemental analysis (tech. fig. 27) correspond with those recorded in technical examinations of works by Botticelli and with fifteenth-century Florentine painting. Lead white and azurite were used for the sky and background (the presence of copper in these areas are possibly a result of glazes of other copper-containing pigments, such as verdigris, and malachite used for the foliage) and are consistent with that used in Botticelli works, including *La Primavera*, although these are by no means unusual for the period.<sup>2</sup> Lead-tin yellow was used in several areas of the painting, including the light green of the Madonna's cloak, the gold area of the prayer book, and in the halos.<sup>10</sup> The presence of mercury in some areas (skin and traces in halo, background) indicates limited use of vermilion, perhaps due to cost. The red pigments in the robes of St. John the Baptist and the Madonna figure were likely a combination of red lead, earths, and organic lakes. Gold leaf was used in the prayer book and appears to be oil gilding.

**XFR Analysis:**





**Technical Figure 27:** XRF sample locations. Circle of Sandro Botticelli, *Madonna and Child with St. John the Baptist*, about 1500, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2014.85.



Sample	Location	Elements	Possible Pigments
1	Ground layer	Major: Ca, S Minor: Trace: Pb, Fe, Sr	Calcium sulfate ground, trace of lead white, trace of iron oxide (earth pigments).
2	Sky	Major: Cu, Ca, Pb Minor: Fe Trace:	Azurite, lead white, iron oxide (earth pigments), calcium (from ground layer).
3	Tree leaf	Major: Cu, Pb Minor: Trace: Ca, Fe, Sn	Copper-containing green and/or blue pigment, lead white, lead-tin yellow, trace of calcium (from ground layer), trace of iron oxide (earth pigments).
4	Blue middle ground	Major: Cu, Pb Minor: Fe Trace: Ca	Azurite, lead white, iron oxide (earth pigments), trace of calcium (from ground layer).
5	Green foreground	Major: Cu, Pb, Fe Minor: Sn Trace: Ca, Ti	Copper-containing green and/or blue pigment, lead white, iron oxide (earth pigments), lead-tin yellow, trace of calcium (from ground layer).
6	Madonna's green robe lining	Major: Cu, Pb Minor: Trace: Fe, Ca	Copper-containing green and/or blue pigment, lead white, calcium (from ground layer), trace of iron oxide (earth pigments), lead-tin yellow.
7	Madonna's blue robe	Major: Pb, Cu Minor: Fe, Ca Trace: K, Ti	Azurite, lead white, iron oxide (earth pigments), calcium (from ground layer).
8	Madonna's red dress	Major: Pb Minor: Ca, Fe Trace: Cu, K	Likely red lake pigments (cannot be confirmed with XRF), lead white, trace of copper-containing green and/or blue pigment, iron oxide (earth pigments), calcium (from ground layer).
9	Madonna's light green blanket	Major: Cu, Pb Minor: Sn Trace:	Copper-containing green and/or blue pigment, lead white, lead-tin yellow.
10	Madonna's headdress	Major: Pb, Cu Minor: Ca, Fe Trace: K	Lead white, azurite, likely red lake pigments, iron oxide (earth pigments), calcium (from ground layer).
11	Jesus's robe	Major: Cu, Pb Minor: Fe Trace: Ca, Ti	Azurite, lead white, iron oxide (earth pigments), trace of calcium (from ground layer).
12	Gilding on Jesus's robe	Major: Cu, Pb Minor: Fe, Au Trace: Ca, Ti	Azurite, lead white, gold leaf, iron oxide (earth pigments), trace of calcium (from ground layer).
13	John the Baptist's red robe highlight	Major: Hg Minor: Ca Trace: Fe, Mn	Vermilion, calcium (from ground layer), trace of iron oxide (earth pigments).
14	John the Baptist's red robe shadow	Major: Hg Minor: Ca Trace: Fe, Mn	Vermilion, likely red lake pigments (cannot be confirmed with XRF), calcium (from ground layer), trace of iron oxide (earth pigments).
15	John the Baptist's hair shirt	Major: Pb, Hg, Fe Minor: Ca, Cu Trace: Ti, Mn	Vermilion, iron oxide (earth pigments), calcium (from ground layer), copper-containing green and/or blue pigment.
16	John the Baptist's hair shadow	Major: Pb, Fe Minor: Trace: Ca, Cu, Ti, Hg, K	Lead white, iron oxide (earth pigments likely yellow ochre), trace of calcium (from ground layer), trace of copper-containing green and/or blue pigment, trace of vermilion.
17	John the Baptist's hair highlight	Major: Pb, Fe Minor: Trace: Ca, Cu, K, Zn	Lead white, iron oxide (earth pigments likely yellow ochre), trace of calcium (from ground layer), trace of copper-containing green and/or blue pigment.
18	Black robe	Major: Cu, Pb Minor: Ca Trace: Fe, Ti, K	Copper-containing green and/or blue pigment, lead white, possible carbon black, trace of iron oxide (earth pigments), calcium (from ground layer).
19	John the Baptist's skin	Major: Pb Minor: Hg Trace: Fe, Ca	Lead white, vermilion, trace of iron oxide (earth pigments), trace of calcium (from ground layer).
20	Madonna's cheek	Major: Pb Minor: Hg Trace: Fe, Ca	Lead white, vermilion, trace of iron oxide (earth pigments), trace of calcium (from ground layer).
21	Jesus's halo	Major: Cu, Pb, Fe Minor: Zn Trace: Ca	Bronze restoration paint?, azurite, lead white, iron oxide (earth pigments), trace of calcium (from ground layer).
22	Madonna's halo	Major: Cu, Pb, Fe Minor: Au Trace: Ca	Gold leaf, azurite, lead white, iron oxide (earth pigments), trace of calcium (from ground layer).

Sample	Location	Elements	Possible Pigments
23	John the Baptist's staff highlight	Major: Pb, Fe Minor: Cu Trace: Ca	Lead white, iron oxide (earth pigments likely yellow ochre), copper-containing green and/or blue pigment, trace of calcium (from ground layer).
24	Yellow plant	Major: Pb Minor: Cu, Sn Trace:	Lead white and/or lead-tin yellow, copper-containing green and/or blue pigment.
25	Purple desk	Major: Pb, Cu, Fe Minor: Ca, Fe Trace: K	Iron oxide (earth pigments), lead white, copper-containing green and/or blue pigment, likely red lake pigments, calcium (from ground layer).

Table 1: Results of X-ray fluorescence analysis conducted with a Bruker Artax microfocus XRF with rhodium tube, silicon-drift detector, and polycapillary focusing lens (~100µm spot).

\*Major, minor, trace quantities are based on XRF signal strength not quantitative analysis.

**Surface Appearance:**

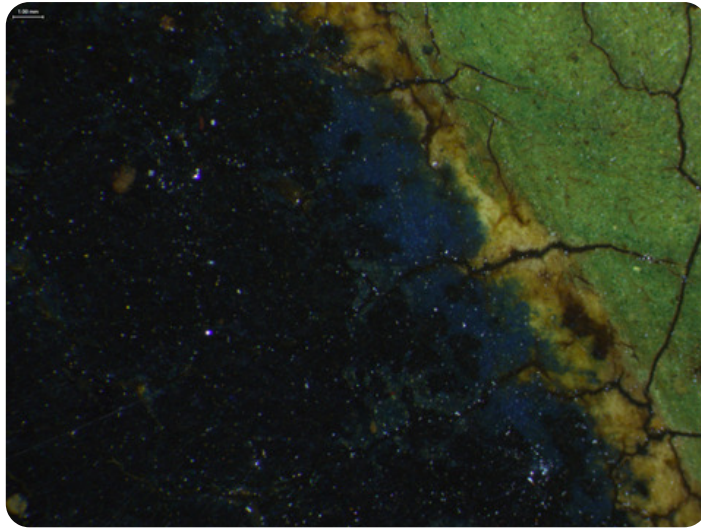
The paint appears to be relatively thinly applied, with no areas of impasto, although the brushwork and defining lines are slightly raised.

**CONDITION OF PAINT**



**Technical Figure 28:** Painting during the 2021 treatment showing the condition of the original paint layer before inpainting. Circle of Sandro Botticelli, *Madonna and Child with St. John the Baptist*, about 1500, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2014.85.

A photograph from the 2021 treatment showing the condition of the paint layer after varnish removal and before inpainting shows the condition of the original paint layer (tech. fig. 28). Many areas of glazing, as well as large areas of the Madonna's cloak, the Madonna's left hand, the Christ child's right foot, and St. John's cloak, had been heavily abraded from a previously invasive cleaning. Other losses are present along the joins in the panels and the sky, and there are small losses across the panel. Degradation in the Madonna's blue robe has led to flattening of this area (tech. fig. 29).



**Technical Figure 29:** Photomicrograph from the Madonna's robe showing the original blue color with the degraded oil-containing layer that has darkened the robe's appearance. Circle of Sandro Botticelli, *Madonna and Child with St. John the Baptist*, about 1500, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2014.85.

**DESCRIPTION OF VARNISH/SURFACE COATING**

Analyzed     Observed     Documented

Type of Varnish	Application
<input type="checkbox"/> Natural resin	<input checked="" type="checkbox"/> Spray applied
<input checked="" type="checkbox"/> Synthetic resin/other	<input checked="" type="checkbox"/> Brush applied
<input checked="" type="checkbox"/> Multiple Layers observed	<input type="checkbox"/> Undetermined
<input type="checkbox"/> No coating detected	



**Technical Figure 30:** Ultraviolet-induced visible fluorescence. Circle of Sandro Botticelli, *Madonna and Child with St. John the Baptist*, about 1500, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2014.85.

The report from the 2021 treatment records that several layers of synthetic varnish composed of a blend of [Paraloid B-72](#) (20%) and Larapol A81 (80%) dissolved in Shellsol A100 were brush applied to the surface to saturate the dark robe of the Madonna. A final coat of 30% Larapol A81 in Shellsol A100 was applied over the layers once the darks were saturated. The painting does not fluoresce strongly in ultraviolet-induced visible fluorescence due to the presence of synthetic varnish. However, extensive inpainting can be identified in the ultraviolet-induced visible



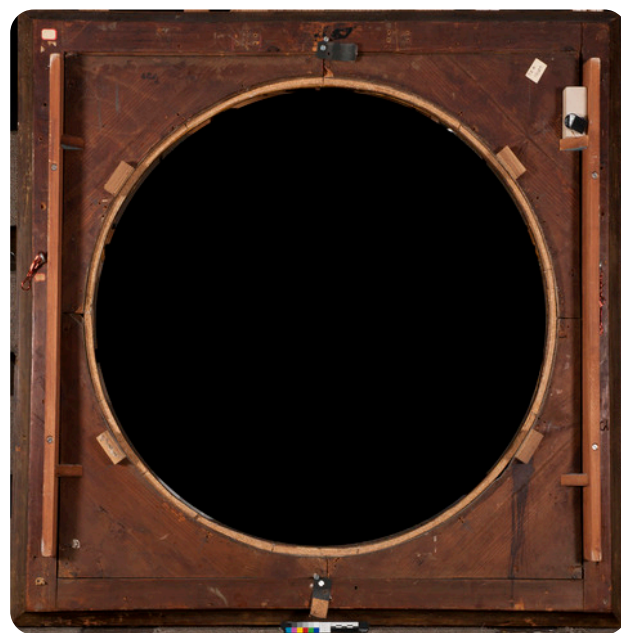
fluorescence photograph (tech. fig. 30). The inpainting was applied using Gamblin Conservation Colors in 30% Larapol A81 in Shellsol A100. A final spray varnish of 20% Larapol A81 in Shellsol A100 was applied.<sup>11</sup>

#### CONDITION OF VARNISH/SURFACE COATING

The varnish is clear and well saturated. The varnish is slightly glossy, which was necessary to achieve a fully saturated coating. The inpainting is saturated and well matched.

#### DESCRIPTION OF FRAME

- Original/first frame
- Period frame
- Authenticity cannot be determined at this time/ further art historical research necessary
- Reproduction frame (fabricated in the style of)
- Replica frame (copy of an existing period frame)
- Modern frame



**Technical Figure 31:** Frame, front. Circle of Sandro Botticelli, *Madonna and Child with St. John the Baptist*, about 1500, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2014.85.

**Technical Figure 32:** Frame, back. Circle of Sandro Botticelli, *Madonna and Child with St. John the Baptist*, about 1500, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2014.85.

#### Frame Dimensions:

Outside frame dimensions: 114 × 114 cm

Sight size: 84 × 84 cm

#### Distinguishing Marks:

Item 4. Paper label, handwriting in purple ink, upper-right corner, "T.R. 10029" (tech. fig. 32).

Item 5. Paper label with red border, handwriting in pencil, upper-left corner, "6734/23" (tech. fig. 33).



**Technical Figure 33:** Label. Circle of Sandro Botticelli, *Madonna and Child with St. John the Baptist*, about 1500, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2014.85.UMO:

Item 6. Wood-burned inscription, upper-left corner, "GES#" (tech. fig. 34).



**Technical Figure 34:** Inscription. Circle of Sandro Botticelli, *Madonna and Child with St. John the Baptist*, about 1500, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2014.85.

Item 7. Handwritten inscription, black ink, upper-left corner, "No. 735 Gaudenzio Ferrari/ ...Milanese" (tech. fig. 35).



**Technical Figure 35:** Inscription. Circle of Sandro Botticelli, *Madonna and Child with St. John the Baptist*, about 1500, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2014.85.

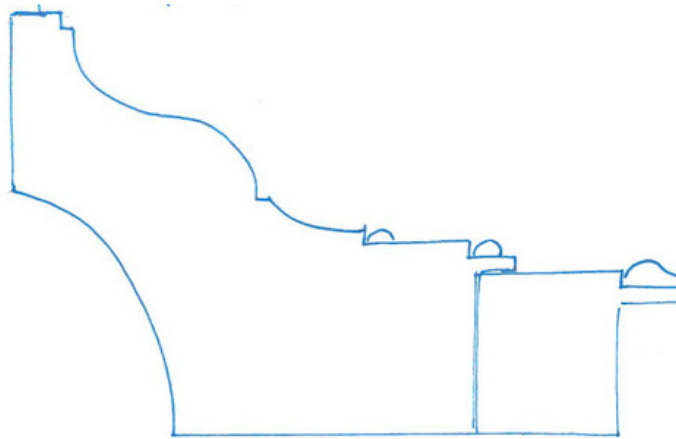
Item 8. Handwritten inscription in pencil, upper-left corner, "3~ 736" (tech. fig. 36).



**Technical Figure 36:** Inscription. Circle of Sandro Botticelli, *Madonna and Child with St. John the Baptist*, about 1500, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2014.85.

#### Description of Molding/Profile:

According to Timothy Newbery's examination from 19 January 2012, the frame is a twentieth-century, Eastern European frame constructed from pine (possibly from about 1920). It is an empire-style frame repainted later, possibly to fit the tondo (tech. fig. 31). It has miter-lapped corners (tech. fig. 32) and includes acanthus leaf and shield, bead, and reel ornaments made from composition (compo). It is painted blue with orange and bronze paint for the decorative elements. There is also decoration on the spandrel and ogee.<sup>12</sup>



**Technical Figure 37:** Profile of the frame, as drawn by Timothy Newbery. Circle of Sandro Botticelli, *Madonna and Child with St. John the Baptist*, about 1500, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2014.85.

#### CONDITION OF FRAME

The frame is structurally stable after the 2021 consolidation but is in relatively poor aesthetic condition. It was damaged in the past and restored in the twentieth century using bronze and blue paint. The spandrel is also slightly warped. There have also been several poorly executed repairs to the molded composition (compo).

#### Notes

1. Paul A.J. Spheeris, "Conservation Report on the Condition of the Clowes Collection," 25 October 1971, Conservation Department Files, Indianapolis Museum of Art at Newfields.
2. Martin Radecki, Clowes Collection condition assessment, undated (after October 1971), Conservation Department Files, Indianapolis Museum of Art at Newfields.
3. Memorandum from Martin Radecki to Bret Waller, "Conservation Work on Clowes Fund Collection," 16 February 1996, Conservation Department Files, Indianapolis Museum of Art at Newfields.
4. Roxane Sperber, CON2020.10: Examination, Treatment Proposal, and Treatment Report, 2020–2021, CI0029 (2014.85), Conservation Department Files, Indianapolis Museum of Art at Newfields.
5. Due to the slight convex warp of the panel, the images on the individual X-radiography plates have been slightly distorted. This distortion makes it impossible to merge the X-radiographs without slightly morphing the image. Therefore, the appearance of the wood grain in the X-radiograph is not completely straight, and the horizontal batten appears slightly askew.
6. Ian Tyers, "Tree-Ring Analysis and Wood Identification of Paintings from the Indianapolis Museum of Art: Dendrochronological Consultancy Report 1082," January 2019, p. 32, Conservation Department files, Indianapolis Museum of Art at Newfields.
7. Luca Uzielli, "Historical Overview of Panel-Making Techniques in Central Italy," in *The Structural Conservation of Panel Paintings: Proceedings of a Symposium at the J. Paul Getty Museum, 24-28 April 1995*, ed. Dardes, Kathleen, and Andrea Rothe (Los Angeles, CA: Getty Conservation Institute, 1998), 122, 126, [https://www.getty.edu/conservation/publications\\_resources/pdf\\_publications/pdf/panelpaintings2.pdf](https://www.getty.edu/conservation/publications_resources/pdf_publications/pdf/panelpaintings2.pdf).
8. Jill Dunkerton and Ashok Roy, "The Materials of a Group of Late Fifteenth-Century Florentine Panel Paintings," *National Gallery Technical Bulletin* 17 (1996): 20–31, [http://www.nationalgallery.org.uk/technical-bulletin/dunkerton\\_roy1996](http://www.nationalgallery.org.uk/technical-bulletin/dunkerton_roy1996).
9. <http://www.palazzo-medici.it/mediateca/en/Scheda-La-Primavera-di-Sandro-Botticelli>.



10. Jill Dunkerton and Ashok Roy, "The Materials of a Group of Late Fifteenth-century Florentine Panel Paintings," *National Gallery Technical Bulletin* 17 (1996).

11. Roxane Sperber, CON2020.10: Examination, Treatment Proposal, and Treatment Report, 16 July 2021, CI0029 (2014.85), Conservation Department Files, Indianapolis Museum of Art at Newfields.

12. Timothy Newbery, frame specialist, London, England. Visual analysis completed at the Indianapolis Museum of Art, 19 January 2012.

## Additional Images



Circle of Sandro Botticelli (Master of the Campana Panels?) (Italian, 1444/1445–1510), *Madonna and Child with St. John the Baptist*, about 1500, tempera and oil on poplar panel, approximately 80 cm, front, visible light, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2014.85.



Circle of Sandro Botticelli (Master of the Campana Panels?) (Italian, 1444/1445–1510), *Madonna and Child with St. John the Baptist*, about 1500, tempera and oil on poplar panel, approximately 80 cm, back, visible light, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2014.85.



Circle of Sandro Botticelli (Master of the Campana Panels?) (Italian, 1444/1445–1510), *Madonna and Child with St. John the Baptist*, about 1500, tempera and oil on poplar panel, approximately 80 cm, front, raking light, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2014.85.



Circle of Sandro Botticelli (Master of the Campana Panels?) (Italian, 1444/1445–1510), *Madonna and Child with St. John the Baptist*, about 1500, tempera and oil on poplar panel, approximately 80 cm, front, ultraviolet-induced visible fluorescence, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2014.85.



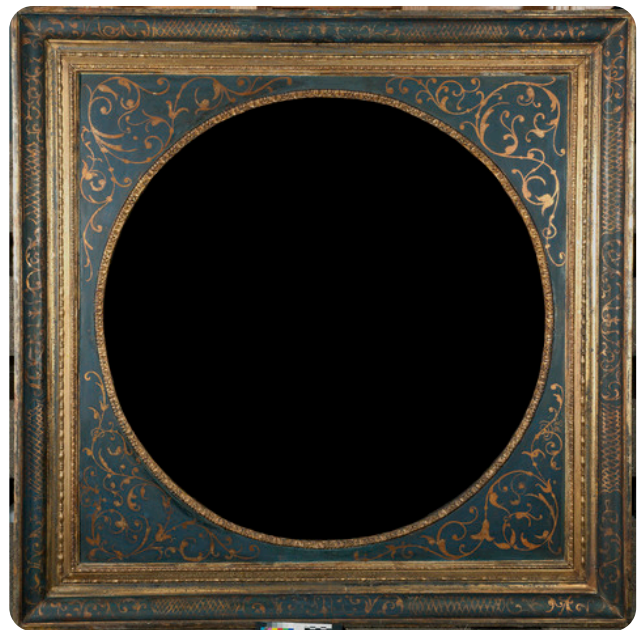
Circle of Sandro Botticelli (Master of the Campana Panels?) (Italian, 1444/1445–1510), *Madonna and Child with St. John the Baptist*, about 1500, tempera and oil on poplar panel, approximately 80 cm, front, infrared reflectography, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2014.85.



Circle of Sandro Botticelli (Master of the Campana Panels?) (Italian, 1444/1445–1510), *Madonna and Child with St. John the Baptist*, about 1500, tempera and oil on poplar panel, approximately 80 cm, X-radiography, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2014.85.



Circle of Sandro Botticelli (Master of the Campana Panels?) (Italian, 1444/1445–1510), *Madonna and Child with St. John the Baptist*, about 1500, tempera and oil on poplar panel, approximately 80 cm, during 2021 treatment, front, visible light Indianapolis Museum of Art at Newfields, The Clowes Collection, 2014.85.



Frame for *Madonna and Child with St. John the Baptist*, 114 × 114 cm, front, visible light Indianapolis Museum of Art at Newfields, The Clowes Collection, 2014.85.





Frame for *Madonna and Child with St. John the Baptist*, 114 × 114 cm, front, visible light Indianapolis Museum of Art at Newfields, The Clowes Collection, 2014.85.