DAACS Cataloging Manual: Industrially Produced Ceramics

This manual covers cataloging protocols for industrially produced ceramics (IPCs). This includes all industrially produced refined stonewares and earthenwares, porcelain, and industrially produced coarse earthenwares and stonewares. It does not include protocols for low-fired, non-industrially produced coarse earthenwares.

LAST UPDATED: MAY 2025
VERSION 1.0: 2003

The DAACS Industrially Produced Ceramics Manual documents how ceramics vessels are cataloged in the DAACS PostgreSQL database. This manual is one of sixteen DAACS Cataloging Manuals. Each manual documents a specific module of the DAACS database, and they provide protocols for using each module. In addition to defining each data field (meta data), the manuals describe how data should be entered into data field, provide guidance on artifact identification, and give examples of how artifacts should be cataloged.

The DAACS database was developed in 2000 by Jillian Galle and Fraser Neiman, in collaboration with members of the DAACS Steering Committee. Jillian Galle, Fraser Neiman, and DAACS Staff, including Leslie Cooper, Lynsey Bates, Lindsay Bloch, Elizabeth Bollwerk, Jesse Sawyer, and Beatrix Arendt, led the development of cataloging protocols. In addition to DAACS staff and steering committee members, Monticello current and former Archaeology Department staff, Jennifer Aultman, Sara Bon-Harper, Derek Wheeler, Donald Gaylord, Karen Smith, and Nick Bon-Harper also contributed to the development of cataloging protocols. Jennifer Aultman and Katherine Grillo produced the initial versions of these DAACS manuals in 2003. They have been continuously revised by DAACS staff in the intervening years.

This manual was substantially revised for the introduction of the Bronze, Silver, and Gold cataloging tiers in 2022, and in preparation for the new website launch in 2024. These revisions were made by Galle, Bollwerk and by DAACS analysts Iris Puryear, Allison Mueller, Catherine Garcia, and Lindsay Bloch.

Convoy, a web design and graphic design company based in Charlottesville, Virginia, initially programmed the DAACS database in SQLServer (2001-2013). The University of Virginia's Institute for Advanced Technology in the Humanities (IATH) built and currently maintains the PostgreSQL version of the DAACS database (2014-present). Convoy also designed the original DAACS website (2004), and has since redesigned the website twice (2014, 2024).

Table of Contents

1. THE DAACS DATABASE

The DAACS database was designed by Galle and Neiman in 2001 with direct input from the DAACS Steering Committee and collaborating institutions. Today DAACS' large relational database is comprised of over 200 tables programmed in open-source PostgreSQL. It is linked to a Ruby-on-Rails web-based interface that allows DAACS Research Consortium members to access the database through a web browser with a login from anywhere with a working internet connection. For a detailed summary of the DAACS database and history of DAACS, please see Galle, Bollwerk, and Neiman 2019.

In 2018, a major grant from the National Endowment for the Humanities' Digital Humanities Division provided funds to develop a tiered cataloging interface that would allow DRC users to engage with the database on a variety of levels while retaining the data standards and integrity built into the original system. This new interface, with its Bronze, Silver, and Gold tiers, went live in March 2022. This project was a collaboration between DAACS, The University of Virginia's Institute for Advanced Technology in the Humanities, and Convoy.

2. ABOUT THIS MANUAL

The **Industrially Produced Ceramic Vessel** module in DAACS is designed to facilitate the standardized identification and recordation of detailed sherd attributes. Ceramic analysis in DAACS always starts on the sherd level, rather than vessel. Non-vessel fired clay artifacts, such as bricks, floor and roof tiles, doorknobs, marbles, and toys should be cataloged in the General Artifacts Module. Glazed decorative wall tiles such as hand painted Delft tiles are included in this manual.

Please note that *non*-industrially produced or ambiguous coarse earthenwares are cataloged in the DAACS Coarse Earthenware Module, a separate interface from the industrially produced DAACS Ceramic Module. DAACS distinguishes industrially produced Coarse Earthenware ceramics that have well-understood and easily identified types from "locally" manufactured Coarse Earthenware ceramics that have "ambiguous" or difficult to identify types, where "locally" refers to manufacture within the region or country in which the sherd was found. Cataloging protocols for non-industrially produced coarse earthenwares are documented in the DAACS Course Earthenware Manual.

This manual covers cataloging protocols and standards at the Bronze, Silver, and Gold levels for the following industrially-produced ceramic ware types.

Industrially Produced Coarse Earthenwares:

- Albisola
- Biot
- Buckley-Type
- Huveaune
- Dutch Coarse Earthenware
- Dutch Slipware
- Essex Post-Medieval Blackware
- French Coarse Earthenware

- Iberian Coarse Earthenware
- Ligurian Buffware
- Mexican Coarse Earthenware
- Midlands Purple
- North Devon Gravel Tempered
- North Devon Plain
- North Devon Slipware
- Post-Medieval London-Area Redware
- Red Agate, Coarse
- Redware
- Saintonge
- Slipware, North Italian
- Slipware, North Midlands/Staffordshire
- Staffordshire Mottled Glaze (Manganese Mottled)
- Surrey-Hampshire Borderware
- Vallauris
- Werra Ware

Refined Earthenwares:

- Agate, refined (Whieldon-type)
- Astbury-Type
- Bennington/Rockingham
- Canary Ware
- Cauliflower Ware
- Creamware
- Creamware (Carolina)
- Delftware, Dutch/British
- Faience
- Ironstone/White Granite
- Jackfield Type
- Majolica
- Pearlware
- Redware, refined
- Red Agate, refined
- Refined Earthenware, unidentifiable
- Refined Earthenware, modern
- Tin Enameled, unidentified
- Wedgwood Green
- Whieldon-type Ware
- Whiteware
- Yellow Ware

Porcelain:

- Porcelain, Chinese
- Porcelain, Japanese
- Porcellaneous/Hard Paste
- Porcelain, American Hard Paste
- Porcelain, English Hard Paste
- Porcelain, English Bone China
- Porcelain, English Soft Paste
- Porcelain, French Hard Paste

Stonewares:

- American Stoneware
- Black Basalt
- Bristol Glaze Stoneware
- British Stoneware
- Burslem
- Frechen Stoneware
- British Brown/Fulham-Type
- German Stoneware
- Hessian Refractory
- Jasperware
- Nottingham
- Rosso Antico
- Shaw
- Slip Dip
- Staffordshire Brown Stoneware
- Stoneware, unid.
- Turner Type
- Westerwald/Rhenish
- White Salt Glaze

The following sections provide an overview of the DAACS Gold, Silver and Bronze interfaces and cataloging protocols for each level, as well as detailed descriptions of individual database fields and instructions for cataloging specific artifact types. Fields are listed in the order in which they appear at the Gold level.

2.1. Comparison of Ceramic Attributes recorded for Bronze, Silver, and Gold Cataloging Levels

Field	Entry Level and Field Location		
	Bronze	**Silver**	**Gold**
Artifact Count	Main	Main	Main
Ware Type	Main	Main	Main
Tin Enamel Type	Main	Main	Main
Material	Main	Main	Main
Manufacturing Technique		Main	Main
Vessel Category	Main	Main	Main
Form		Main	Main
Completeness		Main	Main
Decoration?	Main	Main	Main
Mended?		Main	Main
Exterior Surface		Main	Main
Exterior Color		Main	Main
Exterior Glaze Opacity			Main
Interior Surface		Main	Main
Interior Color		Main	Main
Interior Glaze Opacity			Main
Notes	Main	Main	Main
Sherd Thickness			Measurements
Maximum Sherd Measurement		Measurements	Measurements
Sherd Weight	Main	Measurements	Measurements
Mended Sherd Weight		Measurements	Measurements
Rim Length			Measurements
Rim Diameter			Measurements
Mended Rim Diameter			Measurements
Base Length			Measurements

Base Diameter			Measurements
Mended Base Diameter			Measurements
Tile Length			Measurements
Tile Width			Measurements
Genre	Main	Decoration	Decoration
Pattern Name		Decoration	Decoration
Pattern Notes			Decoration
Stylistic Elements			Decoration
Use/Wear			Wear/Condition
Evidence of Burning			Wear/Condition
Post-Manufacturing Modification?		Main	Wear/Condition
Base Mark		Base Mark	Base Mark
Base Mark Color		Base Mark	Base Mark
Base Mark Reference		Base Mark	Base Mark
Add Image	Images	Images	Images
Add Object	Objects	Objects	Objects
Add Mends to Artifact		Mends	Mends
Mended Form		Mends	Mends

3. Bronze Level Protocols

3.3. Bronze Overview

The main benefit of cataloging ceramic vessel sherds at the Bronze Level is the ability to batch larger quantities of sherds by a smaller number of diagnostic fields. The result is the ability to catalog more artifacts at a faster pace. However, think carefully about the analytical tradeoffs. If you catalog at the Bronze level, you will not record potentially important pieces of information, such as detailed measurements and decoration attributes.

The fields recorded at the Bronze level are:

- Artifact Count
- Ware
- Tin Enamel Type
- Material
- Vessel Category
- Decoration? (Y/N)
- Decorative Genre
- Notes
- Sherd or Batch Weight
- Links to Images
- Links to Objects

We begin by introducing Bronze level batching protocols and offering suggestions for cataloging efficiency. We then describe the fields recorded at the Bronze level. Details on individual ware types can be found in Section 7.

3.4. Bronze Batching Protocols

- Batch all sherds, regardless of size, that share the following diagnostic attributes:
    - Ware
    - Material
    - Vessel Category
    - Decorative Genre
- Artifact Count should record the total number of sherds in the batch. Sherd weight should be the total weight of the batch in grams.
- Please note that it is possible to have a "batch" with an Artifact Count of 1.
- If there is decoration on the sherd that is not temporally significant, and therefore does not have a Decorative Genre, record Decoration as "Yes," Genre as "Not Applicable," and describe the general type of decoration in the Notes section (e.g., "Exterior has incised decoration. No assigned genre.").

3.5. Bronze Sorting Recommendations

We recommend following the following steps for sorting sherds prior to cataloging. This sorting process will expedite cataloging.

1. Sort sherds by ware type.
2. Sort ware type groups into smaller groups by vessel category.
3. Sort your Ware/Category groups by decorated and undecorated sherds.
4. At this point, you should have many small piles of sorted ceramics on your desk. For example: a pile of creamware, flat, with no decoration; a pile of pearlware, hollow, with underglaze transfer print blue decoration; a pile of Chinese porcelain, hollow, with hand painted overglaze decoration.
5. Note that at the end of this process you may have batched groups with numerous sherds, or a group with just one sherd. A batch of one is still a batch and should be recorded using the prescribed guidelines.
6. All attributes must match within a group of sherds to create a batch.

4. Silver Level Cataloging Protocols

4.1. Silver Overview

The main benefit of cataloging ceramic vessel sherds at the Silver Level is the ability to batch sherds while also collecting more attribute data, such as surface treatment, color, base marks, and more measurements, than offered by the Bronze interface. The result is the ability to catalog artifacts at a faster pace than Gold but with more information that Bronze. However, think carefully about the analytical tradeoffs. If you catalog at the Silver level, you are not recording detailed stylistic information, wear/condition data, or rim and base measurements.

The fields recorded at the Silver level are:

- Artifact Count
- Ware
- Tin Enamel Type
- Material
- Manufacturing Technique
- Vessel Category
- Vessel Form
- Completeness
- Decoration? (Y/N)
- Mended?
- Exterior Surface*
- Exterior Color*
- Interior Surface*
- Interior Color*
- Notes
- Maximum Sherd Measurement
- Sherd or Batch Weight
- Mended Sherd Weight
- Decorative Genre
- Pattern Name
- Post Manufacturing Modification?
- Base Mark
- Base Mark Color
- Base Mark Reference
- Notes
- Links to Images
- Links to Objects
- Links to Mended Artifacts

***Note:** Exterior/Interior Surface and Surface Color are only recorded for coarse earthenwares and non-refined stonewares at the Silver level. See detailed cataloging protocols in Section 4.2.

4.2. Silver Batching Protocols

4.2.1. Protocols for Refined Earthenwares, Refined Stonewares, and Porcelains

- Batch all sherds that share the following attributes:
  - Ware
  - Manufacturing Technique
  - Material
  - Completeness

- Vessel Category
- Form
- Completeness
- Genre
- Pattern Name (if applicable)
- Maximum Sherd Size (Batch in 10 mm bins modified for DAACS Silver. Size Bins include: less than 20 mm, 21-30 mm, 31-40 mm, etc.)

- Artifact Count should record the total number of sherds in the batch.

- For each batch, record the four fields in the Surfaces section on the Main Tab as follows:
  - Exterior Surface = "Not Recorded"
  - Exterior Surface Color = "Not Recorded, batched"
    Interior Surface = "Not Recorded"
  - Interior Surface Color = "Not Recorded, batched"
  - **Note**: Non-refined Stonewares and Coarse Earthenwares are also batched by Exterior and Interior Surfaces. Protocols are below. See Section 2 for a breakdown of ceramic ware types by material type (i.e., refined vs. non-refined stonewares, etc.).

- Sherd weight should be the total weight of the batch in grams.

- If there is decoration on the sherd that is not temporally significant, and therefore does not have a Decorative Genre, record Decoration as "Yes," Genre as "Not Applicable" and enter notes on the general type of decoration in the Notes (e.g., "Exterior has incised decoration. No assigned genre.").

4.2.2. Protocols for Coarse Earthenwares and Non-Refined Stonewares

- Batch all sherds that share the following attributes:
  - Ware
  - Material
  - Manufacturing Technique
  - Completeness
  - Vessel Category
  - Form
  - Completeness
  - Exterior Surface
  - Exterior Color
  - Interior Surface
  - Interior Color

    - Genre
    - Maximum Sherd Size (less than 20 mm, 21-30 mm, 31-40 mm, etc. - 10 mm modified bins for DAACS Silver)

- Artifact Count should record the total number of sherds in the batch.

- Exterior and Interior Surface Colors are recorded using the DAACS Detailed Color Groups. See Section 2 for a breakdown of ceramic wares by material type (i.e., refined vs. non-refined stonewares, etc.).

- Sherd weight should be the total weight of the batch in grams.

- If there is decoration on the sherd that is not temporally significant, and therefore does not have a Decorative Genre, record Decoration as "Yes," Genre as "Not Applicable," and enter notes on the general type of decoration in the Notes (e.g., "Exterior has incised decoration. No assigned genre.").

4.2.3. Protocols for All Ware Types when Artifacts Mend

Mended sherds should be cataloged at the sherd level, which may result in batches with counts of one. This includes both sherds that are physically glued together, as well as fragments with the potential for cross-mending that are not physically mended. If the mending occurs across two batches, then Mends tab information should be recorded ("Mends to" Artifact IDs and Mended Form) for each batch. However, if two mended sherds have all of the same attributes (including max. sherd size), then they can be recorded in one batched record (Artifact Count=2). Do not batch mended with non-mended sherds at Silver or Gold Levels.

- Example 1: Three bowl fragments are physically glued together, two are 20 mm and one is 30 mm, all other attributes are the same. Two records would be created for this scenario: one with a count of 2 and max size 20 mm, and another with a count of 1 and max size 30 mm. Mended Yes/No is recorded as "Yes, Physically Mended" and information is recorded in the Mends tab for both records.

- Example 2: Two flat, "Tableware, unid," undecorated base sherds, size 30 mm, are mended. One record is created, Mended Yes/No Field is recorded as "Yes, Physically Mended", Artifact Count =2. The only information recorded in the Mends tab is Mended Form.

4.2.4. Sherds that Cannot Be Batched (Silver)

Sherds of all ware types with any of the following criteria should be cataloged individually, with Artifact Count = 1:

- Sherds that exhibit any post-manufacturing modification. Post-Manufacturing

Modification field in the Wear/Condition section on the Main tab should be recorded as "Yes." The modification should be described in the Notes field.

- Sherds with base marks or other manufacturer's marks should always be cataloged individually. Record this information under the Base Mark tab.
- Mended sherds that do *not* share all the same attributes. Mended sherds should be catalogued individually unless all attributes, including Maximum Sherd Measurement, are identical at the sherd level. This includes both physically glued sherds and fragments with the potential for cross-mending. See Section 4.2.3 for detailed protocols.

4.3. Silver Level Sorting Recommendations

We recommend the following steps for sorting sherds prior to cataloging. This sorting process will expedite cataloging.

1. Sort sherds by ware type.

2. Separate any sherds that cannot be batched (Section 4.2.4).

3. Sort ware types into smaller groups by Manufacturing Technique, Completeness, Vessel Category, Form, Genre, and Pattern Name (if applicable). If you are cataloging coarse stonewares and earthenwares, you will also batch by exterior and interior surface treatment and color (Section 4.2.2).

4. You should have many small piles on your desk at this point in the process. For example: a pile of creamware, press molded, flat, tableware unid., bases, with no decoration; a pile of pearlware, press molded, hollow, teabowl, rim/body sherds with transfer print Blue Willow pattern decoration; a pile of Chinese porcelain, wheel thrown, hollow, bowl, body sherds with hand painted blue decoration.

5. Separate each batched pile into size bins.
    a. Sherds **20 mm and under** can be batched together. Enter 20 in Max Sherd Size field.
    b. Sherds **greater than 20 mm** should be batched by 10 mm size bins.
        i. Enter 30 for sherds 21-30mm
        ii. Enter 40 for sherds 31-40mm
        iii. Enter 50 for sherds 41-50mm,
        iv. Etc.

6. Note that at the end of this process you may have a "batch" of one sherd. A batch of one is still a batch and should be recorded using the following guidelines.

7. All attributes must match within a group of sherds to batch them.

5. Gold Level Cataloging Protocols

5.1. Gold Overview

The main benefit of cataloging at the Gold level is the ability to record a large number of individualized measurements and the maximum amount of attribute data for every artifact. Cataloging at the Gold level also allows you to capture information about detailed stylistic elements and decorative motifs in addition to broader decorative genre. However, think carefully about the analytical tradeoffs. The ability to batch multiple artifacts under a single record is much more limited at the Gold level, and the process of identifying and recording a large number of individualized attributes at the sherd level is time consuming and requires a high level of cataloger expertise. The choice of cataloging level should reflect the research goals, as well as time and/or budgetary considerations, specific to a given project.

Please note that Gold Level standards represent the original Ceramic attribute fields that have been part of DAACS since 2001 (with few exceptions).

The fields recorded at the Gold level are:

- Artifact Count
- Ware Type
- Tin Enamel Type
- Material
- Manufacturing Technique
- Vessel Category
- Vessel Form
- Completeness
- Decoration? (Y/N)
- Exterior Surface Treatment
- Exterior Color
- Exterior Glaze Opacity
- Interior Surface Treatment
- Interior Color
- Interior Glaze Opacity
- Notes
- Sherd Thickness
- Maximum Sherd Measurement
- Sherd or Batch Weight
- Mended Sherd Weight
- Rim Length
- Rim Diameter
- Mended Rim Diameter
- Base Length
- Base Diameter
- Mended Base Diameter
- Tile Length
- Tile Width
- Decorative Genre
- Pattern Name
- Pattern Notes
- Stylistic Elements Related Table: Interior/Exterior
- Stylistic Elements Related Table:

Location
- Stylistic Elements Related Table: Decorative Technique
- Stylistic Elements Related Table: Decoration Color
- Stylistic Elements Related Table: Stylistic Element
- Stylistic Elements Related Table: Motif
- Wear/Condition Related Table: Wear Location
- Wear/Condition Related Table: Completeness
- Wear/Condition Related Table: Wear Pattern
- Evidence of Burning
- Post Manufacturing Modification?
- Base Mark
- Base Mark Color
- Base Mark Reference
- Notes
- Links to Images
- Links to Objects
- Links to Mended Artifacts

In the following sections, we introduce the Gold level cataloging protocols and offer suggestions for cataloging efficiency. Details on individual ware types can be found in Section 7.

5.2. Gold Batching Protocols

Batching protocols at the Gold level are complex, with batching reserved only for the least diagnostic sherds. Please read the following carefully and reach out to DAACS with any questions.

5.2.1. General Gold Batching Rules

At the Gold Level, sherds may *only* be batched if they share the following criteria:

- All sherds in batch measure 15mm or less in maximum sherd diameter.
- Form is “Unidentifiable.”
- Completeness is identified as “Body” or is “Unidentifiable.”
- Sherds are undecorated.
- All sherds in batch must share the following attributes:
    - Ware
    - Manufacturing Technique
    - Vessel Category
    - Form = “Unidentifiable”
    - Completeness = “Body” or “Unidentifiable”
    - Maximum Sherd Measurement = 15mm or less

- Do not record Surface Color or Glaze Opacity for batched sherds. These fields should be

entered as “Not Recorded, Batched.”

- Sherds can be batched together even if some in the group are burned or missing glaze and others are not. If some sherds in the batch are burned, enter “Not Recorded” in the Evidence of Burning field. Similarly, if some sherds in the batch are missing glaze, catalog as normal but enter Surface type as “Not Recorded,” and Surface Color as “Not Recorded, Batched.”

- Non-diagnostic, transfer-printed under sherds can be batched if they meet all the above criteria. However, the decorative Genre must be the same for all sherds in the batch (for example, each sherd in the batch is "Transfer Print Under, Green"), and the Pattern and Completeness must be unidentifiable. Stylistic Elements do not need to be recorded for transfer-printed sherds. Do not batch overglaze transfer-printed sherds or those with identifiable patterns.
    - If sherds are printed on one side: they should be batched together, with Category, Form, Completeness, and Pattern entered as “Unidentifiable.”
    - If sherds are printed and the surface of one side is missing: then they should be batched with other printed-on-one-side sherds.
    - If sherds are printed on both sides: they should be batched together, with Category entered as “Hollow,” and Form, Completeness, and Pattern as “Unidentifiable.”

- Sherds with the following criteria should always be cataloged individually, with Artifact Count = 1:

    - Sherds that exhibit evidence of use wear and/or post-manufacturing modification.

    - Sherds with base marks or other manufacturer’s marks.

    - Mended sherds should always be cataloged individually at the Gold level. This includes both physically mended sherds as well as fragments that mend but are not physically glued together.

5.2.2. Batching Exceptions

- Sherds with underglaze transfer-printed decoration may be batched if they are less than 15mm in diameter, have a Completeness of “Unidentifiable,” the same decorative Genre, and an “Unidentifiable” pattern. Stylistic Elements do not need to be recorded for transfer-printed sherds. Do not batch overglaze transfer-printed sherds.
- All unidentifiable “Refined Earthenware, modern” can be batched, regardless of form, sherd size, and color. Batch by Ware and record Count and Weight. List other fields as “Not Recorded.” See Section 7.2.14 for details on how DAACS defines “Refined earthenware, modern.”

5.3. Gold Level Sorting Recommendations

We recommend following the steps outlined below for sorting sherds prior to cataloging. This sorting process will expedite cataloging.

1. Sort sherds by Ware type.

2. Divide ware type categories into smaller groups based on Manufacturing Technique, Category, Form, and Completeness.

3. From your smaller groups, separate out any sherds with decoration. Sort decorated sherds by decorative Genre.

4. At this point in the process, you should have many small piles on your desk. For example: a pile of creamware, molded, flat, tableware unid., bases, with no decoration; a pile of pearlware, molded, teabowl, rim/body sherds with transfer-printed under, blue decoration; a pile of Chinese porcelain, wheel thrown, hollow, bowl, body sherds with hand painted blue decoration.

5. Divide your small groups into 5 mm size bins. Separate out any sherds that are 15mm or less in maximum sherd diameter that meet the criteria for batching outlined in Section 5.2. All other sherds must be cataloged individually.

6. Separate individually cataloged sherds by Surface type, Surface Color, and Glaze Opacity (if applicable). Record this information in the Surfaces section on the Main tab.

7. Record Sherd Thickness, Maximum Sherd Diameter, and Weight under the Measurements tab. Additional measurements should be taken for sherds with diagnostic completeness (i.e., rim or base fragments).

8. For decorated sherds, identify and record individual stylistic elements under the Decoration tab.

9. Separate out any sherds that exhibit evidence of post-manufacturing modification, use wear, or burning. Record this information in the Condition tab.

10. Remember that mended sherds are always cataloged individually at the Gold level, even if physically glued together. Select “Yes, Physically Mended,” or “Yes, Mends But Not Physically” on the Main tab and record information in the Mends tab.

6. DAACS Ceramic Field Definitions and Protocols

The descriptions that follow refer to the data fields in the order in which they appear at the Gold cataloging level. If cataloging at Bronze or Silver, the same general guidelines apply, but also refer to level-specific cataloging instructions.

6.1. Main Tab

6.1.1. Artifact Count

Numeric

This field documents the number of sherds cataloged in a single record. For example, a count of one means that one sherd is described in the record. A count of 13 means 13 sherds have been cataloged ("batched") together based on common diagnostic features. These 13 sherds are captured in a single record.

Note: Fresh breaks that occur in the field or during artifact processing are cataloged as one sherd and therefore can be batched with similar sherds according to the previous rules in Silver and Gold level cataloging. In the Notes field, record "[X] sherds in this batch are fresh breaks."

6.1.2. Ware

Controlled Vocabulary

The Ware field provides a list of 93 commonly recognized historic ceramic ware types. DAACS requires that each Ware have mutually exclusive defined attributes. The attributes of each ware type and associated cataloging protocols are described in detail in Section 7.

Please take note of the following special cases:

Redware, Refined

Sherds identified as "Redware, refined" must have a paste color consistent with the following color chips: Pantone 7594, 7610, or 7631 from the DAACS Redware color sheet. To identify whether a sherd is what DAACS classifies as a "Redware", match the paste color of the sherd, as observed in the sherd's cross-section, with one of the color chips.

Coarse Earthenware

Finally, DAACS makes the distinction between **"known imported, industrially produced"** coarse earthenware ceramic-types (IPC), whose ware types are easily described and whose attributes are most generally agreed upon, and **"ambiguous imported"** coarse earthenwares whose diagnostic attributes are not agreed upon or are more difficult to identify, and **"locally-made"** coarse earthenwares. "Ambiguous imported" and "Locally-made" types are cataloged in a different module and using a separate set of cataloging protocols from the

industrially produced ceramic types covered by this manual. Pay close attention to the following information to ensure you are cataloging your coarse earthenwares in the correct module.

"Known imported, industrially produced" coarse earthenwares are cataloged using the IPC Module, using the same attribute fields and protocols as refined earthenware, porcelains, and stonewares.

"Locally-made" coarse earthenware types are: "Caribbean Coarse Earthenware, hand built", "Caribbean Coarse Earthenware, unid.", "Caribbean Coarse Earthenware, wheel thrown", "Colonoware", "Indigenous," and "Redware."

Difficult to Identify Sherds:

Occasionally you will only be able to identify the Material of the sherd (i.e., Refined Earthenware, Stoneware, etc.), but not the specific Ware. For these sherds, the Ware types would be, for example, "Refined Earthenware, unidentified" or "Stoneware, unidentified." Note that completely unidentifiable coarse earthenware should be cataloged in the Coarse Earthenware Module, not the Industrially Produced Ceramic Module.

Only use "Unidentifiable" when you cannot tell either the basic Material (coarse or refined earthenware, stoneware, or porcelain) or the Ware type of the sherd.

6.1.3. Tin Enamel Type

Controlled Vocabulary

This field is used to capture more detailed information about tin-enameled wares. Ware types such as "Majolica" are defined broadly to encompass a range of tin enameled wares manufactured in different regions and often with unique attributes and decorative styles. Identifying a specific tin enamel type allows catalogers to distinguish, for example, between a majolica produced in Spain such as Sevilla Blue-on-Blue, and a majolica manufactured in Mexico such as Puebla Blue-on-White. There are three tin-enameled ware categories in DAACS, to which this field applies: "Delftware, Dutch/British," "Faience," and "Majolica." If a tin enameled sherd cannot be identified to one of these specific Wares, enter Ware as "Tin Enamel, unid" and select "Unidentifiable" for Tin Enamel Type.

Tin Enamel Type is closely related to ceramic ware type and should be considered a subcategory of the Ware field. Each tin enamel type represents a subset of ceramics within a given ware type, which are distinguished by the unique characteristics of their decoration, enamel, and/or paste, while also sharing the essential attributes that define the larger ware category. When cataloging tin enameled wares, make sure to select a Tin Enamel Type that is

applicable to the Ware Type of the sherd in question. See Appendix 2 in this manual for a complete index of Tin Enamel Types and associated type descriptions.

1.1.1. Coarse Earthenware Type

Controlled Vocabulary

Coarse earthenware "type" designations are recorded in this field. These types identify subsets of existing ware types according to diagnostic attributes. The default Earthenware Type is "Not Applicable." The earthenware types used in the Industrially Produced Ceramics module have been established for a particular region across multiple projects (e.g., Orange Micaceous [Iberian Coarse Earthenware]). See Section 7.1. for individual Coarse Earthenware Types that are appropriate for specific Wares.

6.1.4. Material

Controlled Vocabulary

This field indicates the basic ceramic material of the sherds in the record. Material Types include: "Refined Earthenware", "Coarse Earthenware", "Porcelain", "Stoneware" and "Unidentifiable." Descriptions and cataloging protocols for some of the more common specific wares that fall into each of these Material categories are found in Section 7, below. General definitions of Material types are as follows:

"Coarse Earthenware"	Porous clay bodies with visible inclusions usually characterize coarse earthenwares. Most are gray-to-red-to-brown in color, and have a lead glaze on one or both surfaces. with some exceptions noted in Section 7.1 below. After the development of refined earthenware in the eighteenth century, this material was most often used for utilitarian vessels (and some tablewares).
"Refined Earthenware"	. Harder and denser than coarse earthenwares, most refined earthenwares have few inclusions in their paste. The body is generally cream- colored to white and lead-glazed. In DAACS, tin-enameled wares are cataloged as "Refined Earthenwares."
"Porcelain"	Impervious to liquids, nearly vitrified, and generally translucent, porcelain materials tend to have white or off-white bodies. See exceptions (i.e., English Soft Paste) in Section 7.3, below. Porcelain is most common in teaware and tableware forms.
"Stoneware"	A dense and somewhat vitrified ceramic, impervious to liquids. Most early stonewares were made in England and Germany, although American stonewares are also common after c. 1750. Stoneware was used primarily for utilitarian and some tableware forms. Refined stonewares served tableware and teaware functions.
"Unidentifiable"	Encompasses sherds that are too fragmentary, burned, etc., for material type to be recognized.

6.1.5. MANUFACTURING TECHNIQUE

Controlled Vocabulary

Ceramic vessels encountered at historic archaeological sites are generally produced in one of five ways:

"Wheel thrown": Look for horizontal rilling or "throwing lines" to determine whether a vessel is wheel thrown. They may be present on the interior, exterior, or both. Wheel thrown vessels may also have concentric trimming marks on the exterior base. Most stonewares and coarse earthenwares were wheel thrown. A few refined earthenwares (especially early wares such as tin enameled wares, and some heavy forms such as chamber pots), as well as some types of porcelain (e.g., Chinese) were also sometimes wheel thrown.

"Press molding": Pressing soft clay balls or sheets into molds. Generally creates thin-bodied vessels and permits the production of complex molded shapes, such as creamware baskets. Thin-bodied refined earthenwares (such as teawares and most tablewares) are generally press molded, and some porcelain and refined stoneware is press molded. For coarse earthenwares, press molding was typically used to produce hump-molded plates or platters.

"Slip Cast": With slip casting, a watery slip is poured into a mold and allowed to harden to produce a vessel. Slip casting can often be recognized when the indentation from decoration on the outside of a vessel can be felt in "negative" on the inside. Fine stonewares, such as Black Basalt and White Salt Glaze, as well as porcelains, were sometimes slip cast.

"Handbuild, coil": Coiled vessels are built by joining together a continuous spiral or series of coils. Adjacent coils are smoothed together using fingertips, a paddle and anvil, or a similar tool. "Handbuild, coil" should only be used when there is diagnostic evidence of coil manufacture such as a coil break; otherwise, record Manufacturing Technique for handbuilt pottery as "Handbuild, unid." Note that industrially produced ceramics are unlikely to be handbuilt, with the exception of some large, utilitarian vessels (e.g., Biot storage jars).

Handbuild, unid": Some handbuilt pottery was made via pinching or drawing up clay from a single ball, or by flattening slabs of clay and joining them together. Based on the possibility that manufacturing technique for handbuilt pottery could be either slab, coiled, or a combination of the two,

if there is no diagnostic evidence of coil manufacture, record Manufacturing Technique as "Handbuild, unid." Note that industrially produced ceramics are unlikely to be handbuilt, with the exception of some large, utilitarian vessels (e.g., Biot storage jars).

"Unidentifiable": Generally used for completely unidentifiable sherds, often extremely burned or damaged fragments. This may also apply in the case of sherds with ambiguous attributes when the ware type is known to have been manufactured using multiple techniques (e.g., a White Salt Glaze body sherd that is curved but lacks clear throwing marks and is too small to determine if it is associated with a hollow, wheel thrown form, or if it could be part of the well on a flat, press molded vessel).

6.1.6. Vessel Category

Controlled Vocabulary

Vessel Category refers to whether the general shape of the original vessel was "Hollow" or "Flat." Hollow forms include bowls, cups, storage jars, etc. Examples of flat vessels are plates, platters, saucers, etc. Note that "dished plates" are recorded as flat forms in DAACS. Specify a Vessel Category whenever possible, especially since we remain conservative when identifying vessel form. When it is not possible to deduce the Vessel Category, select "Unidentifiable."

6.1.7. Form

Controlled Vocabulary

Form refers to the specific form of the original vessel, such as "plate" or "milk pan." In DAACS, this is determined for each sherd individually; thus, even if you have a mended form, the individual sherds may lack the diagnostic attributes to identify it to a specific form. Mended forms are recorded on the Mends tab. Since most archaeological ceramic assemblages are quite fragmentary, it is often impossible to determine the exact form of the vessel from which the majority of sherds derive. Therefore, DAACS provides several choices for cataloging ambiguous sherds:

"Unidentifiable": completely unidentifiable form
"Unid: Teaware"

"Unid: Tableware"

"Unid: Utilitarian"

These are the most common entries for ceramic forms in DAACS. They are used when you cannot identify an exact vessel form, but you can identify the vessel's function—i.e., you might not be able to specify a thick stoneware sherd as a jar or bottle, but you can identify it as "Unid:

Utilitarian." Similarly, you might have a thin porcelain sherd whose curvature clearly indicates it was a teaware, but which lacks the diagnostic attributes of a more specific teaware form (e.g., teabowl, saucer). You would identify that sherd as "Unid: Teaware."

TEAWARES

Teawares include anything related to the ritual of drinking tea, coffee, and chocolate. Teawares include tea pots, teabowls, saucers, slop bowls, and creamers, coffee pots and chocolate pots. Note that mugs and tankards are not included in this category (these are instead defined as Tablewares). Teawares were most commonly made in Porcelain, Refined Earthenware, and refined Stoneware. Teawares are often identified by their small size, thin walls, and decoration. Below is a sample of possible teaware form descriptions:

"Teapot": Most often globular in shape; usually have a seating ring for the lid and are pierced where the spout attaches to catch the tea leaves.

"**Teabowl"**: Handleless bowl-like cups with low foot rings, used almost exclusively throughout the seventeenth and eighteenth centuries for imbibing tea.

"Teacup": Handled teacups began to appear during the third quarter of the eighteenth century.

"Saucer": During the seventeenth and most of the eighteenth century, these tend to be deep, often resembling shallow bowls. These early forms do not have cup rings (i.e., the circular indentation where the cup rests). Later saucer forms have small marleys and resemble miniature plates.

"Creamer": Small pitchers, usually pear-shaped. Creamers, teapots and other serving teawares were sold in sets by the mid-eighteenth century

"Coffee Pot": Unlike teapots, coffee pots tend to be tall, and straight sided or pear-shaped. Spouts are also longer than those for teapots.

TABLEWARES

Tablewares include vessels used for food service and consumption. They include plates, soup bowls, and serving vessels (anything from fish and meat platters to pitchers and lidded tureens). This category also includes "tavernwares" such as mugs and tankards. Tablewares range from coarse earthenwares and stonewares to refined earthenwares and porcelain. Matched dinner services do not appear until the last quarter of the eighteenth century.

Note on Platters and Plates: We define platters as either oval or sub-rectilinear in form. Plates are circular. Be very conservative when identifying plate vs. platter. If the sherd is large but you are still uncertain, simply indicate that the sherd is a flat, unidentifiable tableware. Platter diameter estimates are taken the same way as specified in the Measurements section, but it is understood that the diameter represents a point between the major and minor axis of a platter.

Utilitarian Wares

Utilitarian vessels are used for food production and, to a lesser extent, food storage, and hygiene (e.g., chamberpots, large wash bowls, and pitchers)Coarse earthenwares and stonewares are common, with utilitarian refined earthenwares gradually increasing in frequency to the nineteenth century. Below is a sample of specific form descriptions:

"**Milk Pan**": Wide, shallow bowl forms with flat bases, sloping walls and wide, thick rims; the latter have pouring spouts that often are simple thumb impressions. These pans were used to separate cream from milk and a variety of other kitchen tasks.

"Storage Jar": Tall, wide-mouthed vessels with flat bases. Eighteenth-century and earlier jars usually expand below the mouth into a rounded shoulder before tapering to a slightly smaller base; straight-sided (cylindrical) shapes are most common during the nineteenth century.

"Bottle": Storage. Short, constricted neck, a narrow mouth with thick lip or rim, and shoulders that taper to a flat base. There is sometimes a single loop handle at the neck and shoulder.

"Pipkin:" Relatively small, wide-mouthed cooking vessels that stand on three legs and have a single, usually hollow, handle projecting at right angles from the body or rim. Think of a deep bowl with three legs and a handle.

"**Chamberpots**": Squat, wide-mouthed vessels with flat bases and round, bulbous walls. There are two dominant rim shapes on chamberpots, both highly distinctive: wide and flat or wide and rounded (i.e., rolled under in some creamware chamberpot forms). They usually have a wide strap handle. Some had accompanying but separate lids. They are made in coarse earthenware, stoneware, and refined earthenware.

Gastroliths

Some small, heavily eroded ceramic sherds are gastroliths, also called stomach stones or gizzard stones. These are cataloged in the Ceramic table with the form as "Gastrolith." The ware type and all other fields should be cataloged as the sherd would be cataloged normally. Most

ceramic gastroliths are “Refined earthenware, unid” or “Porcelain, unid” with missing interior and exterior glaze. However, please identify the specific glaze type, if present, and surface color, if possible (otherwise “Unidentifiable”).

At the Silver and Gold Level, all measurements should be taken, and a brief description should be noted.

GAMING PIECES

Occasionally, ceramic sherds are deliberately reworked and reshaped into a rounded or multi-sided object. These are cataloged in the Ceramic table with the form as “Gaming Piece.” Other fields should be cataloged as one would normally catalog a sherd in terms of Ware, Decoration, etc. Completeness is most often “Unidentified.” In addition, Post-Manufacturing Modification should be entered as “Yes.” Always image gaming pieces.

6.1.8. COMPLETENESS

Controlled Vocabulary

This field describes what part of the vessel a sherd represents, for example “Body” or “Base.” A footring should be cataloged as “Base.” “Foot” should only be used when you have the podal support (not footring) of an actual footed vessel form, such as a pipkin or creamer.

6.1.9. DECORATION?

Controlled Vocabulary

The default for this field is “No.” If you have decoration that will be entered for Genre or Stylistic Elements enter “Yes.” If yes, remember to fill in the appropriate Decoration fields.

6.1.10. MENDED?

Controlled Vocabulary

The default for this field is “No.” If the mended sherd is actually glued to another sherd, enter “Yes, Physically Mended.” If sherds fit together, but are not physically glued, enter “Yes, Mends But Not Physically” in this field.

Sherds that are mended with other sherds must be cataloged individually at the Gold level (see Bronze and Silver batching instructions for special rules). Measure individual Sherd Thickness (if possible), Maximum Sherd Size, and estimate Sherd Weight by dividing the Mended Sherd Weight by the number of mended sherds. On the Measurements tab, remember to fill out Mended Sherd Weight, Mended Rim Length (if applicable), and Mended Base Length (if applicable). Also be sure to record the Artifact IDs of the sherds that mend directly to the sherd being cataloged in the Mends tab, as well as the Mended Form. Please see Section 6.8. below for detailed field descriptions.

6.1.11. Exterior Surface

Controlled Vocabulary

Enter the type of exterior surface (e.g., glaze type or unglazed/bisque). See individual ware type description to identify which terms should be used for specific wares. If the original surface is missing, select "Missing."

6.1.12. Exterior Color

Controlled Vocabulary

This field is used for recording the color of a sherd's exterior surface. Record the surface color for both glazed and unglazed sherds. However, only record color if you have the original surface – do not identify the exterior color of a sherd whose exterior surface is missing completely. This applies to both glazed and unglazed sherds.

If the Exterior Surface is "Missing," Exterior Color should be listed as "Not Applicable." If a sherd is burned, stained, or damaged so that you cannot tell the original color of the vessel's surface, list the Exterior Color as "Unidentifiable."

In DAACS, Exterior and Interior Color are recorded using different color ranges from the DAACS Color Book depending on the specific ware type, as described below.

Refined Ceramic Surface Colors

White ceramics emulating Chinese porcelain were highly popular during the historic period. This white or whitish appearance was achieved in a variety of ceramic material types, typically through a combination of paste and glaze color. The surface color is diagnostic and may distinguish a particular ware type or reflect temporal or geographic variation. For this reason, DAACS records the surface color of these "white" ceramics using a specific set of color chips, which can be found in the Refined Ceramic Surface Colors section of the DAACS Color Book. The following is a list of ware types to which these protocols apply.

Use the Refined Ceramic Surface Colors for the following ware types:

White-bodied Refined Earthenwares: "Creamware," "Creamware (Carolina)," "Delftware, Dutch/British," "Faience," "Ironstone/White Granite," "Pearlware," "Tin Enameled, unid.," "Majolica," "Refined earthenware, unid.," "Whiteware."

All white-bodied Refined Stonewares: "Slip Dip," "Turner Type," "White Salt Glaze."

All Porcelains: "Porcelain, American Hard Paste," "Porcelain, Chinese," "Porcelain, Japanese," "Porcellaneous/Hard Paste," "Porcelain, English Bone China," "Porcelain, English Hard Paste," "Porcelain, English Soft Paste," "Porcelain, French Hard Paste," "Porcelain, unidentifiable"

Detailed Color Groups

For **all other ware types**, record the color range that best matches the color of the exterior and interior surface found in the Detailed Color Groups section of the DAACS Color Book.

Protocols for Decorated and/or Slipped Sherds

The interactions of slips and other decorative elements with clay bodies and glazes can make it difficult to identify the Exterior Color. Below are a few guidelines for these instances.

- If an all-over single-color slip (i.e., an engobe) is inherent to the ware type, record this as the Exterior Color using the Detailed Color Groups. This includes the background color of the coarse earthenwares "Slipware, North Midlands/Staffordshire, "Dutch Slipware," and "North Devon Slipware." The background slip should be readily identifiable from other "decorative" slip. This also includes the stonewares "Bristol Glaze Stoneware" and "American Stoneware" with Albany Slip.

- If a surface has marbling or mixing of two or more colors of slip, such that no one color is dominant, select "Body Color Obscured by Decoration" and record the slip decoration on the Decoration tab as appropriate. This may include Wares such as "Slipware, North Midlands/Staffordshire," and "Slipware, North Italian," among others.

- For refined earthenwares such as "Creamware" or "Pearlware" with a "Slipware, Factory Made" decorative genre, slips should not be recorded as Exterior Color. If no unslipped surface is present, select "Body Color Obscured by Decoration."

- If a decorative technique such as applied powder crystals, paint, or transfer-printed ink covers the entire surface of a sherd (thus obscuring the color of the vessel's surface), list the Exterior Color as "Body Color Obscured by Decoration." The color as seen on the sherd should then be listed in the Decoration table under the Stylistic Element section.

- Colored glazes are not considered decoration (e.g., Wedgwood Green). Identify the color of tinted glazes as Exterior Color using the Detailed Color Groups.

6.1.13. Exterior Glaze Opacity

Controlled Vocabulary

Opacity is recorded for <u>all glazed ceramics with Material recorded as "Coarse Earthenware."</u> This field provides a description of the amount of light that can pass through the glaze. Do not

record Glaze Opacity for sherds identified as Refined Earthenware, Stoneware, or Porcelain (the default is "Not Applicable").

"Opaque": The ceramic paste (or decoration such as a slip beneath the glaze) is not visible through the glaze. Some light may pass through where glaze is thin, or along broken edge, but only to a small extent.

"Translucent": The ceramic paste (or decoration such as a slip beneath the glaze) and inclusions, if present, are visible through the glaze, but the glaze is not clear.

"Transparent": Very clear. The ceramic paste (or decoration such as a slip beneath the glaze) and any inclusions, are plainly visible through the glaze, and the paste color comes through the glaze.

6.1.14. Interior Surface

Controlled Vocabulary

The same protocols apply for Interior Surface as for Exterior Surface. See Section 6.1.11 for cataloging instructions.

6.1.15. Interior Color

Controlled Vocabulary

The same protocols apply for Interior Color as for Exterior Color. See the Section 6.1.12 for cataloging instructions.

6.1.16. Interior Glaze Opacity

Controlled Vocabulary

The same protocols apply for Interior Glaze Opacity as for Exterior Glaze Opacity. See Section 6.1.13 for cataloging instructions.

6.1.17. Ceramic Table Special Cases: Detached and Missing Glaze

Detached Glaze

Most detached glaze will be from tin-enameled earthenware, although glaze from other refined and coarse earthenware is sometimes found. Detached glaze can be batched in all cataloging levels. The only measurement that needs to be taken is weight.

Material, Manufacturing Technique, and Ware refer to the sherd the glaze came from (not the glaze itself). Thus, if you can identify the glaze as coming from a tin-enameled earthenware, catalog the glaze as follows:

Ware:	"Tin-Enameled, Unidentified" (if you have only the glaze, do *not* identify sherd as a more specific ware such as "Delftware, Dutch/British)."
Material:	"Refined Earthenware"
Manu Tech:	"Wheel Thrown"
Vessel Category:	"Unidentified"
Vessel Form:	"Unidentified"
Completeness:	"Detached Glaze"
Ext/Int Surface:	Choose one (since you usually will not be able to tell if the glaze is from the interior or exterior, unless the glaze has an identifiable curvature), and note the glaze type as "Tin Glaze." For the alternate side, list the glaze as "Missing," with "Not Applicable" for the Exterior/Interior Color.

MISSING GLAZE

If a sherd is entirely missing glaze on one or both sides, Exterior/Interior Surface should be listed as "Missing Surface," and Color should be listed as "Not Applicable."

If some, but not all, of the glaze from one or both sides of a sherd is missing, "Missing Glaze" should be entered into the Use Wear table. Enter Surface type, Surface Color, and Glaze Opacity as normal.

MISSING SURFACE

If a sherd is missing all of its glazed and/or original ceramic surfaces and is thus unidentifiable, the Ware field should identify the general Material, i.e., "Refined earthenware, unidentifiable," "Stoneware, unidentifiable," or as appropriate.

Ext/Int Surface:	"Missing Surface"
Ext/Int Color:	"Not Applicable"
Ext/Int Glaze Opacity:	"Not Applicable"

6.2. MEASUREMENTS

6.2.1. SHERD THICKNESS

Numeric

This field is recorded at the Gold level, for unbatched sherds. Using calipers, measurement is taken in millimeters to the nearest tenth. The original surface must still be attached to both sides of the sherd to measure sherd thickness. If not, this field is left blank. When a rim is present, thickness measurements are always and only taken directly below the lip. Sherd thickness should always be taken for individually cataloged sherds

6.2.2. Maximum Sherd Measurement

Numeric

Maximum sherd size is measured using the DAACS cataloging mats. Each mat has a series of circles used to measure sherds in 5mm or 10mm increments, depending on whether Silver or Gold level cataloging is implemented. The size of the smallest circle into which the sherd fits completely is the sherd size. If the sherd is too large to fit within any of the circles on the mat, a tape measure is used across the sherd's longest dimension and the measurement is rounded up to the next number divisible by 5.

6.2.3. Sherd Weight

Numeric

Sherd weight is taken in grams, to the nearest tenth. Record for individual, batched, and mended sherds. To calculate the individual sherd weight of a sherd that is physically mended to other sherds (and therefore cannot be weighed individually), divide the mended sherd weight by the number of sherds that compose the mended fragment. For example, if two sherds mended together weigh 5.0 g., the Sherd Weight for each should be recorded as 2.5 g.

6.2.4. Mended Sherd Weight

Numeric

Only record Mended Sherd Weight for sherds that are physically glued together. This is the combined weight of the mended sherds.

6.2.5. Rim Length

Numeric

Rim length is measured for all rim sherds with intact lips. This measurement records an arc along the circumference of the rim and should be taken in millimeters, to the nearest hundredth using calipers. If a rim has significant curvature, its rim length is measured with a flexible tape measure.

6.2.6. Rim Diameter

Numeric

Rim diameter is taken for sherds with rim lengths of *greater than 20mm*. The lip must be present, if not continuously, then at multiple points along the rim. The radius template on the DAACS cataloging mat is used for this measurement –the curvature of the rim is matched to the curves on the mat to the nearest arc shown on the mat. When dealing with thicker sherds, the general rule is to measure along the exterior of the rim (rather than trying to determine the interior diameter of the vessel). Diameter measurements on the mats are in millimeters.

In order to measure the rim diameter for a flat, scalloped-edge vessel using the radius template, there must be at least three scalloped points. If less than three points are present but an interior edge of the marley is present, use the radius template and add twice the marley width to complete the total diameter measure.

For ware types with thick rims (e.g., many coarse earthenwares and stonewares) and vessels with a very large diameter, 20mm may be insufficient to determine rim diameter. If rim diameter cannot be accurately estimated using the chart, leave the field blank.

6.2.7. Mended Rim Diameter

Numeric

Enter the rim diameter for mended rim sherds, using the entire mended rim length. This value may not always match the individual Rim Diameter measurement.

6.2.8. Base Length

Numeric

Base length is measured for all base sherds, provided some portion of the exterior curvature or footring is present. This measurement records an arc along the circumference of the base and should be taken in millimeters, to the nearest hundredth using calipers. If a base has significant curvature, its length is measured with a bendable tape measure.

6.2.9. Base Diameter

Numeric

Base diameter is taken for base footring sherds with Base Length of **greater than 20mm and for which a reliable measurement can be obtained**. The base diameter template (transparent sheet) is used for this measurement –the curvature of the base is matched to the curves on the template to the nearest arc. Diameter measurements are in millimeters.

6.2.10. Mended Base Diameter

Numeric

Enter the mended base diameter for applicable sherds using the base diameter template.

6.2.11. Tile Length

Numeric

If complete, measure the longest dimension in millimeters. For square tiles, length and width may be equal.

6.2.12. Tile Width

Numeric

If complete, measure the shortest dimension in millimeters. For square tiles, length and width may be equal.

6.3. Decoration

General

This section in the Decoration Tab enables the cataloger to record ceramic decoration at a more general level than the thorough identification of individual decorative elements and motifs recorded in the Stylistic Elements section. This section should not be used in place of the Stylistic Elements section but rather as a supplement to it. The section consists of three fields: Decorative Genre, Pattern Name, and Pattern Notes.

6.3.1. Decorative Genre

Controlled Vocabulary

The Genre field is used to assign, where possible, each decorated sherd to a temporally significant decorative genre, e.g. “Shell Edge, blue” or “Famille Rose”. The Genre field allows researchers to conduct analysis using commonly accepted decorative terminology. Use “Not Applicable” (default) for undecorated sherds, and sherds whose “decoration is inherent in the form. (e.g., some molded body decorations). See the Ceramics Genre Appendix (https://www.daacs.org/about-the-database/daacs-cataloging-manual/) for complete list of Genres with images and descriptions of each.

6.3.2. Pattern Name

Controlled Vocabulary

Identifiable transfer print and hand painted pattern names are recorded here. Enter “Unidentifiable” for all transfer-printed sherds for which the printed pattern cannot be determined. Unidentifiable hand painted or molded patterns do not need to be recorded as Unidentifiable, the default is “Not Applicable.” See the Ceramics Pattern Appendix (DAACS Cataloging Manuals - DAACS) for complete list of Patterns with images and descriptions of each.

6.3.3. Pattern Notes

Open Text

Use this field to cite any additional published references that are not listed in the Pattern Appendix, and to record notes about unidentifiable patterns, if desired. Contact DAACS administrator if you would like to add a new Pattern Name.

Stylistic Elements

Each instance of decoration is recorded as a separate Stylistic Element at the Gold cataloging level. This includes the use of multiple colors, or the same decorative technique applied to different locations on the sherd, i.e., a painted band on proximal rim and a painted band on the base, would be captured as separate Stylistic Elements.

6.3.4. Interior/Exterior

Controlled Vocabulary

Indicates whether the decoration being recorded is located on the interior or exterior of the vessel. Ifa sherd has decoration on both sides they will be recorded separately. Three options are provided in this field: “Interior,” “Exterior,” and “Perforate.” “Perforate” is reserved for those decorations (stylistic elements) that involve puncturing the vessel completely through, as in Figure 1.

Figure 1. Creamware sherd with perforate decoration. DAACS Artifact ID: 1001-341J-NOS—00108.

6.3.5. Location

Controlled Vocabulary

This field records where the decoration in question is located. For the most part the locations relate to the Completeness terms used elsewhere. For example, the perforate decoration on the creamware sherd above has “Body” recorded as the location of the decoration.

The term “Proximal Rim” is used to describe decoration that is adjacent to the lip of a vessel. Use “Proximal Rim” to describe decoration that is located next to the rim on what has traditionally

been called the marley on some vessels. DAACS employs “Proximal Rim” instead of marley because hollow vessels such as bowls and teacups do not have marleys, but they do have exterior and interior decoration located next to or along the rim.

The location of decoration on the exact lip, such as a painted band on the exterior edge of a rim sherd or a scalloped edge, should be cataloged as “Rim” with Interior/Exterior recorded as “Exterior.”

If a decoration extends from one location to another (for example a transfer-printed scene that extends from the base onto the body), record the location where the majority of the decoration lies.

If decoration appears in two locations on a sherd and is disconnected, each should be recorded separately. For example, a transfer-printed proximal rim band should be cataloged separately from a transfer-printed central scene on the base of a plate.

6.3.6. Decorative Technique

Controlled Vocabulary

The method by which the particular decoration being recorded was applied. For discussion of specific decorative techniques by Ware, see Section 7.

6.3.7. Decoration Color

Controlled Vocabulary

Color of the decoration is determined using the Detailed Color Groups section of the DAACS Color Book. Do not use individual Munsell colors. Note that in addition to the Detailed Color Groups, metallic colors of “Copper,” “Gilt,” and “Silver” from the DAACS Basic Colors sheet should also be used when applicable. When recording Decoration Color, determine the number of color ranges represented in a particular decoration, and record each color range as a separate decoration entry. For example, in Figure 2, the botanical band element contains two colors, which will be recorded as two separate entries in the Decoration table. The only difference between those two entries will be the Decoration Color; all other Stylistic Elements fields will be identical.

Figure 2. Pearlware sherd with applied color. DAACS Artifact ID:1003-950TPS-NOS—00009.

There are several terms in the Decoration Color list that require further explanation:

"No Applied Color": The Decorative Technique does not involve an applied color (e.g., molding, incising). If painting is layered over molding, as in Pearlware with shell-edge, use "Not Applicable," as described below.

"Not Applicable": Use when you have a single motif comprised of both a Decoration Color and an additional Decorative Technique such as molding or incising (for instance, Shell Edge pearlware involves both painting and molding). Record the Decoration Color and the additional Decorative Technique as separate entries. For the applied color record, use the **Detailed Color Groups** section to identify the color. For the other Decorative Technique, enter "Not Applicable" under Decoration Color. For example, for a blue shell-edged pearlware rim sherd, record the following:

Int/Ext	Location	Dec Tech	Decoration Color
"Interior"	"Proximal Rim"	"Painted, under free hand"	"Purple-Blue, Muted Medium"
"Interior"	"Proximal Rim"	"Molded"	"Not Applicable"

"Not Recorded": *Do not* use this term for ceramics, even though it appears on the list.

6.3.8. Stylistic Element

Controlled Vocabulary

These are the individual design elements that together form a motif. Not every single mark of decoration on a sherd of ceramic is recorded as a stylistic element as this would quickly become cumbersome. However, several hundred stylistic elements have been defined for DAACS. Each of these elements is described and illustrated in the Stylistic Element Glossaries (https://www.daacs.org/about-the-database/daacs-stylistic-elements/).

Note: DAACS does not record Stylistic Elements for transfer printed decorations. In these cases, Stylistic Element should be entered as "Not Applicable."

6.3.9. Motif

Controlled Vocabulary

A motif, as defined for DAACS, is a group of individual stylistic elements that combine to create a larger, coherent thematic element that occupies part or all of a sherd or vessel. Motif was included in the database as a way for analysts to acknowledge that stylistic elements often work together to create larger designs or scenes. The motif field captures information about

which elements work together to comprise a motif and how those elements are spatially related to each other. For example, in Figure 3 "Geometric Band 11," "Trellis Band 47" and "Fish Roe Band 10" combine to create a single motif on the proximal rim (or marley) of the plate. In this case, these elements are stacked concentrically and are therefore part of the same "stacked combination" motif, described below. Stylistic elements in the well and on the base combine to form separate motifs as well.

Note: DAACS does not record Motif for transfer printed decorations. In these cases, Stylistic Element is "Not Applicable."

Figure 3. Hand painted Chinese Porcelain plate. DAACS Object ID:430.

Decoration on the interior and exterior surfaces of the sherd should have separate Motif designation letters, e.g. if the Motif for the decoration on the interior of the sherd is designated "Individual A" and "Individual B", record any decoration on the exterior beginning with "Individual C."

Options in the motif field are as follows:

"Individual (A, B, C, D, E, etc.)": A single element such as a sprig, cat's eye, Trellis Band, Plain Band, etc. Used for solitary stylistic elements that appear only once on the sherd and are not touching other stylistic elements. For example, on the painted pearlware sherd (Figure 2), the plain brown band is "Individual, A", and the Botanical Band is "Individual, B." The two elements are perceived as two individuals because they do not actually touch. If they did touch, they would instead be cataloged as both part of "Stacked Combination A." Here is how the decoration is recorded for Figure 2, in three separate Stylistic Element entries.

Location	Dec Tech	Decoration Color	Stylistic Element	Motif
"Proximal Rim"	"Painted, under free hand"	"Yellow, Muted Dark"	"Plain Band 01"	"Individual A"

“Proximal Rim”	“Painted, under free hand”	“Yellow, Muted Dark”	“Botanical Band, unid”	“Individual B”
Painted, under free hand”	Painted, under free hand”	“Yellow, Intense Light”	“Botanical Band, unid”	“Individual B”

“Individual, repeated (A, B, C, D, etc.)”: A single element that is identically repeated on the sherd. For example, a sprig that appears more than once on a sherd. The repeated element must be the same color and design. If, for example, a sherd of a slipware mug has two cat’s eyes that each consist of the same three colors, there would be three lines entered in the Decoration tab – one for each color. All three lines would be identical except for color. All would be “Individual, repeated A” if the cat’s eye was the only repeated element on the sherd.

“Adjacent combination”: Applies to elements that are adjacent to and touch each other in a horizontal orientation. In most cases, these will be bands on Chinese porcelain that consist of different stylistic elements placed side-by-side. In Figure 4, the “Trellis 2” and “Botanical, composite” located on the body of the plate (in the well, encircling the central scene) comprise an Adjacent Combination. Elements that together comprise a single “Adjacent Combination” should all be given the same letter designation, e.g. “Adjacent Combination A,” to indicate that they are part of the same grouping.

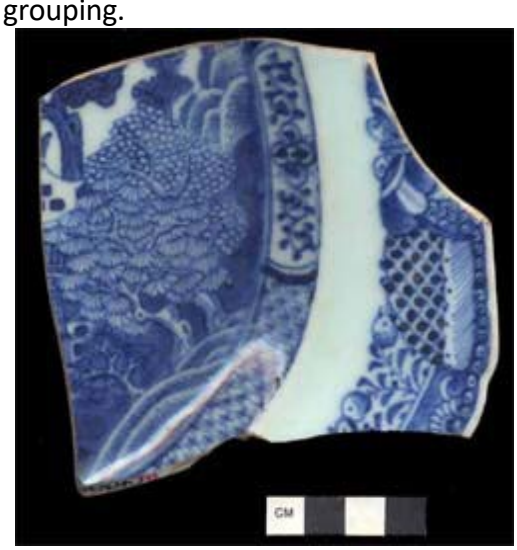

Figure 4. Hand painted Chinese Porcelain plate. DAACS Artifact ID:1000-546AA-NOS—00330.

“Stacked combination”: Occurs when two or more elements are concentrically stacked so closely that they physically touch each other in a vertical orientation. The geometric band, diaper/dot band, and swag at the proximal rim in Figure 3 form an example of a stacked combination. Again, elements forming the same motif should be designated with the same letter in the Motif field.

Adjacent/Stacked combination": When a complex motif (usually a band on Chinese porcelain) consists of both adjacent and stacked elements, it is recorded as an "Adjacent/Stacked Combination." For example, in Figure 4, the proximal rim decoration is a band that has both elements stacked on top of each other and elements arranged side-by-side. It is an Adjacent/Stacked Combination. Again, remember to group elements that form the same motif with the same letter designation in the Motif Field. Note that the molded edge is NOT part of the Adjacent/Stacked combination, it is an Individual element.

"Scene Combination": This designation is used to link stylistic elements that, together, form a scene. Most commonly used for central scenes. For example, in Figure 3, the Chinese porcelain plate shown above, the tree and house are both listed as "Scene Combination A" under motif. The "A" indicates that they are both part of the same scene, which was the first (and in this case only) scene identified on the object.
Again, be sure to group elements from the same motif with the same letter in the Motif Field.

"Not Applicable": Use this option for transfer-printed sherds, wherein Stylistic Element and Motif are both recorded as "Not Applicable."

6.4. Wear/Condition

This table is used to identify the location and nature of any identifiable wear on the sherd. These marks can be identified according to the specific operation performed on the vessel. Navigate to the Wear/Condition tab and select "Add Use/Wear" to enter a new line for each recognizable pattern of wear on the sherd.

6.4.2. Wear Location

Controlled Vocabulary

Record whether the location occurs on the "Exterior" or "Interior" of the vessel. If necessary, "Not Applicable" and "Unidentifiable" may also be used.

6.4.3. Completeness

Controlled Vocabulary

Record on which part of the original vessel the wear is located.

6.4.4. Wear Pattern

Controlled Vocabulary

The cataloger should be able to identify the following use wear patterns:

"Utensil Wear": Straight or curvilinear utensil marks and scratches are often seen in and around the center of the vessel.

"Base Abrasion": The base of a vessel often gets abraded from continual use. The glaze on the resting point of the vessel is often worn away.

"Spalling": Small, circular flaking of the glaze.

"Worn/Eroded": Use this term when you cannot tell the specific type of deterioration seen on the vessel, but it is clearly deteriorated.

"Toothbrush Abrasion": A result over-cleaning in the lab, toothbrush abrasion is primarily seen on unglazed, soft-bodied coarse earthenwares.

"Partial Missing Surface": Use this phrase when a sherd is missing a part of its glaze or surface. When a sherd is completely missing its glaze or surface, this should be indicated in the Exterior/Interior Glaze, and Exterior/Interior Color fields. There is no need to also include this information in the Use Wear field.

"Residue/Soot": Residue and sooting are related types of wear from the use of a vessel in cooking or food preparation. When vessels are placed directly in the coals to cook food, soot will accumulate along the rim as irregular dark areas that may be flaky and which tend to fill in any recessed areas on the vessel (e.g., from incised or impressed decoration). If the vessel was suspended or placed above the fire for cooking, the sooting will be present on the base. Residue refers to baked-on or soaked-in concretions of food and is typically found on vessel interiors. It may appear flaky and dark and is generally concentrated around the base. Occasionally, drips of residue/soot may also be found on the exterior or interior of the vessel body. Note that "Residue/Soot" is a use wear pattern typically only found on coarse earthenwares and/or utilitarian forms.

6.4.5. Evidence of Burning

Controlled Vocabulary

The default for this field is "Unburned." Otherwise, pick the appropriate description from the list. If a sherd is entirely burned, enter "Both Interior and Exterior Burned." See Section 5.2.1. for what to do with batched, burned sherds.

6.4.6. Post-Manufacturing Modification

Controlled Vocabulary

The Post-Manufacturing Modification field is present across all of the artifact entry modules. Use this field when an artifact appears to have been physically modified to change its original function, or in order to repair a break (not mending by archaeologists). Examples include grinding down a piece of ceramic to form a gaming piece or mending a ceramic vessel to prolong its use life. Often, as in the case of ceramic gaming pieces, the modification will also be reflected in the ceramic Form field (i.e., "Gaming Piece" or "Gaming Piece, Preform").

6.5. Base Mark

6.5.1. BASE MARK

Controlled Vocabulary

This field indicates how the base mark was applied to the vessel. Choices are:

"Impressed"
"Incised"
"Printed"
"Painted"
"Not Applicable": This is the default and indicates a sherd has no mark.
"Unidentifiable": When a mark can be discerned but the cataloger cannot, for example, tell whether it has been painted or printed on.

Do *not* record base mark cartouches or other decorative elements in the Decoration table.

6.5.2. Base Mark Color

Controlled Vocabulary

If the base mark has an applied color, record the appropriate color using the Basic Colors section of the DAACS Color Book.

6.5.3. Base Mark Reference

Open Text

List any reference that gives information about the observed base mark.

6.6. Images

Navigate to the Images tab and select "Add Image" to link images to your artifact record. Images must first be uploaded and entered into the DAACS Image Module. Please see DAACS Image Manual for instructions on image capture and entry into the database.

6.7. OBJECTS

Navigate to the Objects tab and select “Add Object” to link an Object to your artifact record. Associated Objects must first be entered into the DAACS Object Module. Please see DAACS Object Manual for instructions on Object entry into the database.

6.8. MENDS

If your sherd is mended, fill out the appropriate information in the Mends tab. Be sure to also indicate on the Main tab that the sherd is mended in the Mended (Y/N) field.

6.8.1. MENDS TO ARTIFACT

Controlled Vocabulary

Select “Add Mends to Artifact” to add a new line for each sherd that *directly* mends to the artifact being cataloged. Only enter the artifact IDs for sherds that *directly* mend (but are not physically glued) or that are physically glued to the sherd being cataloged. You must click on the relevant artifact ID to select and save it, even if you have entered the complete ID. Do *not* enter artifact IDs for sherds that do not directly mend to the sherd in question, even if they are clearly associated with the same mended vessel.

6.8.2. MENDED FORM

Controlled Vocabulary

In the Mended Form field, enter the form of vessel as recognizable from all of its mended parts. Through mending, a cataloger can often identify a vessel form otherwise unidentifiable from its individual constituent sherds. The default for this field is “Not Mended.” Remember that on the Main tab, artifact Form should always be identified on an individual sherd level. Because of this, Form and Mended Form for an individual record will often be entered differently for mended sherds.

7. DESCRIPTIONS AND CATALOGING PROTOCOLS FOR INDUSTRIALLY-PRODUCED CERAMIC WARES

The following type descriptions and manufacturing date ranges reflect the most common ceramic wares and attributes found on historic sites in North America and the Caribbean, particularly in British colonial contexts. Please note that for projects in other areas or on sites dominated by other historic colonial powers (e.g., Spanish, French, Dutch, Portuguese), commonly occurring ware types and associated date ranges may vary substantially.

7.1. COARSE EARTHENWARES

Coarse earthenwares are most often seen as utilitarian vessels, such as bowls, milk pans, and storage containers. Coarse earthenwares are generally quite thick-walled and can be irregularly shaped, with some specific exceptions noted below.

Many coarse earthenwares are lead-glazed on the interior only, though the glaze may extend over the vessel rim and onto part of the exterior. The paste color and glaze colors are highly variable and are typically diagnostic for ware types. Slip may be applied between the body and the glaze as an engobe or to form a decorative pattern. The glaze for coarse earthenwares is always lead-based. Clear or "colorless" lead glazes often impart a yellowish hue to the ceramic surface resulting from iron impurities in the glaze mixture. Metallic oxides were also often used to impart color to the glaze. The most common colored glazes seen on coarse earthenwares include an opaque black glaze that sometimes appears metallic, and a translucent tinted glaze appearing brown or olive green in color. Other colored lead glazes appear mottled or speckled with flecks of brown or green caused by the addition of these oxides.

Some Coarse Earthenware types have more specific variations, identified as Coarse Earthenware Types. The default CEW Type is "Not Applicable." See individual Wares for related CEW Types, to apply as appropriate.

7.1.1. ALBISOLA

This is a type of North Italian coarse earthenware. It shares many characteristics with French coarse earthenwares. The paste is red and high-fired with abundant small white rock inclusions. Plates and shallow dishes are more common than hollow forms. The vessels are lead glazed with a clear glaze that appears brown over the body. Thick trails of painted black or brown oxide decoration, often executed in a curvilinear or zig-zag pattern, may be visible under the glaze. DAACS Manufacturing Date Range: 1690-1750.

Ware:	"Albisola"
CEW Type:	"Not Applicable"
Material:	"Coarse Earthenware"

Manu Tech:	"Wheel Thrown"
Ext/Int Surface:	"Lead Glaze"
Ext/Int Surface Color:	Record using Detailed Color Groups Section of the DAACS Color Book.

7.1.2. BIOT

Biot is a French coarse earthenware. It was primarily exported in the form of very large storage jars with round rims, typically handbuilt with coils. They often have white slipped surfaces, producing a glaze that may appear opaque, and is buff to pale yellow or olive green in color. Note that the presence of the solid slip is considered inherent in the ware type and is not treated as an element of decoration. Vessels are typically glazed on the interior only, with some spillover onto the exterior. The paste is buff to pink, sometimes with faint marbling, and may exhibit uneven oxidation layers in cross-section. Sherds are very thick (>10mm). There are abundant inclusions such as large hematite and limestone (white rock) nodules. DAACS Manufacturing Date Range: 1700-1800.

Ware:	"Biot"
CEW Type:	"Not Applicable"
Material:	"Coarse Earthenware"
Manu Tech:	Generally "Handbuilt, unid;" if coils are visible "Handbuilt, coil."
Ext/Int Surface:	"Lead Glaze" or "Unglazed/Bisque."
Ext/Int Surface Color:	Record using Detailed Color Groups section of the DAACS Color Book.

7.1.3. BUCKLEY-TYPE

Produced in the Buckley district of Wales, and in other parts of the Coal Measures of Great Britain. Buckley-type has a distinctive, two-toned "marbled" body composed of brick red clay amended with buff-colored clay and is relatively highly-fired. It often contains quartz, hematite, and white inclusions. Buckley-type is most often glazed with a very dark brown or black glaze. Buckley-type usually has prominent throwing rings and milk pans are quite distinctive in form, with a thick rim that has a double-lipped exterior. DAACS Manufacturing Date Range: 1720-1775.

Ware:	"Buckley-type"
CEW Type:	"Not Applicable"
Material:	"Coarse Earthenware"
Manu Tech:	"Wheel thrown"
Ext/Int Surface:	"Lead Glaze"
Ext/Int Surface Color:	Record using Detailed Color Groups section of the DAACS Color Book.

Additional Cataloging Notes:

If a sherd has some of these characteristics, but cannot be confidently identified as Buckley-type, it should be cataloged as Redware, with a Coarse Earthenware Type of "Coal Measures" in the Coarse Earthenware Module.

7.1.4. Dutch Coarse Earthenware

Dutch Coarse Earthenware is a sandy textured, pink-to-orange bodied ware produced in the Netherlands. It typically has a clear glossy glaze, but green glazes also occur. Common forms include bowls, porringers, and cooking pots, often with distinctive triangular loop handles. DAACS Manufacturing Range: 1600-1850.

Ware:	"Dutch Coarse Earthenware"
CEW Type:	"Not Applicable"
Material:	"Coarse Earthenware"
Manu Tech:	"Wheel Thrown"
Ext/Int Surface:	"Lead Glaze"
Ext/Int Surface Color:	Record using the Detailed Color Groups section of the DAACS Color Book.

7.1.5. Dutch Slip Ware

Dutch Slipware is a sandy textured, pink-to-orange bodied coarse earthenware produced in the North Holland. Dutch Slipware is a slipped variant of Dutch Coarse Earthenware. It is typically characterized by a green glaze applied over a white slip that accentuates the green color of the glaze and helps it to stand out. Common forms include bowls, porringers, and cooking pots, often with distinctive triangular loop handles.

Ware:	"Dutch Coarse Earthenware"
CEW Type:	"Not Applicable"
Material:	"Coarse Earthenware"
Manu Tech:	"Wheel Thrown"
Ext/Int Surface:	"Lead Glaze"
Ext/Int Surface Color:	Using the Detailed Color Groups section of the DAACS Color Book, enter the color of ceramic surface as it appears over the solid slip.

7.1.6. Huveaune

This French coarse earthenware from the Huveaune Valley was produced from clay with very few inclusions. The vessels feel lightweight for their size and the red-to-orange paste is rather chalky in texture. Both the interior and exterior surfaces are usually lead glazed. Interiors may have a thick white slip applied under the glaze. Glaze colors are predominantly caramel/ginger color, also some clear and yellow glazes. Shallow milk pans and bowls are common. Slip trailed decoration is possible but rarely found on sites in the Americas. DAACS Manufacturing Date Range: 1700-1900.

Ware:	"Huveaune"
CEW Type:	"Not Applicable"
Material:	"Coarse Earthenware"
Manu Tech:	"Wheel Thrown"
Ext/Int Surface:	"Lead Glaze"
Ext/Int Surface Color:	Record using the Detailed Color Group section of the DAACS Color Book.

7.1.7. French Coarse Earthenware

The ware type "French Coarse Earthenware" is used to generally describe coarse earthenware sherds that do not easily fall into known French types (e.g., Biot, Huveaune, Saintonge, Vallauris); however, they display a constellation of characteristics seen in the identifiable French earthenwares, such as specific paste inclusions and/or combinations of slip and glaze. These sherds are clearly European in manufacture. Sherds with a paste color matching one of the Redware color chips *without* similarities to French ware types (e.g., paste inclusions and density of paste) should be cataloged as "Redware." DAACS Manufacturing Date Range: 1600-1900.

Ware:	"French Coarse Earthenware"
CEW Type:	"Not Applicable"
Material:	"Coarse Earthenware"
Manu Tech:	Generally, "Wheel Thrown."
Ext/Int Surface:	Generally, "Lead Glaze."
Ext/Int Surface Color:	Record using the Detailed Color Group section of the DAACS Color Book.

7.1.8. Iberian Coarse Earthenware

Iberian Coarse Earthenware is a generic term for coarse earthenwares produced in Spain and Portugal. There are two primary types of Iberian Coarse Earthenware found North American and Caribbean sites. The first is the most common and consists of large, undecorated storage jars used to transport olive oil and dried goods (e.g., "Olive Jars"). The bodies of these storage vessels are thick with prominent throwing rings visible on interior surfaces. The paste is dusty red to pinkish grey in color and usually includes granules of a white, chalk-like temper, as well as quartz sand. Exterior surfaces are not typically glazed, but may have traces of what appears as a chalky, white wash. This white-appearing surface has sometimes been interpreted as an applied wash, but more often represents the natural color of the firing surface and is the product of specific conditions within the kiln during manufacture. Because it is difficult to consistently distinguish the presence of an applied wash from the natural firing surface of the vessel, unglazed surfaces on Iberian Coarse Earthenwares should be entered as "Unglazed/Bisque." Interior surfaces may be treated with a dark brown or olive green lead glaze, which is almost always heavily spalled on archaeological examples. Iberian jars have thick,

"donut" shaped rims with little to no neck, and expand at the shoulder before tapering to a flat or conical base. They may or may not have handles. Lids, rarely recovered, are unglazed slabs of clay that are roughly circular. Smaller Iberian storage jars (some 18" in height) are also found, with vessel walls noticeably thinner than those of their larger counterparts. In addition to the more common amphora-style form, globular body shapes have also been documented. Flat bases are more common after 1745, while conical bases tend to be earlier. The second category of Iberian Coarse Earthenware that is often recovered archaeologically consists of more finely potted, unglazed tablewares with a compact, red paste. These wares are occasionally decorated, typically with molded or incised designs. They include the Coarse Earthenware Type "Orange Micaceous." DAACS Manufacturing Date Range: 1490-1800.

Ware:	"Iberian Coarse Earthenware"
CEW Type:	"Olive Jar, unidentifiable," "Orange Micaceous," or "Unidentifiable," as appropriate.
Material:	"Coarse Earthenware"
Manu Tech:	"Wheel Thrown"
Ext/Int Surface:	"Unglazed/Bisque," or "Lead Glaze" (generally only on interiors); occasionally "Tin Enamel."
Ext/Int Surface Color:	Record using the Detailed Color Groups section of the DAACS Color Book.
Vessel Category:	"Hollow"
Form:	Usually "Storage Jar," "Utilitarian, Unid.," or as appropriate.

7.1.9. Ligurian Buffware

Ligurian Buffware is an early Italian coarse earthenware with a thin, patchy lead glaze over a soft buff-colored body. In American contexts it is found only in costrel forms. Vessels may have simple star or spiral painted decoration on the shoulder. It dates to the seventeenth century.

Ware:	"Ligurian Buffware"
CEW Type:	"Not Applicable"
Material:	"Coarse Earthenware"
Manu Tech:	Most often, "Wheel Thrown."
Ext/Int Surface:	Generally, "Lead Glaze," or as appropriate.
Ext/Int Surface Color:	Record using the Detailed Color Groups section of the DAACS Color Book.

7.1.10. Mexican Coarse Earthenware

In DAACS, Mexican Coarse Earthenware is a ware type that encompasses several coarse earthenware types produced during the colonial era in Mexico. They are typically wheel thrown and unglazed. In lieu of a glaze, these wares are generally painted and highly burnished. The paste color ranges from buff to bright red, depending on the specific Coarse Earthenware Type represented, and contains abundant white rock and other inclusions. This type category includes

CEW Types such as Guadalajara Polychrome and Mexican Red Painted, as well as sherds that have attributes consistent with other Mexican Coarse Earthenwares, but which cannot be identified with a more specific CEW Type. DAACS Manufacturing Date Range: 1550-1800.

Ware:	"Mexican Coarse Earthenware"
CEW Type:	Guadalajara Polychrome," "Mexican Red Painted," or "Unidentifiable," as appropriate.
Material:	"Coarse Earthenware"
Manu Tech:	Most often, "Wheel Thrown."
Ext/Int Surface:	Generally, "Unglazed/Bisque," or as appropriate.
Ext/Int Surface Color:	Record using the Detailed Color Groups section of the DAACS Color Book.

7.1.11. Midlands Purple

Midlands Purple is a late-medieval to post-medieval English coarse earthenware. Highly fired, the paste color is dark purple to brown with visible inclusions. Surfaces are usually unglazed, but some black lead glaze may be present. Throwing rings are typically prominent, and forms include storage jars and flasks. DAACS Manufacturing Date Range: 1600-1640.

Ware:	"Midlands Purple"
CEW Type:	"Not Applicable"
Material:	"Coarse Earthenware"
Manu Tech:	"Wheel Thrown"
Ext/Int Surface:	Generally, "Unglazed/Bisque," or "Lead Glaze"
Ext/Int Surface Color:	Record using the Detailed Color Groups section of the DAACS Color Book.

7.1.12. North Devon Gravel-Tempered

This coarse earthenware exhibits surface and interior reduction from uneven firing conditions. The body ranges in color from salmon pink or orange to dark gray. The lead glaze is transparent or translucent, ranging from bright yellow to olive green or brown in appearance, depending on the degree of reduction. The most common forms are large shallow plates, bowls, milk pans, and storage jars. North Devon Gravel-Tempered has abundant large, angular quartz inclusions, comprising up to 25% or more of the paste. Decoration is rare. Occasionally, unglazed forms are found (e.g., ovens). DAACS Manufacturing Date Range: 1600-1775.

Ware:	"North Devon Gravel-Tempered"
CEW Type:	"Not Applicable"
Material:	"Coarse Earthenware"
Manu Tech:	"Wheel Thrown"
Ext/Int Surface:	"Lead Glaze," or "Unglazed/Bisque."

Ext/Int Surface Color:	Record using the Detailed Color Groups section of the DAACS Color Book.

7.1.13. North Devon Plain

This coarse earthenware exhibits surface and interior reduction from uneven firing conditions. The body ranges in color from salmon pink or orange to dark gray. The lead glaze is transparent or translucent, ranging from bright yellow to olive green or brown in appearance, depending on the degree of reduction. The most common forms are large shallow plates, bowls, milk pans, and storage jars. North Devon Plain has finer quartz sand inclusions than the gravel-tempered variety. Decoration is rare. DAACS Manufacturing Date Range: 1600-1710.

Ware:	"North Devon Plain"
CEW Type:	"Not Applicable"
Material:	"Coarse Earthenware"
Manu Tech:	"Wheel Thrown"
Ext/Int Surface:	"Lead Glaze," or "Unglazed/Bisque."
Ext/Int Surface Color:	Record using the Detailed Color Groups section of the DAACS Color Book.

7.1.14. North Devon Slipware

North Devon Slipware is a variety of the coarse earthenware type North Devon, produced in southwest England. The body ranges in color from salmon pink to orange to dark gray, typically with multiple colors present due to uneven firing conditions. The paste is almost always gravel-free (consistent with North Devon Plain), although occasionally gravel-free vessels were produced with gravel-tempered handles. The lead glaze is transparent or translucent, ranging from bright yellow to olive green or brown. A white slip is applied beneath the glaze with sgraffito decoration that scratches through it, in a variety of motifs. Slip trailing has also been documented as a decorative technique. Jugs and plates are common. DAACS Manufacturing Date Range: 1600-1730.

Ware:	"North Devon Slipware"
CEW Type:	"Not Applicable"
Material:	"Coarse Earthenware"
Manu Tech:	"Wheel Thrown"
Ext/Int Surface:	"Lead Glaze"
Ext/Int Surface Color:	Using the Detailed Color Groups section of the DAACS Color Book, record the color of the glazed surface as it appears over the solid slip.
Decoration:	"Yes" (only if sgraffito or slip decoration present).

7.1.15. Post-Medieval London-Area Redware

Coarse earthenware from the London Basin is characterized by a deep orange-red body that has a sandpaper or emery board texture. Under 10X magnification, abundant well-rounded sand grains and hematite nodules are typically present. Occasionally flint may also be seen as an inclusion. The paste often exhibits well-defined bands of oxidation and reduction, especially in thicker sherds. The most common glaze seen in America is translucent dull/honey-colored, appearing opaque where damaged or deteriorated. The forms found in America are mostly utilitarian, especially large milk pans with round rims. Black glaze may be present on tablewares, which can also have slip trailing with thick white slip raised above the surface. DAACS Manufacturing Date Range: 1600-1750.

Ware:	"Post-Medieval London-Area Redware"
CEW Type:	"Not Applicable"
Material:	"Coarse Earthenware"
Manu Tech:	"Wheel Thrown"
Ext/Int Surface:	"Lead Glaze," or "Unglazed/Bisque."
Ext/Int Surface Color:	Record using the Detailed Color Groups section of the DAACS Color Book.

7.1.16. Red Agate, Coarse

A wheel thrown, coarse-grained earthenware initially introduced in Staffordshire during the third quarter of the eighteenth century. The paste was formed by wedging two or more clays together (usually red and white/yellow) and is very similar to Buckley-type but with a clear or translucent glaze. Forms are mainly utilitarian (e.g., milk pans) and frequently have rouletted bands or white slip decorations. The distinction between "Red Agate, Coarse" and the refined earthenware type, "Red Agate, Refined," is based on the presence or absence of visible paste inclusions at 10X magnification, as well as attributes of thickness and form (utilitarian vs. tableware). DAACS Manufacturing Date Range: 1750-1800.

Ware:	"Red Agate, Coarse"
CEW Type:	"Not Applicable"
Material:	"Coarse Earthenware"
Manu Tech:	"Wheel Thrown"
Ext/Int Surface:	"Lead Glaze"
Ext/Int Surface Color:	Record the color of the "redder" of the two wedged clays using the Detailed Color Groups section of the DAACS Color Book.

7.1.6 Redware

"

7.1.17. Saintonge

Saintonge is a French coarse earthenware common on French colonial sites. These wares have a pink or salmon colored pasted with large hematite inclusions. They often have an overall white slip with a transparent or translucent copper green glaze on top. Milk pan forms are common, as are pitchers. Decorated wares from Saintonge are rarely recovered in colonial contexts, but some vessels may have oxide paints. Pottery was produced in Saintonge from the Medieval period onward, appearing in early French colonial contexts across the Atlantic until at least the late 18th century. DAACS Manufacturing Date Range: 1600-1800.

Ware:	"Saintonge"
CEW Type:	"Not Applicable"
Material:	"Coarse Earthenware"
Manu Tech:	"Wheel Thrown"
Ext/Int Surface:	"Lead Glaze"
Ext/Int Surface Color:	Record using the Detailed Color Groups section of the DAACS Color Book.

7.1.18. Slipware, North Italian

This early coarse earthenware is sometimes identified as Pisan Ware, as it originated in Tuscany. It has a fine red body with few inclusions. It is generally decorated with multiple colors of slip, including red, brown, and copper green, all over a white slip ground. The slips were joggled while wet to produce a marbled effect and covered with a lead glaze. Incised decoration with clouded colors is less commonly seen. In America, North Italian forms include plates, shallow bowls, and costrels. DAACS Manufacturing Date Range: 1610-1675.

Ware:	"Slipware, North Italian"
CEW Type:	"Not Applicable"
Material:	"Coarse Earthenware"
Manu Tech:	"Wheel Thrown"
Ext/Int Surface:	"Lead Glaze"
Ext/Int Surface Color:	If slip present, "Body Obscured by Decoration." If the unslipped ceramic paste is visible, record the surface color using the Detailed Color Groups section of the DAACS Color Book.
Genre:	"Combed/Dot/Marbleized/Trailed"
Stylistic Elements:	If applicable, record the applied color with using the Detailed Color Groups. Two-color marbleized slip would be entered with a separate line for each color, with the same Stylistic Element (i.e., "Marbleized").

7.1.19. Slipware, North Midlands/Staffordshire

This distinctive yellow coarse earthenware is sometimes referred to as "combed," "combed and dotted," or "dotware." The lead-glazed, buff-colored body includes a sparse peppering of dark

inclusions or a fine, red marbling. Surfaces are covered with a white slip (appearing yellow beneath the transparent glaze) into which trails and/or dots of red slip (appearing brown beneath the glaze) have been introduced. The most common forms are combed platters and shallow bowls, produced using press molding, usually having crimped edges, and handled cups or mugs. The latter usually have dotted rims (the dots are about 1 cm in diameter) with several thin, parallel trails of slip encircling the bulbous bodies. The lead glaze usually does not extend to the feet of hollow wares, or the exterior of flat forms. A seldom- seen variant of this buff-bodied ware is covered with a dark brown engobe decorated by yellow (white) dots of slip. Another variant is a red clay body agatized with lesser amounts of buff- colored clay; these vessels are covered with a white engobe through which trails of slip are combed. "Dot" wares range from 1700-1770, and combed dishes from 1670-1795. DAACS Manufacturing Date Range: 1670-1795.

Ware:	"Slipware, North Midlands/Staffordshire"
CEW Type:	"Not Applicable"
Material:	"Coarse Earthenware"
Manu Tech:	"Wheel Thrown" or "Press Molded"

Additional Cataloging Notes:

There are several combinations of Surface and Color treatments that are manifest on North Midlands Slipware sherds. Examples below describe how these combinations should be recorded:

1. If there is a clear lead glaze over solid slip, record the sherd as follows:

Ext/Int Surface:	"Lead Glaze"
Ext/Int Surface Color:	Record the color of the slip with the Detailed Color Groups.
Ext/Int Opacity:	"Transparent" if clear glaze.
Decoration?:	"No" (nothing is entered in the Decoration Table).

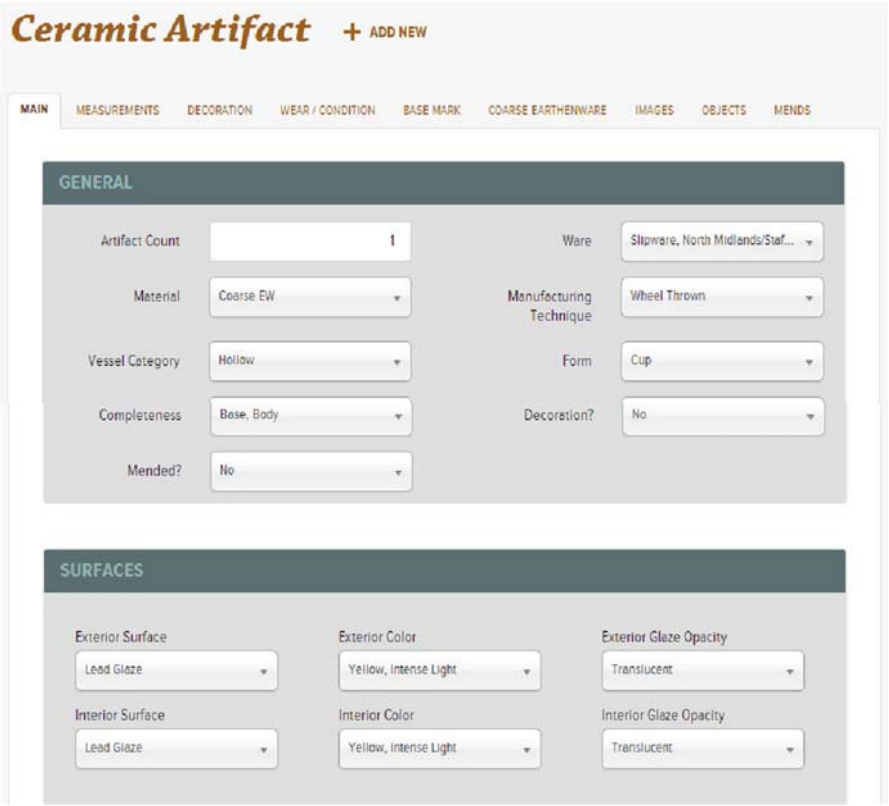

Figure 5. Example of how to complete Main tab for sherd with solid slip.

2. If the surface is unglazed/bisque, but there is a slip that obscures the color of the ceramic paste, record the sherd as follows:

Ext/Int Surface:	"Unglazed/Bisque"
Ext/Int Surface Color:	Record the color of the slip with the Detailed Color Groups.
Ext/Int Opacity:	"Not Applicable" if both surfaces are unglazed.
Decoration?:	"No" (nothing is entered in the Decoration Table).

3. If the surface is lead glazed or unglazed/bisque and the unslipped ceramic paste is exposed, record the sherd as follows:

Ext/Int Surface:	"Unglazed/Bisque" or "Lead Glaze"
Ext/Int Surface Color:	Record the color of the unslipped ceramic surface using the Detailed Color Groups.
Ext/Int Opacity:	Dependent on whether original paste color is visible through glaze.

4. If there is a clear lead glaze over a solid slip, and **there is combed, trailed, marbleized, or dotted decoration**, record the sherd as follows:

Ext/Int Surface:	"Lead Glaze"

Ext/Int Color:	Record the color of the solid slip with Detailed Color Groups.
Ext/Int Opacity:	"Transparent" if clear glaze.
Genre:	"Combed/Dot/Marbleized/Trailed"
Stylistic Elements:	Record the stylistic element and color of the applied decorative slip with the Detailed Color Groups. For example, "Yellow-red, muted medium" with Stylistic Element "Trailed" or "Dots."

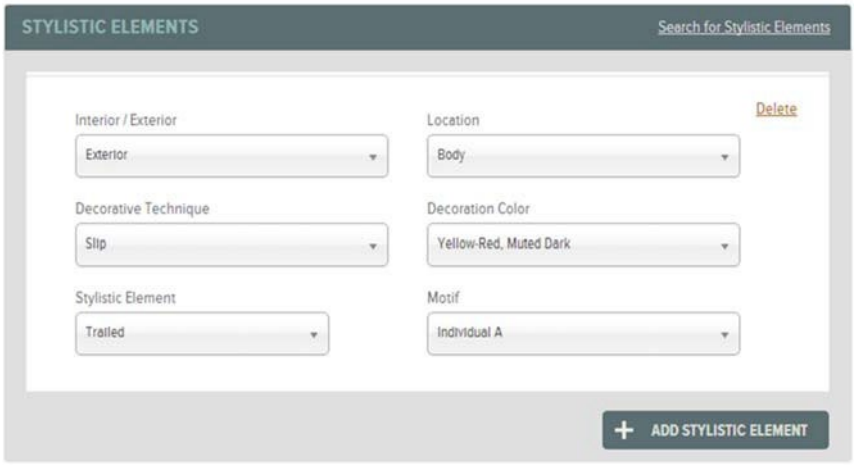

Figure 6. Example of how to record Stylistic Elements for a sherd with slipped/trailed decoration.

5. If there is a clear lead glaze over a marbleized slip pattern, and it is impossible to tell which slip was the main base color, record the marbleized sherd as follows:

Ext/Int Surface:	**"**Lead Glaze"
Ext/Int Surface Color:	"Body Color Obscured by Decoration"
Genre:	"Combed/Dot/Marbleized/Trailed"
Stylistic Elements:	Record the applied color with using the Detailed Color Groups. Brown and yellow marbleized slip would be entered as two lines for each color, with the same Stylistic Element ("Marbleized").

7.1.20. Staffordshire Mottled (or Manganese Mottled)

Staffordshire Mottled Glaze is a high-fired coarse earthenware produced in England. This typically finely potted ware has a caramel brown lead glaze with evenly dispersed, dark purplish-brown flecks and streaks of manganese. The dense clay body has a grainy texture and

is light tan in color, occasionally with fine marbling. A variety of this ware with a slightly coarser paste and thicker vessel walls has also been recovered archaeologically. Sherds usually represent small tankards, bowls, and other tavern wares. Tankards may be cordoned above the base. DAACS Manufacturing Date Range: 1680-1780.

Ware:	"Staffordshire Mottled Glaze"
CEW Type:	"Not Applicable"
Material:	"Coarse Earthenware"
Manu Tech:	"Wheel Thrown"
Ext/Int Surface:	"Lead Glaze"
Ext/Int Surface Color:	Record the predominant surface color using the Detailed Color Groups section of the DAACS Color Book.

7.1.21. Surrey-Hampshire Border Ware

This coarse earthenware was produced in the early post-medieval period in England. It is generally produced with a white or pale gray colored clay with very few inclusions. The vessels tend to be relatively thin, with lead glaze that appears bright yellow or apple green. Occasionally translucent brown glazed vessels are also found. Border Ware vessels are typically glazed on the interior only, but with substantial spillover onto the exterior. The most common forms are pipkins, pitchers, and chafing dishes, but a variety of different utilitarian and tableware forms were also manufactured. A pink or red-bodied variant of Border Ware was produced but is less often encountered on American sites. The majority of these wares are undecorated, though occasionally rustication is present. DAACS Manufacturing Date Range: 1600-1700.

Ware:	"Surrey-Hampshire Border Ware"
CEW Type:	"Not Applicable"
Material:	"Coarse Earthenware"
Manu Tech:	"Wheel Thrown"
Ext/Int Surface:	"Lead Glaze"
Ext/Int Surface Color:	Record using the Detailed Color Groups section of the DAACS Color Book.

7.1.22. Vallauris

Vallauris is a coarse earthenware produced in France. The paste color ranges fall into the buff, pink and orange categories in the DAACS Paste Color Range, and contains numerous quartz, hematite, and white rock inclusions. The core is often pink with whiter, oxidized sections near the exterior. The interior is nearly always lead-glazed with a clear glaze, which results in a glazed interior color ranging from light orange to dark reddish brown. The exterior is often unglazed. In some cases, burned or heavily reduced Vallauris may resemble Caribbean Coarse Earthenware, but the presence of a yellow glaze may be an indicator that the heavily burned sherds are indeed Vallauris. Residue/Sooting/Fire Clouding on the exterior is also common on

Vallauris sherds. The most common forms are for cooking, have straight sides, and small loop handles extending from the lip. DAACS Manufacturing Date Range: 1750-1900.

Ware:	"Vallauris"
CEW Type:	"Not Applicable"
Material:	"Coarse Earthenware"
Manu Tech:	"Wheel Thrown"
Ext/Int Surface:	"Lead Glaze"
Ext/Int Surface Color:	Record using the Detailed Color Groups section of the DAACS Color Book.

7.1.23. Werra Ware

Werra Ware is a German slip-decorated coarse earthenware. The paste is pink to orange or red in color, soft, with abundant sand inclusions and porous texture. The slip decoration is typically polychrome, with slip-trailing and sgrafitto. The glaze tends to be very thin and friable, often poorly preserved archaeologically. DAACS manufacturing range for Werra Ware is 1560-1640.

Ware:	"Werra Ware"
CEW Type:	"Not Applicable"
Material:	"Coarse Earthenware"
Manu Tech:	"Wheel Thrown"
Ext/Int Surface:	"Lead Glaze"
Ext/Int Surface Color:	Record using the Detailed Color Groups section of the DAACS Color Book.

7.2. Refined Earthenwares

The Material category of Refined Earthenwares includes a wide range of ceramic Wares with fine paste and low firing temperature. The majority are white-bodied, produced to visually mimic Chinese Porcelain. Occasionally produced via wheel-throwing, but more often refined earthenwares were press molded. The most common forms are teawares and tablewares, but some utilitarian forms were also produced in Refined Earthenware. The glaze is usually lead-based; either pure lead, tin-enamel, or an alkaline-lead mixture found on later types. The decorative techniques are highly variable and can be very ornate.

7.2.1. Agate, Refined (Whieldon-Type)

A dense, highly fired earthenware covered with a colorless, transparent lead glaze. The paste is composed of two or more colors of clay wedged together, with surfaces cleaned to expose the marbling as a decorative effect. The clay was typically dyed in blues, greens, and browns,

mixed with unaltered white. The primary method of manufacture was by press-molding the agatized clay, which is sometimes referred to as "laid agate." It was generally produced in hollow teaware forms. It differs from Red Agate, Refined, in the use of multiple clay colors, press molding, and a colorless (rather than yellow or brown tinted) transparent glaze. DAACS Manufacturing Date Range: 1740-1775.

Ware:	"Agate, refined (Whieldon-type)"
Material:	"Refined Earthenware"
Manu Tech:	"Press Molded," or "Wheel Thrown."
Ext/Int Surface:	"Lead Glaze"
Ext/Int Surface Color:	"Agate Body"

7.2.2. Astbury-Type

Astbury-Type is a red-bodied refined earthenware produced in England. The body is generally very thin-walled and is characterized by a dense, highly fired paste covered with a clear lead glaze. Sprig molding and engine turned decoration are common, as well as the application of a white slip (especially at the rim). Astbury is usually distinguishable from "Redware, refined" in the following ways. The paste ranges from a pale pink/buff to dull red in color and is so dense that it is almost stoneware-like. The exterior color is often described as "ginger" and is more light brown than the red or dark red seen on "Redware, refined." As Luster decoration was not introduced into the Staffordshire potteries until the late 18th-century, luster decoration will not be seen on Astbury. Very similar to Red Agate, Refined, without the marbling. Usually seen in tea services and bowls. DAACS Manufacturing Date Range: 1727-1750.

Ware:	"Astbury-Type"
Material:	"Refined Earthenware"
Manu Tech:	"Press Molded" or "Wheel Thrown"
Ext/Int Surface:	"Lead Glaze"
Ext/Int Surface Color:	Record using the Detailed Color Groups section of the DAACS Color Book.

7.2.3. Bennington/Rockingham

Though some consider this type as merely a variant of Yellow Ware, DAACS identifies Bennington/Rockingham as a distinct ware type with characteristics of a buff-colored, refined earthenware paste and a lead glaze with inclusions of iron or manganese oxide that creates a "runny," caramel-spotted effect. DAACS Manufacturing Date Range: 1830-1900.

Ware:	"Bennington/Rockingham"
Material:	"Refined Earthenware"
Manu Tech:	"Wheel Thrown" Or "Press Molded"
Ext/Int Surface:	"Lead Glaze"
Ext/Int Surface Color:	Record the predominant surface color using the Detailed Color Groups section of the DAACS Color Book.

7.2.4. CANARY WARE

Canary Ware is a white-bodied, refined earthenware with a bright yellow antimony glaze, which was produced in both Britain and France. Luster decoration, overglaze transfer printing, and mottos are types of decoration commonly seen on Canary Ware. Be careful not to confuse Canary Ware with the yellow-bodied, clear-glazed earthenware known as Yellow Ware. DAACS Manufacturing Date Range: 1780-1835.

Ware:	"Canary Ware"
Material:	"Refined Earthenware"
Manu Tech:	"Press Molded"
Ext/Int Surface:	"Lead Glaze"
Ext/Int Surface Color:	Record using the Detailed Color Groups section of the DAACS Color Book.

7.2.5. CAULIFLOWER WARE

Cauliflower Ware is special variant of Wedgwood Green Ware (see below). The vessel forms include tea and tablewares with molded vegetable and fruit forms such as cauliflower, pineapple, and melon. They typically have multiple colors of glaze, mimicking the natural coloration of the plant. Note that the glaze color is considered inherent in this ware type and is recorded as the Surface Color, not as decoration. DAACS Manufacturing Date Range: 1760-1780.

Ware:	"Cauliflower Ware"
Material:	"Refined Earthenware"
Manu Tech:	"Press Molded"
Ext/Int Surface:	"Lead Glaze"
Ext/Int Surface Color:	Record using the Detailed Color Groups section of the DAACS Color Book.
Genre:	"Cauliflower", "Pineapple," or "Melon."

7.2.6. CREAMWARE

Creamware was successfully marketed by Josiah Wedgwood as "Queen's Ware." It has a cream-colored body covered by a clear lead glaze that, in puddled areas such as foot rings appears yellow or olive yellow. Early creamware tends overall to be a deeper yellow or darker cream color than in later years. Molded rims, including "Feather Edge" and neoclassical borders, are common decorative techniques in early vessels; hand-painted overglaze enamel colors, over and underglaze transfer printing, and annular style decoration are also seen, particularly in later years. Engine-turned bodies and sprig molding are seen throughout the span of this ware type. DAACS Manufacturing Date Range: 1762-1820.

Ware:	"Creamware"
Material:	"Refined Earthenware"

Manu Tech:	"Press Molded"
Ext/Int Surface:	"Lead Glaze"
Ext/Int Surface Color:	Record using the Refined Ceramic Surface Colors section of the DAACS Color Book.

7.2.7. CREAMWARE, CAROLINA

The production of refined white earthenware was brought to North and South Carolina by John Bartlam in the 18th century. He produced earthenwares with molded decorative motifs common on White Salt Glaze Stoneware, Creamware, Whieldon Ware, and Cauliflower Ware, such as Barley Pattern, Pineapple, and engine turning. The plates and hollow forms were most commonly glazed with clear, copper green, or honey brown lead glaze, occasionally with clouded or tortoise decoration. Unlike European creamwares, hollow forms were often wheel-thrown. Carolina Creamware had limited distribution within the Carolinas and is characterized by a notable softer and more friable paste than found on most European creamwares. DAACS Manufacturing Date Range: 1765-1775.

Ware:	"Creamware, Carolina"
Material:	"Refined Earthenware"
Manu Tech:	"Wheel Thrown" or "Press Molded."
Ext/Int Surface:	"Lead Glaze"
Ext/Int Surface Color:	Record using the Refined Ceramic Surface Colors section of the DAACS Color Book.

7.2.8. DELFTWARE, DUTCH/BRITISH

The term "Delftware" collectively refers to tin-enameled ware from England and the Netherlands. Delftware has a very soft clay body – it is most often buff or pinkish-buff in color, but it can range from salmon to pale yellow. The tin glaze is fragile and readily flakes off. This opaque white glaze usually has a pale blue tint, but it can also be a grayish white. Cobalt-blue, painted designs are most frequent, but polychrome painted decoration is not uncommon. In addition, a distinctive palette of pastel colors referred to as "Fazackerley" enjoyed a brief period of popularity (c. 1750-1770). Note that early 17th century delftware can have lead glazed exterior surfaces and typically lacks the blue/grey tinted enamel color characteristic of later wares. DAACS Manufacturing Date Range: 1600-1800.

Ware:	"Delftware, Dutch/British"
Tin Enamel Type:	"Not Applicable," or "Unidentifiable," as appropriate (Use of this field is project-specific, and detailed types may only be entered for certain sites.).
Material:	"Refined Earthenware"
Manu Tech:	Almost always, "Wheel Thrown."
Ext/Int Surface:	"Tin Glaze" (occasionally, "Lead Glaze," for exterior surfaces).

Ext/Int Surface Color: Record using the Refined Ceramic Surface Colors section of the DAACS Color Book.

Additional Cataloging Notes:

If you have a (probable) Delftware sherd that is missing all of its glaze, catalog as follows:

Ware: "Tin-Enameled, Unid" (use this instead of "Delftware, Dutch/British").
Material: "Refined Earthenware"
Manu Tech: "Wheel Thrown"
Ext/Int Surface: "Missing"
Ext/Int Surface Color: "Not Applicable"

See Section 6.1.17. for instructions on how to catalog fragments of detached tin glaze.

Protocols for recording decoration on Delftware, Dutch/British:

- For Delftware with painted decoration, the Decorative Technique should be listed as "Painted, under free hand." While the painting was initially laid on top of the glaze, it was done before the glaze firing, thus the glaze and paint merge together. This is unlike typical overglaze painting, which is a separate process of painting on the surface after the glaze firing.

- Another common decoration during the mid-18th century on Delft was "powdered" decoration. It was executed mainly on plates and bowls whereby the pigment was "blown" on over a stencil, creating a speckled effect. For powdered decoration, use the following protocols:

  Genre: "Applied Powder/Crystals, Purple"
  Decorative Technique: "Applied Powder/Crystals"
  Decoration Color: Use Detailed Color Groups to identify color
  Stylistic Element: Often "Solid"
  Motif: "Individual A"

- Delftware is also often sponge-painted. Sponging was a quick way to depict such objects as trees and bushes. Decorative Technique for this should be entered as "Sponged."

7.2.9. FAIENCE

Faience is a French, tin-enameled earthenware. Its grainy body is most often buff in color but, like most tin-enameled wares, it can range from deep salmon to nearly cream. Two readily identifiable varieties are Rouen and Nevers. Rouen has a bluish-white tin-enameled glaze on interior surfaces, and a deep brown lead glaze on the exterior. Usually seen in platters, bowls,

and mugs. “Debased” Rouen comes in very thick body forms, typically with a pink paste; decoration often consists of narrow blue and black borders on interior rims, and scalloped edges on platters (c. 1775-1800). Nevers-type wares have a deep blue glaze decorated with white or bluish-white and/or polychrome painted designs. DAACS Manufacturing Date Range: 1700-1800.

Ware: “Faience”
Tin Enamel Type: “Brittany-Style, “Normandy Blue-on-White Style,” “Provence Blue-on-White Style,” Provence Yellow-on-White Style,” “Rouen,” “Rouen/St. Cloud Polychrome Style,” “Unidentifiable,” “Not Applicable” (use of this field is project-specific).
Material: “Refined Earthenware”
Manu Tech: “Wheel Thrown” (occasionally, “Press Molded”).
Ext/Int Surface: “Tin Glaze” (except for the exterior of Rouen, which is “Lead Glaze”).
Ext/Int Surface Color: Record using the Refined Ceramic Surface Colors section of the DAACS Color Book. For sherds identified as Rouen, use the Detailed Color Groups section to identify the color of the lead-glazed surface.

7.2.10. Ironstone/White Granite

Ironstone and White Granite are later varieties of Whiteware. They can be distinguished from whitewares by their dense, white paste and harder, less porous clay bodies. The alkaline-lead glazes generally had whiteners and opacifiers such as calcium, zinc, or tin added. Grayish-blue glaze pooling is common, and glazed surfaces often develop a large crazing pattern that resembles “cracked ice.” Ironstone/White Granite comes in a wide range of vessel forms, which are often heavier and thicker walled than whiteware vessels. Vessels are often marked, and decoration is highly variable, although neoclassical and geometric molding is very common. DAACS Manufacturing Date Range: 1840-present.

Ware: “Ironstone/White Granite”
Material: “Refined Earthenware”
Manu Tech: “Press Molded”
Ext/Int Surface: “Alkaline/Lead”
Ext/Int Surface Color: Record using the Refined Ceramic Surface Colors section of the DAACS Color Book.

Cataloging Note: For “Victorian Majolica,” a decorative variant of Ironstone/White Granite, catalog as follows:

Ware: “Ironstone/White Granite”
Material: “Refined Earthenware”
Manu Tech: “Press Molded”

Ext/Int Surface:	"Alkaline/Lead Glaze"
Ext/Int Surface Color:	Use Detailed Color Section of the DAACS Color Book.
Genre:	"Victorian Majolica"
Stylistic Elements:	Enter any molded decoration appropriately.

7.2.11. JACKFIELD TYPE

Jackfield-type is a dense, highly fired refined earthenware with a dense, dark purple to black body that was fired with a glossy, black lead glaze. Typically very thin-walled, Jackfield-type is found in teaware and fine tableware forms. Molded spouts and handles are common, and some vessels exhibit overglaze enamel or gilded decoration. Jackfield-type was manufactured in Britain during the latter half of the 18th century. Thomas Whieldon's Jackfield wares had a slightly redder body. DAACS Manufacturing Date Range: 1745-1790.

Ware:	"Jackfield Type"
Material:	"Refined Earthenware"
Manu Tech:	"Press Molded"
Ext/Int Surface:	"Lead Glaze"
Ext/Int Surface Color:	Record using the Detailed Color Groups section of the DAACS Color Book.

7.2.12. MAJOLICA

Majolica is a general category that refers to tin-enameled earthenware produced in Spain, Mexico, and Italy. The paste color is highly variable, depending on the type, with an overall white, buff, or pale blue tin- enamel glaze. The decoration may be executed in a single color, such as blue on white, but is more commonly polychrome. Botanical motifs are common, and much of the painting has a soft, impressionistic quality, in contrast to the sharper scenic or representational decorations on tin glazed wares such as Delft. Tablewares such as plates and assorted hollow forms are common. DAACS Manufacturing Date Range: 1540-1800.

Ware Type:	"Majolica"
Tin Enamel Type:	As appropriate, or "Majolica, unid." There are many potential majolica types, and their applications are project-specific.
Material:	"Refined Earthenware"
Manu Tech:	"Wheel Thrown"
Ext/Int Surface:	"Tin Glaze," or "Missing" (occasionally, "Unglazed/Bisque").
Ext/Int Surface Color:	Record Surface Color using the Refined Ceramic Surface Color section of the DAACS Color Book. If the glaze is missing, enter "Not Applicable."

7.2.13. PEARLWARE

Pearlware is a refined earthenware with an off-white clay body and a clear lead glaze that has a slightly bluish tint, most evident where the glaze is thicker (e.g., foot rings, etc.). Decoration includes molded rims, with "Shell Edge" the most common. These rims were painted blue and, to a slightly lesser extent, green. Blue and polychrome hand-painted designs, transfer printed patterns, and factory-made slipware motifs are very common, often in combination with engine-turned bodies and sprig-molded elements. DAACS Manufacturing Date Range: 1775-1830.

Ware:	"Pearlware"
Material:	"Refined Earthenware"
Manu Tech:	"Press Molded"
Ext/Int Surface:	"Lead Glaze"
Ext/Int Surace Color:	Record using the Refined Ceramic Surface Colors section of the DAACS Color Book.

7.2.14. Red Agate, Refined

Refined Red Agate is a thin-bodied, refined earthenware with an agatized paste that is the result of wedging together a combination of buff and red clays to create a marbled effect. Surfaces are coated with a clear lead glaze, allowing the agatized body to show through. Forms are primarily tablewares (commonly mugs and bowls) and teawares. White sprig molding and other decorative bands are sometimes present. The distinction between Red Agate, Refined" and the coarse earthenware type, "Red Agate, Coarse," is based on the presence or absence of visible paste inclusions at 10X magnification, as well as thickness and form (utilitarian vs. tableware). DAACS Manufacturing Date Range: 1740-1775.

Ware:	"Red Agate, Refined"
Material:	"Refined Earthenware"
Manu Tech:	"Wheel Thrown"
Ext/Int Surface:	"Lead Glaze"
Ext/Int Surface Color:	Record the surface color of the "redder" of the two wedged clays using the DAACS Detailed Color Groups.

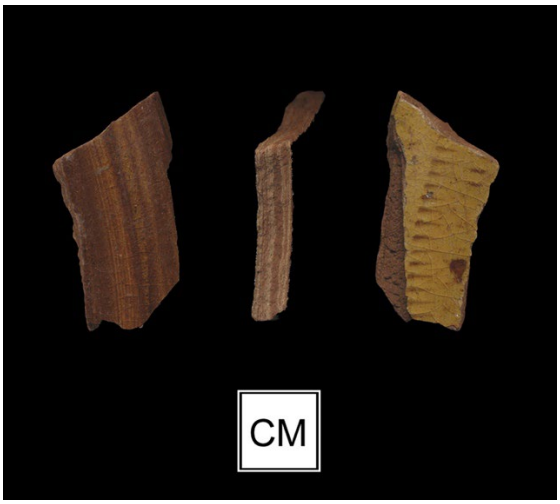

Figure 7. Refined Red Agate sherd with interior slip decoration. DAACS Artifact ID: 5006-92-84-72-321-DRS—00257.

7.2.15. REDWARE, REFINED

"Redware, refined" is used to describe highly fired red-bodied earthenwares with a fine paste and thin walls. In DAACS, sherds identified as "Redware, refined" must have a body color (as viewed along the broken edge of the sherd) that falls into one of the following color chip categories found in the **Redware Color Range** section of the DAACS Color Book: Pantone 7594, 7610, or 7631. Although they have a similar body color to coarse redwares, refined redwares have more in common with other refined earthenwares of the 18th and 19th centuries in regard to paste composition, glaze, and form. Common forms are hollow vessels, especially creamers and small pitchers, which have a clear lead glaze. Common decorative types include engobe slip, a variety of luster colors, rustication, yellow transfer print, sprig molding, and underglaze painting. A white slip on the interior of red-bodied refined ware, especially vessels with exterior luster decoration, is very common. DAACS Manufacturing Date Range: 1780-1900.

Ware:	"Redware, refined" (paste color must closely match Pantone 7594, 7610, or 7631 in the Redware Color Range section of the DAACS Color Book).
Material:	"Refined Earthenware"
Manu Tech:	Usually "Press Molded," sometimes "Wheel Thrown."
Ext/Int Surface:	"Lead Glaze"
Ext/Int Surface Color:	Use Detailed Color Groups to record glazed or unglazed surface colors. If slip present, enter "Body Color Obscured by Decoration."
Genre:	Depending on Decoration: "Luster", "Yellow Printed Brown/Black Ware (Portobello)", "Slipware, factory made", or "not Applicable. Please note: if you have a sherd with both Luster and Slip or hand painted decoration, the luster trumps the slip/paint, and "Luster" should be entered into

	the Genre Field. You can then record all decorative technique types in the Stylistic Element fields.
Stylistic Elements:	Record all instances of different decorative types on the sherd.

7.2.16. Refined Earthenware, Modern

In DAACS we define modern refined earthenwares as any refined earthenware type that post-dates 1900. Modern refined earthenwares can be batched regardless of form, sherd size, and color. Batch by ware (which will be Refined earthenware, modern) and record count and weight. List other fields as "Not Recorded."

Note: If a principal investigator does not want to batch refined earthenwares that post-date 1900, such as Fiesta Wares, they can choose to catalog each sherd individually by ware type. Please contact the DAACS Project Director to add modern ware types.

7.2.17. Refined Earthenware, Unidentifiable

Occasionally we encounter refined earthenware sherds whose ware type cannot be identified. We recognize two types of unidentifiable refined earthenwares, those that are damaged beyond identification and those whose ware type cannot be identified with current research or resources.

Damaged Sherds:

These sherds may be burnt, stained or otherwise damaged such that ware- type identification is impossible. In those cases, refined earthenwares that are unidentifiable due to damage to the sherds should be batched regardless of form, sherd size, and color. Batch by ware (which will be Refined earthenware, unidentifiable) and record count and weight. List other fields as "Not Recorded."

Currently Unidentified Sherds:

In other cases, we see refined earthenware sherds whose ware types are not identifiable by DAACS staff using currently available resources. In these cases, the sherds are cataloged individually (do not batch) and each individual attribute is recorded.

7.2.18. Wedgwood Green

Wedgwood's Green Glaze was developed in partnership by Thomas Whieldon and Josiah Wedgwood. It has the same cream-colored body as Whieldon but covered with a lustrous, translucent copper green lead glaze. Vessel forms include tea and tablewares with molded vessel rims borrowed from the white salt-glazed stoneware repertoire. Note that the green color of the glaze is considered inherent in this ware type and is recorded as the Surface Color, not as decoration. DAACS Manufacturing Date Range: 1759-1775.

Ware:	"Wedgwood Green"

Material:	"Refined Earthenware"
Manu Tech:	"Press Molded"
Ext/Int Surface:	"Lead Glaze"
Ext/Int Surface Color:	Record the color of the solid green surface using Detailed Color Groups section of the DAACS Color Book.

7.2.19. WHIELDON-TYPE WARE

Whieldon Ware is associated with Thomas Whieldon's factory. This early refined earthenware has a lead glaze splashed with translucent oxide colors. Teawares and tablewares also often had molded vessel rims, borrowed from the white salt-glazed repertoire. With Whieldon, information about color will always have to be entered into the Decoration table. Decorative Technique should be "Applied Powder/Crystals." The two main Stylistic Elements seen on Whieldon are Clouded and Tortoiseshell. Clouded decoration can be seen in a variety of colors, including brown, yellow, green, purple, blue, and gray. The decoration appears as blurry, cloud-like splotches of color. Tortoiseshell is a less blurry, more stippled style of decoration. It usually appears as brown on a cream-colored background. Clouded and Tortoiseshell decorations occasionally appear together on the same vessel. Molded rim patterns often seen on Whieldon include Dot, Diaper, and Basketweave; Bead and Reel; Barley; Queen's shape; Royal pattern, and Feather-edged. DAACS Manufacturing Date Range: 1740-1775.

Ware:	"Whieldon-type Ware"
Material:	"Refined Earthenware"
Manu Tech:	"Press Molded"
Ext/Int Surface:	"Lead Glaze"
Ext/Int Surface Color:	"Body Obscured by Decoration," or as appropriate (if you can reliably identify the undecorated body color, use the Refined Ceramic Surface Color section of the DAACS Color Book).
Genre:	Generally, "Not Applicable" (if there is molded edge decoration, enter as appropriate).
Stylistic Elements:	"Clouded" or "Tortoiseshell." Decorative technique should be "Applied Powder/Crystals."

7.2.20. WHITEWARE

Whiteware is a refined earthenware that more or less evolved from Pearlware. The body is dense and white with a clear, glassy glaze. When puddled, Whiteware glazes sometimes appear blue or blue-gray tinted, but note that the overall surface should appear white. Vessels are often thicker, with less finely made footrings when compared to pearlware. Glazes on whitewares were either lead or more commonly alkaline-lead. Because visually distinguishing these glaze types is nearly impossible, we always record the glaze as "Alkaline-Lead." Transfer printed designs are the most commonly seen form of decoration up to c. 1860. A variety of other decorative techniques are also encountered, including polychrome cool painting, sponging, and factory-made slip decoration. Embossed vessel rims are also common, although

these are generally more delicately executed than similar molded decoration that appears on Ironstone/White Granite. DAACS Manufacturing Date Range: 1820-present.

Ware:	"Whiteware"
Material:	"Refined Earthenware"
Manu Tech:	"Press Molded"
Ext/Int Surface:	"Alkaline-Lead"
Ext/Int Surface Color:	Record using the Refined Ceramic Surface Colors section of the DAACS Color Book.

7.2.21. YELLOW WARE

Yellow Ware is a very highly fired refined earthenware produced in Britain and America. American yellow ware has a dense, yellow-to-buff colored body with a clear glaze. The English variety has a cream to buff body with a yellow-tinted glaze. Factory made slipware decoration is most often seen. Most common as utilitarian and some serving vessels. Be careful not to confuse "Yellow Ware" with "Canary Ware," or "Bennington/Rockingham." Note that although some researchers consider it a subcategory of Yellow Ware, DAACS classifies Bennington/Rockingham as its own ware type (see above). DAACS Manufacturing Date Range: 1825-1940.

Ware:	"Yellow Ware"
Material:	"Refined Earthenware"
Manu Tech:	"Press Molded"
Ext/Int Surface:	"Lead Glaze"
Ext/Int Surface Color:	Record using Detailed Color Groups section of the DAACS Color Book.

7.3. PORCELAINS

Porcelain is a ceramic material characterized by vitrification of the paste. Light will shine through porcelain and porcelaneous bodies. Porcelain is typically, thin, highly fired, with a bright and shiny transparent feldspathic/alkaline glaze. Porcelain technology developed in Asia, but the process was imitated in a variety of European wares. Porcelain may have molded decoration, overglaze, or underglaze painting, among other decorative techniques. Among the more expensive of ceramic wares, porcelains were typically used for teawares and fine tablewares.

7.3.1. PORCELAIN, CHINESE

Chinese porcelain is a hard-paste porcelain, and accounts for nearly all of the porcelain found on colonial and early Federal periods archaeological sites. Chinese porcelain has an extremely dense body that is white in color. The hard, very glossy, transparent glaze is fused to the body and has a bluish or light gray tint. Blue underglaze- painted floral and landscape designs are most common. Overglaze colors include red, black, green, pink ("famille rose"), pale green ("famille verte"), and gilding, and are often used in combination with underglaze blue. Low

relief incising or molding ("An Hua") is sometimes seen. A chocolate-brown slip covered the exterior surfaces of "Batavian" wares. More rarely, one sees a pale, jade-green slip referred to as "Ceyledon," or white, underglaze slip-trailed designs known as "bianco sopro bianco." By the nineteenth century, vessel forms were often quite thick and designs had a heavy-handed quality. DAACS Manufacturing Date Range: 1600-present.

Ware:	"Porcelain, Chinese"
Material:	"Porcelain"
Manu Tech:	Use "Press Molded" unless there are obvious signs that wheel throwing is the primary mode of manufacture.
Ext/Int Surface:	"Feldspathic/Alkaline"
Ext/Int Surface Color:	Record using Refined Surface Colors section of the DAACS Color Book.

7.3.2. Porcelain, English Bone China

English Bone China has a dense, white clay body fluxed with calcined bone. It is translucent. The glossy to semi-glossy glaze is minutely crazed and often has a yellowish tint (this is especially apparent on more weathered examples). Decorative techniques include both underglaze and overglaze painting, decalcomania, and sprig molding. DAACS Manufacturing Date Range: 1794-present.

Ware:	"Porcelain, English Bone China"
Material:	"Porcelain"
Manu Tech:	"Press Molded"
Ext/Int Surface:	"Lead Glaze"
Ext/Int Surface Color:	Record using the Refined Ceramic Surface Colors section of the DAACS Color Book.

7.3.3. Porcelain, English Hard Paste

English hard-paste porcelain has very dense, hard porcelain body, which is translucent. Vessels are dead white in color and the clear glaze is glassy in appearance. Molded forms, sprig molding, transfer printed designs, and hand-painting are all seen, but twentieth-century vessels are almost exclusively decorated over the glaze with decalcomania and liquid gold. English Hard Paste is distinguished from the broader Ware of "Porcellaneous/Hard Paste" by the presence of diagnostic maker's marks or decoration. DAACS Manufacturing Date Range: 1820-present.

Ware:	"Porcelain, English Hard Paste"
Material:	"Porcelain"
Manu Tech:	"Press Molded"
Ext/Int Surface:	"Feldspathic/Alkaline"
Ext/Int Surface Color:	Record using the Refined Ceramic Surface Colors section of the DAACS Color Book.

7.3.4. Porcelain, English Soft Paste

The clay body of English soft-paste porcelain seems chalky, both in color and texture. The level of translucency is dependent on the thickness of a given sherd. The glaze is just semi-glossy and can be very white or slightly greenish in color (as compared to the bluish-gray of Chinese porcelain). It is sometimes susceptible to the same degree of crazing that occurs on whiteware. Archaeological examples may have a soft of "soapy" texture, as compared to other porcelain types. English soft-paste porcelains often have blue, underglaze painted Chinoiserie designs. Overglaze polychrome colors and gilding are less common. Beginning in the 1750s, Soft Paste Porcelain was also sometimes transfer-printed. The first examples were overglaze printed in black; blue underglaze printing followed soon thereafter. DAACS Manufacturing Date Range: 1745-1795.

Ware:	"Porcelain, English Soft Paste"
Material:	"Porcelain"
Manu Tech:	"Press Molded"
Ext/Int Surface:	"Lead Glaze"
Ext/Int Surface Color:	Record using the Refined Ceramic Surface Colors section of the DAACS Color Book.

7.3.5. Porcelain, French Hard Paste

Like other hard paste porcelains, French hard-paste porcelain has a very dense, high-fired body and is translucent. Vessels are dead white in color and the clear glaze is glassy in appearance. French Hard Paste shares many attributes with English and other hard paste porcelains. Only use this term if you have a maker's mark and/or specific decorative elements that are considered diagnostic. Hard paste porcelain sherds with ambiguous attributes should be cataloged as "Porcellaneous/Hard Paste." DAACS Manufacturing Date Range:

Ware:	"Porcelain, French Hard Paste"
Material:	"Porcelain"
Manu Tech:	"Press Molded"
Ext/Int Surface:	"Feldspathic/Alkaline"
Ext/Int Surface Color:	Record using the Refined Ceramic Surface Colors section of the DAACS Color Book.

7.3.6. Porcelain, Japanese

Japanese porcelain first became available early in the eighteenth century but became much more common at the turn of the twentieth century. Earlier Japanese porcelains tend to be heavier and thicker than most contemporary Chinese porcelains. Another noticeable difference is the appearance of small, pimple-like blemishes found on the bases of Japanese

porcelains, which were the result of a particular firing technique and are not seen on Chinese porcelains. The glaze on Japanese porcelain also tends to be thicker than on Chinese porcelain, and designs on Chinese porcelain are also usually sharper than on Japanese porcelain, as the glaze on Japanese porcelain tends to run. Common decoration on Japanese porcelain includes underglaze and overglaze painting, as well as transfer printing. DAACS Manufacturing Date Range: 1870-present.

Ware:	"Porcelain, Japanese"
Material:	"Porcelain"
Manu Tech:	"Press Molded"
Ext/Int Surface:	"Feldspathic/Alkaline"
Ext/Int Surface Color:	Record using Refined Ceramic Surface Colors section of the DAACS Color Book.

7.3.7. Porcellaneous/Hard Paste

Porcellaneous/Hard Paste is a general term referring to porcelain and porcelain-like wares from Europe and America. After the Revolutionary War, hard-paste Continental porcelain made its way to America. Porcelains produced during the later nineteenth and twentieth centuries in England, America, and elsewhere are fired to hard-paste consistency but are usually referred to as "Porcellaneous" wares. Porcellaneous wares have very dense, hard porcelain bodies and are translucent. Vessels are dead white in color and the clear glaze is glassy in appearance. Molded forms, sprig molding, transfer printed designs, and hand-painting are all seen, but twentieth-century vessels are almost exclusively decorated over the glaze with decalcomania and liquid gold. DAACS Manufacturing Date Range: 1820-present.

Ware:	"Porcellaneous/Hard Paste"
Material:	"Porcelain"
Manu Tech:	"Press Molded"
Ext/Int Surface:	"Feldspathic/Alkaline"
Ext/Int Surface Color:	Record using the Refined Ceramic Surface Colors section of the DAACS Color Book.

7.4. Stonewares

Stoneware is a dense and nearly vitreous high-fired ceramic. Used to produce both utilitarian and tableware forms, stonewares are durable and exhibit a range of decorative techniques. Throughout the seventeenth and much of the eighteenth century, the overwhelming majority of stonewares were imported from England and Germany, up until the American Revolution. Stonewares are almost always salt-glazed. Salt-glazing is colorless and imparts a pitted, "orange-peel" effect to vessel surfaces, which tends to be more pronounced on the exterior of hollow forms than on interior surfaces. By the nineteenth century, some stonewares were alkaline-glazed.

Cataloging Notes: Remember to take Surface Colors for both the interior and exterior of stoneware vessels, using the Detailed Color Groups section of the DAACS Color Book.

7.4.1. American Stoneware

American Stoneware encompasses a range of stoneware types produced in North America. The dense clay body is light brown to brown, *or* medium to dark grey in color. Forms are almost always hollow, and vessel surfaces are most often (but not exclusively) salt-glazed. During the nineteenth century, potters often applied a dark, glossy brown engobe (known as "Albany slip") and/or an alkaline glaze with a white zinc emulsion to the surfaces of hollow forms. Other alkaline-glazed stonewares began to be produced in the southern states during the 19th century, with surfaces characterized by thick, runny translucent or milky glazes. Hand painted and stenciled designs in cobalt blue paint or slip are common (usually simple floral or stylized motifs), although many vessels are undecorated. Utilitarian wares are most common, especially storage jars and bottles, butter churns, bowls, and chamber pots. DAACS Manufacturing Date Range: 1750-1920.

Ware:	"American Stoneware"
Material:	"Stoneware"
Manu Tech:	"Wheel Thrown"
Vessel Category:	"Hollow"
Ext. Surface:	Usually "Salt Glaze." May be "Alkaline-Lead," or "Albany Slip."
Int. Surface:	Often "Salt Glaze." May be "Albany Slip," "Alkaline-Lead," or "Wash."
Ext/Int Surface Color:	Record using the Detailed Color Groups section of the DAACS Color Book.

Additional Cataloging Notes:

There is no separate ware category in DAACS for what is often referred to as "American Blue and Gray." Catalog these vessels as "American Stoneware," and enter the decoration information into the Decoration table, including Genre ("Blue and Gray").

A common type of nineteenth-century American Stoneware had a thick, white alkaline glaze on the exterior of the vessel, with a dark brown Albany-slipped interior. Do not record Albany Slip as Decoration. Catalog these vessels as follows:

Ware:	"American Stoneware"
Material:	"Stoneware"
Manu Tech:	"Wheel Thrown"
Vessel Category:	"Hollow"

Form:	As appropriate.
Decoration?:	"No"
Ext. Surface:	"Alkaline-Lead" (same glaze as seen on Bristol Glaze Stoneware).
Int. Surface:	"Albany Slip"
Ext/Int Surface Color:	Record the color of both surfaces using the Detailed Color Groups section of the DAACS Color Book.

7.4.2. Black Basalt

Black Basalt is a dry-bodied (unglazed), refined stoneware. Body is black to charcoal-gray in color, very dense, and relatively thin-walled. Usually has sprigged decoration; sometimes molded or engine-turned, or hand-painted in polychrome colors or gilding. Forms include tea services, pitchers, vases. Originally produced by Wedgwood, Black Basalt was eventually manufactured by a number of Staffordshire potteries. Similar ware to Rosso Antico but with manganese added to produce the black clay body. Also referred to as "Dry-Bodied Black Stoneware." DAACS Manufacturing Date Range: 1750-1820.

Ware:	"Black Basalt"
Material:	"Stoneware"
Manu Tech:	"Press Molded" or "Slip Cast."
Vessel Category:	"Hollow"
Ext/Int Surface:	Usually "Unglazed/Bisque." May have "Lead Glaze" on interior.
Ext/Int Surface Color:	Record using Detailed Color Groups section of DAACS Color Book (usually "Neutrals, Dark").

7.4.3. British Stoneware

The term "British Stoneware" is used in DAACS to encompass ceramic sherds that have attributes consistent with British Stoneware, but which cannot be identified to a more specific ware type (e.g., British Brown/Fulham-type). Specific ware type categories of British stoneware can be found below. DAACS Manufacturing Date Range: 1671-1800.

Ware:	"British Stoneware"
Material:	"Stoneware"
Manu Tech:	"Wheel Thrown"
Vessel Category:	"Hollow"
Ext/Int Surface:	Usually "Salt Glaze" (or as appropriate).
Ext/Int Surface Color:	Record using the Detailed Color Groups section of the DAACS Color Book.

7.4.4. BRISTOL GLAZE

Bristol Glaze refers to a distinct type of stoneware produced by British and American potteries beginning in the 19th century. It is typically found on ginger beer or soda water bottles, and is characterized by a two-toned surface, the bottom half being white, and the top half a yellow to brown. The white surface is an allover white emulsion glaze, often applied to both the interior and exterior. The top half is rendered brown by the addition of manganese oxide, iron oxide, or both. The glaze may be alkaline or alkaline-lead, so "Alkaline-Lead" is the default. The first Bristol-glazed stoneware was produced in England in the nineteenth-century. The ware was immensely popular, and the glazing process was adopted by American potters by the 1880s. Most commonly beverage bottles, such as ginger beer and soda water. DAACS Manufacturing Date Range: 1835-present.

Ware:	"Bristol Glaze Stoneware"
Material:	"Stoneware"
Manu Tech:	"Wheel Thrown"
Vessel Category:	"Hollow"
Ext/Int Surface:	"Alkaline-Lead"
Ext/Int Surface Color:	Record using the Detailed Color Groups section of the DAACS Color Book or enter "Body Color Obscured by Decoration" (see below for detailed cataloging protocols).

Additional Cataloging Notes:

The applied manganese or iron oxide that creates the yellow surface on Bristol Glazed Stoneware should be treated as decoration, with cataloging protocols similar to those used for North Midlands Slipware. If the sherd is all white, the color of the white-appearing surface is recorded in both the interior and exterior fields. If the exterior is covered solely by the yellow glaze, then the exterior color is recorded as "Body Obscured by Decoration" and then the yellow glaze is recorded in the Stylistic Element field (see example below). If the exterior has both the white and yellow glaze, the exterior white-to-buff base color is recorded in the Exterior Surface Color field, and the yellow glaze is recorded as dipped decoration in the Decoration table.

Ext/Int Surface:	"Alkaline-Lead"
Ext Color:	"Body Obscured by Decoration"
Int Color:	Record using the Detailed Color Groups in the DAACS Color Book.
Genre:	"Not Applicable."
Dec. Int/Ext:	"Exterior"
Dec. Location:	As Appropriate.
Dec Tech:	"Dipped"
Dec Color:	Record using the Detailed Color Groups in the DAACS Color Book.
Stylistic Element:	"Solid"
Motif:	"Individual A"

7.4.5. BRITISH BROWN/FULHAM TYPE

British Brown/Fulham Type is a brown, salt-glazed stoneware produced in Britain and commonly encountered on eighteenth-century colonial sites. Fulham-type vessels are dipped in brown iron oxide; often this oxide only covers the upper half of the body. The brown exterior has a pronounced stippled appearance. The clay body is medium gray in color; it appears darker and somewhat grainier than German stoneware. Reduction from firing often leaves the interior surfaces with a red or salmon tint but this is not an applied surface. Tavern wares – storage jugs and bottles, tankards, and mugs are the most common forms. Tankards and mugs are often cordoned above the base. Government capacity stamps are impressed on many pieces. Produced in Fulham, Southwark, and Bristol. DAACS Manufacturing Date Range: 1671-present.

Ware:	"British Brown/Fulham Type"
Material:	"Stoneware"
Manu Tech:	"Wheel Thrown"
Vessel Category:	"Hollow"
Ext/Int Surface:	"Salt Glaze," or as appropriate.
Ext/Int Surface Color:	Record using the Detailed Color Groups section of the DAACS Color Book.

Additional Cataloging Notes:

Do not catalog the dipped iron oxide into the Decoration table. This technique is implied with the ware type "British Brown/Fulham Type." If present, cordoning is considered decoration and should be cataloged into the Decoration table, with the Stylistic Element entered as "Cordoned" and Decorative Technique listed as "Incised, lathe-engine turned."

7.4.6. FRECHEN BROWN

Frechen Brown is a German stoneware characterized by salt glazing applied over an iron oxide wash, producing a brown surface. The paste is dense and varies from creamy buff to pale gray. Vessels include jugs, bottles, tankards, chamber pots, storage containers and "Bellarmine Bottles" (English terminology) or "Bartmann Krug" (German terminology) jugs decorated with sprig molding (often anthropomorphic faces and medallions). When compared with British stoneware, the paste of Frechen is denser with fewer visible inclusions, and vessels are overall thinner walled. German stoneware is common on 17th century American colonial sites but is encountered less frequently in 18th century contexts as the market gradually came to be dominated by British-produced stonewares. DAACS Manufacturing Date Range: 1600-1800.

Ware:	"Frechen Stoneware"
Material:	"Stoneware"
Manu Tech:	"Wheel Thrown"
Vessel Category:	"Hollow"
Ext/Int Surface:	"Salt Glaze"

Ext/Int Surface Color:	Record using the Detailed Color Groups section of DAACS Color Book.

7.4.7. German Stoneware

The term "German Stoneware" is used in DAACS to capture ceramic sherds that have attributes consistent with German Stoneware, but which cannot be identified as a specific type (e.g., Westerwald/Rhenish, Frechen). Ware descriptions for specific German stonewares can be found below.

Ware:	"German Stoneware"
Material:	"Stoneware"
Manu Tech:	"Wheel Thrown"
Vessel Category:	"Hollow"
Ext/Int Surface:	"Salt Glaze"
Ext/Int Surface Color:	Record using Detailed Color Groups section of the DAACS Color Book.

7.4.8. Hessian Refractory

Hessian Refractory is a specialized German medieval to post-medieval ware type used to produce crucibles for high-temperature processing of metals and glass. Highly fired, vessels are unglazed and have abundant quartz inclusions. The forms are typically conical with a flat base. In American contexts, they are found only in the early seventeenth century.

Ware:	"Hessian Refractory"
Material:	"Stoneware"
Manu Tech:	"Wheel Thrown"
Vessel Category:	"Hollow"
Ext/Int Surface:	"Unglazed/Bisque"
Ext/Int Surface Color:	Record using Detailed Color Groups section of the DAACS Color Book.

7.4.9. Jasper Ware Type

Japerware Type is a dry-bodied, refined stoneware. The paste is dyed a pastel color such as pale blue, olive green, or pink, and forms are decorated with sprig molding (often white-sprigged Classical figures, medallions, etc.). Most often seen in trinket or cosmetic boxes, wall plaques, and vases, though some tablewares were also produced. Although generally unglazed/bisque, a thin, clear lead glaze is sometimes applied to the surface. DAACS Manufacturing Date Range: 1775-present.

Ware:	"Jasperware Type"
Material:	"Stoneware"
Manu Tech:	"Press Molded"

Ext/Int Surface:	Usually “Unglazed/Bisque,” occasionally “Lead Glaze.”
Ext/Int Surface Color:	If slipped, record “Body Color Obscured by Decoration.” Otherwise, record using Detailed Color Groups section of the DAACS Color Book.

7.4.10. Nottingham-Type

Nottingham is an English brown stoneware characterized by an even, lustrous or metallic, brown-slipped exterior. A thin white layer that can be seen only in cross-section lies between the brown exterior and the tan, compact clay body. Seen in finely-potted tavern vessels such as mugs, tankards, pitchers, as well as bowls, coffee and tea pots. Bands of rustication (tiny fragments of clay applied to exterior surfaces, resulting in an appearance not unlike grated coconut) are a common decorative technique. The ware is salt glazed, though the characteristic pitted effect is not always evident. DAACS Manufacturing Date Range: 1683-1810.

Ware:	“Nottingham-Type”
Material:	“Stoneware”
Manu Tech:	“Wheel Thrown”
Vessel Category:	“Hollow”
Ext/Int Surface:	“Salt Glaze”
Ext/Int Surface Color:	Record using Detailed Color Groups section of the DAACS Color Book.

Additional Cataloging Notes:

Do not include the brown-slipped exterior surface or the white layer in the Decoration table, as this is implied with the ware type “Nottingham-Type.”

Rustication should be cataloged in the Decoration Table as follows:

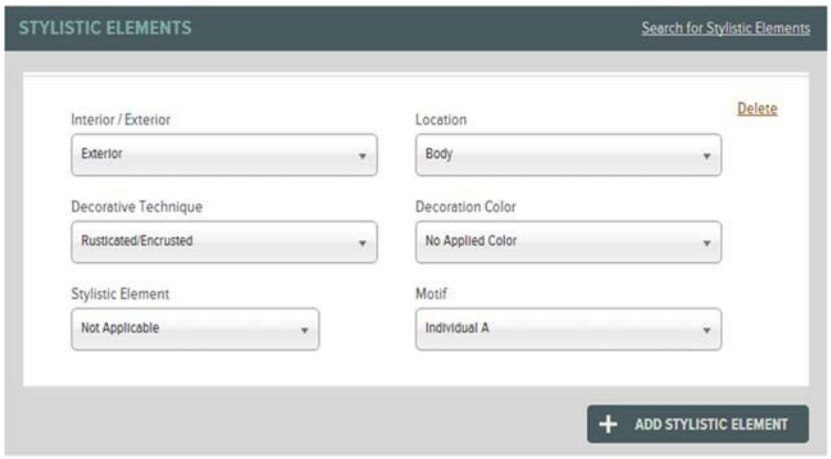

Figure 8. Stylistic element entry for a sherd with rustication.

7.4.11. Rosso Antico

"Rosso Antico" was Wedgwood's name for a dry-bodied (unglazed), refined stoneware with a very dense, red paste. Vessels are thinly potted and sprig molding and engine-turned decoration are common. Tea and coffee services. It was produced by a number of Staffordshire potters and is sometimes referred to as "Eler's Ware," or simply "Dry-Bodied Red Stoneware." DAACS Manufacturing Date Range: 1700-1772.

Ware:	"Rosso Antico"
Material:	"Stoneware"
Manu Tech:	"Press Molded" or "Slip Cast"
Vessel Category:	"Hollow"
Ext/Int Surface:	Usually "Unglazed/Bisque." May have "Lead Glaze" interior.
Ext/Int Surface Color:	Record using DAACS Detailed Color Groups section of DAACS Color Book.

7.4.12. Shaw Stoneware

Shaw Stoneware is a variety of refined stoneware patented by Ralph Shaw in 1733 and produced by him and other Staffordshire potters until the mid-18th century. This ware has a brown to black body and was salt glazed. The exterior is coated with a brown slip, over which white sprig molding and fine slip bands were applied. A white slip was applied to interior surfaces. Common forms include pitchers, jugs, and tankards. DAACS Manufacturing Date Range: 1733-1750.

Ware:	"Shaw Stoneware"
Material:	"Stoneware"
Manu Tech:	"Press Molded" or "Wheel Thrown"
Ext/Int Surface:	"Salt Glaze"
Ext/Int Surface Color:	Record using the Detailed Surface Color Groups section of the DAACS Color Book.

7.4.13. Slip Dip Stoneware

Slip Dip is an English refined stoneware, which is sometimes referred to as "Dipped/Slipped White Salt Glaze." The body is gray to tan in color and is dipped in a white slip, or engobe. Hollowware rims, spouts, and the tops of handles are often covered with brown oxide slip. The pitting associated with salt-glazing is not always evident here. Often seen in rather thick- bodied tavern wares. Although some researchers classify Slip Dip as a form of White Salt Glaze stoneware, DAACS considers "Slip Dip" a unique ware type. As compared with White Salt Glaze stoneware, the body of Slip Dip wares is somewhat less refined, characterized by a darker, greyish-buff or tan colored paste with larger inclusions that are more clearly visible in cross section. The application of the characteristic white engobe functions to obscure the off-white color of the paste, giving the appearance of a purely white-bodied ware. DAACS Manufacturing Date Range: 1715-1775.

Ware:	"Slip Dip"
Material:	"Stoneware"
Manu Tech:	"Wheel Thrown"
Ext/Int Surface:	"Salt Glaze"
Ext/Int Surface Color:	Record using the Refined Ceramic Surface Colors section of the DAACS Color Book.

7.4.14. Staffordshire Brown

Staffordshire Brown is virtually identical to Nottingham-type stoneware except for the absence of an underlying white slip. The clay body is tan to medium gray in color. Forms are the same as in Nottingham. DAACS Manufacturing Date Range: 1700-1800.

Ware:	"Staffordshire Brown Stoneware"
Material:	"Stoneware"
Manu Tech:	"Wheel Thrown"
Vessel Category:	"Hollow"
Ext/Int Surface:	"Salt Glaze"
Ext/Int Surface Color:	Record using Detailed Color Groups section of the DAACS Color Book.

Cataloging Note: There is no need to include the brown-slipped exterior surface in the Decoration table, as this is implied with the ware type "Staffordshire Brown Stoneware."

7.4.15. Turner's Type

Turner's Type is a refined stoneware produced in Britain. Exterior surfaces are buff or off-white in color and have a matte finish; interiors appear creamy under a glossy glaze. Vessels are press molded, often with engine-turning and sprig molded decoration. Bases and rims may be overglaze painted with contrasting, dark enamel color. In color and texture, body is similar to porcelain and may appear slightly translucent. Pieces were

often originally fitted with silver rims and lids. Most common forms are ewers and mugs. DAACS Manufacturing Date Range: 1785-1825.

Ware:	"Turner Type"
Material:	"Stoneware"
Manu Tech:	"Press Molded"
Vessel Category:	"Hollow"
Ext/Int Surface:	Exterior is "Unglazed/Bisque." If the interior has a glossy surface, catalog this as "Lead Glaze."
Ext/Int Surface Color:	Record using the Refined Ceramic Surface Colors section of the DAACS Color Book.

7.4.16. Westerwald/Rhenish

Westerwald/Rhenish is a salt-glazed stoneware produced in Western Germany along the Rhine River. It is characterized by a very dense clay body that is light to medium gray in color. Vessels are decorated with incised, sprig molded, and stamped motifs. Floral elements, checks, and abstract designs are common, usually highlighted in a rich cobalt blue color. Bands of manganese (purple) decoration also occur, if less commonly. Tankards, jugs, and mugs are usually cordoned above the base and below the rim. Most often seen in tankards, mugs, chamber pots, and serving jugs with cylindrical necks. Manganese decoration dates to c.1650-1725. DAACS Manufacturing Date Range: 1600-1775.

Ware:	"Westerwald/Rhenish"
Material:	"Stoneware"
Manu Tech:	"Wheel Thrown"
Vessel Category:	"Hollow"
Ext/Int Surface:	"Salt Glaze"
Ext/Int Surface Color:	Record using Detailed Color Groups section of the DAACS Color Book.

Cataloging Note: "Chatter" marks (sharp, narrow, slightly raised parallel lines) from the potter's tool are often evident on exterior surfaces of bulbous-bodied chamber pots and other vessels. These should not be recorded as decoration. Record in notes if marks are substantial.

7.4.17. White Salt Glaze Stoneware

White Salt-Glaze Stoneware is an English refined stoneware characterized by a nearly white, dense clay body. The high density of the paste and white body color were achieved through the use of white-firing ball clay that was infused with calcined flint. Salt glazing produces a finely pitted surface, the "orange peel" texture of which is often less pronounced than that found on other salt-glazed wares. White salt-glazed stoneware could be finely potted and was manufactured in a variety of different forms, including tea

wares, table and tavern wares, and utilitarian forms such as chamber pots. Molded vessel rims, including a distinctive repertoire of plate rims, are very common as are sprigged decorations. Overglazed polychrome enamel colors are also seen. DAACS Manufacturing Date Range: 1720-1805.

Ware:	"White Salt Glaze"
Material:	"Stoneware"
Manu Tech:	"Press Molded," "Wheel Thrown," or "Slip Cast."
Exterior Surface:	"Salt Glaze"
Ext/Int Surface Color:	Record using the Refined Ceramic Surface Color Groups in the DAACS Color Book.

Additional Cataloging Protocols:

The following instructions describe how to record specific decorative techniques that occur on White Salt Glazed Stoneware:

- *Scratch Blue and Scratch Brown:* White salt-glazed stoneware with incised designs, usually floral, filled with cobalt or iron oxide slip; in "debased" versions the potter did not completely wipe the excess slip from the surrounding surfaces. Seen on tavern wares and chamber pots. Date Ranges: Scratch Brown, 1720-1730; Scratch Blue, post 1750.

Genre:	"Scratch Blue" or "Scratch Brown," as appropriate.
Dec. Tech:	"Scratch/Fill" or "Scratch/Fill Debased"
Dec. Color:	Identify color of the painted decoration using the Detailed Color Section of the DAACS Color Book.*Littler's Blue*: White salt-glazed stoneware hollow forms with exteriors entirely covered by a solid blue slip. Occasionally decorated by gilded designs. The color is uniform, and surfaces are smooth; seen in tea wares. Record Genre (Decoration table) as "Littler's Blue." Date Range: 1750-1765.

- *Slip-casting:* The slip-casting process allowed for crisp, finely detailed molded patterns, which are visible in reverse on the interiors of these extremely thin-bodied vessels. Often tea wares and small serving vessels such as sauce boats. Molded patterns on slip-cast vessels should be recorded in the Stylistic Elements table with Decorative Technique entered as "Molded." There is no corresponding decorative Genre. Remember to record Manufacturing Technique on the Main Tab as "Slip Cast." Date Range: post 1745.

- *Transfer-printing:* Black transfer printed designs were used for only a brief period. Date Range: 1756- 1765. See Section 6.37.1 for how to catalog transfer printed decoration.

- *Molded Plate Rim Patterns:* Molded rim patterns include “Dot, Diaper, and Basketweave,” “Bead and Reel,” “Barley,” “Queen’s shape,” “Royal pattern,” and “Feather Edge.” Each of these patterns has a corresponding Genre. See the Genre Appendix for instructions on how to catalog molded rim patterns. Date Range: post 1740.
- *Enameled Colors:* Overglaze hand painted designs, usually floral motifs. Genre should be “Overglaze, handpainted.” Date Range: post 1746.