National Park Service

Regional Museum Services Program

Western Archeological and Conservation Center, Conservation Laboratory

255 N. Commerce Park Loop, Tucson AZ 85745

Treatment Report

Catalog Number: PECO 3547

IDENTIFICATION:

Catalog Number: PECO 3547

Object: OLLA

Material: CERAMIC

Accession number: PECO-00046

Center Accession number:

Measurements: H 11, DIAM 15 CM

Date of Treatment Report: 6/3/2021

Conservation Treatment Performed by: Kasey Hamilton
Project Objects Conservator

Description:

"SMALL BLACK OLLA RESTORED, 95% COMPLETE, 2 pieces
"Pottery of Pecos"; Vol II; Fig. 277g" as stated in the ICMS record.

The object is a low-fired ceramic with a round base, wide shoulder, tapered neck, and wide flared rim. A decorative band consisting of two incised lines and circular impressions is present just above the shoulder. The clay body is mottled with a range of dark brown to black coloration, likely related to firing.

TREATMENT:

Treatment Procedure:

1) Surface dust was reduced using a HEPA filtered vacuum and soft brush.

2) A map of sherd locations was created by wrapping thin plastic sheeting around the ceramic and tracing the outlines of the sherds using a felt tipped pen.

3) The object was placed in an acetone chamber to soften the joining adhesive to aid in disassembly. After two days the joins had not softened. Cotton poultices wet with acetone were applied to the joins. Some adhesive was removed by the poultices, however the joins did not soften enough to permit disassembly. At this point, additional solvent testing was conducted on the remaining adhesive. This adhesive was found to be insoluble in acetone and ethanol and soluble in hot deionized water. Cotton poultices wet with hot deionized water were applied to the ceramic overall and additional heat was added as necessary using a heat gun.

4) Once disassembled, remaining adhesive residues were reduced from the edges of the sherds using hot deionized water. Brushes, bamboo skewers, dental tools and toothbrushes were used to help remove old repair materials from the texture of the ceramic.

5) Excess adhesive was reduced as possible from surfaces adjacent to cracks using cotton swabs wetted with acetone.

6) Sherd edges were consolidated with 5% Paraloid B-72 in acetone applied by brush.

7) The sherds were reassembled using 30% Paraloid B-72 in acetone.

Date of completion of treatment: 6/1/2021 **Actual treatment hours:** 18

Treatment discussion:

Although initial examination and spot testing confirmed the presence of cellulose nitrate, the ceramic did not disassemble as expected in the acetone vapor chamber. The ceramic appears to have been reassembled using a different adhesive which was later covered with cellulose nitrate. The adhesive within the joins was found to be soluble in hot water. Cotton poultices wet with hot water were used instead of an acetone vapor chamber to disassemble the object.

Otherwise, the treatment was performed as proposed and the dissociated fragment was successfully reintegrated into the vessel.

Treatment Materials Used

Acetone: supplied through Fisher Scientific Co, Fair Lawn, NJ

De-Ionized Water: manufactured in lab through de-ionizing column

Paraloid B-72: ethyl methacrylate/ methylacrylate copolymer: manufactured by Rohm & Haas co., Philadelphia, PA

BT Digital Photograph: PECO_3547_BT1-BT6_2021

AT Digital Photograph: PECO_3547_AT1-AT6_2021

CERTIFICATION: **The above treatment was executed in accordance with the Code of Ethics and Standards of Practice of the American Institute of Conservation of Historic and Artistic Works.**

Conservator signature and date:  6/11/2021