INTRODUCTION
This painting (ACP 1573) depicts the image of the Virgin of Guadalupe surrounded by five corner scenes illustrating the story of her apparition. It was purchased in 1967, Nogales, Mexico, and given to St. Joseph’s University in 2006.

The naively painted image is on a canvas support with a vertical seam. The presence of paint vestiges on the seam allowance led to the conclusion that this support was constructed from two different older paintings. Art historical research on devotionals of the Virgin of Guadalupe provided evidence that the use of seams was typical of the traditional techniques used to create “true” Guadalupan iconography.

Infrared reflectography revealed the presence of two similar overlapping design campaigns depicting the Virgin on top of the re-used canvases supports. Cross-section microscopy revealed the stratigraphies of a double ground applied to the re-used canvases and another double ground applied to create a smooth surface on the fractured topography of the original canvases.

ART HISTORICAL CONTEXT
According to legend, a Nahuaht-speakings9 Madonna appeared to a local man named Juan Diego, in December 1531. The Virgin asked Juan Diego to persuade the bishop of Mexico City to erect a church in Her name, but the bishop ignored this request. To convince the bishop the Virgin miraculously raised a bed of red roses and instructed Juan Diego to collect them and bring them to him. When Juan Diego unfolded his white cloth filled with roses, the image of the Virgin was impressed on the fabric. This legend explains the origin of the original image (Fig. 1, known as the zitoma). The first painting including the four scenes (Fig. 3) is a devotional copy from 1654 by the Mexican painter, José Juárez. These four scenes are also depicted in the corners of ACP 1573.

As the cult of the Virgin spread in New Spain, devotional copies proliferated. Replication of these images of the Virgin of Guadalupe multiplied in the seventeenth century. The Mexican painter, Miguel Cabrera, examined the original image twice in the 1750s to validate its divinity and to establish parameters for the creation of “true copies.” In his book, MetepecAmericano, Cabrera described a vertical seam on the original painting. In his own devotional copies Cabrera included a seam whether or not it was structurally necessary (Fig. 2). Cabrera’s book was read by New Spanish painters seeking to achieve artistic recognition through their own copies. The location and orientation of the seam in ACP 1573 suggests that it is intentional, following the traditional replication of the image. This information provides a new layer of meaning for the painting. Imaging techniques showed that the uppermost pictorial layer was a complete overpainting campaign possibly done to “refresh” a previously damaged image of the Virgin with the apparition scenes. Overpainting is not an unacceptable feature in religious art where divine images must have a pristine appearance in order to be worthy of veneration.

CONDITION
In a previous restoration campaign, ACP 1573 was directly glued to a four-member strainer, and the backing edge was cut off.

The lower section of the seam had split open at some point and had been repaired with crude linen whiskitching that pierced the painted layers (Fig. 9). Exacerbated by the thick stratigraphy of the painting, the surface showed overall cupping and areas of slightly lifted paint.

The uppermost varnish layer was grimy and had yellowed significantly. Several areas of previous overpainting were visible over this varnish layer.

TREATMENT
The art historical and archaeological investigation of ACP 1573 suggested that the older painting campaigns might have religious significance. Removing any of these older campaigns would also impede future understanding of its history. Consequently, overpainting campaigns under the yellowed varnish were left intact as important testimony to the life of the painting. The painting was cleaned with a xylene/ethanol gel in order to remove the thick layer of yellow natural resin varnish and overlying overpaint.

The structural treatment was designed to reestablish the tension on the previously repaired seam. The distracting brittle threads that had been used to repair the lower section of the seam were removed. In order to re-establish the seam, a modified Trecker device was constructed to bring the edges of the canvas together (Fig. 12); the area was humidified through Gore-tex fabric, and a strong polyester thread was used to sew and bring together the open section of the seam. A StableAid/50A crated reinforcement fabric was used as a seam binding to avoid stressing the brittle canvas while closing the gap as much as safety allowed.

Next steps will include additional consolidation of cupped and lifted paint, filling and texturing large areas of loss to mimic the rough topography of the paint layers, and inpainting.

ANALYSIS
IR reflectography revealed similar juxtaposed compositions of the Virgin and the apparition scenes. The major compositional changes are visible in the background. The initial background had vine decorations with cherubs framing the scenes as seen on figure 4, where an underlying cherub’s head is discernible under a red clothed angel.

Energy Dispersive X-ray Fluorescence (EDXRF) was used to identify vermilion (HgS) as the superficial red color of the tunics of the angels and the Virgin. XRF was also used to analyze blue areas of the original vestiges of paint at the verso of the right canvas. The results of this analysis suggest that the color is Prussian blue (Fig. 7).

Cross-sectional microscopy from a sample taken from the right-side canvas was used to characterize the complex layers of ACP 1573. As seen on figure 5 there are, from the bottom up: [A] a double red ground and blue and white paint layers, which are vestiges of the re-used painting; [B] a double red ground layer covered with blue paint associated with the initial Virgin of Guadalupe design, and [C] a blue layer from the uppermost overpainting campaign. Technical studies conducted at El Prado Museum revealed that the practice of using double red grounds traveled from Italy to Spain and from Seville to the New World. The molecular composition of the original red ground on this cross-section was further analyzed with Raman Spectroscopy, which indicated the presence of hematite.

Raman Spectroscopy analysis confirmed the presence of Prussian blue mixed with lead white and barium sulfide on the re-used canvas fragment at the right suggesting that the right-side painting could not have been painted before 1704. Analysis of the left-side section is currently in progress.

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1 Blackman on the layered topography of the image, which is in Travels with a Child to Mexico.

Fig. 9. Cross-section from the right canvas showing, [A] layers in the original canvases, [B] layer from an old relief image of Guadalupe, and [C] overpainting campaign.

Fig. 10. Artistic diagram of the layered structure: [A] the original canvases joined by a seam; [B] the area was humidified through Gore-tex fabric; and [C] a blue layer from the uppermost overpainting campaign. Technical studies conducted at El Prado Museum revealed that the practice of using double red grounds traveled from Italy to Spain and from Seville to the New World. The molecular composition of the original red ground on this cross-section was further analyzed with Raman Spectroscopy, which indicated the presence of hematite.

Fig. 7. XRF spectrum of blue layer on the verso elevation of canvas at WFRM.

Fig. 8. Schematic diagram of Juan Diego’s white cloak with roses and blue cross from Seville to the New World. The molecular composition of the original red ground on this cross-section was further analyzed with Raman Spectroscopy, which indicated the presence of hematite.

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