

## CONSERVATION DEPARTMENT

*Condition & Treatment Report*

**Object:** [1983.0125] Dish, Platter, COLUMBIA

**Creator Name:** William Adams and Sons factory

**Category:** Ceramics

**Title:** COLUMBIA

**Material:** Earthenware (white), Lead glaze

**Object Date: Dated: Earliest:** 1835 **Latest:** 1840

**Measurements:**

**Height:** 3.48 cm (1.37 in)

**Length:** 34.50 cm (13.58 in)

**Width:** 25.95 cm (10.22 in)



**Reason for Examination:** Gallery rotation

**Requested by:** Leslie B. Grigsby

**Catalog Description:** The lead-glazed white earthenware dish is molded in a rectangular form with canted corners, a moderately deep well, and a flat base (there is no footrim). The straight rim flares outwards. A clear glaze coats the body. Underglaze transfer-printed designs in pale blue decorate the top of the dish.

The border design consists of an undulating foliate and floral vine against a horizontally striated ground. The well features a romanticized landscape of a group of two women and two men accompanied by two dogs in a garden overlooking a lake. Gothic garden pavilions, fences, and columns edge the garden. Tall trees and flowering plants flank the foreground scene. On the far left bank is a large building topped with minarets.

Printed in blue on the underside of the rim is a scroll bearing the pattern name "COLUMBIA" and "W. ADAMS & SONS". The scroll rests against a plinth also supporting a covered vase and flowers. "7" is printed on the underside of the dish.

Three peg marks are on the rim.

**Conservation Description:** Examination under short-wave UV light (Hand held Mineralight® Lamp, model number UVGL-58 with multiband UV at both 254nm and 366 nm. The lamp operates at 115 V, 60 Hz, and 0.16 Amps), confirms that the glaze is lead glaze, as it fluoresces bright white.

**Previous Treatment:** No record of previous treatment.

**Condition:** Structure:

There are two cracks through the rim and edging: one runs perpendicularly 5.5 cm from the rim into the center cartouche on the upper proper right of the dish; the other runs perpendicularly 6.2 cm from the rim into the center cartouche on the lower proper right of the dish, with an

associated rim loss measuring 1 cm in length, by 0.5 cm in width. There is slight movement along these cracks, compromising the overall stability of the dish.

**Staining:**

There is a significant amount of staining on the dish overall, having likely occurred through use of this object with food items. The staining is dark orange-brown in color and most evident in the white background of the central design, embedded in both aforementioned cracks, and all over the undecorated verso, most concentrated on the edges of the base. This staining fluoresces yellow under long-wave UV, which is most likely organic matter, rather than adhesive or restoration material (there is no evidence of previous restoration).

**Glaze:**

Overall, the glaze is crazed but in good condition, and the crazing is accentuated by the staining present. There are many scratches and small losses to the glaze surface, mostly on the inner well and outer edges, due to use.

**Surface:**

There is moderate-to-heavy surface dirt and grime.

**Accession number:**

The accession number "83.125" is written in yellow paint over top a barrier layer on the underside of the dish.

**Proposed Treatment:** 1. Carry out pre-treatment photodocumentation.

2. Surface clean dish with 1:1 ethanol/deionized water, using dampened cotton pads and swabs.

3. Test stain reduction methods using lightly penetrative poultices (e.g. 5% agarose gel) with low percentages of chelators (e.g. 2% citric acid), followed by tests of oxidative bleaches (hydrogen peroxide, carbamide peroxide). Carry out stain reduction, with the goal being to reduce staining only within the central design and along the two cracks; the aim is not to eliminate the stain completely from the entire dish.

4. After stain reduction along the cracks, consolidate using 15% Paraloid B72 (w/v in acetone), and apply even pressure around perimeter until adhesive has fully set.

5. Compensate for small loss along lower edge by filling with an acrylic spackle and inpainting with acrylic paints and gloss media.

6. Carry out after treatment photodocumentation

**Proposal By:** Lauren Fair

**Proposal Date:** 07/10/2014

**Authorized By:** Bruno Pouliot

**Authorization Date** 07/11/2014

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**Treatment:** 1. Pre-treatment photodocumentation carried out by J. Schneck.

2. Surface cleaned dish with cotton pads dampened with 1:1 ethanol/deionized water, which removed yellow material and loose dirt from the surface. Followed this by using cotton swabs dampened with 2% sodium citrate (pH 8.8 with sodium borate), which lessened some of the imbedded grime in areas of exposed body where the glaze had been scratched or abraded, and rinsed this application with 1:1 ethanol/deionized water. (1/2 hour)

3. Stain reduction:

- Testing:

On a small test area on the verso, cut a small Kaydry tissue square dampened with the sodium citrate solution mentioned above, covered with plastic wrap for 1 hour, then removed to air dry. Also tried test area with 5% agarose gel with 5% sodium citrate at pH 8.5, covering first, then allowing to air dry. Both poultice methods with sodium citrate proved to move and reduce the staining, with the area under the agarose appearing more uniform and "cleaner."

- Therefore, a fresh solution of agarose gel (4.5%) was mixed with 4% sodium citrate (pH 8.5 with sodium tetraborate), and sheets of the gel were laid flat on the inner well of the dish. After 1-2 hours, the gels were removed and replaced with Kaydry tissue dampened with 2% sodium citrate (pH 8.8 with sodium borate), covering in plastic for ~1 hour, then uncovering and allowing to dry overnight. This process was repeated until the majority of the stain on the inner well of the dish was reduced. (4 hours)

- After ~3 applications of the above poultice procedure, the majority of the stain on the proper right half of the dish was almost completely removed; while the proper left side still had much visible staining that the citrate chelator seemed to not affect any longer. Therefore, a 20% carbamide peroxide (urea-stabilized hydrogen peroxide) solution was applied in a slightly damp Kaydry tissue poultice to the entire inner well of the dish, and along the two cracks through the border. On visibly cleaned areas, the bleach served to rinse residual chelator; while in the still-stained areas on the proper left, the bleach served to break down remaining organic residues. After the first bleach application, the entire proper right side of the well was satisfactorily reduced of its staining, and much of the proper left side was reduced as well, though not all.

- Locally, areas on the proper left side received repeated bleach poultice applications. The bleach was applied with Kaydry tissue as mentioned above, but also in a Laponite poultice (5% gel with 20% carbamide peroxide) applied over top a barrier tissue of gampi usuyo Japanese paper.

(6 hours)

4. Crack consolidation: 10% Paraloid B72 was run into the cracks from both the top and underside surfaces using a syringe. A rubber band tourniquet was applied to the rim of the dish to apply even pressure for 24 hours. Excess adhesive was then removed with a small scalpel blade. (1/2 hours)

5. Loss compensation: The loss at the upper rim of the dish at the edge of the crack was first isolated by coating the break edges with dilute B72 in acetone. Flugger acrylic putty tinted with Golden fluid acrylics was applied and finished. Final inpainting was applied using Golden fluid acrylics and gloss medium. (1/2 hours)

6. After treatment photodocumentation was carried out by J. Schneck.

**Treatment Materials Used:**

1:1 deionized water:denatured ethanol

sodium citrate

sodium citrate

agarose (linear polysaccharide extracted from seaweed)

hydrogen peroxide - stabilized

Paraloid B-72 (ethyl methacrylate [70%] and methyl acrylate [30%] copolymer)

Flügger Acrylic Putty

Golden Fluid Acrylics

Golden Porcelain Restoration Glaze

**Treated By:** Lauren Fair

**Date Completed:**08/14/2014

**Treatment Hours:** 11.50



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