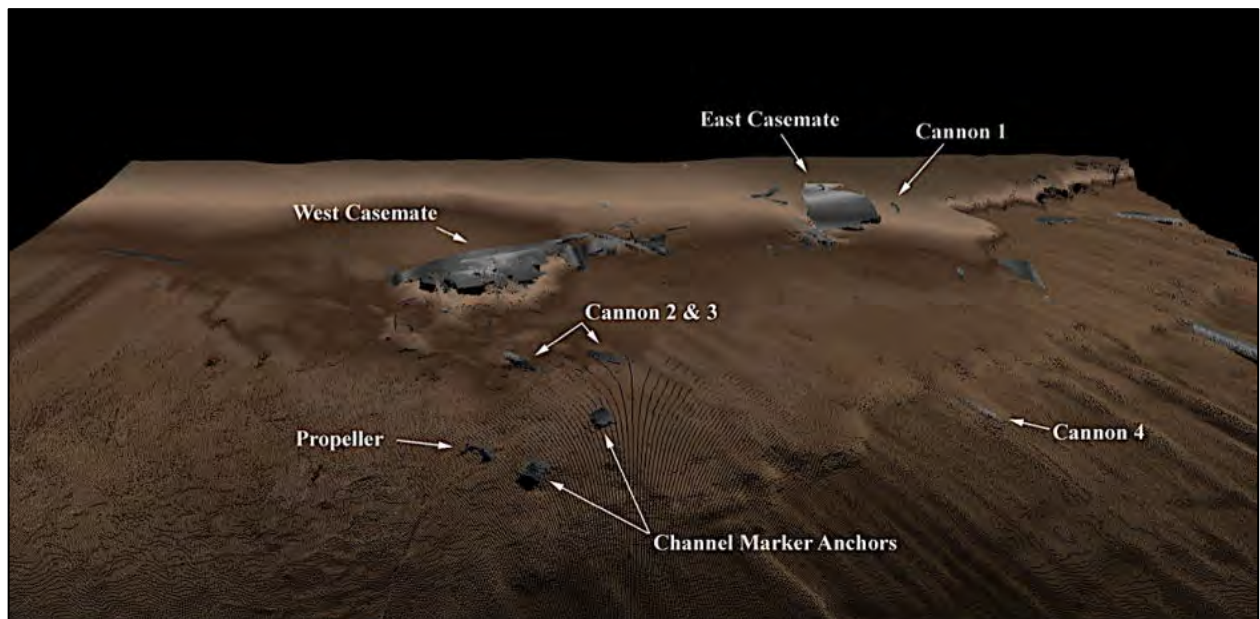




Contract No. W912HN-12-D-0016
Delivery Order No. 0028

U.S. Army Corps of Engineers
Savannah District

CSS *GEORGIA*
ARCHEOLOGICAL DATA RECOVERY AND MITIGATION
FOR THE SAVANNAH HARBOR EXPANSION PROJECT (SHEP),
CHATHAM COUNTY, GEORGIA AND JASPER COUNTY, SOUTH CAROLINA



PREPARED FOR:

**US Army Corps of Engineers
Savannah District**

UNDER CONTRACT TO:

**DCA/GEC A Joint Venture, LLC
Jacksonville Beach, Florida**

SUBMITTED BY:

**Panamerican Consultants, Inc.
Memphis, Tennessee**

**FINAL DRAFT REPORT
OCTOBER 2019**

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ABSTRACT

In accordance with 36 CFR Part 800, a Programmatic Agreement was signed by the U.S. Army Corps of Engineers–Savannah District, respective State Historic Preservation Offices, and the U.S. Navy, Naval History and Heritage Command to mitigate the impacts to the CSS *Georgia* shipwreck site 9CH1512 from Savannah Harbor Navigation Project activities. Subsequently, a systematic archaeological recovery project was developed and approved for implementation as mitigation of the adverse project effects. Commenced at the beginning of January to the end of October 2015, and then completed from mid-June to the end of July 2017, the complex and at times difficult project performed in an environmentally hostile site environment was based on a phased approach, the success of which was a result of the efforts of numerous teams and phase-specific personnel. Performed under a U.S. Navy, Naval History and Heritage Command Permit, the archaeological investigation of the CSS *Georgia* and recovery of artifacts, ordnance, machinery, and vessel structure can only be described as a very successful undertaking with artifact recovery that was seen as literally amazing. Representing approximately 440 tons of material, 32,782 artifacts were recovered, 13,601 artifacts weighing 165 tons were shipped to the Conservation Research Laboratory at Texas A&M University for conservation, and 19,181 artifacts weighing 274 tons were reburied. The investigation and recovery of CSS *Georgia* generated extensive physical data concerning the design, construction, and steam machinery of the ironclad, and recovered artifacts in some instances represent the largest extant assemblages of specific types to date.

TABLE OF CONTENTS

ABSTRACT.....	i
LIST OF FIGURES.....	viii
LIST OF TABLES.....	xxix
I. INTRODUCTION.....	1
II. HISTORIC BACKGROUND.....	5
HISTORIC CONTEXT.....	5
<i>Construction</i>	5
<i>Description</i>	5
<i>Armor</i>	9
<i>Ordnance</i>	10
<i>Propulsion System</i>	10
<i>Sinking and Salvage</i>	10
III. PREVIOUS INVESTIGATIONS.....	19
IV. RESEARCH DESIGN METHODOLOGY.....	39
RESEARCH ISSUES.....	40
<i>Historical Research</i>	41
<i>Archaeological Research</i>	41
Vessel Design and Construction.....	41
Machinery and Performance.....	41
<i>National Register of Historic Places Status</i>	42
PROPOSED ARCHAEOLOGICAL METHODOLOGY.....	42
I. <i>Archeological Data Recovery Phase</i>	44
Objective 1—Moorings Deployment.....	44
Objective 2—Baseline/Navigation Web Restoration.....	44
Objective 3—Large Artifact/Vessel Component Location and Identification.....	46
Objective 4—Diver Remote Sensing, Artifact Mapping, and Small Artifact Recovery.....	47
Objective 5—In Situ Casemate Documentation.....	48
Southeast Casemate.....	48
East Casemate.....	48
West Casemate.....	48
Objective 6—Site Excavations.....	49
II. <i>Large Artifact Recovery Phase</i>	50
Objective 1—Engineering Coordination.....	50
Objective 2—Ordnance Recovery.....	50
Ordnance Inerting and Transportation.....	50
Objective 3—Large Artifact Recovery.....	51
Archaeological Clearance.....	52

Objective 4—Southeast Casemate Section Recovery	52
Objective 5—East Casemate Section Recovery	52
Objective 6—West Casemate Section Recovery	53
Archaeological Clearance.....	54
Objective 7—Excavations Post Casemate Recovery.....	55
<i>III. Mechanized Recovery Phase.....</i>	<i>55</i>
Objective 1—Grapple Recovery.....	56
Objective 2—Magnetic Recovery	56
Objective 3—Clamshell Recovery	56
<i>IV. Final Archaeological Clearance Phase</i>	<i>57</i>
Objective 1—Remote Sensing Survey	57
Objective 2—Archaeological Diver Clearance	57
<i>V. Redeposition of Selected Components/Artifacts Phase</i>	<i>57</i>
PROPOSED CONSERVATION METHODOLOGY	59
<i>Artifact Field Stabilization, Accessioning, Storage, and Shipment</i>	<i>59</i>
<i>Ordnance—Proposed Processing.....</i>	<i>63</i>
<i>Artifact Shipment To the Conservation Research Laboratory, Texas A&M University, College Station, Texas</i>	<i>63</i>
<i>Artifact Conservation.....</i>	<i>64</i>
The Conservation Research Laboratory at Texas A&M University.....	64
Artifact Conservation.....	65
<i>Curation of artifacts and records.....</i>	<i>66</i>
V. SITE FORMATION	69
VI. INVESTIGATION RESULTS	83
PROJECT PERSONNEL.....	83
2015 Operations.....	83
2017 Operations.....	84
PHASE I: ARCHEOLOGICAL DATA RECOVERY	84
Objective 2—Establish Moorings, Baseline, and Primary On-Site Datums.....	84
Objective 3—Large Artifact/Vessel Component Location and Identification	92
Objective 4—Diver Remote Sensing, Artifact Mapping, and Small Artifact Recovery	92
Objective 5—In Situ Casemate Documentation.....	102
East Casemate	102
West Casemate.....	102
South Casemate.....	103
Objective 6—Site Excavations	108
PHASE II: LARGE ARTIFACT RECOVERY PHASE	109
Objective 1—Engineering Coordination	109
Objective 2—Ordnance Recovery	114
Ordnance Inerting and Transportation	121
Objective 3—Large Artifact Recovery	125
Objectives 4, 5, and 6—South, East, and West Casemate Section Recovery.....	131
South Casemate Section Recovery	131
East Casemate Section Recovery.....	138
West Casemate Section Recovery	147
Archaeological Clearance	150

<i>Objective 7—Excavations Post-Casemate Recovery</i>	150
2017 East and West Casemate Recovery	151
East Casemate Section Recovery June 18 to June 21	153
West Casemate Section Recovery June 22 to July 2	157
PHASE III: MECHANIZED SITE RECOVERY PHASE	164
<i>Objectives 1 and 3—Grapple Railroad Iron Recovery and Clamshell Recovery</i>	164
ARTIFACT RECOVERY AND ANALYSIS	177
<i>Clothing Group</i>	177
Belt Buckle and Sash Medallion	177
Belt Buckle	177
Eagle Breast Plate	179
Buttons	183
Methodology	183
Civil War Buttons	184
Revolutionary War Buttons	189
Unidentified Buttons with Markings	190
Unmarked Buttons	190
Summary	194
Footwear	194
Jewelry	194
<i>Glass</i>	198
Intact Bottles and Makers' Marks	203
Potential Intrusion and Site Environment	206
<i>Historic Ceramics</i>	208
Ceramic Forms	213
Decoration	214
Maker's Marks	220
Summary	223
<i>Pewter Artifacts</i>	224
Methodology	224
Tableware	224
Friction Primers	233
Medical Equipment	234
Unidentified Artifacts	235
<i>Miscellaneous Items</i>	236
<i>Prehistoric Ceramics and Projectile Points/Knives</i>	242
<i>Tools</i>	251
Catalogue	251
Augers	253
Artifact 1850.30	253
Artifact 2160.10	254
Axes	255
Artifact 1899.1	255
Artifact 2331.3	255
Artifact NP 117	255
Chisels	259
Artifact 1879.19	259
Artifact 2923.10	259
"Drill"/Star Chisel	259
Artifact 1861.17	259

Files	259
Artifact 2193.4	259
Artifact 2808.4	261
Hammers	262
Artifact 1899.2	262
Artifact 2165.8	262
Artifact 2927.11	264
Artifact 3058.1	264
Artifact 3158.5	265
“Pliers”	265
Scrapers/“Caulking Tools”	267
Artifact 1814.7	267
Artifact 1852.5	268
Artifact 1852.11	268
Artifact 1853.2	268
Artifact 1853.17	269
Artifact 1853.18	269
Artifact 1856.4	270
Artifact 1892.4	271
Artifact 2165.11	271
Artifact 2996.2	271
Wrenches	271
Artifact 1879.12	271
Artifact 1879.19	272
Artifact 1899.20	275
Artifact 1900.1	275
Artifact 3019.5	276
Artifact 3020.1	276
Artifact 1899.16	276
Artifact 1964.2	276
Wooden Tool Handles	276
Artifact 1299	278
Artifact 1926.4	278
Artifact 2182.1	279
Anvil	279
GIS Analysis	279
Summary	281
<i>Brick</i>	281
Brickmaking and the Civil War	281
CSS Georgia Brick Recovery	282
Firebrick	286
Brooklyn Fire-Brick Works	287
The Southern Porcelain Manufacturing Company	288
Partial/Unidentified Makers	289
Miscellaneous Brick	290
Summary	293
<i>Cannon</i>	294
The Dahlgren Cannon	297
John A. Dahlgren	297
Dahlgren Cannon Design	299
Dahlgren IX-Inch Cannon, Dimensions	301
The Brooke Cannon	301
John M. Brooke	301

Brooke Cannon Design	302
6.4-inch Brooke Rifle Dimensions	304
The Tredegar Iron Works	305
The Noble Brothers Foundry	308
Recovered Cannon	309
6-Pounder Cannon—Cannon No. 1	309
IX-Inch Dahlgren—Cannon No. 2	312
IX-Inch Dahlgren—Cannon No. 5	316
6.4-inch Single Banded Brooke Rifle—Cannon No. 3	318
6.4-inch Single Banded Brooke Rifle—Cannon No. 4	321
<i>Gun Furniture</i>	323
Improving the Accuracy of Naval Guns	325
The Gunner's Quadrant	325
Adjusting for Difference in Thickness	325
Gunner's Level	327
Point-Blank Range	327
Calculating Distance	328
The Function of the Naval Gun Sights	329
The Advantages of Naval Gun Sights	332
The Advent of Nineteenth-Century Naval Gun Sights	332
Gun Sights Recovered from CSS Georgia	335
Matching Gun Sights and Guns	344
Method of Graduating Tangent Scales	347
Maker's Mark—The Daniel Edwards Foundry	348
Instantaneous Discharge: The Percussion Locks	349
Percussion Locks Recovered from CSS Georgia	350
Summary	355
Future Research	355
<i>Gun Carriage Components</i>	356
Pivot Carriages	357
Trucks	359
Compressors	364
Tackle	365
Cap Squares/Trunnion Caps	368
Pivot-Carriage Track	371
Wrenches	372
Gun Carriage Fasteners	373
Elevation Screws	374
Pivot Pins and Sockets	374
Marsilly Carriages	377
Roller Handspike	381
Six-pounder Carriage	381
<i>Discarded Military Munitions</i>	383
Brooke 6.4-inch Shells	391
Dahlgren IX-Inch Spherical Shell	399
6.4-Inch Tennessee (Mullane) Bolts	407
Grape Shot and Canister	411
6-Pounder Shot	415
Powder Tanks	422
<i>Small Arms</i>	426
Firearms	426

Bullets and Cartridges.....	432
.577 Caliber Enfield	432
Maynard.....	435
.44 Caliber Pistol Round	437
Ball Projectiles	437
Edged Weapons	439
Swords	439
Bayonets	442
Gun Flints	450
<i>Machinery, Hull, and Casemate: A Structural Analysis</i>	452
Propulsion Machinery.....	453
Hull Remains	481
<i>Casemate</i>	483
<i>Reconstruction</i>	493
Primary Propulsion Machinery.....	496
VII. ARCHAEOLOGICAL CLEARANCE AND REDEPOSITION	501
PHASE IV: FINAL ARCHAEOLOGICAL CLEARANCE.....	501
<i>Objective 1—Remote Sensing Survey 2015</i>	501
<i>Objective 2—Archaeological Diver Clearance</i>	505
PHASE V: 2015 AND 2017 REDEPOSITION AND BURIAL OF SELECTED ARTIFACTS AND VESSEL COMPONENTS	506
VIII. CONCLUSIONS	517
 APPENDIX A: PERMITS	
 APPENDIX B: PROJECT PERSONNEL	
 APPENDIX C: ARTIFACT DATABASE [APPENDIX AFFIXED TO BACK COVER]	

LIST OF FIGURES

Figure 1-01. Location of the CSS <i>Georgia</i> wreck site	1
Figure 1-02. Proposed passing lane channel toe in relationship to the CSS <i>Georgia</i> wreck site	2
Figure 2-01. 1862 illustration of the CSS <i>Georgia</i>	7
Figure 2-02. 1862 illustration of CSS <i>Georgia</i>	7
Figure 2-03. One of four contemporary engravings of the CSS <i>Georgia</i> presented in Northern periodicals	7
Figure 2-04. 1863 Lithograph of CSS <i>Georgia</i>	8
Figure 2-05. Photograph of a framed glass photograph originally believed to be the CSS <i>Georgia</i> , but now known to be a hoax perpetrated by John Potter in 1986	8
Figure 2-06. Robert Holcombe’s reconstruction of the CSS <i>Georgia</i>	9
Figure 2-07. Map showing the location of the CSS <i>Georgia</i> wreck opposite Fort Jackson	12
Figure 3-01. Excerpt from the 1986 site plan produced by the USACE–Savannah District during diving operations at the CSS <i>Georgia</i> wreck site	22
Figure 3-02. Sidescan sonar image from the 2003 investigation	24
Figure 3-03. AutoCAD site plan	24
Figure 3-04. Casemate armor configuration	25
Figure 3-05. Casemate wall and armor construction configuration	25
Figure 3-06. AutoCAD line drawing of propeller and shaft	26
Figure 3-07. Reconstruction of the CSS <i>Georgia</i> engines	26
Figure 3-08. 2D DTM site map produced as georeferenced TIFFs	28
Figure 3-09. Labeled screen grab of the 3D WreckSight program	28
Figure 3-10. Site plan showing datum and baselines repositioned, the East Casemate where the original recovery candidates were located, as well as the subsequent Recovery Section adjacent the downriver side of the West Casemate	30
Figure 3-11. 2013 Multibeam image showing East Casemate with displaced sections	31
Figure 3-12. Subsequent Recovery Section located adjacent Datum 3 and the Baseline	32
Figure 3-13. Navigation computer screenshot showing USBL system remote tracking interfaced on the georeferenced multibeam site map	33
Figure 3-14. Barge on site with lift crane	33
Figure 3-15. Site base map showing barge position to the north of the site	34
Figure 3-16. Iron I-beam cradle being lowered down to the recovery section	35
Figure 3-17. Recovery Section with the cradle removed	36
Figure 3-18. Wood backing that detached from the Recovery Section	36
Figure 3-19. Artifact recovery from excavation beneath Recovery Section	37
Figure 3-20. Initial profile cut of the small section of rail required for subsequent testing	38
Figure 4-01. Archaeological phases	43
Figure 4-02. 2013 Georeferenced Multibeam Site Map. Shown are Casemates, Cannon, Propeller, Boilers (?), Mooring Buoy locations, Datum, and Transit Lines	45
Figure 4-03. Circled in red, identification of large objects downstream are the focus of Objective 3	46
Figure 4-04. Location of the four proposed test excavations	49

Figure 4-05. Sediment Basin selected for reburial location	58
Figure 4-06. Survey Shack work area	60
Figure 4-07. Warehouse employed for wet artifact storage	60
Figure 4-08. Artifact cataloging station in the Survey Shack	61
Figure 4-09. USACE Engineer Depot dock	62
Figure 4-10. Roll-off containers full of artifacts being offloaded from the materials barge onto a flatbed truck at the USACE Depot dock for transport to CRL	64
Figure 5-01. Excerpt from 1867 U.S. Coast Survey map of the Savannah River showing wreck of the “Ram Georgia” opposite Fort Jackson	69
Figure 5-02. Excerpt from the 1871 Gillmore and Ludlow Map showing the shoaling on the northern side of the wreck site	70
Figure 5-03. Excerpt from the 1872 U.S. Coast Survey map of the Savannah River	71
Figure 5-04. Excerpt from the 1891 survey map of the Savannah River by Lt. O.M. Carter	72
Figure 5-05. Excerpt from the 1923 U.S. Coast and Geodetic Survey map of the Savannah River	73
Figure 5-06. Excerpt from the 1942 U.S. Army Corps of Engineers–Savannah District <i>Annual Survey – 1942</i> , <i>Savannah Harbor, Georgia</i> showing Barnwell Island as a complete landmass with South Carolina.....	74
Figure 5-07. 2002 Reson Bathymetric image that graphically illustrates the site and its surrounding environment..	75
Figure 5-08. 2003 Reson Bathymetric oblique image of the site looking down river	76
Figure 5-09. 2003 Reson Bathymetric image of the East Casemate section showing slope of site bottom and proximity of dredge cuts	76
Figure 5-10. Excerpt from the 1979 acoustic sidescan image showing casemate sections with little if any surrounding sediment.....	77
Figure 5-11. Acoustic image of the CSS <i>Georgia</i> wreck site looking downriver.....	78
Figure 5-12. Acoustic image of the CSS <i>Georgia</i> wreck site looking downriver showing depth or height of the dredge cuts	78
Figure 5-13. Acoustic image of the CSS <i>Georgia</i> wreck site looking down on West Casemate	79
Figure 5-14. 1986 acoustic image of the CSS <i>Georgia</i> wreck site depicting the West and East Casemate sections .	79
Figure 5-15. 2003 acoustic image of the West and East Casemate sections	80
Figure 5-16. 1986 acoustic image excerpt showing the East Casemate section and missing or damaged areas	81
Figure 5-17. 2003 acoustic image of the East Casemate section	81
Figure 5-18. 1986 acoustic image excerpt showing the West Casemate section and missing or damaged areas	82
Figure 5-19. 2003 acoustic image of the West Casemate section	82
Figure 6-01. <i>Offshore Retriever</i> moored at both bow and stern waiting for tide to turn to begin diving operations. USBL system pole is being fastened vertically aft of black bumper.	85
Figure 6-02. Archaeologist preparing to enter the water with Surface-Supplied Air diving equipment. Note black USBL system transponder attached to the bailout SCUBA tank. Fort Jackson in background left.	86
Figure 6-03. Dive station looking aft towards dive tender.....	87
Figure 6-04. Navigation computer operator ensured input of USBL system data, and output onto the 2013 Multibeam Site Map monitor observed by the topside dive supervisor.	88
Figure 6-05. Yellow Sonardyne Scout Pro USBL system vessel-mounted receiver lashed amidships during transit to and from the site.....	88
Figure 6-06. Navigation computer screenshot showing USBL system remote tracking interfaced on the geo- referenced 2013 Multibeam Site Map.....	89

Figure 6-07. Site plan showing mooring buoy locations and transit lines from each to the West and East Casemate datums, respectively; baseline between East and West Casemate datums; and transit lines to Cannon 1, 2, and 3 and the propeller.....	90
Figure 6-08. Huge container ships transited almost daily by the site, as the site sits on and in the northern side of the channel.	91
Figure 6-09. This is a photo of a close call where the container ship just barely missed the Red Wreck Buoy and only then with the help from a tug.	91
Figure 6-10. Identification of large objects downstream (circled in red) were the focus of Objective 3.....	92
Figure 6-11. Initial site grid. Essentially, a 10-x-10-foot grid was overlaid in GIS onto the electronic 2013 Multibeam Site Map.....	93
Figure 6-12. Artifact Retrieval Basket being brought to the surface, a very simple yet productive system.	94
Figure 6-13. Completed Unit 8-D Artifact Recovery form shows the basket in the center next to Cannon 2 along with the 8-foot “Condenser” on the opposite side.	95
Figure 6-14. Completed Unit 14-A Artifact Recovery form shows a dozen UXO, both ball and shell.	96
Figure 6-15. Maritime archaeologist James Duff with recovered bronze Brooke shell sabot and a bronze wing nut recovered in Unit 10-D.	97
Figure 6-16. Various artifacts recovered during mapping of a unit. Shown are leg irons, a bronze firing hammer for one of the large guns, and a bronze lid (possibly for a powder can) all recovered in Unit 8-C.	98
Figure 6-17. Floor jack-like hand pike for a Marsilly gun carriage recovered in Unit 13-B.	98
Figure 6-18. 2013 Multibeam Site Map with the 198 unit maps superimposed. Locations of completed Unit 8-D (left) and 14-A (right) Artifact Recovery forms are shown (see Figures 6-13 and 6-14 above).	100
Figure 6-19. In total, 72 DMM were located and mapped during Objective 4. These included Brooke shells, Dahlgren balls, and non-explosive solid Bolts.....	101
Figure 6-20. East Casemate data point stations. Note the triangular section just to the north of the main section, as well as the small section to the south. Downriver is to the right.	105
Figure 6-21. West Casemate data point stations. Note the numerous sections of loose rail on top of the casemate. Upriver is to the right.	106
Figure 6-22. South Casemate data point stations. Hawse pipe can be seen under the number 7 station. North is upstream and downriver is to the right.....	107
Figure 6-23. Location of the four proposed test excavations (red squares).	108
Figure 6-24. Barges on-site. The smaller Command Center/Dive Station barge with 75-ton crane at left, with larger artifact storage barge with 100-ton crane at right. <i>Bully Boy</i> is tied to end of the smaller barge.	110
Figure 6-25. The smaller barge with 75-ton crane	111
Figure 6-26. The Command Center. Archaeologist William Wilson and Co-Principal Investigator Dr. Gordon Watts are in center at navigation computer for the USBL diver tracking system	111
Figure 6-27. The Dive Station. “Green Diver” in foreground is equipped with USBL. “Yellow” Safety Standby Diver is at left. “Red” Diver in background paired with Green Diver for dive.	112
Figure 6-28. CODA sonar head being readied next to the Dive Station. By turning the pole, the sonar head was easily directed to anywhere coverage was required.	112
Figure 6-29. Screen shot of the CODA image. Shown are two air plumes marking the location of the divers, the one at the right is at the DMM.....	113
Figure 6-30. The Dive Station with USBL and CODA tracking monitors at the Communication Station (left monitor is for USBL tracking; right monitor is for CODA tracking).....	113
Figure 6-31. Ordnance basket with enclosed DMM buckets as well as the USBL transponder employed for diver location of the basket.	114

Figure 6-32. DMM-filled basket and lifting rig.	115
Figure 6-33. Buoy field showing locations of DMM-filled baskets awaiting transfer to the Inerting Site.....	115
Figure 6-34. During Objective 2 134 DMM were recovered. These included 83 Brooke shells, 45 Dahlgren balls, and six non-explosive solid Bolts.	116
Figure 6-35. Location of the five cannon. The fifth cannon, a Dahlgren, was recovered during the Mechanized Recovery Phase.	118
Figure 6-36. Method of rigging cannon for lifting.....	119
Figure 6-37. Cannon 1, a 6-pounder, is the smallest gun on-site and was located adjacent to and just downriver from the East Casemate.	119
Figure 6-38. Cannon 3, a banded 32-pounder being examined by MDSU-2 divers who helped rig the gun for lifting. Note the 3-inch diameter hole through cascabel.	120
Figure 6-39. Based on its identifying marks, Cannon 2 is the No. 1 Port gun.	120
Figure 6-40. Cannon 4, a banded 32-pounder, with its broken muzzle clearly visible.....	121
Figure 6-41. On the USACE Engineer Depot dock, Cannon 3 and 4 being readied for transshipment to the CRL facility at Texas A&M University.	122
Figure 6-42. A basket of 6.4-inch Brooke shells being unloaded at the Inerting Site. Note their projecting fuze (courtesy of the U.S. Army Corps of Engineers–Savannah District).	122
Figure 6-43. Blast window looking towards sandbagged shell drilling “room” (courtesy of the U.S. Army Corps of Engineers Savannah District).	123
Figure 6-44. Archer fuze that has just been removed from a 6.4-inch Brooke shell (courtesy of the U.S. Army Corps of Engineers–Savannah District).	123
Figure 6-45. Inerted Brooke shell with hole drilled for removal of all contents. Note the fuze has not yet been removed (courtesy of the U.S. Army Corps of Engineers–Savannah District).	124
Figure 6-46. Inerted Dahlgren shell with hole drilled for removal of all contents (courtesy of the U.S. Army Corps of Engineers–Savannah District).	124
Figure 6-47. Triple-bladed propeller being lifted onto the barge.	125
Figure 6-48. 2003 schematic of propeller showing the single strut (as presented in Watts and James 2007).	125
Figure 6-49. Propeller blade with strut at left.....	126
Figure 6-50. First identified as a condenser, it is possible that the riveted cylinder represents a mud drum.....	126
Figure 6-51. A flywheel possibly from a nineteenth-century diver’s air pump at left, and a possible hawsehole plate.	127
Figure 6-52. Map of Large Artifact Recovery by MDSU-2.....	128
Figure 6-53. Steam fitting recovered during Large Artifact Recovery.	129
Figure 6-54. Steam fitting recovered during Large Artifact Recovery.	129
Figure 6-55. Brass steam pump recovered during Large Artifact Recovery.....	130
Figure 6-56. Iron steam pipe recovered during Large Artifact Recovery.....	130
Figure 6-57. 2003 acoustic image of South Casemate showing rows of rail fully exposed and aligned side-to-side, lying with the no longer extant wood backing on top.....	132
Figure 6-58. In the 2013 Multibeam Sonar Survey image of the South Casemate, an invasive mussel species covers the casemate muting the visible rails.....	132
Figure 6-59. Seven-ton hammer blade affectionately known as “the Guillotine” showing sliding blade in its track. Note USBL transponder on mid-right side.....	133
Figure 6-60. Rail separator drop locations on the South Casemate as recorded with the USBL system (red circles). Note barge position in relation to casemates. East Casemate is off its upriver end.....	134
Figure 6-61. The second grapple test recovery (SEC-2) on the South Casemate.	135

Figure 6-62. Bundling rails on the South Casemate. The angle of the side can be seen on the near end.	136
Figure 6-63. Angled side on the South Casemate.	136
Figure 6-64. One of the two pieces of partially intact wood from SEC-2. The timber, whose straight bottom edge is clearly visible and is only extant because of the iron concretion, shows the rail concretion impression and indicates the rails were at an approximately 30-degree angle when built.	137
Figure 6-65. South Casemate bundles incorporated in a single roll-off container for transportation to CRL.	137
Figure 6-66. 1980 acoustic image showing sections that would be displaced outlined in red.	138
Figure 6-67. 2013 Multibeam Sonar Survey (Dean et al. 2016) image with displaced sections outlined. Note large linear piling that would be lifted off the East Casemate sections and placed on bottom just upriver.	139
Figure 6-68. Site map of East Casemate sections showing sections recovered in 2015 and sequence. Section Nos. 4 and 5 were recovered after employment of the rail separator.	139
Figure 6-69. Northern, triangularly shaped, first section recovered (No. 1) being readied for shipment. Note the lack of wood backing on the inner face, as evidenced by the spikes that would have attached the wood being visible.	140
Figure 6-70. Intact sections, as well as sections purposely separated into manageable widths, were banded in order to keep them consolidated for transportation. The sections were separated rail by rail once at CRL, a process required for conservation.	141
Figure 6-71. The second section raised (No.2); approximately 2-x-8 feet.	141
Figure 6-72. The third section raised (No. 3).	142
Figure 6-73. CODA screenshot showing (small, left screen) rail separator being placed on East Casemate and (large, right screen) cut made on the left side of the casemate to section off the No. 5 piece.	142
Figure 6-74. Fourth section of East Casemate raised. Separated from the main section with the rail separator, note the descending rail angle.	143
Figure 6-75. The fifth section recovered, located on the southern edge of the main casemate section, was detached with the rail separator.	143
Figure 6-76. The sixth section recovered from the East Casemate.	144
Figure 6-77. The first attempt at raising the large, intact East Casemate section in 2015.	145
Figure 6-78. Rigging frame constructed that would hopefully allow for a successful second attempt at recovery of the casemate. This would not be the case.	145
Figure 6-79. Similar to the first lift attempt, after the casemate broke the surface, it was held stationary to enable engineers to check the rigging and general load for safety.	146
Figure 6-80. Acoustic image of the East Casemate on the riverbed immediately after the second failed attempt and de-rigging in 2015.	146
Figure 6-81. Sectioning locations on the West Casemate.	147
Figure 6-82. Recovered sections from the West Casemate.	148
Figure 6-83. Larger (No.1) section recovered from the West Casemate.	149
Figure 6-84. Smaller (No. 2) section adjacent to the right of the No. 1 section recovered from the West Casemate. Similar to No. 1 section, it has bent rail ends.	149
Figure 6-85. Small (No. 3) section recovered from the West Casemate. At first thought to be the bottom of a gunport because of its squared-off top, it would be found that there was a line of fasteners at 8 feet, resulting in many pieces having similar clean breaks at the this 8-foot mark.	150
Figure 6-86. The work platforms for the 2017 Operation recovery effort consisted of the Farrell 256 Crane and Dive Barge (right), the Witte 1403 Hopper Barge for casemate storage (center), and a smaller material spud barge for mechanized recovery and screening (right).	151
Figure 6-87. Iron I-beam frame for lifting casemate sections.	152

Figure 6-88. Airlift made of a 1-foot diameter 30-foot long iron pipe that was lowered into place by crane and then positioned by diver prior to beginning airlifting on both the East and West Casemates.	152
Figure 6-89. East Casemate breaking the surface during recovery. At this point it was found to weigh 23.5 tons (43.5 tons with the lift frame).	153
Figure 6-90. Cleaning of the mud and invasive mussels on top of the casemate.	154
Figure 6-91. Isometric 3-D image of a section of the mussel and mud covering the East Casemate	154
Figure 6-92. 3-D profile image of the mussel and mud covering the East Casemate showing coverage up to 1.5 feet. Note that both the mud and invasive mussels were not present on the casemate or the site in 2003. It is thought that the mussels contributed to the mud accumulation.	155
Figure 6-93. East Casemate after high-pressure washing on the Witte casemate barge, ready for recordation.	155
Figure 6-94. 3D isometric of the main section of the East Casemate. Note the bent rails and where they break at the line of fasteners.	156
Figure 6-95. Multibeam map of the West Casemate labeled with the majority of 2017 lifts (in white), several of which were very diagnostic.	158
Figure 6-96. West Casemate section WC-4. Its angled top edge represents the end of the angled casemate.	159
Figure 6-97. West Casemate section WC-4. Its angled top edge after high-pressure cleaning.	159
Figure 6-98. Lift WC-7. Originally one 4-foot wide piece, together they form a square, 27-inch wide, as-built cutout thought to represent a gun port. It will be found to be the only gunport on the entire length of the West Casemate.	160
Figure 6-99. 3D-model of lift WC-7 after high-pressure cleaning.	160
Figure 6-100. Drone shot of West Casemate lift just breaking the surface.	161
Figure 6-101. Drone shot of West Casemate placed next to the East Casemate on the Witte barge.	161
Figure 6-102. Drone shot of West Casemate prior to cleaning. Components of a gun carriage would be found under the mud in the left center atop the casemate.	162
Figure 6-103. 3D isometric of the main section of the West Casemate. Note the bent rails at top and middle section missing the top third of the 24-foot rail lengths. They have all broken away at a line of fasteners.	163
Figure 6-104. 14-ton, seven-finger grapple depositing initial test on deck. The sediment matrix was carefully hosed off the barge to the right and away from wreck site	165
Figure 6-105. Clamshell grab being brought on board. Notice the timber disallowing closure of the mouth, with a resultant loss of sediment.	165
Figure 6-106. Initial processing of a clamshell grab. Over-built, the screen was difficult to access, affected processing efficiency, and raised safety concerns.	166
Figure 6-107. With the large 6-x-6-inch top grate raised, personnel had to enter the screen to wash sediment through two horizontal grates.	166
Figure 6-108. Locations of initial grapple and clamshell excavations south of the West Casemate. Note the differing footprint sizes (10-foot grapple tests and 6-foot clamshell grabs).	167
Figure 6-109. Grapple test coverage for 2015 and 2017 combined. Each test was numbered consecutively and covered a 10-foot wide area.	168
Figure 6-110. Clamshell grab coverage or 2015 and 2017 combined. Each grab was numbered consecutively and covered a 6-foot square area.	169
Figure 6-111. 2015 Barge layout with crane in the center and four screening bays on either side.	170
Figure 6-112. Close up of screening bay holding just-deposited clamshell grab S-14.	171
Figure 6-113. Storyboard for clamshell grab S-	171
Figure 6-114. Two teams of eight archaeologists processed the filled bays.	172
Figure 6-115. After initial removal of the sediment matrix, the artifacts were sorted into artifact groups.	172

Figure 6-116. Roll-off reburial containers with tagged artifacts and groups segregated by sheets of plastic.....	173
Figure 6-117. Artifacts selected for conservation were placed into drums or buckets by group or class after initial recordation.	174
Figure 6-118. Example of small artifacts from an excavation being photographed	174
Figure 6-119. Recording rail segments that will be reburied.	175
Figure 6-120. Initial photograph of G-401 showing machinery, a Brooke shell, and a Bolt (scale is in feet).....	175
Figure 6-121. Field sketch of possible capstan base recovered in grapple test G-401	176
Figure 6-122. Artifact 1878.1: (front) Federal sword belt buckle showing eagle and wreath, design 619 (courtesy of CRL, Texas A&M University).....	178
Figure 6-123. Artifact 1878.1: (back) Federal belt buckle showing bent tongue (courtesy of CRL, Texas A&M University).	178
Figure 6-124. Example of the missing clasp (left) and how it would fit together (right; image courtesy of Harry Ridgeway, personal collection).....	179
Figure 6-125. Historic Civil War-era photograph showing the 13 th New York Cavalry wearing the type of Eagle Officers belt buckle recovered from the site (courtesy of Hanover Brass Foundry Reproduction Military Belt Plates 2019).....	179
Figure 6-126. Artifact 3284.7: (front) Federal eagle breastplate, regulation 1826 (courtesy of CRL, Texas A&M University).	180
Figure 6-127. Artifact 3284.7: (back) Federal eagle breastplate, regulation 1826 (courtesy of CRL, Texas A&M University). Note the two sets of holes where the original hooks would have been located.....	180
Figure 6-128. Examples of what the hooks on the back of an eagle breastplate would have looked like and how they were attached to the sash belt of the soldier's cartridge box (images courtesy of Union Drummer Boy 2019).....	181
Figure 6-129. Historic Civil War-era photograph showing the Federal eagle breastplate location attached to the sash belt of the Union soldier's cartridge box (image courtesy of Civil War Collector 2019).	182
Figure 6-130. Union general service buttons (courtesy of CRL, Texas A&M University).	185
Figure 6-131. XRF results of the front of CSSG 1879.9 (courtesy of Kelsey Rooney, Texas A&M University, 2016).	186
Figure 6-132. XRF results of the back of CSSG 1879.9 (courtesy of Kelsey Rooney, Texas A&M University, 2016).	186
Figure 6-133. Confederate Infantry buttons (courtesy of CRL, Texas A&M University).....	187
Figure 6-134. Georgia (top) and Louisiana (bottom) buttons bearing state seals (courtesy of CRL, Texas A&M University).	188
Figure 6-135. Revolutionary War buttons (courtesy of CRL, Texas A&M University).	189
Figure 6-136. Unidentified buttons with markings (courtesy of CRL, Texas A&M University).	191
Figure 6-137. Unidentified plain metal buttons (courtesy of CRL, Texas A&M University).	191
Figure 6-138. XRF Results of CSSG 2701.4 (courtesy of Kelsey Rooney, Texas A&M University, 2016).	192
Figure 6-139. Wood and composite buttons (courtesy of CRL, Texas A&M University).	193
Figure 6-140. XRF results of CSSG 2182.4 (courtesy of Christopher Dostal, Conservation Research Laboratory, Texas A&M University, 2017).	193
Figure 6-141. Map of Clothing Group artifacts showing a general distribution.	195
Figure 6-142. Side view of Artifact 1812.1, a mostly intact sole with a little side leather remaining.	196
Figure 6-143. Bottom view of Artifact 1812.1, a mostly intact sole with a little side leather remaining. Composition is clearly visible.	196
Figure 6-144. Top or interior view of the sole of Artifact 1819.3, the toe of which is very square.	197

Figure 6-145. Top or interior view of the sole of Artifact 2944.2, the toe of which is rounded.	197
Figure 6-146. Ornate piece of gold jewelry (stone missing), Artifact 2521.04, recovered from Unit 11-D.	198
Figure 6-147. Artifact 2436.2, the 2.5 inch diameter, bronze circular floral wreath buckle was recovered from Unit 14-B. Note the tang at right center on the back of the buckle used for fastening.	198
Figure 6-148. Recovery from G-133 that shows an assortment of artifact types including six glass fragments (right), a dozen small ceramic sherds (center), along with, metal, prehistoric ceramics, and a DMM fuze.	199
Figure 6-149. One of several whole bottles recovered during Mechanized Recovery.	199
Figure 6-150. Distribution map of glass showing an almost site-wide distribution. Compare this distribution to the historic ceramics (below).	200
Figure 6-151. Examples of assorted glass colors recovered from the wreck. Note the fragment stamped with “NAVY” in the bottom photo.	202
Figure 6-152. Artifact 5061, intact bottle, plain, recovered during Mechanized Recovery of Artifacts.	203
Figure 6-153. Artifact 2070.4, whole bottle embossed with “JOHN RYAN PORTER & ALE PHILADA XX 1859.”	204
Figure 6-154. Artifact 2070.4, from an angle showing “PHILADA XX 1859.”	204
Figure 6-155. Artifact 1806.1, “JAS RAY SAVANNAH GA” mineral soda bottle.	205
Figure 6-156. Artifact 2356.2, 2.5-x-1.5-inch fragment of a panel from a glass bottle embossed with “NAVY.” Not shown, Artifact 1814.2 is an almost identical fragment retaining only “NAVY” as well.	206
Figure 6-157. Recovered from the CSS <i>Cairo</i> and on display at the Vicksburg National Military Park, panel bottled embossed with “US NAVY” on one side panel and either PEPPER or MUSTARD on the.	207
Figure 6-158. Similar bottle originating from the USS <i>Monongahela</i> that grounded on St. Croix in 1867 during a hurricane (as presented at Peachridgeglass.com).	207
Figure 6-159. Opposite panels showing either “PEPPER” or “MUSTARD” (as presented at Antique-Bottles.net).	207
Figure 6-160. Examples of the types and numbers recovered during the Mechanized Site Recovery Phase.	209
Figure 6-161. From a whiteware saucer, this is one of the larger fragments recovered during the Mechanized Site Recovery Phase.	209
Figure 6-162. Distribution of historic ceramics.	210
Figure 6-163. Artifact 1812.03, a salt-glazed stoneware base with unglazed interior recovered from Unit 8-F.	212
Figure 6-164. Artifact 1863.01, a slip-glazed stoneware recovered from Unit 5-E.	212
Figure 6-165. Artifact 1876.01, a stoneware jug handle, neck, and rim showing Albany glaze on interior recovered from Unit 8-D.	213
Figure 6-166. Hand-painted motif on pearlware (left) recovered from north of the site grid (Artifact 2709.3).	214
Figure 6-167. Hand-painted blue design on shell-edged whiteware.	215
Figure 6-168. Transfer-printed sheep motif on pearlware (left) recovered from Unit 18-M (Artifact 2681.06), and a transfer-printed woman with amphora motif on whiteware (right; Artifact 2381.02).	216
Figure 6-169. Steps in the transfer print process (courtesy of C. Andrew Buchner).	216
Figure 6-170. Shell-edged pearlware recovered from Unit 5-F (Artifact 1839.07).	217
Figure 6-171. Diamond-band edged creamware recovered from Unit 15-BB (Artifact 5073.01).	217
Figure 6-172. Example of a complete Rockingham-style pitcher with hound handle, and stag and boar hunt design (from Goldberg 2003).	218
Figure 6-173. Artifact 2664.05 from Unit 23-L a stag motif fragment from a Rockingham style hound and stag motif pitcher.	219
Figure 6-174. Artifact 2855.02 from Unit 4-J a horse and rider fragment from a Rockingham style hound and stag motif pitcher.	219

Figure 6-175. Artifact 2777.11 from Unit 5-L a hound handle from a Rockingham style hound and stag motif pitcher.....	220
Figure 6-176. Example of a complete James Edwards and Son maker's mark. Artifact 2797.4.	221
Figure 6-177. Examples of partial James Edwards & Son. maker's markings on recovered artifacts	222
Figure 6-178. James M. Shaw & Co. mug recovered from Unit 19-J (Artifact 2607.01).....	223
Figure 6-179. Spoon Type 1, bearing the "Kings Pattern," and represented by a single spoon, Artifact 2881.1	226
Figure 6-180. Spoon Type 2, characterized by the shell-drop pattern and simple lines on the stem and handle	227
Figure 6-181. Spoon Type 3, characterized by a shell drop pattern and a lack of defined shoulders	228
Figure 6-182. Spoon Type 4, characterized by a rounded terminal, is characterized by a lack of defined shoulders, and little to no decoration.....	228
Figure 6-183. Spoon Type 5 is characterized by a rounded stem and a narrow, blunt bowl tip. Represented by Artifact 2692.4 (courtesy of CRL, Texas A&M University, College Station, TX.	229
Figure 6-184. Spoon Type 6, characterized by a rounded terminal and a lack of decoration. This type is represented in Artifact 2742.13 (courtesy of CRL, Texas A&M University).....	230
Figure 6-185. Artifact 2581.4, which may have an "X" incised on the convex side of the bowl, near the drop (located at the top of the photo and X-ray; courtesy of CRL, Texas A&M University).	230
Figure 6-186. Artifact 1366, a cruet stand handle (<i>left</i>), and possible rings that would hold condiments, Artifacts 2492.3 (<i>above</i>) and 2432.1 (<i>below</i>). One additional ring fragment, Artifact 2352.8, did not survive conservation (courtesy of CRL, Texas A&M University).....	231
Figure 6-187. Glass artifacts that may belong to cruet or decanter sets.....	232
Figure 6-188. Three pewter friction primers were recovered from the site	233
Figure 6-189. Medical equipment recovered from the site: 2215.1 (<i>bottom left</i>), 2381.3 (<i>top left</i>), and 2684.6 (<i>right</i> ; courtesy of CRL, Texas A&M University).....	234
Figure 6-190. Artifact 2286.4, an unidentified pewter artifact (courtesy of CRL, Texas A&M University).	235
Figure 6-191. Remains of a bronze spyglass. It has been crushed and the lenses are no longer present.	236
Figure 6-192. A complete cask of pine resin. A naval store, it would have been employed for vessel maintenance.....	237
Figure 6-193. Eight-inch wide, 2-inch thick, glass deck-prism.	237
Figure 6-194. Wooden domino recovered from the site.....	238
Figure 6-195. Maynard Bullet with cut marks leading to speculation it was modified for use as a game piece, possibly chess.....	238
Figure 6-196. One of eight kaolin smoking pipe bowls recovered on the site, this one with floral decoration.....	239
Figure 6-197. Artifact 2312.4, one of eight kaolin smoking pipe bowls recovered on the site.	239
Figure 6-198. Artifact 2457.1, one of eight kaolin smoking pipe bowls recovered on the site.	240
Figure 6-199. Artifact 3319.1, one of eight kaolin smoking pipe bowls recovered on the site.	240
Figure 6-200. Three views of the same set of leg irons: as recovered; x-rayed; and conserved.....	241
Figure 6-201. Bronze "skeleton" key (conserved).	241
Figure 6-202. Recovery (both trays) from S-819 in Unit 3-L showing a glimpse of the sheer number of recovered prehistoric ceramics.	242
Figure 6-203. Large decorated rim/body sherd.	243
Figure 6-204. Small check-stamped decorated sherd.....	243
Figure 6-205. Large, cord-marked, body sherd.....	244
Figure 6-206. Small, "Complicated Stamped," sherd.	244
Figure 6-207. Large, "Complicated Stamped," body sherd.	245

Figure 6-208. Large, punctate and incised decorated, rim/body sherd.	245
Figure 6-209. Small, decorated sherd.	246
Figure 6-210. Small, “Complicated Stamped” sherd.	246
Figure 6-211. Recovered PP/K, possibly a <i>Madison</i> (Late Woodland to Mississippian).	247
Figure 6-212. Recovered PP/K, possibly a <i>Citrus</i> (Early to Middle Woodland).	247
Figure 6-213. Recovered PP/K, possibly a <i>Citrus</i> (Early to Middle Woodland).	248
Figure 6-214. Recovered PP/K, possibly a <i>Citrus</i> (Early to Middle Woodland)).	248
Figure 6-215. Recovered PP/K, possibly an <i>Eva Type I</i> (Early Archaic).	249
Figure 6-216. Recovered PP/K, possibly a <i>Morrow Mountain Straight Base</i> (Middle Archaic) or a <i>Kiokee Creek</i> (Late Archaic).	249
Figure 6-217. Distribution map of prehistoric ceramics and PP/Ks showing an almost site-wide distribution.	250
Figure 6-218. Artifact 1850.10. Auger parts as follows.	253
Figure 6-219. Artifact 2160.10 (courtesy of CRL Texas A&M University).	254
Figure 6-220. Artifact 2160.10, two auger bits recovered still in their wooden holder.	254
Figure 6-221. Artifact 1899.1 felling axe parts as follows.	256
Figure 6-222. Felling axe recovered from the CSS <i>Georgia</i>	256
Figure 6-223. Artifact 2231.3 felling axe (courtesy of CRL Texas A&M University).	257
Figure 6-224. Artifact 2231.3 felling axe (courtesy of CRL Texas A&M University).	257
Figure 6-225. Artifact NP 117 potential tomahawk (courtesy of CRL Texas A&M University).	258
Figure 6-226. Artifact NP 117 potential tomahawk (courtesy of CRL Texas A&M University).	258
Figure 6-227. Artifact 1879.19 is a cold chisel (courtesy of CRL Texas A&M University).	260
Figure 6-228. Artifact 2923.10 cold chisel parts as follows.	260
Figure 6-229. Artifact 1861.17, star chisel with cutting edge at right (Following Hines 1995; courtesy of CRL Texas A&M University).	261
Figure 6-230. Single-Cut Coarse Straight Flat File (courtesy of CRL Texas A&M University).	261
Figure 6-231. Single-cut second-cut tapered triangular file parts as follow.	262
Figure 6-232. Artifact 1899.2 is an anti-sparking brass hammer (courtesy of CRL Texas A&M University).	263
Figure 6-233. Cross-pein sledgehammer hammerhead parts as follow.	263
Figure 6-234. Artifact 2927.11, a forging hammer (courtesy of CRL Texas A&M University).	264
Figure 6-235. Artifact 3058.1 is a “double-faced” or “engineer’s” hammer.	265
Figure 6-236. Artifact 3158.5, a cross-pein sledgehammer (courtesy of CRL Texas A&M University). Labels follow terminology in Blackburn (2000:6).	266
Figure 6-237. Artifact 1883.5, “plier handles” (courtesy of CRL Texas A&M University).	266
Figure 6-238. Scraper head Artifact 1814.7 (courtesy of CRL Texas A&M University).	268
Figure 6-239. Artifact 1853.2, a scraper head (courtesy of CRL Texas A&M University).	269
Figure 6-240. Artifact 1853.18, scraper parts are as follows.	270
Figure 6-241. Artifact 1879.12, an s-wrench, parts as follows: (a) jaws, (b) head, and (c) handle. Labels follow Richardson (1890:37, 40; courtesy of CRL Texas A&M University).	272
Figure 6-242. Artifact 1879.19, adjustable wrench.	273
Figure 6-243. Hyde’s Gripping Screw Wrench (as presented in Lovell’s Canada Directory 1857).	273
Figure 6-244. X-ray of Artifact 1879.19. Note apparent contact of screw and bar at right.	274

Figure 6-245. Artifact 1899.20.....	275
Figure 6-246. Artifact 3019.5, a wrench, parts as follows.....	276
Figure 6-247. Artifact 1899.16, an S-wrench.....	277
Figure 6-248. Artifact 1964.2, an S-wrench.....	277
Figure 6-249. Artifact 1299, a tool handle (courtesy of CRL Texas A&M University).....	278
Figure 6-250. Artifact 1926.4 , a tool handle (courtesy of CRL Texas A&M University).....	278
Figure 6-251. Artifact 2182.1, a tool handle (courtesy of CRL Texas A&M University).....	279
Figure 6-252. Artifact 1843.02, the anvil recovered in Unit 6-E.	280
Figure 6-253. Provenience of all recovered tools. Clustering just south of the West Casemate may indicate that the tools were generally stored in the one area of ship.	281
Figure 6-254. Recovered from Unit 7-E, miscellaneous brick fragments from the <i>CSS Georgia</i> depicting multiple brands and styles. These were reburied.	283
Figure 6-255. Recovered from recovered a single grab, the recovery includes numerous firebricks and brick fragments, as well as boiler fire grates and plating from Unit 7-E just south of the West Casemate.....	283
Figure 6-256. Provenience of brick.	284
Figure 6-257. Firebrick still attached to the inside of the boiler face just below one of the doors. Notice the white and cracked nature of the brick, indicating extreme heat. Artifact 1844.02 is from Unit 6-E just south of the West Casemate.....	285
Figure 6-258. Miscellaneous recovered firebricks and brick fragments from the <i>CSS Georgia</i> depicting multiple brands and styles.....	286
Figure 6-259. Examples of the two styles of Brooklyn Fire-Brick Works brick recovered from the <i>CSS Georgia</i> , “Brooklyn Fire-Brick Works, Extra” (top), and “Brooklyn Fire-Brick Works, No. 1” (bottom).....	287
Figure 6-260. Two examples depicting the Southern Porcelain Manufacturing Company firebrick. Top: from a private collection (Stradling 1996:3). Bottom: Southern Porcelain Manufacturing Company Firebrick example recovered from the <i>CSS Georgia</i> , Artifact 1850.5 from Unit 8-E.....	288
Figure 6-261. Firebrick with an unidentified oval border maker’s mark from the <i>CSS Georgia</i> . Artifact NP 25...	289
Figure 6-262. Unidentified “LLER.?ND3” firebrick maker’s mark recovered from the <i>CSS Georgia</i> . Artifact 3073.1.....	290
Figure 6-263. Unidentified “PHILAD” firebrick brand recovered from the <i>CSS Georgia</i>	291
Figure 6-264. Example of complete red brick recovered from the <i>CSS Georgia</i> , Artifact 1279.	292
Figure 6-265. Example of red brick fragment recovered from the <i>CSS Georgia</i> showing interior matrix, Artifact 721.....	292
Figure 6-266. 1871 Gillmore and Ludlow map showing the location of the <i>CSS Georgia</i> opposite Fort Jackson and in relation to two nearby brick-filled obstructions.....	294
Figure 6-267. Cannon No. 5, a XI-inch Dahlgren cannon (Artifact 1823.11) deposited on deck after being grappled from Unit 6-F, just to the northwest of Cannon 2.....	295
Figure 6-268. 6.4-inch Brooke rifle and a cast iron 24-pound flank howitzer recovered in 1986 and on display at Fort Jackson.	296
Figure 6-269. Rear Admiral John A. Dahlgren, the “Father of American Naval Ordnance” (courtesy of Wikipedia.com).....	298
Figure 6-270. Rear Admiral Dahlgren on the USS <i>Pawnee</i> circa 1864, leaning on one of his guns (courtesy of Wikipedia.com).....	298
Figure 6-271. Dahlgren cannon on a Marsilly carriage on the <i>USS Hunchback</i> (U.S. National Archives Photo No. 111-B-2016, Brady Collection).....	300
Figure 6-272. IX-Inch Dahlgren shell gun dimensions (Olmstead et al. 1999:88).	301

Figure 6-273. John Mercer Brooke (as presented in Olmstead et al. 1999).	302
Figure 6-274. Concreted Brooke rifle from the <i>CSS Georgia</i> (Cannon No. 3, Artifact 1611) immediately after recovery, showing the distinctive shape and characteristics of the Brooke rifle.	303
Figure 6-275. Brooke rifling pattern (as presented in Swain 2013).	304
Figure 6-276. 6.4-inch single-banded Brooke rifle dimensions (as presented in Olmstead et al. 1999:127).	304
Figure 6-277. Joseph R. Anderson, owner of the Tredegar Iron Works.	305
Figure 6-278. Tredegar Iron Works and associated facilities.	307
Figure 6-279. Location of the five recovered cannon.	310
Figure 6-280. Recovered 6-pounder cannon, Cannon No. 1, Artifact 1610, the <i>CSS Georgia</i> 's aft spar deck gun; scale in feet.	311
Figure 6-281. Left trunnion of recovered 6-pounder cannon marked August 1862. Observe the "6" in 1862 is reversed left to right. The only way to accomplish this error is to use a foundry pattern stamp, which is reversed for use on molds.	311
Figure 6-282. Right trunnion of recovered 6-pounder cannon marked with "Noble Brothers Co" on top with "Rome GA" underneath.	312
Figure 6-283. IX-Inch Dahlgren, Cannon No. 2, Artifact 1612, removed from electrolysis for recordation.	313
Figure 6-284. IX-Inch Dahlgren, Cannon No. 2, Artifact 1612, showing a weight of 9,300 pounds stamped in line with the breech. Right percussion lock lug at top left.	313
Figure 6-285. IX-Inch Dahlgren, Cannon No. 2, Artifact 1612, the breech stamped with "1389," which is the foundry number.	314
Figure 6-286. Right trunnion of IX-Inch Dahlgren, Cannon No. 2, Artifact 1612, marked with "JRA" and underneath "TF."	314
Figure 6-287. Left trunnion of IX-Inch Dahlgren, Cannon No. 2, Artifact 1612, marked with what appears to be a 1 and 8, and then a 6.	315
Figure 6-288. View of cascabel showing it is a composite or has an insert completing the circular opening for rope.	315
Figure 6-289. Tangent sight mount (or lug; center), as well as two percussion lock mounts (or lugs; left and right). Cuts or impressions on right lock lug indicate that it was employed at the time of scuttling; note touch hole.	316
Figure 6-290. Looking down the bore of the IX-Inch Dahlgren, Cannon No. 5, Artifact 1823.11, at the sabot of the inverted shell.	317
Figure 6-291. IX-Inch Dahlgren, Cannon No. 5, Artifact 1823.11 was recovered from Unit 6-F.	317
Figure 6-292. 6.4-inch Brooke rifle, Cannon No. 3, Artifact 1611 recovered from Unit 8-D, pre conservation.	319
Figure 6-293. 6.4-inch Brooke rifle, Cannon No. 3, Artifact 1611 during electrolysis. The dispart sight, the only one found attached to any of the guns, is visible on the cleaned gun above the trunnions.	319
Figure 6-294. Left trunnion of 6.4-inch Brooke rifle, Cannon No. 3, Artifact 1611 marked with "1862," the year it was produced. Note the threaded hole present in the center face of the stamp, placed after stamping; its purpose is unknown.	320
Figure 6-295. Right trunnion of 6.4-inch Brooke rifle, Cannon No. 3, Artifact 1611 stamped with the "JRA" foundry mark for John R. Anderson, owner of the Tredegar Iron Works in Richmond, Virginia, where it was produced.	320
Figure 6-296. 6.4-inch Brooke rifle, Cannon No. 4, Artifact 1613 taken out of electrolysis for analysis. As a result of one of two muzzle explosions aboard the <i>CSS Georgia</i> thought to be the result of defective shells, the remaining length is just under 10 feet.	321
Figure 6-297. Right trunnion of 6.4-inch Brooke rifle, Cannon No. 4, Artifact 1613 showing extreme corrosion precluding observation of foundry markings.	322

Figure 6-298. Breech of 6.4-inch Brooke rifle, Cannon No. 4, Artifact 1613 showing layered wrought iron breech banding in relationship to the cast iron of the cannon tube.	322
Figure 6-299. Dispart sight recovered from CSS <i>Georgia</i>	323
Figure 6-300. Tangent sight recovered from the CSS <i>Georgia</i>	324
Figure 6-301. Percussion lock/hammer recovered from the CSS <i>Georgia</i>	324
Figure 6-302. Gunner's Quadrant (Manucy 1949:75).	325
Figure 6-303. Example showing placement of Gunner's Quadrant (Collado 1592:38).	326
Figure 6-304. Spanish "gunner's bar" from Douglass Beach Wreck Site (courtesy of Florida Division of Historical Resources).	326
Figure 6-305. Seventeenth-century Gunner's Level (Manucy 1949:77).	327
Figure 6-306. Müller's chart (courtesy of Müller 1780:xxxix).	328
Figure 6-307. Chart showing angles of elevation and corresponding distances to ships (courtesy of Simmons 1812:44).	329
Figure 6-308. Eighteenth-century diagram showing how to level the trunnions (base image: Ward 1861:113; diagram letters repeated for clarity).	330
Figure 6-309. Locating the vertical plane (base image: Ward 1861:113; diagram letters repeated for clarity).	330
Figure 6-310. Diagram showing angular relationships when firing a gun (courtesy of M. Gutierrez, Jr.).	331
Figure 6-311. IX-Inch smoothbore Dahlgren on Marsilly carriage showing location of castings for the attachment of tangent sight (right), percussion lock (center), and dispart sight.	333
Figure 6-312. Brooke Rifle on the CSS <i>Teaser</i> showing the location of the tangent sight above the cascabel, and dispart sight forward in the center of the gun. Note the percussion lanyard placed around the tangent sight and that runs under the percussion lock cover for firing (as presented in Miller and Lanier 1911:77).	334
Figure 6-313. Dahlgren cannon on the <i>USS Hunchback</i> showing tangent sight just forward of the elevation screw, the percussion lock with its coiled lanyard, and the mount for the dispart at right, the sight not in place.	335
Figure 6-314. Artifact 2160.9.	335
Figure 6-315. Artifact 1892.3.	336
Figure 6-316. Artifact 1892.3.	336
Figure 6-317. Artifact 1972.1.	337
Figure 6-318. Artifact 1856.10.	337
Figure 6-319. Artifact 1874.5.	338
Figure 6-320. Artifact 978.	338
Figure 6-321. Artifact 2997.4.	339
Figure 6-322. Artifact 1850.17.	339
Figure 6-323. Artifact 2994.8.	340
Figure 6-324. Artifact 1855.6.	340
Figure 6-325. Artifact 1856.14 (1 of 2).	341
Figure 6-326. Artifact 1856.14 (2 of 2).	341
Figure 6-327. Top view of Artifact 1856.14.	342
Figure 6-328. Artifact 1881.28.	342
Figure 6-329. Distribution map for the tangent and dispart sights.	343
Figure 6-330. Eight-inch chambered shell gun (Olmstead et al. 1997:41).	346
Figure 6-331. Motion of Hidden's patent sliding lock (Tucker 1989:36).	351

Figure 6-332. Artifact 2997.3	351
Figure 6-333. Artifact 1335	352
Figure 6-334. Artifact 2012	352
Figure 6-335. Artifact 2994	353
Figure 6-336. Artifact 2156	354
Figure 6-337. Distribution map for gun carriage components.	356
Figure 6-338. Brooke Rifle and pivot carriage on the CSS <i>Teaser</i> (Miller and Lanier 1911:77).....	357
Figure 6-339. This image shows the eyes for tackle, several wrenches, a compressor, elevation screw, trucks and journals, cap square and trunnion plate, additional tackle, and carriage fasteners (Crowley 2013).....	358
Figure 6-340. Pivot carriage diagram (U.S. Navy Department 1860:60).	358
Figure 6-341. Plan and sectional view of pivot carriage (U.S. Navy Department 1860:60). Note top carriage trucks and journals (left, “S”), elevating screw (left “K”), and eyes for tackle (right, “2”)......	359
Figure 6-342. Distribution of gun carriage trucks according to type. Note that distribution was relatively random, following the same general distribution of most of the artifacts on the site.	361
Figure 6-343. Gun carriage axle, truck (wheel), and journal plate recovered from Unit 9-K (Artifact 5032). Note, as evidenced by this type of journal plate, this wheel and axle belonged to the top carriage, and not the lower pivot carriage.....	361
Figure 6-344. Pivot carriage truck, Artifact 2934.01, immediately after mechanized recovery from Unit 7-F (Artifact 2934.01). Compare this Figure 6-345 below.....	362
Figure 6-345. Pivot carriage truck and small copper-alloy journals recovered from Unit 7-F (Artifact 2934.01, left) compared to a top carriage truck recovered from Unit 7-A (Artifact 1977.16, right).	362
Figure 6-346. Pivot carriage truck (bottom left) with iron journal (top) and fasteners (bottom right) recovered from Unit 14-B (Artifact 2246).	363
Figure 6-347. Carriage compressor immediately after mechanized recovery from G-15. Note the still intact compressor screw and tightening rod.....	364
Figure 6-348. Cupreous compressor recovered from Unit 10-A (Artifact 5921). It no longer retains its compressor screw and tightening rod.	365
Figure 6-349. Eyes for tackle recovered from Unit 12-E (Artifact 323).....	366
Figure 6-350. Block and stiff swivel hook recovered from Unit 6-C (Artifact 1899.21).	366
Figure 6-351. Shown immediately after recovery, another type of tackle, most likely associated with a gun carriage.367	
Figures 6-352. Wooden sheave recovered from Unit 6-G (Artifact 2138.04).	367
Figures 6-353. Brass cap square recovered from Unit 10-D (Artifact 370). Side view.	368
Figures 6-354. Brass cap square recovered from Unit 10-D (Artifact 370). Top view.....	369
Figures 6-355. Brass cap square recovered from Unit 10-D (Artifact 370). Bottom view.	369
Figures 6-356. Iron cap square recovered from Unit 7-G (Artifact 1812.02).	370
Figures 6-357. Small copper-alloy cap squares recovered from Unit 22-L (Artifact 2648.1). Top view. Note the rectangular fastener holes and smaller width compared to Artifact 370 or 1812.02.	370
Figures 6-358. Small copper-alloy cap squares recovered from Unit 22-L (Artifact 2648.1). Side view. Note the rectangular fastener holes and smaller width compared to Artifact 370 or 1812.02.	371
Figures 6-359. Section of pivot-carriage track recovered from Unit 10-E (Artifact 804). Note the notches at either end for fitting pieces together, as well as holes for fastening track pieces to the deck.	372
Figures 6-360. Field photograph of gun carriage wrenches recovered from Grab G-58, Unit 9-E.	372
Figures 6-361. Conserved gun carriage wrench recovered from Unit 9-E (Artifact 1856.6).	373

Figures 6-362. Field photograph of gun carriage fasteners recovered from Unit 9-F, associated with the Marsilly carriage cheek (Artifact 1804.2).	373
Figure 6-363. Elevation screw recovered from Unit 8-D (Artifact 1580).	374
Figure 6-364. IX-Inch smoothbore Dahlgren on Marsilly carriage without elevation screw	375
Figure 6-365. Pivot plate diagram (U.S. Navy Department 1860:Diagram K).	375
Figure 6-366. Pivot plate (Artifact 1623).	376
Figure 6-367. Pivot pin and fasteners.	376
Figure 6-368. Pivot assembly articulated after recovery (Artifact 1623).	377
Figure 6-369. Dahlgren cannon in a Marsilly carriage on the <i>USS Hunchback</i> (U.S. National Archives Photo No. 111-B-2016, Brady Collection).	378
Figure 6-370. Marsilly carriage schematic (U.S. Navy Department 1860:46). Note elevation screw (H), handspike (K), cap squares, trucks, and vertical fasteners.	379
Figure 6-371. Marsilly gun carriage section with wheels and axle recovered from Unit 10-G (Artifact 1809). Image is taken from a field photograph as it was still undergoing conservation treatments during analysis.	379
Figure 6-372. Front view of Marsilly carriage design (image courtesy of Naval History and Heritage Command).	380
Figure 6-373. Marsilly gun carriage cheek (including cap square) recovered from Unit 9-F (Artifact 1804.03). The remainder of the photo has been desaturated to highlight the gun carriage piece.	380
Figure 6-374. Possible Marsilly carriage truck recovered from Unit 18-BB (Artifact 1584). Note the boxing on the right side of the truck	381
Figure 6-375. Marsilly carriage handspike recovered from Unit 13-B (Artifact 1192).	382
Figure 6-376. Marsilly carriage diagram with roller handspike ready to lift and move (Simpson 1862:131).	382
Figure 6-377. Diagram for traditional four-truck naval gun carriage (U.S. Navy Department 1860:Diagram H). Note cap square (1), cap square bolts and associated key and chain (2).	383
Figure 6-378. Material recovered with grab G-208 showing at least three of the five Brooke shells (lower left and next to bucket right) and one spherical Dahlgren shell (far left), along with rail, chain and other assorted artifacts.	384
Figure 6-379. Material recovered with Grab G-201 showing numerous artifacts including rail, timber and brick. A Dahlgren shell can be clearly seen in the middle right of the photograph.	385
Figure 6-380. Brooke shell recovered with Grab G-482, photographed prior to placement in bucket. The shell and small amount of sediment were all that were recovered with Grab G-482.	385
Figure 6-381. In total, These included 155 Brooke shells, 84 Dahlgren balls, and 53 non-explosive solid bolts.	386
Figure 6-382. Distribution Map of 53 bolts showing that they are almost exclusively located near Cannon 4.	387
Figure 6-383. Distribution Map of 155 Brooke shells shows a main cluster area and a smaller cluster to the west, both with several outliers.	388
Figure 6-384. Distribution Map of the 84 Dahlgren shells.	389
Figure 6-385. Distribution Map of all DMM types including 6-pound, grape and canister in relation to the cannon.	390
Figure 6-386. Brooke 6.4-inch ratchet disc sabot shell, Artifact 2364.13, during electrolysis. Note the ratcheted end, left, and the bourrelet band center.	393
Figure 6-387. Brooke copper ratchet disc sabot, Artifact 2806.6. This faceted face fit onto the faceted end of the Brooke shell.	394
Figure 6-388. Brooke copper ratchet disc sabot, Artifact 1609. Differing from the sabot above, it lacks the inset circle surrounding the bolt hole.	394
Figure 6-389. The shallow copper saucer, bowl or basin appearance of the aft face of a Brooke copper ratchet disc sabot, Artifact 794.	395

Figure 6-390. The square-headed iron bolt employed to fasten the sabot (see above) to the Brooke round, Artifact 2086.6.....	395
Figure 6-391. Archer safety pin percussion fuze from CSS <i>Georgia</i> after conservation showing all components. Artifact 4091 from Brooke Shell Artifact 4091. Internal slide with percussion cap at bottom.	397
Figure 6-392. Side view of a conserved but broken Archer fuze showing the position of the safety pin or wire, Artifact NP5.	398
Figure 6-393. Top view of the Archer fuze clearly showing the off-center position of the safety pin or wire, Artifact NP5. Also note facets for screwdriver or naval fuze wrench.....	398
Figure 6-394. Spherical shell for IX-Inch Dahlgren recovered from the CSS <i>Georgia</i> , Artifact 1983.3. Its fuze has been removed.	400
Figure 6-395. Anchor stamp in the fuze well bushing of a spherical IX-Inch Dahlgren shell.....	401
Figure 6-396. Sectioned 8-inch Columbiad shell (top) and IX-Inch Dahlgren shell (bottom) from the USS <i>Westfield</i> . Note the top ‘flat’ on the Columbiad and bottom ‘flat’ on the Dahlgren	402
Figure 6-397. Alger pattern naval water-cap time delay fuze from the spherical IX-Inch Dahlgren shell above, Artifact 1983.30.	404
Figure 6-398. Lead safety cap in place on the head of an Alger water-cap time delay fuze that retains an intact pull-tab and displays clear “10”/”SEC” time delay markings, Artifact 2357.1.	405
Figure 6-399. Artifact 1621.1, the only wooden sabot recovered for a IX-Inch Dahlgren shell on the site. It was recovered when trying to remove a round placed backward into Cannon No. 5 to render the cannon unusable at the time of scuttling. Still in conservation.	406
Figure 6-400. Illustration of a “US 9” DAHLGREN CANNONBALL on sale at auction described as “One of the finest examples of a IX-Inch Dahlgren cannonball on its original wooden sabot that are known to exist.....	407
Figure 6-401. Solid cast iron Tennessee bolt with sabot (modern nut and bolt on lower side of projectile are for electrolytic reduction as part of the conservation process), Artifact 2416.5.....	409
Figure 6-402. Tennessee pattern solid copper sabot with its three distinctive studs, Artifact 3200.1.	410
Figure 6-403. Illustration of a “US 32-POUNDER STAND OF GRAPE with nine iron balls surrounded by two rings and the top and bottom plate and center bolt.” Sold at Auction October 4, 2005 for \$3,100 (as presented at icollector.com 2019).	412
Figure 6-404. Numerous complete stands of grape shot were also recovered, as well as partial stands and loose shot.....	413
Figure 6-405. Grape stand in the mechanical cleaning stage of conservation, showing end plates, bolt, reconstructed ring and three of the nine shot, Artifact 2069.1.	414
Figure 6-406. Examples of small iron shot indicative of the presence of canister rounds, Artifact 2074.5.	415
Figure 6-407. 6-pounder shot locations. The box of shot was located just north of the East Casemate near the 6-pounder cannon.	417
Figure 6-408. Wooden box at time of recovery with cover removed revealing fourteen 6-pounder shot, Artifact 3264.1.....	418
Figure 6-409. 6-pounder munitions case following conservation with shot and wood sabots revealed, Artifact 3264.1.....	418
Figure 6-410. Photograph of a 6-pounder solid shot recovered from the Oconee “Professionally conserved... Tin straps very good to fine and wood sabot in fine condition.” Sold at Auction October 4, 2005 for \$3,600.....	419
Figure 6-411. The 14 6-pounder sabots after conservation, showing both predominant tall conical type and the three examples of the short cylindrical form, Artifact 3264.1.	420
Figure 6-412. 6-pounder shot with one of the eleven tall conical sabots, Artifact 3264.1.3AB.	421
Figure 6-413. 6-pounder shot with one of the three short cylindrical sabots, Artifact 3264.1.2AB. Compare this sabot with the complete example shown in Figure 6-408 above.	421

Figure 6-414. U.S. Navy Powder Tank, 16-x-14 inches, Copper Alloy. NHHC-1990-129-A, Artifact Collection photograph number (as presented at Flickr.com 2019).....	422
Figure 6-415. Provenience of the 25 complete powder tank tops and 11 complete recovered.....	423
Figure 6-416. Powder tank top showing the handles and the circular opening and the still extant, hinged lid. Note the rubber-gasket lined channel on the lid that seats onto and seals over the raised lip around the circular opening.....	424
Figure 6-417. Powder tank top showing the handles and the still extant, circular hinged lid with closing screw toggle, and handles. Artifact 3288. Compare this with Figure 6-415 above, an exact match.	425
Figure 6-418. Powder tank lid toggle screw employed to tighten lid to top of tank. Artifact 3288, an exact match with that seen in Figure 6-413 above.....	425
Figure 6-419. Powder tank base interior showing the raised lip that the side would have soldered to.....	426
Figure 6-420. Provenience of all small arms recovered on the site.....	428
Figure 6-421. Artifact 3263.1. Side view.	429
Figure 6-422. Artifact 3263.1. Opposite side view.	429
Figure 6-423. Artifact 3263.1. Bottom view.	430
Figure 6-424. Artifact 3263.1. Top view.....	430
Figure 6-425. Pre-conservation X-ray image of the pistol.	431
Figure 6-426. Internal mold that depicts the internal workings of the now-absent lock plate.	431
Figure 6-247. Internal view of lock plate from working 1842 percussion pistol (image courtesy of <i>Guns Magazine</i>).432	
Figure 6-428. Recovered .577 caliber Minie Ball bullets; Artifact 2104.4.	433
Figure 6-429. Recovered .577 caliber Minie Ball bullets; 2104.4(top) 2599.2 (bottom).....	433
Figure 6-430. End of an Enfield rounds with wooden plugs in place; artifacts number 2104.4.	433
Figure 6-431. End of an Enfield rounds with wooden plug removed to illustrate the concavity; Artifact 2104.4. ...	434
Figure 6-432. “.57” stamped on the inside of a .577 smooth bullet; Artifact 2056.1.	434
Figure 6-433. Bullet mold for an Enfield round; Artifact 2480.8.	435
Figure 6-434. Recovered Maynard .50 Caliber cartridges (artifacts 1910.9).....	436
Figure 6-435. Base of the recovered Maynard cartridges.	436
Figure 6-436. Examples of Maynard .50 Caliber bullet variants recovered from the site (note top left is not a Maynard).....	437
Figure 6-437. Example of the .44 Caliber dual ring bullet, Artifact 1891.6.	438
Figure 6-438. 17.2 millimeters ball projectile, Artifact 2690.4.....	438
Figure 6-439. Example of the 13.2 millimeters ball projectile, Artifact 2643.4.	438
Figure 6-440. 1832 short artillery sword, Artifact 2480.1.	439
Figure 6-441. 1832 foot artillery sword (Artifact 1851.10).	440
Figure 6-442. Image of cross guard of 1832 foot Artillery sword showing inscription that stands for 7 th Company 2 nd Georgia Regiment (Artifact 1851.10).	441
Figure 6-443. Chape of a scabbard, Artifact 2503.1.	441
Figure 6-444. Examples of Saber and Socket-type Civil War bayonets, from top to bottom two sabre bayonets ...	442
Figure 6-445. PS Justice II rifle bayonet hilt, Artifact 976.	443
Figure 6-446. Ps Justice II showing crosspiece, tang slot and muzzle ring (top), mortise slot and tang bolt (bottom) of Artifact 976.....	443
Figure 6-447. Ps Justice II showing crosspiece, tang slot and muzzle ring (top), mortise slot and tang bolt (bottom) of Artifact 976.....	444

Figure 6-448. PS Justice II showing notch slot near the pommel.	444
Figure 6-449. Artifact 2103.6, a Mississippi rifle bayonet hilt.	445
Figure 6-450. Civil War ‘Zouave’ style Saber Bayonet with Leather Scabbard. Total length of this bayonet is 24 ¾” while the blade itself is about 20” long. Issued with the Remington “Zouave” Rifle	445
Figure 6-451. Zouave rifle bayonet hilt, Artifact 2505.7.	446
Figure 6-452. Zouave tang stud, mortise slot (left), tang slot, muzzle ring and crosspiece (right).....	446
Figure 6-453. Zouave mortise slot.....	447
Figure 6-454. Sharps bayonet hilt, Artifact 2189.1.....	447
Figure 6-455. Sharps bayonet with muzzle ring, tang slot, crosspiece (top), mortise slot and tang bolt (bottom) visible, Artifact 2189.1.....	448
Figure 6-456. Sharps Mortise slot, Artifact 2189.1.....	448
Figure 6-457. Bayonet locket front. Scale in centimeters, Artifact 1824.14.....	449
Figure 6-458. Locket “throat,” Artifact 1824.14.....	449
Figure 6-459. English Spall Gunflint. Scale in centimeters, Artifact 2540.2.....	450
Figure 6-460. Spall gunflint showing wedge shape. Scale in centimeters, Artifact 2540.2.....	451
Figure 6-461. Possible blade gunflint. Scale in centimeters, Artifact 2802.9.	451
Figure 6-462. Illustration of the CSS <i>Georgia</i> published in Frank Leslie’s <i>Illustrated History of the Civil War</i> in 1862.....	452
Figure 6-463. Illustration of the CSS <i>Georgia</i> published in Frank Leslie’s <i>Illustrated Newspaper</i> 21 February 1863.....	453
Figure 6-464. Firebrick, fire grates and ash pan or boilerplate fragments recovered from Unit 7-E just south of the West Casemate.....	454
Figure 6-465. Boiler face or front fragment with one of the ashpit doors prior to being placed into electrolysis. Firebrick was still attached to the inside of the boiler face just below door.....	455
Figure 6-466. Fire tubes recovered from Unit 7-D during Mechanized Recovery. Just over 10 feet long and 4-inches in diameter, these tubes were recovered from a large concentration identified during initial diving investigations prior to Mechanized Recovery along with heavy iron plate in Unit 7-D.	456
Figure 6-467. Artifact 1844.22, double-veined fire grate, side view.	457
Figure 6-468. Artifact 1844.22, double-veined fire grate, end view.	457
Figure 6-469. Grate bar schematic.	458
Figure 6-470. Provenience map of boiler and machinery components.	458
Figure 6-471. Steven’s return fire tube boiler illustration from 1832.	459
Figure 6-472. Boiler drawing for the <i>James Gray</i> built in 1857 (Mariners Museum MS102 Folder 5 211).....	459
Figure 6-473. Return tube boiler drawing (U.S. Department of the Interior 1888:57).	460
Figure 6-474. Fig Island tug with Stevens-style boiler excavated by TAR in 1992.	460
Figure 6-475. Starboard view of the Fig Island tug illustrating the boiler and steam machinery.	461
Figure 6-476. Configuration of the boiler proposed for CSS <i>Georgia</i> based on historical and physical evidence.	461
Figure 6-477. 2015 schematic of condenser while still underwater.	462
Figure 6-478. Artifact 1614, a triple-bladed propeller, being lifted onto the barge (recovered from Unit 2-F).	463
Figure 6-479. End view of propeller showing the hub shaft bushing (center) and remaining strut mount (left).	463
Figure 6-480. 3-D end-on image of Artifact 1614, a triple-bladed propeller recovered from Unit 2-F. Note the broken blades. Shaft bushing and strut mounts removed during conservation; shaft bushing in center of the shaft.....	464
Figure 6-481. Configuration schematic of the twin propellers, shaft bearings, and struts; stern post in center.	464

Figure 6-482. Schematic of propeller shaft and propeller (shaft bushing and strut removed).....	465
Figure 6-483. Four collars near the end of the propeller shaft that served a thrust bearing.....	465
Figure 6-484. Front and top views of the pillow block thrust bearing.....	466
Figure 6-485. Recovered from G-125, Artifact 1909.05, a bearing pillow block recovered from Unit 6-E and half of a four-collared bronze thrust bearing recovered from the same grab that would have attached to the propeller shaft.....	467
Figure 6-486. Conserved Artifact 1909.05, bearing pillow block recovered from Unit 6-E.....	467
Figure 6-487. Internal view of half of four-collared bronze thrust bearing.....	468
Figure 6-488. Flywheel (left to right) rear, side, and front views.....	468
Figure 6-489. Shown at the time of Mechanized Recovery, counterbalance flywheel that was connected to the end one of the vessel's two propeller shafts, and turned by a crank connected to one of the two steam cylinders, which would then turn the propeller.....	469
Figure 6-490. Conserved Artifact 1899.17, a counterbalance flywheel recovered from Unit 6-C. Three feet in diameter and 5 inches thick, this is the opposite side from Figure 6-490.....	469
Figure 6-491. Side, top, and end views of the reconstructed connecting rod.....	470
Figure 6-492. Artifacts 5055.01 and 5055.02, steam cylinders, immediately after recovery from Unit 11-CC.....	470
Figure 6-493. View of one steam cylinder.....	471
Figure 6-494. View of one steam cylinder end.....	471
Figure 6-495. Top, side, and end view schematics of the CSS <i>Georgia</i> steam cylinder.....	472
Figure 6-496. Provenience map of the two cylinders showing their 2003 mapped locations and their 2017 recovery locations. Both the fact that they were found so far away and recovered together in one grab is amazing.	472
Figure 6-497. Schematic of side plate with crosshead guide.....	473
Figure 6-498. View of Artifact 5052.04, a side plate, immediately after recovery in 2017; recovered from Unit 12-BB adjacent to the two cylinders.....	473
Figure 6-499. View of Artifact 5052.04, a slide plate after conservation; recovered from Unit 12-BB immediately adjacent to the cylinders.....	474
Figure 6-500. Crosshead for piston rod, top and side views.....	475
Figure 6-501. Engineering schematic of an 1852 Worthington direct-acting steam pump.....	476
Figure 6-502. Excerpt from 1852 engineering drawing above of one of the early generation Worthington valves. Compare with the valves and gaskets on the recovered pump below.....	477
Figure 6-503. Artifact 1861.13, Worthington steam pump component recovered from Unit 5-F. Note the valves and their black circular rubber gaskets, all surrounded by a copper housing.....	477
Figure 6-504. Opposite side of the Worthington direct-acting steam pump, Artifact 1861.13. The bronze plate with its valve holes can be seen underneath the concreted iron in Figure 6-505.....	478
Figure 6-505. Artifact 1861.13 after conservation. Shown are the Worthington direct-acting steam pump copper housing with bronze valve plate. Two valves have been reinserted.....	478
Figure 6-506. Artifact 1861.13, a Worthington direct-acting steam pump plate, bronze valve plate after conservation, base view. The iron covering would have attached to this side.....	479
Figure 6-507. Close up of one of the bronze, spring-loaded valves of Artifact 1861.13 put in place after conservation as a demonstration; rubber gasket has been removed.....	479
Figure 6-508. Artifact 1861.13, Worthington direct-acting steam pump cast iron cover. This attached to the base of the bronze valve plate above and is thought to represent the bottom of the pump.....	480
Figure 6-509. Unidentified drum with inspection fitting in the end and pipe connections.....	480

Figure 6-510. Artifact 1905.3, a rudderpost with a bronze gudgeon recovered from Unit 6-E. Note the gudgeon straps have been broken at the bronze drift that fastened it in place.	481
Figure 6-511. Artifact 1953.3, a small section of the side of the deck (or bulwark) with a large iron cleat recovered from Unit 8-F.	482
Figure 6-512. 3-D image of Artifact 1953.3, a small section of the side of the deck (or bulwark) with a large iron cleat recovered from Unit 8-F (courtesy CRL Texas A&M University).	482
Figure 6-513. Casemate timber and armor construction configuration.	483
Figure 6-514. Orthomosaic of East Casemate end view, casemate base at left, top at right.	484
Figure 6-515. Casemate timber construction configuration showing rebates in the pine timbers for deck beams.	484
Figure 6-516. Orthomosaic of underside of the East Casemate. Base of the casemate is at bottom.	485
Figure 6-517. Cross section of the CSS <i>Savannah</i> illustrating the casemate overlapping the hull, shelf timbers, and knuckle configuration (as presented in Still 1988).	486
Figure 6-518. CSS <i>Georgia</i> cross section with deck rebates and CSS <i>Savannah</i> knuckle configuration.	486
Figure 6-519. Cross section of cut rails for integrity testing showing how the rails were interlocked in two layers, forming a solid flat surface on both sides. Material between rails may be iron fillings as noted above. All rails are shaped alike.	487
Figure 6-520. Close up of rails showing four different rail shapes.	487
Figure 6-521. Field drawing of the seven different rail shapes on the West Casemate. Compare these rail shapes to Figures 6-519 and 6-520.	488
Figure 6-522. Configuration of fasteners that attach rail armor to the wooden casemate structure.	488
Figure 6-523. Orthomosaic of the West Casemate showing line of bolts that fastened the rail to the wood backing. Their locations identified with the straight arrows, they are located roughly 6 inches from either end of each 24-foot rail section, and two rows of additional bolts are positioned 8 feet from each end.	489
Figure 6-524. Bolts were used to secure the inverted rails to the 8-inch oak and 12-inch pine timbers, the bolts placed through a hole drilled through the center of the inverted rail.	490
Figure 6-525. Orthomosaic of gunport (Lift WC-7) from West Casemate. At left is the 27-inch wide as-built cut-out for the cast iron gunport. The base of the casemate is at far right. It will be found to be the only gunport on the entire length of the West Casemate. Center arrow marks line of fasteners just to the right of the gunport that is found only below the gunport. The two other arrows point to line of fasteners that go completely across the casemate.	490
Figure 6-526. Artifact 1701, the actual gunports were formed with cast iron 4 inches thick, 6 feet 1 inch long, and 2 feet 5 inches wide (27 inches) with their outer upper and lower faces beveled with a circular angle on the exterior side.	491
Figure 6-527. Artifact 2049, the gunport sides were cast in the shape of a half section of rail to accommodate overlapping and interlocking attachment with adjacent rails on the casemate.	491
Figure 6-528. Artifact 2049, the gunport has holes drilled in each corner, most likely to fasten the gunport to casemate wood backing.	492
Figure 6-529. Schematic of the fastening pattern for railroad rail bolts on the casemate, as well as adjacent to the gun port. Gunport casting schematic included.	492
Figure 6-530. Plan view of the reconstructed casemate with ports for ten guns.	493
Figure 6-531. Cross section of the reconstruction at the location of gunports forward of the machinery.	495
Figure 6-532. Cross section of the hull and casemate at the boiler flue.	495
Figure 6-533. Schematic of two steam cylinders, one of each that turned a counter balanced flywheel which, fastened to the end of the propeller shaft, turned both the shaft and the propeller.	496
Figure 6-534. The CSS <i>Mississippi</i> and CSS <i>Louisiana</i> hull configurations plan view under the CSS <i>Georgia</i> casemate.	497

Figure 6-535. Barge hull configuration with location of the primary steam propulsion machinery.....	499
Figure 6-536. Casemate and primary steam propulsion machinery in a barge hull reconstruction.	499
Figure 7-01. Sonar mosaic showing coverage relative to the site grid (north is up).	501
Figure 7-02. Sonar mosaic without grid allows a visual assessment of the remaining material and essentially shows, except for a few sections of rail, and of course the two casemates, a lack of material remaining on the site (north is up).	502
Figure 7-03. Sonar image of the East Casemate after 2015 Mechanized Site Recovery Phase.	503
Figure 7-04. Sonar image of the West Casemate after 2015 Mechanized Site Recovery Phase.	503
Figure 7-05. 2017 Sonar mosaic showing coverage relative to the site grid (north is up).	504
Figure 7-06. 2017 Sonar mosaic showing coverage (north is up).	504
Figure 7-07. Location of the Dahlgren DMM that was still on site in 2015. It was not relocated nor recovered in 2017.	506
Figure 7-08. Reburial location in the Sediment Basin. Note its location relative to the wreck site.	508
Figure 7-09. GIS image showing selected reburial location and hydroprobe locations. Reburial location was placed at just offshore the edge of the bank slope in an area of deep unconsolidated sediments.	508
Figure 7-10. Profiles of the selected reburial location between the arrows. Note almost 30 feet of nonconsolidated sediments.	509
Figure 7-11. 3-D image looking northwest up the Sediment Basin showing reburial location at the bottom of the bank slope between the arrows.	510
Figure 7-12. Clamshell filling containers with bottom sediments to keep the artifacts in place and enable the containers to sink immediately. Dive barge on the right was employed to send divers for burial verification.	510
Figure 7-13. This figure shows the consistency of the fill and reflects the consistency of the bottom sediments. Almost an ooze, it covered the artifacts and in spots flowed out holes in the container.	511
Figure 7-14. All containers were lowered perpendicular to the material barge. Note the mud filling the container.	512
Figure 7-15. Sonar mosaic showing containers in place prior to coverage with mud during the 2015 reburial phase.	513
Figure 7-16. Lowering of East Casemate during reburial. The frame and bridle were reburied as well.	514
Figure 7-17. Lowering of West Casemate during reburial. The frame and bridle were reburied as well.	514
Figure 7-18. Reburial locations of 14 containers and casemates (see Table 7-01 for center coordinates).	515

LIST OF TABLES

Table 6-01. Casemate Section Wood Backing Data.	103
Table 6-02. Physical Characteristics and X-Ray Fluorescence Spectroscopy Analysis of the Buttons.....	184
Table 6-03. Glass Categories and Counts.....	201
Table 6-04. Glass Color Types & Counts.	201
Table 6-05. Historic Ceramic Categories and Counts.	208
Table 6-06. Historic Ceramic Forms.	214
Table 6-07. Transfer-printed whiteware chronology.....	217
Table 6-08. Qualitative XRF analysis of the pewter assemblage, indicating elements present (P), present in trace amounts (T), or not present (-).	225
Table 6-09. Tools from the CSS <i>Georgia</i>	252
Table 6-10. 1863 Inventory of Guns on CSS <i>Georgia</i>	295
Table 6-11. 1863 Inventory of Guns on the CSS <i>Georgia</i>	344
Table 6-12. Matching Gun Sights and Percussion Locks with Guns.	355
Table 6-13. Carriage Trucks, Journals, and Associated Pieces.	359
Table 6-14. Cap Squares recovered from the CSS <i>Georgia</i>	368
Table 6-15. List of Small Arms on Board the CSS Georgia, July 17, 1863.....	427
Table 7-01. Roll-Off Container and Casemate Coordinate Locations.	512

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I. INTRODUCTION

Locally built in 1862 and originally designed as an ironclad gunboat, the CSS *Georgia* served as an integral element of the Confederate defenses that protected Savannah, Georgia until General W.T. Sherman's Union Army captured the city, at which time she was scuttled (December 1864) to prevent capture by advancing Union troops. Rediscovered in the mid-1960s during dredging, the National Register of Historic Places (NRHP) listed shipwreck site is located in the Savannah River about 2 miles south of the City of Savannah in an area that will be impacted by proposed channel modifications for the Savannah Harbor Navigation Project (SHEP). The expansion project will consist of deepening the existing navigation channel including Kings Island Turning Basin, eight berths at Garden City Terminal, two proposed meeting areas, and three proposed bend widenings. Located within one of the two proposed meeting areas, consultation with the Georgia and South Carolina State Historic Preservation Offices (SHPOs) determined that the proposed undertaking would adversely impact the CSS *Georgia* shipwreck site (Georgia State Archaeological Site 9CH1512). The wreck site, which lies just south of the Georgia/South Carolina border and covers an area approximately 350-x-200 feet, is situated atop dense clay in approximately 36 feet of water at the top and side of the northern edge of the Savannah Harbor Navigation Channel at the intersection of the Back River Channel just down river from the city (Figures 1-01 and 1-02). Three sections of casemate, disarticulated railroad rail armor, elements of steam machinery, and ordnance comprise the major surviving elements of the vessel. Small artifacts, vessel hardware, and fastenings are also present in association with those elements.



Figure 1-01. Location of the CSS *Georgia* wreck site (base map courtesy of Google Earth).

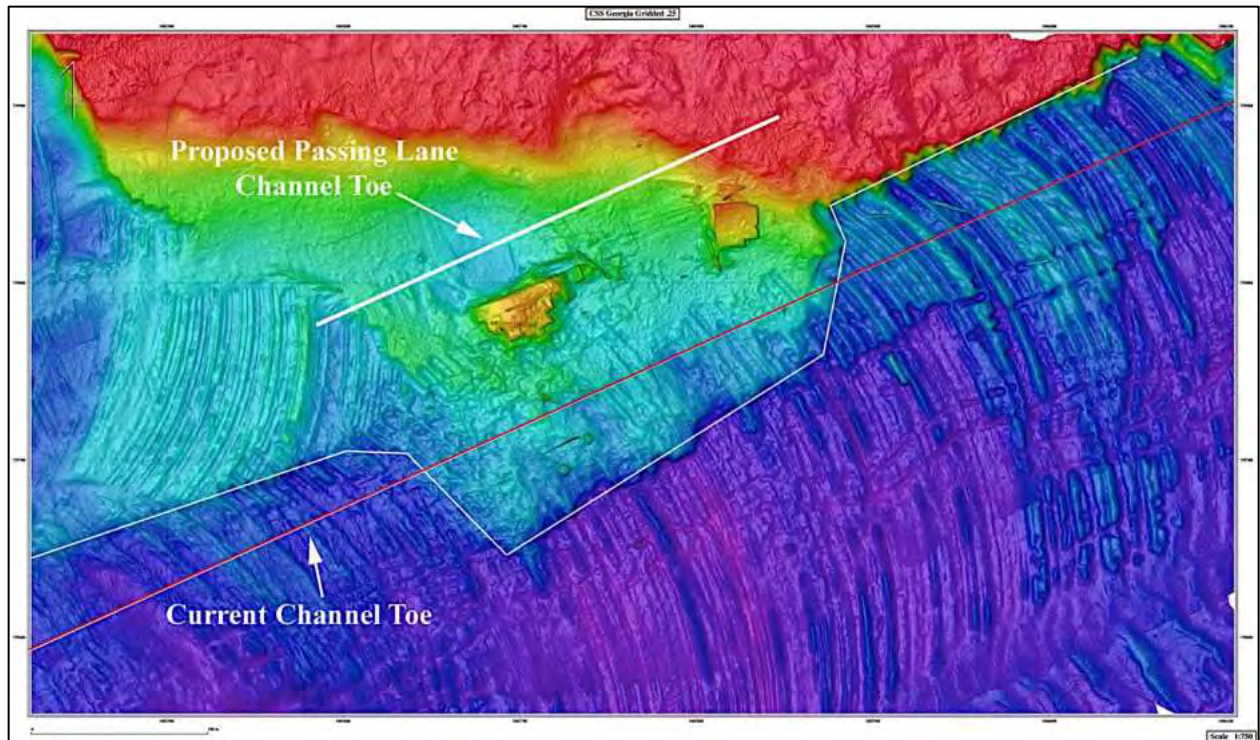


Figure 1-02. Proposed passing lane channel toe in relationship to the CSS *Georgia* wreck site, marked by the two remaining casemate sections.

In accordance with 36 CFR Part 800, a Programmatic Agreement (PA) was signed by the United States (U.S.) Army Corps of Engineers (USACE), Savannah District, respective state SHPOs, and the U.S. Navy, Naval History and Heritage Command (NHHC) to mitigate the impacts to the resource from SHEP activities. Given the nature and scope of the surviving remains of the CSS *Georgia* and the necessity for removing those remains, a Research Design based on systematic archaeological recovery was developed and approved for implementation as mitigation of the adverse project effects. As planned, the multi-phased project would help the USACE–Savannah District fulfill its compliance requirements in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended (PL 89-665); the National Environmental Policy Act of 1969; the Archaeological Resources Protection Act of 1987 as amended; the Advisory Council on Historic Preservation Procedures for the Protection of Historic and Cultural Properties (36 CFR Part 800); the Sunken Military Craft Act; and USACE Regulations as identified in 33 CFR 325, as well as other applicable Federal regulations.

Commenced at the beginning of January to the end of October 2015, and subsequently completed from mid-June to the end of July 2017, the complex and at times difficult project performed in an environmentally hostile site environment was based on a phased approach, the success of which was a result of the efforts of numerous teams and phase-specific personnel. During the 2015 effort, Phase I, Archaeological Data Recovery, consisted of archaeological diver mapping of all site components and artifacts, as well as recovery of small artifacts by a team of maritime archaeologists with Panamerican Consultants, Inc. (Panamerican) under subcontract to DCA/GEC A Joint Venture, LLC (DCA/GEC), of Jacksonville, Florida. Under the archaeological supervision of Co-Principal Investigators Stephen James, Jr. of Panamerican, and Dr. Gordon Watts with Tidewater Atlantic Research (TAR), the U.S. Navy, Supervisor of Salvage (SUPSALV) along with Mobile Diving Salvage Unit 2 (MDSU-2), and Donjon Marine (Donjon) conducted Large Artifact Recovery including recovery of Discarded Military Munitions (DMM), cannon, machinery, and casemate sections under an existing SUPSALV

agreement with the USACE, and an existing SUPSALV contract with Donjon. An expanded archaeological team conducted Phase III, Mechanized Recovery of Artifacts along with Donjon and SUPSALV, as well as Phase IV, Archaeological Clearance, and Phase V, Redeposition of Selected Artifacts. The 2017 effort, which focused on recovery of the East and West Casemates followed by site clearance and reburial, included all participants but MDSU-2. Personnel with Conservation Research Laboratory (CRL) at Texas A&M University were present during all phases and are currently responsible for all artifact conservation.

Performed under a NHHHC Permit (*Appendix A: Permits*), the archaeological investigation of the CSS *Georgia* and recovery of artifacts, ordnance, machinery, and vessel structure can only be described as more successful than could be imagined. Representing over 440 tons of material, 32,782 artifacts were recovered, with 13,601 artifacts weighing over 165 tons shipped to CRL for conservation, and 19,181 artifacts weighing 274 tons reburied.

The investigation and recovery of the CSS *Georgia* generated extensive physical data concerning the design, construction, and steam machinery of the ironclad, and recovered artifacts in some instances represent the largest extant assemblages of specific types to date. While many issues and aspects of the wreck remain unanswered, the data presented in the following report illuminate how this unique vessel was constructed, powered, armed, scuttled, salvaged, impacted over time, and, with the current investigation, finally recovered.

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II. HISTORIC BACKGROUND

HISTORIC CONTEXT

Locally built in 1862 and originally designed as an ironclad gunboat, the CSS *Georgia* was soon designated a “Floating Battery,” likely the result of being seriously underpowered. In use, the CSS *Georgia* was moored to cribbing in the Savannah River opposite Old Fort Jackson, where the river is restricted to a single channel. At her mooring, the CSS *Georgia* was maneuvered with anchor lines to bring the ironclad’s broadside battery to bear on the channel below Fort Jackson. Although the ironclad apparently lacked the power necessary for offensive action, the vessel served as an integral element of Confederate defenses that protected Savannah until General W.T. Sherman’s Union Army captured the city. After a 20-month operational life, the CSS *Georgia* was scuttled in December 1864, to prevent capture by advancing Union troops. The CSS *Georgia* lay forgotten for just over 100 years after the Civil War when she was inadvertently “rediscovered” during dredging operations. Since her discovery, recent hands-on investigations of the wreck site have triggered a surge of interest. However, subsequent research on the vessel has revealed more questions than answers concerning her construction and brief lifespan. The most extensive and recent of these research endeavors was the archival study conducted by New South Associates (New South) of Stone Mountain, Georgia. It was a study from which most of the vessel’s known history presented below originated (Swanson and Holcombe 2003).

CONSTRUCTION

In all likelihood, the ironclad *Georgia* was constructed at Harding’s Shipyard along the southern bank of the Savannah River. Located near Alvin Miller’s foundry on the eastern edge of Savannah, the location was where Major General Henry Jackson was tasked by General Robert E. Lee to build boats in early March 1862 for the transport of troops. Much of what is known concerning the CSS *Georgia*’s early phase of construction comes from Jackson’s order books, and as stated in Swanson and Holcombe (2003:48), “Jackson ordered the CSS *Georgia* built based on the plan proposed by the gunboat’s building committee, which had been appointed by a citizen’s meeting.” Supposedly, plans were drawn up for the vessel after commencement of construction, but these have not been found or do not exist. Her design has been credited to A.N. Miller, the foundry owner, who was likely involved with the CSS *Georgia* until completed.

The CSS *Georgia* was built with funds raised primarily by the Ladies Gunboat Association (LGA). Established in Savannah in early March 1862 and with chapters throughout the state, the LGA was formed specifically to raise funds for the construction of a gunboat. Although the LGA was established just after start of construction, the vessel would be known as the “Ladies Gunboat.” It was not until after March 22 that serious efforts for building the vessel were put into place. Under the direction of the Building Committee—and ultimately General Jackson—the ship was constructed in large part by hundreds of Confederate soldiers, carpenters, engineers, and blacksmiths. Launched on May 19, 1862, by the end of the month at least one side of her casemate had been armored with rail. By mid-July, the vessel was tied up at the Exchange Dock and was far enough along to allow public viewing. On July 24, the floating battery made a trial run, and by late October she had taken up her position opposite Ft. Jackson. She would stay at this location for just over two years until her scuttling late on the night of December 20, 1864.

DESCRIPTION

Swanson and Holcombe (2003:74) state, “because there are no extant plans of the CSS *Georgia*, and because she sank during the war and was not brought to the surface afterwards, all descriptions of the vessel have to rely on contemporary accounts, which were surprisingly few,

and contemporary illustrations, which were either sketchy or contradictory.” One of the best contemporary descriptions of the ironclad was made by a Northern correspondent who stated, “Beyond lay the CSS *Georgia*—to a sailor’s eye a monstrous creature, something like, in appearance, to the pictures we have of the Merrimac; with sides and ends sloping to the water at an angle of, I should think, 45 degrees, and covered with long slabs or strips of railroad iron; with a long box on top of the deck, which also appeared to be armored; and with her ports open” (Swanson and Holcombe 2003:76).

At least four contemporary engravings and an apparent photograph exist of the CSS *Georgia*, as well as five eyewitness descriptions, including the one above. Differing from one another in varying detail, the four engravings from Northern periodicals show a vessel with four sloping, iron-plated sides. Three of the illustrations depict the vessel with a single smoke-stack of a boiler projecting from the top of the casemate near one end, while the fourth image erroneously does not portray this stack. Two of the images depict the vessel with no projecting decks, the cladding meeting the upper edge of the hull at a hard chine at or just above the waterline (Figures 2-01 and 2-02). Illustrated in Figure 2-03, the third engraving is similar to the first two in depicting the vessel with no projecting decks, the cladding meeting the upper edge of the hull at a hard chine at or just above the waterline; however, there appears to be a bollard on her right end suggesting some form or length of deck extension. This image also correctly depicts the cladding as lengths of railroad iron placed vertically on sloping sides. A fourth engraving depicts the vessel with short deck extensions, both fore and aft, and (erroneously?) shows multiple guns projecting from the casemate end in the area of the deck extension (Figure 2-04).

All four engravings depict the sides of the casemate meeting the clad ends at a hard angle. It is unclear, however, if the faces of the angled ends were flat or rounded, although at least one contemporary description states the vessel had flat ends. While the four contemporary images depict the floating battery’s armored sides meeting the upper edge of the hull at a hard chine at or just above the waterline, one of the earliest known descriptions of the CSS *Georgia* states, “the slant of her roof reaches below the water’s edge, the design of which you will readily perceive” (Swanson and Holcombe 2003:74).

Presented in Figure 2-05 is what was initially thought to be the single existing photograph of the CSS *Georgia*. The photograph shows an ironclad vessel with sloping sides and ends. The vessel has a single stack near one end, and has no projecting decks, the cladding meeting the upper edge of the hull at a hard chine at or just above the waterline. The vessel appears to have a boat on a davit opposite or below a single stack. Mr. John Potter, a Savannah native, supposedly found the framed historic photograph with “CSS *Georgia*” inscribed on the back at a yard sale. Unable to afford it, he took a picture of it, a copy of which found its way into the Collections of the Coastal Heritage Society of Savannah where Bob Holcombe uncovered it while doing research. The photograph then became part of the 2003 Archival Research Report (Swanson and Holcombe 2003:74). During the current investigation, when the USACE sent out inquiries to try to find the original framed yard-sale photograph, Potter came forward and confessed to a journalist that the photograph was a composite of two photographs that he had taken as a teenager, one of his brother and the other of a model he had built of the ironclad. He glued the boat’s image onto the photograph of his brother and “used dirt and glue to age the photograph, and then sent it to historical groups (Paton 2015; Tan 2015).

Now with the elimination of the “historic photo,” all that is known of the ironclad’s lower hull is that it was built without a keel. Swanson and Holcombe (2003) propose that the quickness with which the vessel was built suggests a simplified hull form or conversion of an existing vessel such as a rice-flat (i.e., rectangular barge). While virtually nothing is known of her hull configuration, dimensional information exists, but it is contradictory. Estimates on the vessel’s length range from 150 to 250 feet and are based on contemporary accounts. A Confederate soldier stationed at Savannah wrote that the vessel was 150 feet long and 50 feet wide, while a

Unionist South Carolina newspaper reported the vessel's dimensions as 250 feet in length, with a 60-foot beam and a 12-foot high casemate. An 1872 survey conducted by the USACE of the wreck site, then a navigation hazard, indicated the vessel's length was 150-x-60 feet.

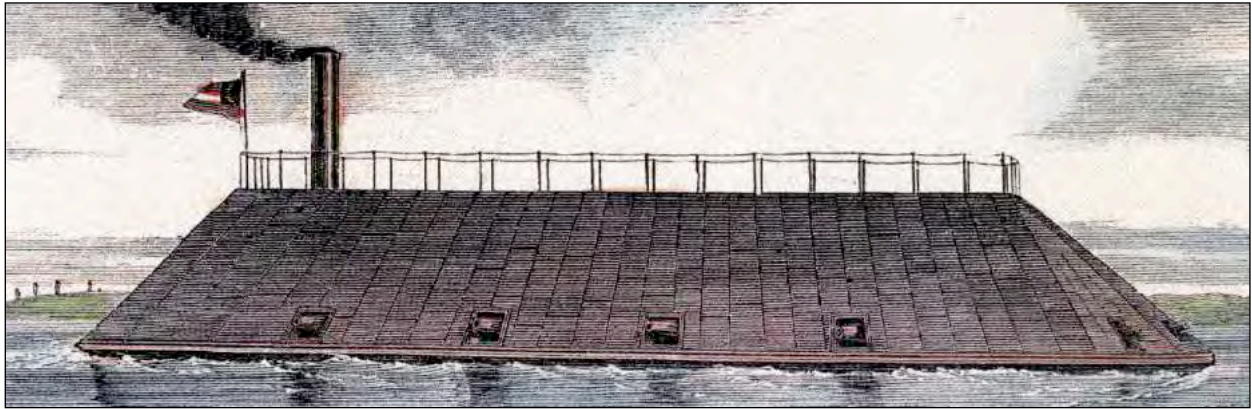


Figure 2-01. 1862 illustration of the CSS *Georgia* that depicts the vessel with no projecting decks, the cladding meeting the upper edge of the hull at a hard chine at or just above the waterline (as presented in *Frank Leslie's Illustrated History of the Civil War 1862* [Leslie and Moat 1895]).

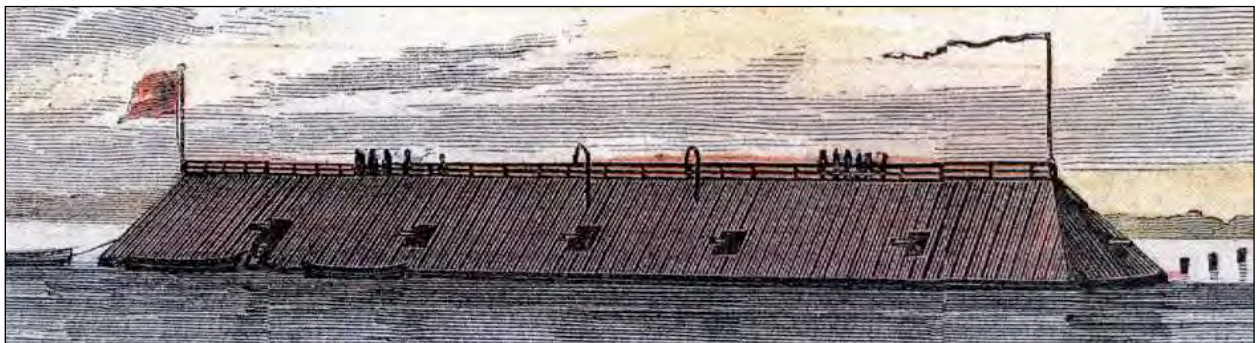


Figure 2-02. 1862 illustration of CSS *Georgia* that depicts the vessel with no projecting decks, the cladding meeting the upper edge of the hull at a hard chine at or just above the waterline. Note the lack of a stack (as presented in *Frank Leslie's Illustrated History of the Civil War 1862* [Leslie and Moat 1895]).



Figure 2-03. One of four contemporary engravings of the CSS *Georgia* presented in Northern periodicals. This illustration is from *Frank Leslie's Illustrated Newspaper*, March 14, 1863 (as presented in Swanson and Holcombe 2003:59).

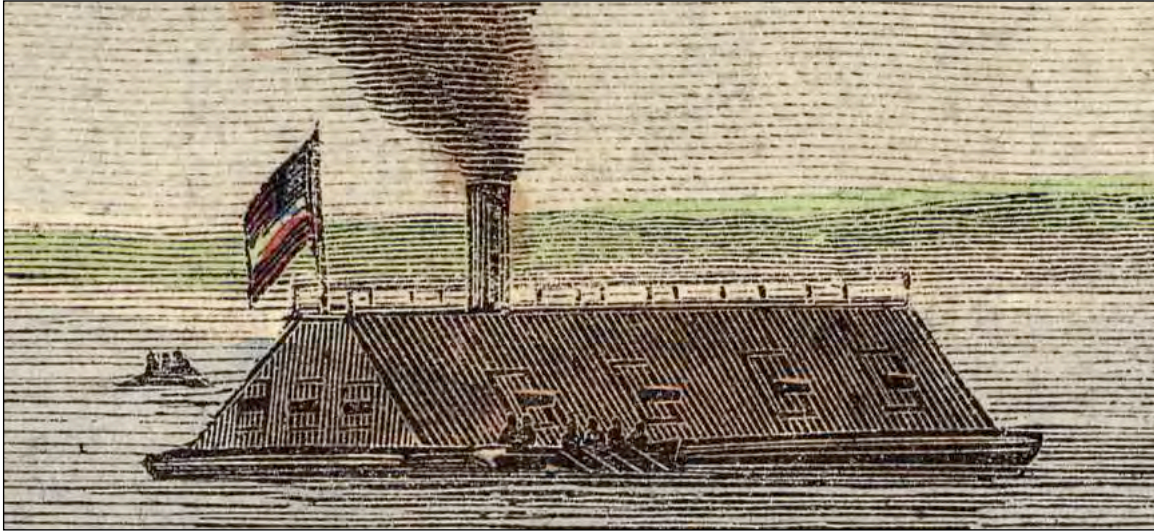


Figure 2-04. 1863 Lithograph of CSS *Georgia* that depicts the vessel with short deck extensions, both fore and aft, and (erroneously?) shows multiple guns projecting from the casemate end in the area of the deck extension. This illustration is from Frank Leslie's *Illustrated Newspaper*, February 21, 1863 (as presented in Swanson and Holcombe 2003).



Figure 2-05. Photograph of a framed glass photograph originally believed to be the CSS *Georgia*, but now known to be a hoax perpetrated by John Potter in 1886 (courtesy of Bob Holcombe; Paton 2015; Tan 2015).

While the most valid contemporary reference states that the angle of the casemate as built was “31 degrees even though the intended inclination was 26 degrees” (apparently from the vertical), a soldier who visited the vessel estimated the casemate angle “at about 45 degrees” (Swanson and Holcombe 2003:60). Presented in Figure 2-06 is Robert Holcombe’s reconstruction of the ironclad based on contemporary Confederate ironclad designs and the four engravings (Figures 2-01 to 2-04). Employing the lower end of the dimensional possibilities for the vessel, the reconstruction has an overall length of 160 feet, a beam of 55 feet, and a draft of 10 feet.

Based in part on John Porter’s proposed, but never constructed, 150-foot harbor defense ironclad, Holcombe’s reconstruction employs a 20-foot long (high) casemate wall. Archaeological data gleaned from the 2003 investigation revealed that the casemate walls were 24 feet in length. Assuming a 45-degree slope for the casemate walls (based in part on the photo) with a 24-foot long casemate side, a minimum beam of 30 feet is obtained. This would imply a weather deck or roof width of 20 feet (between the tops of the casemate sides) if the vessel had a maximum beam of 50 feet, and a weather or spar deck width of 30 feet if the vessel had a maximum beam of 60 feet. This would suggest that the present reconstruction requires modification.

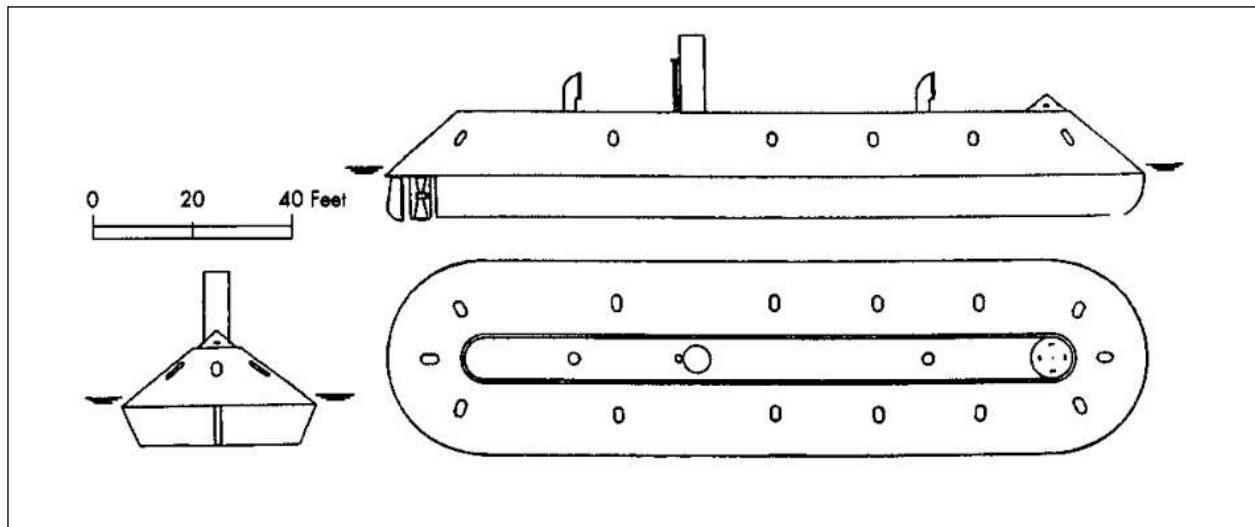


Figure 2-06. Robert Holcombe’s reconstruction of the CSS *Georgia* (as presented in Swanson and Holcombe 2003:77).

ARMOR

On May 19, 1862, the CSS *Georgia* was launched without some if not all of her armor plating; however, a description by Gazaway Lamar, who served on the LGA Steering Committee, states that by the end of that month at least one side of her casemate would be armored with rail. The best description of her armor is given some two weeks later in a June 11 letter by John Elliot in which he states, “her woodwork is composed of about 15 inches of solid timber, upon which is a double layer of railroad iron fitting into each other, and then a composition of iron filings and some kind of cement is to be laid upon the irons so as to cover the inequalities and to make it solid and keep it from shaking” (Swanson and Holcombe 2003:74). The use of railroad track iron was not specific to the CSS *Georgia*, but was employed on several ironclads. Although plate proved superior in shot penetration tests, interlocked layers of rail were tested with success and were subsequently employed on the ironclads *Arkansas*, *Louisiana*, and *Missouri*.

Evidently railroad iron was not originally intended as the armor of choice for the CSS *Georgia*. However, it appears that a search for rolled iron plate was unsuccessful and railroad “T”-iron

seized locally by General Jackson had to be utilized. Covered with long slabs or strips of railroad iron, the T iron with which the vessel was eventually covered was evidently fraught with controversy surrounding seizure and payment. A bill submitted for the seized iron to the LGA indicates the railroad iron came to “2,784 bars weighing 1,098.034 lbs, rendered at 5 plb” (Swanson and Holcombe 2003:72).

ORDNANCE

Designed to carry ten heavy guns within her casemate, four guns were to be mounted on each broadside and one at each end of the vessel’s casemate (suggesting ten gun ports?); however, surviving historical evidence indicates that the CSS *Georgia* had only four heavy and two light guns on her at the time of her sinking (Swanson and Holcombe 2003:60-61). During the Savannah District diving operations at the wreck site in 1986, a 32-pounder reworked into a rifled gun and a 24-pounder howitzer were removed from the wreck, and three heavy guns and a 6-pounder were left on the site. Of those remaining guns, Cannon 1 (the 6-pounder) and Cannon 2 and 3 (two of the three remaining heavy guns) were relocated during the 2003 investigation (discussed below). The third remaining heavy gun was located during the 2013 multibeam investigation discussed below. Discussed below, a fifth heavy gun was recovered during the current data recovery, a find that is at odds with the historical record.

PROPULSION SYSTEM

It is not known what kind of engine the CSS *Georgia* employed, but it is known that the LGA Steering Committee searched for one far and wide. In a letter written on June 11, 1862, John Elliot states that the vessel had a double engine and twin propellers. Swanson and Holcombe (2003) suggest that the engine obtained for the vessel came from the *William Jenkins*, a sidewheeler. However, recent archaeological evidence indicates the engines do not represent a beam engine, as was present on the *William Jenkins*. Regardless of where the engines were obtained or what type they represented, they were only able to make about 2 knots under full steam. All agreed they were inadequate for propelling the vessel against the swift currents or tides of the Savannah River. The engines did, however, serve a functional purpose, as one writer in 1862 stated, “Our iron floating battery is a splendid failure. She has been taken down between the forts and they are obliged to keep her engines at work the whole time to prevent her sinking, she leaks so badly” (Swanson and Holcombe 2003:75). It is thought that the vessel’s leaking was most likely a result of building her with unseasoned wood, a common practice in Confederate vessel construction.

SINKING AND SALVAGE

By Michael L. Jordon

Scuttled late on the night of December 20, 1864, the CSS *Georgia* wreck site went unmarked until struck by a ship in 1866. Subsequently, the wreck was buoyed and notice given to mariners that the vessel “now lies submerged on the northern margin of the main ship channel, between Fort Jackson and Battery Cheves...” (Swanson and Holcombe 2003). The same year, two contracts were entered into between the Treasury Department and Henry Welles to remove the CSS *Georgia* wreck site and other sunken vessels and obstruction. In 1868, Welles used dynamite to remove the vessel, and while his efforts are thought to have ultimately proven unsuccessful, some salvage was conducted (Swanson and Holcombe 2003:93-95). The 1872 report of the Chief of Engineers states:

“The wreck of the CSS *Georgia* next claims attention. It lies on the north side of the channel abreast of Ft. Jackson and has occasioned accident. It has now 11 feet over it at low water, with a sand-bar forming around it on the north side and west end. The CSS *Georgia* was an iron-clad ram about 150 feet in length by 60 feet wide, intended to carry 10 guns in casemates covered with a heavy armor of railroad iron. It has been blasted, but not thoroughly [sic], about eighty tons of

iron having been removed. The engines and machinery are still in her, and including the value of the machinery probably obtainable, it should not cost more than \$10,000 to remove the wreck entirely" [Garrison et al. 1980:35].

Until now, no additional information had been located that would indicate additional salvage of the vessel, and USACE's records said little concerning this subject. Vanishing from the public record, mention of the wreck was found only on occasional survey maps of the river, and even then these ceased to identify her through time. For the current investigation, award-winning Savannah, Georgia historian and filmmaker Mr. Michael L. Jordon took it upon himself to attempt to uncover the true story surrounding the salvage of the vessel. Mining both local and national archives and repositories, he found that the story of who first salvaged the CSS *Georgia* is inextricably tied up with the larger story of the removal of all the Confederate obstructions—including those placed intentionally during the war and the vessels scuttled or otherwise destroyed by the evacuating Confederates on the night of December 20/21, 1864. Though the CSS *Georgia* differed considerably from the dozens of rock- and brick-filled wooden "cribs" placed in the river many months earlier to block Union access, the ship's 500 tons of railroad iron armor and other metal parts were the valuable prize that made contractors willing to do the hard work required to raise the entire lot.

Shortly after the capture of the city, U.S. Army engineers and U.S. Navy divers, along with contract salvage divers, began clearing the river to permit government vessels to reach the city waterfront. A *New York Times* correspondent in Savannah noted on December 31, that "Admiral [John A.] Dahlgren's men "are busily engaged in the work of removing the obstructions in the Savannah River" (*New York Times* 1865). Admiral Dahlgren noted in his diary four days later that he had a "corps of divers with a steamer" at work on the obstructions, but that in spite of their best efforts, the team had failed to raise even a single crib (Official Records 1902). The U.S. Navy divers were led by Lt. William Churchill, commanding officer of the schooner USS *Hope* (Official Records 1902:289). In all, the Federal military-led removal effort eventually cleared three cribs and one sunken wooden vessel from the river, and opened a passage in the South Channel more than 100 feet wide (Government Printing Office 1872). The work progressed quickly enough for a U.S. Navy *Monitor*-class vessel to pass through and anchor near the city by December 31, and was wrapped up by mid-January, 1865 (*New York Times* 1865).

Admiral Dahlgren noted that civilian contract divers had been able to quickly clear an opening in the shallower North Channel (*Report of the Secretary of the Navy, with an Appendix Containing Reports from Officers, December 1865*). While Dahlgren did not identify the civilian contractors, it is likely that they were employed by Captain Bennett, a Northerner and agent of the newly formed Board of Underwriters. Aboard their schooner *John Roach*, Capt. Bennett's group, "laboring incessantly and assiduously with a small gang of divers and a limited supply of submarine apparatus," managed to clear a passage for vessels by January 23, 1865. This feat was attributed to Capt. Bennett's "indomitable energy and Yankee perseverance."

Within a few months, various other civilian salvors went to work removing valuable bricks from the wooden crib obstructions, but there is no record of these individuals diving on the wreck of the CSS *Georgia* (*Savannah Daily Herald*, July 15, 1865, p. 2, column 1). Vanished from the written record for more than a year after slipping beneath the surface of the Savannah River on December 21, 1864, the first mention of the sunken ironclad appeared in two Savannah newspapers on January 23, 1865. In articles about Northern civilian contract divers clearing Confederate obstructions and opening a passage for ships in the north channel of the river, the *Daily Herald* proclaimed that the CSS *Georgia* "...is still in the river opposite Fort Jackson" (*Savannah Daily Herald*, January 23, 1865, p1, column 2).

As 1865 drew to a close, Lt. Charles O. Boutelle of the U.S. Coast Survey produced a detailed chart of all the Confederate obstructions remaining in the river, including the wreck of the CSS

Georgia. On December 2, Boutelle reported that the ironclad "...was simply scuttled & sunk, & now lies with her armament & machinery & all her appointments, precisely as when she went down. She is said to have 500 tons of iron plating upon her & is a valuable vessel for the sake of her material only." A hand-labeled chart accompanying Boutelle's report (Figure 2-07) indicates that the CSS *Georgia* lay in 21 feet of water. While it is unclear on the map whether any of the wreckage protruded above the surface of the water, subsequent events make it seem likely that the wreck was fully submerged (National Archives Record Group 56, Entry 315, Box 27).

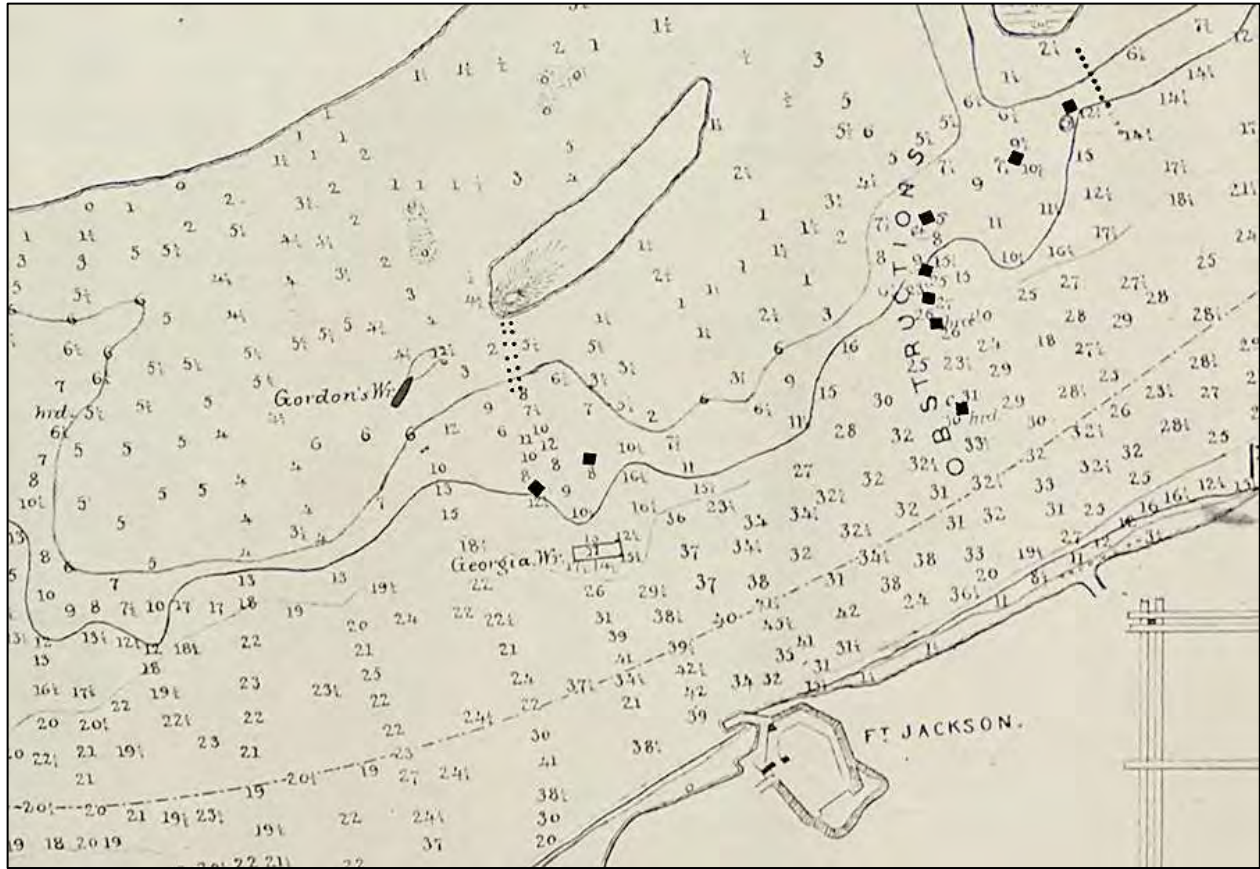


Figure 2-07. Map showing the location of the CSS *Georgia* wreck opposite Fort Jackson (Swanson and Holcombe 2003:93).

On May 11, 1866, the passenger steamer *Lizzie Baker* struck an unknown submerged obstruction across from Fort Jackson. Andy Hartshorn, a former U.S. Navy officer who had served under Boutelle and subsequently obtained a City of Savannah contract to clear the Confederate obstructions in the river, identified the wreckage as the CSS *Georgia* (National Archives Record Group 56, Entry 315, Box 26). This identification was accomplished with much difficulty; when multiple soundings failed to locate the submerged obstruction, Hartshorn's men were forced to drag lines or chains up and down the river until they snagged the wreckage. Mayor Anderson published in local newspapers a notice to mariners warning them of the hidden danger, marked the site with a temporary buoy, and asked Federal authorities to replace it with a permanent marker (*Savannah Daily Herald*, May 12, 1866, p. 3, column 2). Hartshorn's men are known to have recovered an anchor from the CSS *Georgia*, but apparently removed little if anything else from the wreckage (National Archives Record Group 56, Entry 315, Box 34).

Unbeknownst to Hartshorn and his associates, a rival salvor was aiming to steal Hartshorn's business weeks before his contract was even signed. Henry Spalding Welles, also a New Yorker,

was a successful contractor who managed the construction of miles of railroad track before the war, primarily in the mid-Atlantic states. Unfortunately for Hartshorn, Welles' prewar industrial work also included building the northern-owned Brunswick and Florida (B&F) Railroad (later Brunswick and Albany; The New York Genealogical and Biographical Record, Volume XXVII). Primarily Northern investors funded this short line between Brunswick, a small city on the Georgia coast south of Savannah, and the southern Georgia interior. The company hoped eventually to connect the deep-water port of Brunswick with destinations as far west as the Florida panhandle and even Mississippi (*Milledgeville Southern Recorder*, May 15, 1855, p. 2, column 2). When Georgia seceded from the Union, the directors—all but one of who were Northerners—abruptly ceased their involvement with the project. Their Southern counterparts groused, “all the money, bonds, and assets of the company are now in the North, without hope of the shareholders being able to reclaim them.” A Georgia-based provisional board of directors asked the Confederate State government to take control of the railroad on September 23, 1861, and state did so on October 7 (Georgia, Executive Department Minutes, January 2, 1860 to July 10, 1866, Microfilm Drawer 61, Box 77, p. 245-246). Records indicate that State authorities removed rail from the Brunswick and Albany tracks for military purposes on several occasions. Apparently, at least one of these seizures was conducted for naval uses, for on July 31, 1862, Confederate Attorney General C.H. Watts wrote U.S. Navy Secretary Stephen Mallory to render an opinion on the legality seizure for this purpose. Welles and his associates believed their iron rails had been ripped up without their consent to form the armor of the CSS *Georgia*, and Welles spent two weeks in Savannah in January 1866, to collect evidence to bolster their claim (*Report of the Joint Committee on Reconstruction, at the First Session Thirty-Ninth Congress, Part III, Georgia, Alabama, Mississippi, Arkansas*).

Acting as the authorized agent of the railroad, Welles obtained notarized affidavits from several people involved in the CSS *Georgia*'s construction, as well as Georgia's former wartime Adjutant General, Henry Wayne. Hiram Roberts, an LGA Steering Committee member, testified on January 27, 1866, that at least a portion of the rails used to sheathe the ironclad had indeed come from Welles' railroad. Wayne testified on January 29 that the CSS *Georgia*'s entire casemate was clad in an estimated 491 tons of B&F Railroad iron. Wayne reported that Macon and Western Railroad president Isaac Scott purchased the iron from someone claiming to represent the Northern-owned railroad, and then Scott resold the iron to the State of Georgia. Welles contended the original sale was invalid, since it was made without the consent of the B&F Railroad's loyal Northern directors (National Archives Record Group 56, Entry 315, Box 27).

Since, according to the Captured and Abandoned Property Acts, materials involved in the Confederate war effort became by default the property of the U.S. government, Welles first shared Henry Wayne's testimony with Will R. Garrard, a U.S. Treasury Department agent in Savannah. Two days later, on February 2, 1866, Welles forwarded Wayne's affidavit to Treasury Secretary Hugh McCulloch. Welles asked McCulloch to grant him the exclusive right to salvage the CSS *Georgia* and the exploded wreck of the ironclad CSS *Savannah*, with the help of an unnamed local salvage expert “[who has] done more work of raising sunken vessels than all others at this harbor...” It would later become known that this man was none other than Henry Willink, Jr., the former Confederate shipyard owner (National Archives Record Group 56, Entry 315, Box 27). Willink was a natural and appropriate choice, since he had personally supervised the construction and placement of some of the wooden cribs (*Savannah Times*, May 31, 1879, 1, column 3).

By now the municipal authorities in Savannah had already begun preliminary negotiations with Hartshorn, but they had twice been warned not to allow anyone to salvage the wreck of the CSS *Georgia*. As early as January 11, 1866, Secretary McCulloch had advised Mayor Anderson that there were claims against the iron on the wreck of the CSS *Georgia*, and instructed him to leave the vessel out of any contract to clear the river. On March 20, 1866, Secretary McCulloch telegraphed Mayor Anderson asking whether any contracts had been signed to remove the

Confederate obstructions from the Savannah River, and Mayor Anderson replied the next day that Hartshorn was interested in doing the work, but no agreement had yet been made. McCulloch warned Anderson on March 24 not to sign any contracts with anyone until the ownership of the railroad iron at the bottom of the river had been determined, but McCulloch's instructions went unheeded (National Archives Record Group 56, Entry 315, Box 27). On April 4, Hartshorn wrote to Mayor Anderson, "I will sign the contract at once, if you please, and run my risk in the matter of the claim for the RR [B&F Railroad] iron." As noted, Hartshorn signed his contract with the city on April 20.

On May 1, Henry Welles inked his own deal with the Treasury Department, setting the stage for a showdown between the two would-be salvors and their opposing government backers. Welles' contract required him to raise a number of sunken Confederate vessels from the Savannah River, including the CSS *Georgia*, CSS *Ogeechee*, CSS *Savannah*, and other, unspecified vessels. All of the salvaged material was to be auctioned, and the contract specified Welles would be paid one-half the net proceeds from the sale of railroad iron and three-fourths of the net raised from the sale of hulls, personal property, and all other recovered materials. If, however, Welles could prove beyond doubt that the railroad iron did originate with the B&F Railroad, the Treasury Department would release to him the remainder of the money from the sale of the iron (National Archives Record Group 56, Entry 315, Box 27).

On June 4, 1866, McCulloch wrote to Mayor Anderson ordering him to cancel the city's contract with Hartshorn and allow Welles and his contractors to take over the work of clearing the river. Mayor Anderson had no intention of making way for Welles; the mayor ordered Hartshorn's men to disregard the Federal contract Willink showed them and go back to work (National Archives Record Group 56, Entry 315, Box 26). The city authorities' problem with Welles' contract was that, unlike their agreement with Hartshorn, it did not require Welles to remove the stone- and brick-filled wooden cribs that posed a great hazard to vessels, but was instead limited to the more valuable vessels. Since the war had left the city coffers too empty to pay Hartshorn or anyone else to remove the obstructions, the mayor and aldermen were counting on the value of the iron on the CSS *Georgia* and the CSS *Savannah* to make the work worth doing. Without the promise of auctioning the salvaged iron, the city had no hope of getting all the less valuable, but equally dangerous, cribs removed from the channel. The city council summed up its arguments in an elegantly worded "Memorial," which was sent to President Andrew Johnson (National Archives Record Group 56, Entry 315, Box 27). The council also voted to send Mayor Anderson and former Savannah Alderman, U.S. Postmaster, and Confederate Postmaster Solomon Cohen to Washington, D.C. to personally argue the city's case. Council members did not record their reasons for selecting Cohen to accompany Mayor Anderson, though perhaps it had something to do with the fact that Cohen had been elected in December 1865 to represent the newly loyal First District of Georgia in the U.S. Congress. Republicans prevented Cohen and other elected Southerners from taking their seats (*Savannah Morning News*, Aug. 16, 1875, p. 3, column 3).

No written record has been discovered to indicate that Mayor Anderson and Cohen met personally with President Johnson, though they did have a meeting with Johnson's personal secretary Ed Cooper, and possibly with Treasury Secretary McCulloch as well (National Archives Record Group 56, Entry 315, Box 27). The Savannah authorities' wish for Hartshorn's contract to remain in effect was not granted, though the Savannahians did get the next best thing: Welles' contract was amended on July 5 to require Welles to remove all of the wooden cribs and other comparatively worthless obstructions in addition to the high-value wrecks (*Report of Edward C. Anderson, Mayor of the City of Savannah, For the Year Ending September 30, 1866*). In recognition of Welles' increased outlay of labor and resources, the department agreed to allow him to keep all of the proceeds from the sale of anything he salvaged from the river, rather than the percentage he was allocated under his former contract (National Archives Record Group 56, Entry 315, Box 27). Unfortunately, Hartshorn and his Southern Wrecking and Sub Marine

Company were on the hook for the expenses they incurred starting the work that spring. According to Willink, the jilted Hartshorn left Savannah for good on December 5, 1866, with numerous unpaid debts owed to his agents, divers, and marine service providers, as well as to Willink himself. Hartshorn, allegedly, also made off with the anchor recovered from the CSS *Georgia* (National Archives Record Group 56, Entry 315, Box 34).

Initially, Welles hired Savannah shipbuilder Willink, who had constructed the ironclad CSS *Savannah*, as his supervisor in the field, and began actively preparing to remove the obstructions in the Savannah River on June 30, 1866, beginning by building and acquiring the flat wooden vessels he would need to raise the sunken materials (National Archives Record Group 56, Entry 315, Box 34). Salvage divers joined the team late August 1866 and in September 1866, Willink provided the following list of equipment he assembled for the work:

“Mr. Welles has made extensive preparations for this work. We now have here, three powerful Steam Pumps, capable of discharging 20,000 gallons of water per minute; four excellent hydraulic jacks, capable of lifting 30 tons each; Submarine Pumps, capable of lifting 30 tons each; Submarine Pump, Armor, Chains, etc. and are daily looking for a powerful Steam Tug with another Steam Pump, Cranes, etc. to be used expressly for this work” [National Archives Record Group 56, Entry 315, Box 32].

The equipment and personnel cost Welles more than \$30,000 (National Archives Record Group 56, Entry 315, Box 32).

Willink’s men first raised the Confederate gunboat *Isondiga* and the steamer *Fire Fly* from the Back River, a light ship near Elba Island, and a portion of the partially completed ironclad CSS *Milledgeville*. Welles spent the next three and a half years struggling to remove the cribs, with his progress severely impeded by the difficulty of the task at hand, by occasional sabotage, and by the malarial fevers that wracked his workforce every summer (National Archives Record Group 56, Entry 315, Box 32). The CSS *Georgia*’s valuable wreckage, however, remained on the bottom virtually untouched. In his reports to Welles and a letter to Mayor Anderson, Willink made no mention of salvaging anything from the wreck of the CSS *Georgia* (National Archives Record Group 56, Entry 315, Box 32). The undisturbed state of the wreck when Willink began working in fall of 1866, is substantiated by Mayor Anderson’s annual report for that year, which was dated September 30. Referring to the CSS *Georgia*, Anderson wrote, “This vessel was scuttled on the night of the evacuation, and now lies with her armament, machinery and all her appointments precisely as when she went down, a most dangerous obstacle in the navigation of the river. There are said to be about five hundred tons of railroad iron covering her shield” (*Report of Edward C. Anderson, Mayor of the City of Savannah, For the Year Ending September 30, 1866*).

Almost from the beginning, Savannah’s municipal and business leaders were dissatisfied with the progress of the work, particularly in regards to the removal of the troublesome wooden cribs. Mayor Anderson noted “serious delays” in his 1866 report, but expressed the hope that, “under the auspices of our energetic fellow-townsmen, Mr. Henry F. Willink, Jr., [the work] will be pushed forward without further loss of time” (*Report of Edward C. Anderson, Mayor of the City of Savannah, For the Year Ending September 30, 1866*). John Stoddard, Savannah’s Commissioner of Pilotage and a member of the LGA Steering Committee, which funded the CSS *Georgia*’s construction in 1862, complained in January 1867, of “little or nothing is being done by Mr. Welles in removing the obstructions in this Harbor...Are we to fold our hands, while he does nothing?” (National Archives Record Group 56, Entry 315, Box 31). Later that month, Mayor Anderson forwarded Stoddard’s letter to U.S. Supreme Court Justice and former Savannah Mayor James Moore Wayne, adding, “Many fair promises have been made, and much valuable time lost, without any adequate results to the commerce of the Port” (National Archives Record Group 56, Entry 315). Wayne in turn forwarded Stoddard’s and Anderson’s letters to

Treasury Secretary McCulloch, who expressed surprise at the complaints and demanded from Welles an accounting of his work (National Archives Record Group 56, Entry 315, Box 31).

Writing from Savannah, Welles forwarded Willink's most recent report and conveyed his own shock at the allegations made against him and his subcontractor. Of Willink, Welles wrote, "He is the most reliable and energetic man I have ever known as a Georgian..." Regarding his Savannah detractors, Welles sniffed, "These gentlemen should remember that it is easier to sink these things than to raise them..." and concluded, "I am inclined to think there is some prejudice existing against me personally." Willink blamed the delays in the work on the malarial fevers that preyed on Savannah every summer. In his report to Welles the previous September, Willink lamented, "Every man employed on the River has been sick," saying that his foreman had died from fever, and the man's replacement was sickened but recovered (National Archives Record Group 56, Entry 315, Box 32). Four additional men later died from exposure. Willink himself was exhausted, claiming to have spent many nights and every Sunday on the job, and seemed to take personally the criticism from his fellow Savannahians. "As I have given so much cause for complaint," he grumbled, "I would suggest your appointing some more competent person to take charge of this important work" (National Archives Record Group 56, Entry 315, Box 34). Willink's eventual replacement as superintendent of Welles' salvage crew was Jabez M. Woodward, a civil engineer from New York, though Woodward did not assume control until December (*The Executive Documents Printed by Order of the Senate of the United States for the First Session of the Forty-Third Congress*, Dec. 11, 1873, p. 23, Vol. 1). It is unclear exactly how long Willink remained on the job.

The change of personnel did little to alleviate the friction between Welles and Savannah's government and business leaders. In his 1867 Mayor's Report on September 30, Mayor Anderson complained again about the slow progress of removing the cribs, and on November 26, 50 Savannah ship captains and pilots signed a formal complaint addressed to the Secretary of the Treasury, accusing Welles of failing in this regard (Report of Edward C. Anderson, Mayor of the City of Savannah, For the Year Ending September 30, 1867). The city's business elite joined the chorus on December 2, with a blistering missive penned by Cohen's brother Octavus, president of the Merchants' General Exchange and Board of Trade of Savannah and another LGA Steering Committee member. Most alarmingly for Welles, on December 17, 13 members of Congress, representing Northern port cities doing maritime business with Savannah, wrote their own letter to Secretary McCulloch requesting that he look into the delays in clearing the obstructions (National Archives Record Group 56, Entry 315, Box 34). The legislators had been prompted to take this action by Northern shipping agents, who in turn had been goaded into action by the city authorities in Savannah (Report of Edward C. Anderson, Mayor of the City of Savannah, For the Year Ending September 30, 1867, pg. 17).

With little actual salvage on the CSS *Georgia* having taken place, in a report by Captain John Baker of the U.S. Revenue Service in early March 1869, he warned that the ironclad remained "a hidden enemy to vessels approaching or leaving Savannah, and liable at any moment to cause disaster" (National Archives Record Group 56, Entry 315, Box 37). Around this time, a change in presidential administrations in Washington D.C. brought a new Secretary of the Treasury who increased pressure on Welles to finish the work of clearing the Confederate obstructions from the river (National Archives Record Group 56, Entry 14, Register 18, p. 5). On January 18, 1870, exasperated by complaints against Welles pouring in from leading Savannahians and their allies in Northern port cities, coupled with a new opinion from government lawyers advising that salvaging enemy shipwrecks did not fall within the purview of the Treasury Department, Secretary George S. Boutwell abruptly cancelled Welles' contract (National Archives Record Group 56, Entry 315, Box 37). The task of clearing the obstructions from the Savannah River would now fall to the USACE.

But Welles was not ready to give up on the CSS *Georgia* and its iron, and by all appearances the Treasury Department was willing to let him keep working—permitted he wrap things up quickly. Welles' men ceased their work on the stubborn cribs and rushed to take control of the CSS *Georgia* and two other valuable wrecks. Welles' field supervisor in Savannah, Woodward, reported on January 24, 1870—six days after the cancellation of Welles' contract—“I have hold of the Confederate gun boat Georgia opposite Fort Jackson, the Confederate gun boat *Savannah* in Back River, and the Dry Dock in St. Augustin [sic] Creek” (National Archives Record Group 56, Entry 315, Box 38). Three pieces of documentary evidence prove that Welles had implicit permission to keep salvaging these wrecks even after his contract was cancelled. On the back of one of the documents in Welles' file in Washington D.C., the department's top lawyer scrawled, “A constructive recovery or certain vessels may be tacitly recognized sufficient to reimburse Mr. Welles” (National Archives Record Group 56, Entry 315, Box 38). Two years later, another Treasury Department lawyer announced:

“At the time of the termination of his contract...I find an intimation was made that the Department would not interfere with his recovery of such property as he had in hand and in regard to which he claimed to have incurred large expenditure but it was supposed that he would close the business up speedily” [National Archives Record Group 56, Letters Relating to Claims Received in the Office of the Sec. of the Treas. 1864-1887, M503, Roll 61].

Further evidence of the department granting implicit permission to Welles is found in a detailed memorandum of the case compiled by a Treasury Department clerk on October 31, 1872, in which is reported:

“...it was considered by the Dept. that there would not be any objection to allowing Welles to take and hold the property that he had commenced recovering before notice of the termination of the contract. It was the opinion of the Solicitor Mr. Danfield, that Mr. Welles should, any event, be allowed this privilege” [National Archives Record Group 56, Letters Relating to Claims Received in the Office of the Sec. of the Treas. 1864-1887, M503, Roll 61].

In spite of this grace period, Welles did not wrap things up quickly on the Savannah River. Almost two years after Welles' contract ended, the CSS *Georgia*'s wreck still lay on the bottom. On November 28, 1871, USACE Captain William Ludlow reported:

“The wreck of the CSS *Georgia* next claims attention. It lies on the north side of the channel abreast of Fort Jackson and has occasioned accident. It has no 11 feet over it at low water, with a sand-bar forming around it on the north side and west end. The CSS *Georgia* was an iron-clad ram, about 150 feet in length by 60 feet wide, intended to carry ten guns in casemates covered with a heavy armor of railroad-iron. It has been blasted, but not thoroughly, about eighty tons of iron having been removed. The engines and machinery are still in her, and, including the value of the material probably obtainable, it should not cost more than \$10,000 to remove the wreck entirely” [Annual Report of the Chief of Engineers to the Secretary of War 1872:657].

Curiously, Capt. Ludlow made no mention of Welles, Woodward, or his men working the wreck, but there are indications the crew may still have been on the site. Treasury Department documents dated September 1872 indicate Welles attempted to prevent the USACE from advertising the wreck for sale, arguing he still had legal title and the right to salvage the iron himself. The Treasury Department verified the cancellation of Welles' contract, and advised the USACE to proceed with plans to sell the CSS *Georgia*'s wreckage (National Archives Record Group 56, Entry 315, Box 37). Perhaps it was around this time, when his legal avenues were exhausted and the CSS *Georgia*'s valuable iron finally slipped from his grasp, that a frustrated Welles instructed his men to toss salvaged materials back into the Savannah River.

In the end, Welles was forced to take legal action to recoup his financial losses on the Savannah River. On February 4, 1873, Treasury Secretary Boutwell wrote the chairman of the Senate

Commerce Committee, insisting, “If Mr. Welles has expended more than he has received for improving the harbor under his contract, I know of no authority to adjust and pay the same, except the authority be granted by Congress” (National Archives Record Group 56, “BE” Series, 1861-78, Vol. 19). Accordingly, Welles turned to Congress for relief in late 1873. Welles claimed that between June 1866 and the termination of his contract on January 24, 1870, his men raised more than 30 wrecked ships, a large number of cribs, and a large but unspecified number of “torpedoes and other obstructions;” in the process widening the main shipping channel from 69.5 feet to more than 1,000 feet. The work had been impeded by inaccuracies in Lt. Boutelle’s December 1865 map of the obstructions, which depicted a single line of sunken cribs near Fort Jackson, rather than the double line that actually blocked the channel. Welles claimed the work had set him back more than \$230,000, and he had been unable to recover these costs because the contract was cancelled before he could raise the most valuable wrecks. Welles petitioned Congress to pay him \$250,000 (The Executive Documents Printed by Order of the Senate of the United States for the First Session of the Forty-Third Congress (1873-74), 1874 Vol. 1, Exec. Doc. 5., 4-6). In his finding of facts, Major General Quincy Gillmore, the chief USACE in Savannah, corroborated Welles’ claim, concluding:

“...Mr. Welles accomplished an important public improvement at a heavy personal cost. No default, on his part, is alleged. The annulment of his contract, before he had taken up the most valuable of the wrecks deprived him of the only legitimate means he possessed under it, to reimburse himself for money actually expended by him. In addition, I deem it at least questionable whether the same work could have been done by the United States at that time, under the contract system or otherwise, at a less cost than that incurred by Mr. Welles. I, therefore, consider his claim for \$250,000 a just one, and recommend its payment” [*The Executive Documents Printed by Order of the Senate of the United States for the First Session of the Forty-Third Congress* (1873-74), 1874, Vol. 1, Exec. Docs. 5 and 4].

Welles’ petition made its way through various House and Senate committees between December, 1873 and February, 1874. On February 27, Congress voted to pay Welles \$193,132.96 (*Annual Report of the Chief of Engineers to the Secretary of War*, 1888: 1017). This amount reflected \$40,000 Welles had been paid for the government for some of the materials he raised from the river, subtracted from the \$233,000 Welles had actually expended (*Congressional Record, Containing the Proceedings and Debates of the Forty-Third Congress, First Session*, Vol. II, 1874, 1701). It was not the full amount Welles had requested, but it would have to do. The USACE continued to remove Confederate obstructions from the Savannah River through at least 1876, though traces remain today (Babits1988:13).

III. PREVIOUS INVESTIGATIONS

The CSS *Georgia* lay forgotten for just over 100 years after the Civil War, entering the modern age on March 30, 1968, when she was inadvertently “rediscovered” during dredging operations when its wreckage was struck by the dredge *St. Louis*, which was removing sediments from the Savannah River under contract to the USACE. The dredge’s cutter head was found snarled in rusted railroad iron, much like a fork stuck in a kitchen garbage disposal. Ralston Lattimore, superintendent of the Federal Battlefield Park at nearby Fort Pulaski, identified the wreckage as the CSS *Georgia* (*Savannah Morning News*, March 30, 1968). The USACE sent commercial divers down, who returned with more iron artifacts (*Savannah Morning News*, Feb. 16, 1969, 1-2C.). All of the recovered objects were conserved at Fort Jackson, which was operated as a museum by the Georgia Historical Commission (GHC), a now-defunct state agency (*Savannah Morning News*, July 23, 1968, B4). The ensuing decade was a time of confusion for the USACE as it struggled to ascertain which agency possessed the authority to deal with the CSS *Georgia*’s remains.

The National Park Service (NPS) was the sole agency authorized to investigate the wreck as a cultural resource. Accordingly, Lattimore contacted the agency’s regional director, who informed him that the General Services Administration (GSA) was the proper authority to determine the disposition of the ship. The USACE contacted the GSA, which acknowledged ownership under Section 3755, Revised Statutes, as amended (40 U.S.C. 310), but stated that it desired to transfer title to either the NPS or the Smithsonian Institution (Smithsonian). Since the NPS had already been contacted, the USACE reached out in May 1968 to the Smithsonian and its National Armed Forces Museum Advisory Board. The Smithsonian declined to participate in any salvage operation, and suggested that the task be undertaken by state or local organizations. The GHC was the logical choice (Anuszkiewicz 1979).

At a meeting of the GHC on April 4, 1968, at Fort Jackson in Savannah (which was operated by the GHC at that time), Fort Jackson Superintendent Alston Waylor brought before the commission’s attention the discovery of a wreck thought to be the CSS *Georgia*. Waylor noted that the GSA, which owned the wreck, might be willing to turn it over to the commission. Waylor estimated it would cost \$250,000 to raise the CSS *Georgia*. He proposed dragging the wreck onto the bank in front of Fort Jackson and covering it with the mud that needed to be removed from the fort’s moat. Waylor suggested that recovered artifacts could be placed on exhibit inside the fort. The GHC adopted a resolution expressing an interest in possibly salvaging the CSS *Georgia* (Minutes, April 4, 1968 Meeting of Georgia Historical Commission).

Almost immediately, commission members began to fret about the cost of recovering the CSS *Georgia*. On May 7, 1968, Executive Secretary Mary Gregory Jewett wrote to Savannah attorney and historian Alexander Lawrence, warning “...we have had experience in salvage operations and they are fantastically expensive with preservation a constant problem and even more expensive than the initial salvage...If we should claim custody [of the CSS *Georgia*], salvage operation would become our problem and you know our financial status” (Georgia Historical Commission File May 7, 1968). Sometime in early summer 1968, Colonel William Barnes, commander of the USACE–Savannah District wrote a letter to Georgia Governor Lester Maddox stating that the Federal government had no further interest in the CSS *Georgia* and was interested in turning it over to the State of Georgia (Anuszkiewicz 1979). At their July 12, 1968 meeting in Atlanta, commission members stipulated that they would require positive identification of the wreck, proof that it could be raised intact, and an estimate of the cost, before they were willing to accept ownership of the vessel (Minutes, July 12, 1968 meeting of Georgia Historical Commission, 4).

On July 22, 1968, the Col. Barnes issued a permit authorizing the commission to explore and salvage the CSS *Georgia* (*Savannah Morning News*, July 23, 1968, B4).

Sometime in late 1968, GHC Executive Secretary Jewett wrote to the Chief of Naval Operations at the Pentagon in Washington D.C., asking for help identifying the vessel and estimating the cost of raising it. Rear Admiral H.J. Kossler, Commandant of the Sixth Naval District in Charleston, South Carolina, wrote Jewett on January 8, 1969, offering to provide an officer and two enlisted men to dive on the wreck sometime in February. “It occurs to me that the first order of business might be to positively identify the vessel, if possible,” RADM Kossler wrote, “and then to determine some idea of the magnitude of the salvage problem” (Rear Admiral H.J. Kossler, U.S. Navy, to Mary Gregory Jewett, Jan. 8, 1969). Jewett accepted RADM Kossler’s offer, and the dives were scheduled for February 16, 1969. Cold weather delayed the work until Thursday, February 27, 1969, when a team of U.S. Navy Self-Contained Underwater Breathing Apparatus (SCUBA) divers inspected the wreckage. They were led by Lieutenant Commander Lew M. Tew, commanding officer of the submarine rescue vessel USS *Petrel*, based in Charleston, South Carolina. The divers spent about two hours total on the wreck. Divers brought three or four pieces to the surface, including a piece of deck planking with a wooden dowel protruding from it. The divers reported that the size of the wreckage matched descriptions of the CSS *Georgia*, but they could make no positive identification. They found that the vessel size was approximately 200-x-60 feet wide, and that “the superstructure and upper works had deteriorated and collapsed; the gun deck had collapsed and the engines were determined to be in the same approximate position as when the *Georgia* was scuttled. The vessel was covered with 12 to 16 feet of silt and the hull was believed to be intact” (Garrison et al. 1980:35). According to a local newspaper reporter who accompanied the divers, the team concluded, “...it would be extremely costly, technically difficult if not impossible, and dangerous to try to salvage the ship intact...” though it might be possible to raise the engines and cannons.

In truth, the GHC had no intention of raising the CSS *Georgia*, and passed a resolution to this effect at their meeting at Fort King Georgia in Darien on January 10, 1969, two days after RADM Kossler made his offer to send divers to Savannah, but before Jewett had received his letter. The commission members estimated it would cost more than \$1,000,000 to raise, conserve, and exhibit the CSS *Georgia*’s remains—an amount that exceeded their budget (Minutes, January 10, 1969 meeting of Georgia Historical Commission, 1). On January 14, 1969, Jewett proposed tabling the resolution until the divers finished their exploration of the wreck, explaining, “...with the opinion of the Navy to back us up, we will be in a better position and less subject to criticism if we should determine that we are not able to handle the project” (Mary Gregory Jewett to Georgia Historical Commission members, Jan. 14, 1969). At the commission’s next meeting in Atlanta on April 11, 1969, armed with the information provided by the U.S. Navy divers, the members voted unanimously to decline the USACE’s offer of the CSS *Georgia*, but asking for the opportunity to exhibit any artifacts which might be raised from the ship (Minutes, meeting of Georgia Historical Commission, April 11, 1969, 3-6). In June, the commission extended its exclusive exploratory permit with the USACE until the end of 1969, in order to protect the wreckage from the predations of private SCUBA divers; Jewett reported interest from divers as far away as California (*Savannah Morning News*, July 8, 1969). The commission chose to allow the permit to expire in January 1970 (*Savannah Morning News*, Jan. 29, 1970, 1D). The GHC was dissolved in the 1970s, and most of its functions are now the responsibility of the Georgia Historic Preservation Division (GA HPD), which is under the Georgia Department of Natural Resources (GA DNR).

In 1971, the USACE instructed the Standard Dredging Corporation (SDC) of New York to salvage the CSS *Georgia* as the company removed sediments to create a basin for a tide gate in the Back River. Engineer Michael Coburn of the dredge *Cartagena* conducted his own informal study of the wreck, meeting with local historians, visiting archives, and even sending commercial divers down under USACE supervision. In an effort to avoid the expense and trouble of actually

raising the CSS *Georgia*, SDC proposed digging an out-of-the-way trench on the river bottom and using the *Cartagena*'s anchors to drag the wreckage into the hole, safely out of the way of harbor expansion operations. Concerned that this would damage the historically significant wreck, the USACE removed the recovery from SDC's contract and instructed the contractor to avoid dredging within 250 feet of the wreck (1972 Annual Report, Chief of Engineers on Civil Works Activities, Volume II, 8-4).

Efforts to salvage the CSS *Georgia* ceased until USACE–Savannah District commander Colonel Tilford C. Creel revived interest in the ship in 1978 (*Savannah Morning News*, Oct. 10, 1978, B1). Col. Creel hoped to get the wreck listed on the NRHP, but also aimed to learn whether any of the wreckage extended into the main shipping channel, posing a hazard to passing vessels. USACE archaeologist Rick Anuszkiewicz coordinated the first series of exploratory dives beginning on November 11, 1978. Murky water and strong currents frustrated efforts to survey the wreckage (*Savannah Morning News*, Nov. 12, 1978, B1). Later that month, Dr. James Henry of the Skidaway Institute of Oceanography outside Savannah surveyed the wreckage with an Edgerton, Germeshausen & Grier Inc. (EG&G), sidescan sonar device (*Savannah Morning News*, Nov. 20, 1978, D1). On December 11 and 12, 1978, Alan Albright and Ralph Wilbanks from the University of South Carolina's Institute of Archaeology and Anthropology surveyed the wreck site again with a similar device. Later that month, Albright and Wilbanks dove on the wreck, exploring a large section of the ship's broken iron casemate. They found that it was sheathed in interlocked railroad rail (Interview with archaeologist Ralph Wilbanks, conducted by Michael Jordan at the Marshall House Hotel in Savannah on Aug. 2, 2017). Divers from the USACE–Savannah District multidisciplinary dive team, composed of professionals in various fields who volunteered to dive on various USACE projects, began visiting the wreck around this time (Interview with retired USACE diver Joe Wilson, conducted by Michael Jordan at the Marshall House Hotel in Savannah on Aug. 2, 2017).

Dredging activities in the vicinity of the wreck were halted starting in 1974, and no further investigations were conducted of the CSS *Georgia* for quite some time. In January of 1979, a group of students and underwater archaeology instructors from the CRL at Texas A&M University arrived on the scene, contracted by the USACE to perform a survey to assess its condition, previous impacts, conduct structural integrity tests, and to develop a mitigation strategy. Arriving the weekend of January 6 and 7, 1979, the archaeologists conducted magnetic and bathymetric surveys, and used computer software to produce a contoured map of the site. Later, the CRL team joined the USACE divers on the bottom (Interview with Dr. Ervan Garrison, conducted by Michael Jordan at Fort Jackson on July 11, 2015). The dives continued off and on throughout the year. The divers created a grid of ropes crisscrossing the wreckage, and used it to create a map of the site. Diver Tom York, a USACE marine biologist and assistant dive officer, captured black-and-white underwater television footage of the wreck on October 28, 1979 (*Savannah Morning News*, Oct. 29, 1979, B1). Some artifacts were recovered during this period, including one spherical cannon projectile and 13 rifled shells, the blade of a carpenter's adze, a set of iron shackles, a bearing plate taken from a wooden beam, a broken piece of railroad iron, the base of a glass bottle, and a whiteware serving dish (Texas A&M Research Foundation, College Station, Texas, 1980, 43, 82). The principal investigators concluded that the CSS *Georgia*'s hull and decks were intact and buried beneath layers of sand and clay, with all of the vessel's armament and machinery preserved inside (Texas A&M Research Foundation, College Station, Texas, 1980, 43, 112).

In May of 1983, the USACE released a General Design Memorandum outlining its recommendations for the CSS *Georgia*'s future. The wreck was deemed an impediment to expanding the shipping channel, and its cultural significance required archaeological mitigation. The authors proposed that the USACE construct a wet-cell cofferdam around the ironclad. They predicted this would slow the current and increase visibility, allowing divers and archaeologists to successfully recover the ship's remains and conserve them in an onshore facility nearby. The

idea was reportedly based on a cofferdam used by archaeologist John Broadwater to excavate a British shipwreck in Yorktown, Virginia in the late 1970s, though the first proposal to use a cofferdam to raise the CSS *Georgia* was actually put forward by Norman Scott of Florida-based Expeditions Unlimited in April of 1979. In 1983, the USACE estimated the total cost at just over \$2,000,000 (Interview with Dr. Ervan Garrison, conducted by Michael Jordan at Fort Jackson on July 11, 2015). No funds were allocated, and the plan was never put into action.

USACE scientists and divers returned to the wreck site in 1984, aiming to address concerns in the local shipping community that the wreckage had shifted into the shipping channel. A new hydrographic survey was performed in February, followed by a sonar survey in early April. The surveys revealed that two large sections of the ship remained intact. Experts concluded that the CSS *Georgia*'s wreckage was not protruding into the channel. Divers placed markers around the ship, with the intent of returning to the site periodically to see if the markers had moved—indicating the wreck was shifting (*Savannah Morning News*, Apr. 13, 1984, 1A, 10A). The divers would also locate four cannon and recover approximately 100 rounds of ammunition during 1984 (Figure 3-01).

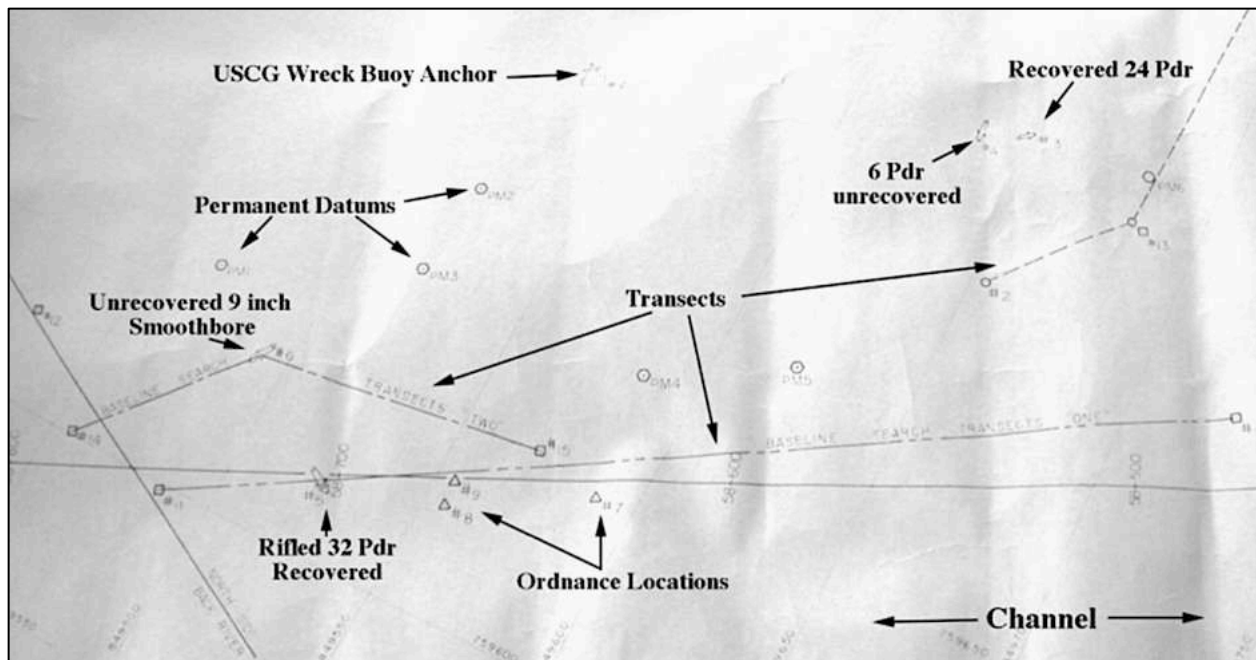


Figure 3-01. Excerpt from the 1986 site plan produced by the USACE-Savannah District during diving operations at the CSS *Georgia* wreck site. Not depicted on the map, the East Casemate section would be generally located at the upper right near the unrecovered 6 pounder, and the West Casemate would be generally located above the unrecovered 9-inch smoothbore, above and adjacent to the “Permanent Datums” (courtesy of the USACE-Savannah District).

Specifically, on April 12, 1984, USACE archaeologist Anuszkiewicz and diver Wilson discovered a cannon perched precariously atop the CSS *Georgia*'s armored casemate. Fearing the gun might roll into the channel, the team decided to raise it. The cannon was hoisted off the wreck on Saturday, April 14, 1984, and lowered into the moat at Fort Jackson, where the thick, wet mud would protect it from degradation until conservation could begin. The gun proved to be a 5.5-foot long, 1,500-pound, smoothbore howitzer that fired 24-pound iron balls. Records indicated this was the one-of-a-kind gun cast by Alvin Miller of Savannah specifically for the CSS *Georgia* (*Savannah Morning News*, Apr. 15, 1984, 1A, 9A).

Divers located a second cannon on April 26, 1984. This weapon was a 5,700-pound, 10-foot long, rifled gun. The USACE publicly announced plans to raise the cannon by 1:00 p.m. on Saturday, April 28, 1984, and a crowd of 100 people gathered at Fort Jackson to watch the huge artifact break the surface. Unexpectedly strong currents delayed the recovery until 4:30, by which time most of the spectators had left. The weapon was too heavy to place in the fort's moat, so it was instead lowered into a specially-dug, plastic-lined pit on the fort grounds, and the pit was filled with water to protect the rusted metal (*Savannah Morning News*, Apr. 29, 1984, 1B). John Roberson, an employee of the nonprofit Coastal Heritage Society (CHS), which began operating Fort Jackson in 1976, supervised the conservation of the two cannon. Both guns went into electrolysis tanks at Fort Jackson in 1986, and were ready for display at Fort Jackson by July of 1989 (*Savannah Morning News*, July 6, 1989, 1B). Roberson discovered that the larger rifled gun was loaded, and took it to the U.S. Marine Corps Air Station in nearby Beaufort, South Carolina, to have the shell safely removed (Interview with John Roberson, conducted by Michael Jordan at Fort Jackson on Aug. 2, 2017).

On February 10, 1987, the CSS *Georgia* was added to the NRHP, the culmination of close to two decades of effort by successive personnel at the USACE–Savannah District. The USACE first attempted to nominate the CSS *Georgia* to the NRHP in 1973. The nomination was approved by the SHPO, but was blocked in 1981, by a NPS historian who wanted the CSS *Georgia* nominated as a group with two other wrecked vessels from the Confederate Navy's Savannah squadron. NPS personnel also requested a photograph of the CSS *Georgia*, but none could be located. It was officially listed when the USACE overcame these obstacles in 1987, by proving that the other two wrecks no longer existed and substituting a sidescan sonar image in place of a photograph (Anuszkiewicz January 5, 1979).

When it became clear that the USACE had no imminent plans to raise the CSS *Georgia*, the nonprofit CHS began a public campaign to raise funds and awareness about the ironclad. In July 1987, with permission from the USACE, the society sent archaeologists Wilbanks and Gordon Watts to the bottom to explore the wreckage. Using SCUBA gear, the men made two dives from a small boat, the first lasting 58 minutes and the second 47 minutes (Interview with Ralph Wilbanks, conducted by the author at the Marshall House Hotel in Savannah on Aug. 2, 2017). In this short amount of time, the archaeologists were able to prove conclusively that there was no intact hull pressed into the mud and clay beneath the wreck. Nor were there any companionways, as alleged by earlier divers. Watts and Wilbanks did locate and study an intact oval gun port in the section of wreckage later identified as the East Casemate (Interview with Dr. Gordon Watts by Michael Jordan on July 23, 2017).

Since the site's discovery in the late 1960s, subsequent research on the vessel revealed more questions than answers concerning her construction and brief life span. The most extensive and recent of these research endeavors was the archival study conducted by New South Associates of Stone Mountain, Georgia (Swanson and Holcombe 2003), which preceded the subsequent 2003 field investigation (see below). The research from the archival study was incorporated into the historical background presented above.

In 2003, under a Permit for Intrusive Archaeological Research on U.S. Naval Cultural Resources, No. PCI-2003-002, issued by the U.S. Navy, NHHHC, Panamerican, and TAR performed an *in situ* archaeological assessment of the site while under subcontract to Gulf South Research Corporation of Baton Rouge, Louisiana (Watts and James 2007). The 2003 investigation of the CSS *Georgia* generated considerable insight into the nature and scope of the surviving vessel structure and the archaeological record associated with those remains. The most significant issue addressed was determining the amount and condition of the surviving vessel structure at the wreck site. Based on previous investigations at the wreck site it had been assumed that a significant portion of the hull of the vessel survived underneath the sections of extant and exposed armored casemate, or was in fact buried in bottom sediments. The 2003 investigation clearly

established that the surviving remains of the Civil War ironclad were limited, and that the lower hull of the vessel no longer existed. Two large sections of iron casemate and a third smaller section were present along with the vessel's propulsion machinery including steam cylinders and at least one propeller and shaft, three cannon, a possible boiler, and miscellaneous, small (as of yet unidentified) components and artifacts (Figures 3-02 to 3-07).

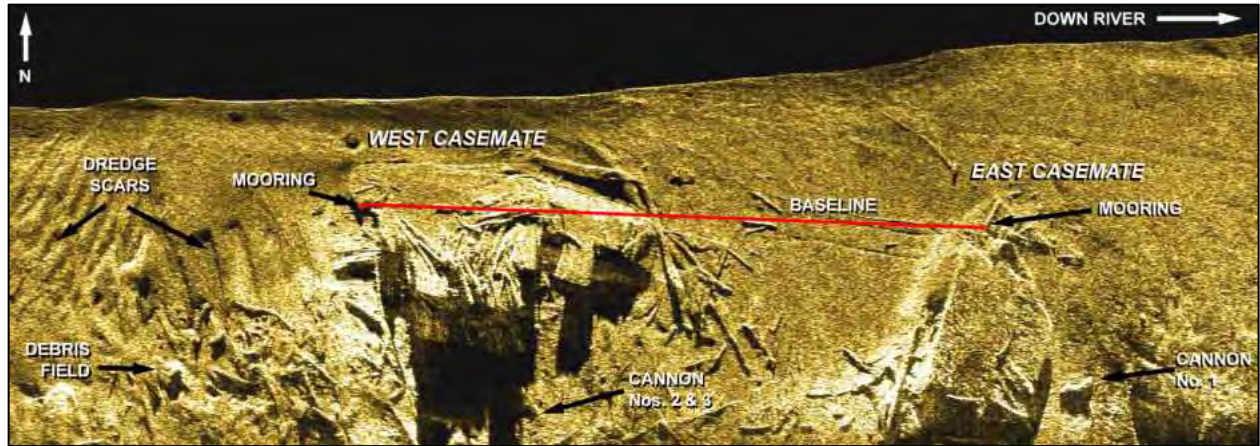


Figure 3-02. Sidescan sonar image from the 2003 investigation (as presented in Watts and James 2007).

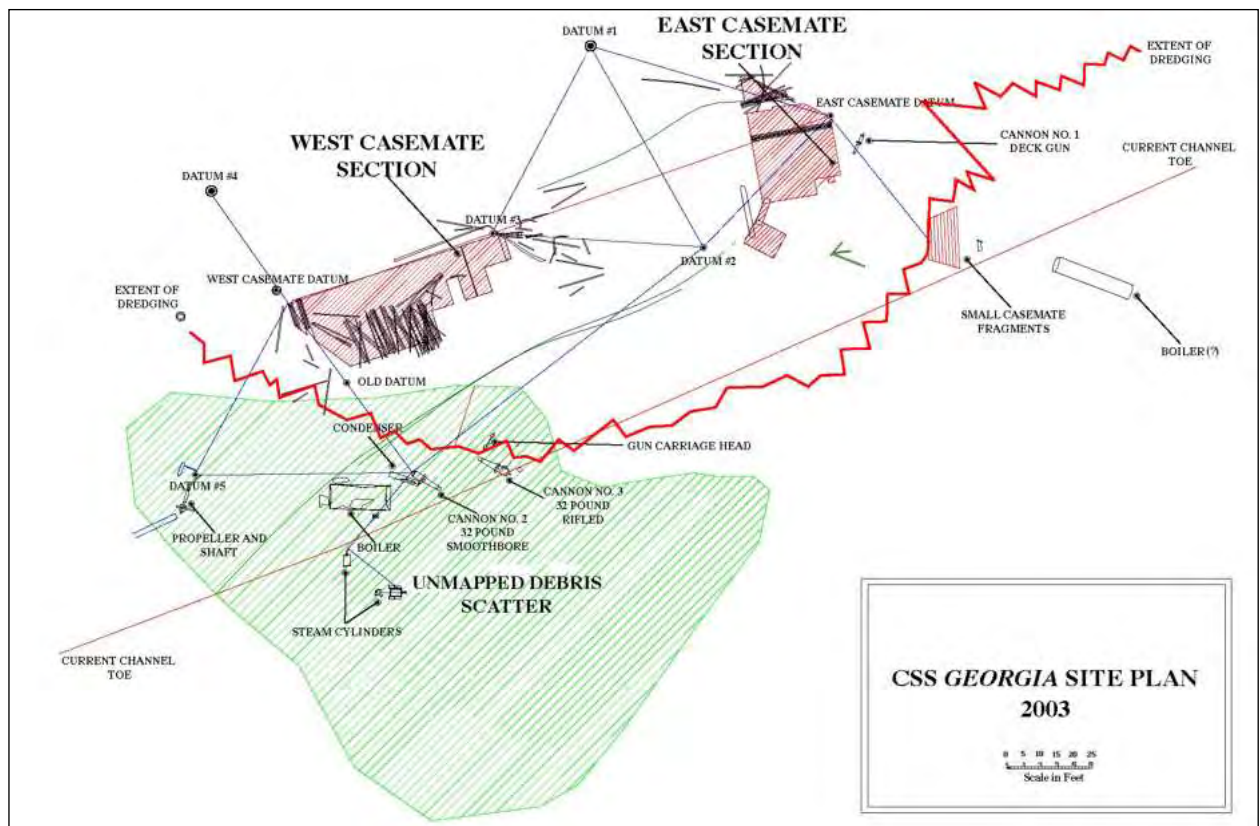


Figure 3-03. AutoCAD site plan (as presented in Watts and James 2007).

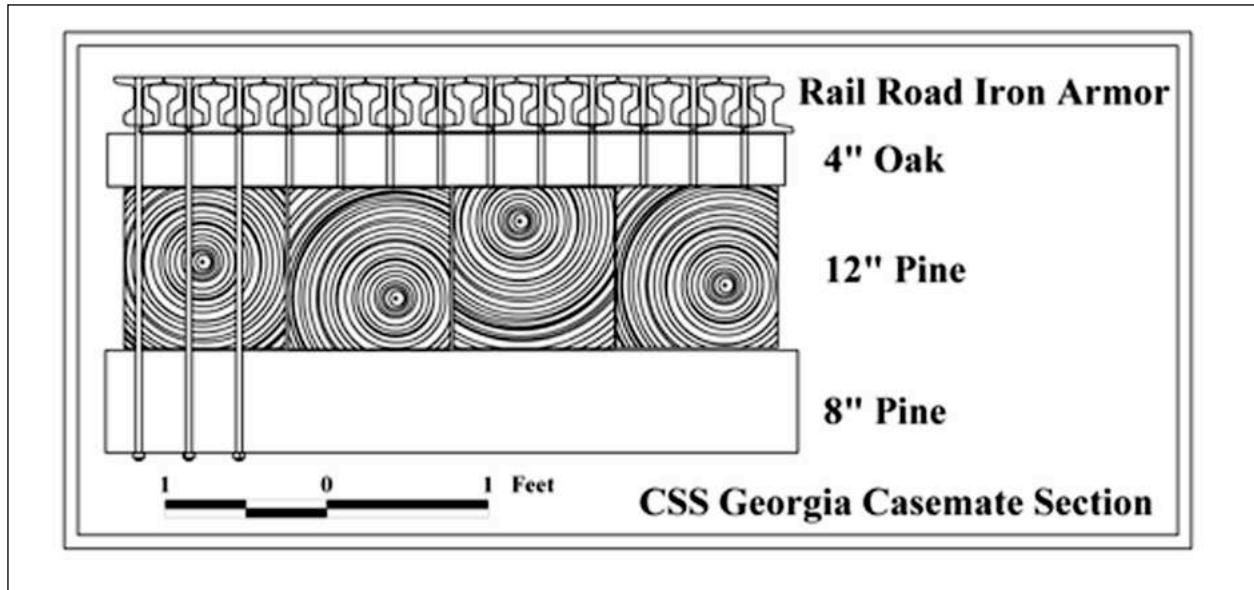


Figure 3-04. Casemate armor configuration (as presented in Watts and James 2007).

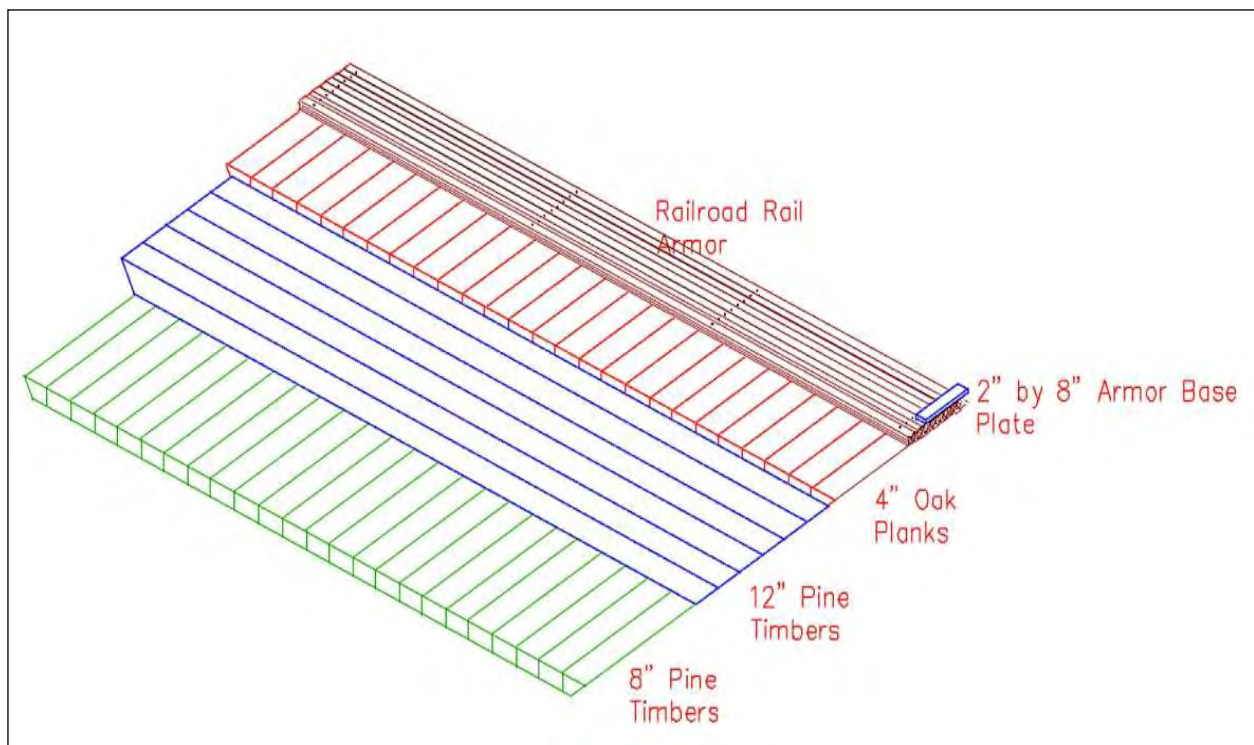


Figure 3-05. Casemate wall and armor construction configuration (as presented in Watts and James 2007).

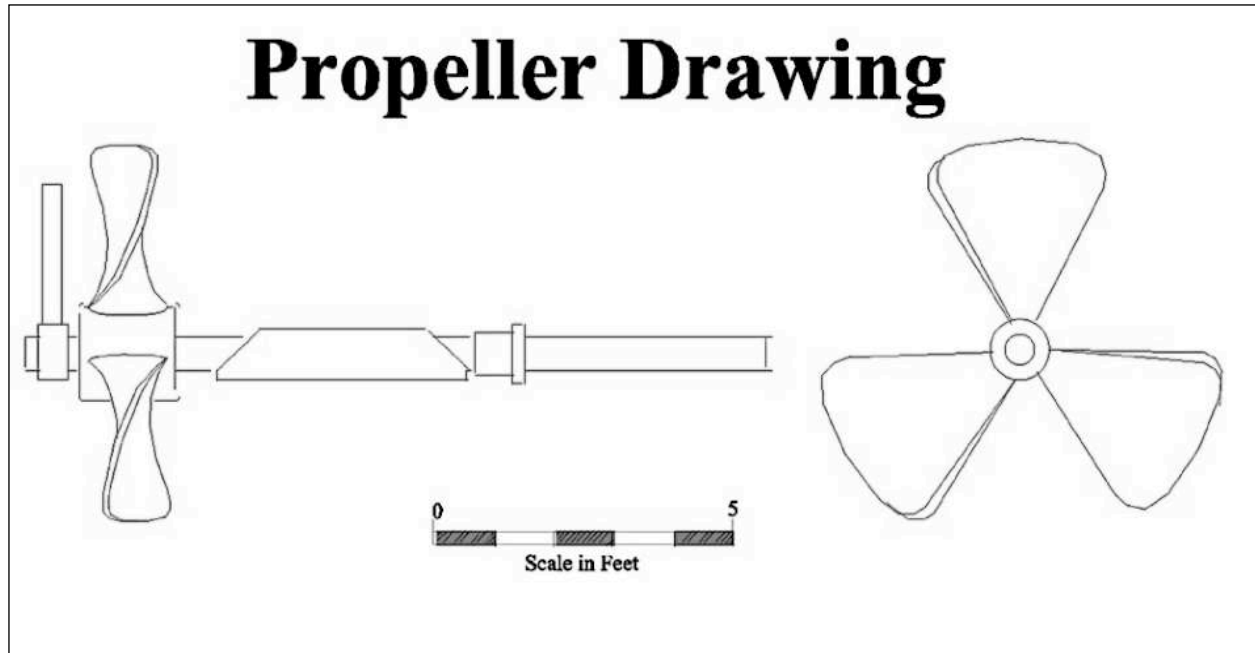


Figure 3-06. AutoCAD line drawing of propeller and shaft (as presented in Watts and James 2007).

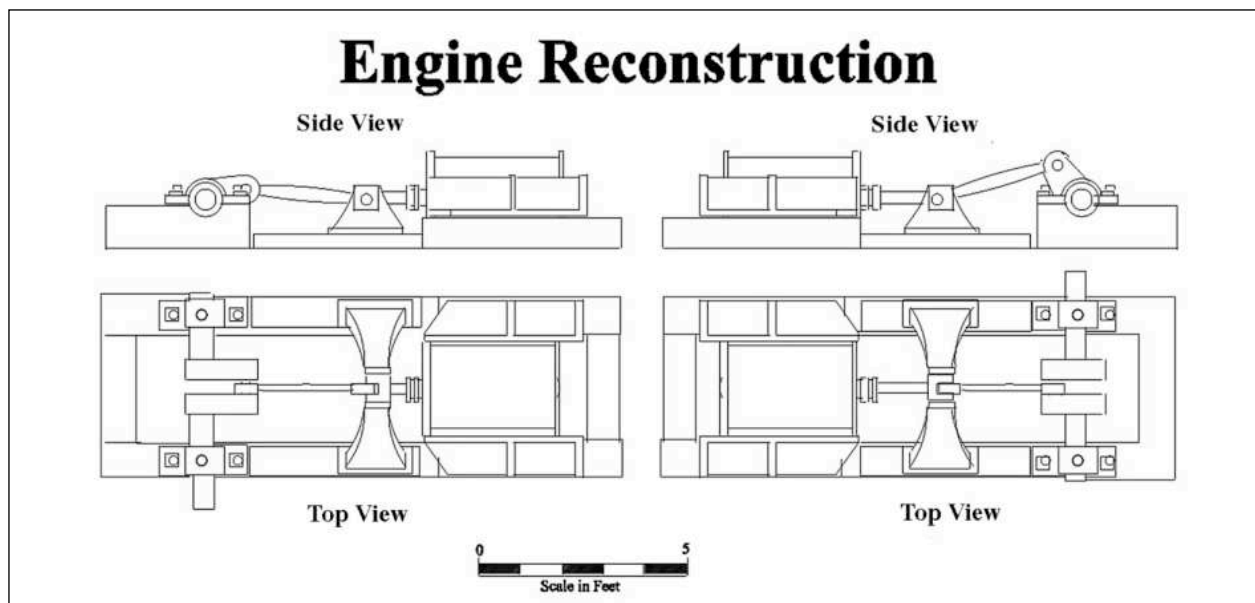


Figure 3-07. Reconstruction of the CSS *Georgia* engines (as presented in Watts and James 2007).

The absence of lower hull and the impacts to the existing components were found to be a direct result of 1870s salvage attempts and to a much greater degree operation and maintenance dredging operations associated with the Savannah Harbor Navigation Project. With respect to dredging impacts, the previous dredging activities, especially the 1983 box cutting of side slopes and excavation of 4 vertical feet of channel bottom for advance maintenance dredging at the wreck site, have had an extreme and ongoing adverse effect on the property. Besides cutting or “chewing” into the wreck, dredging impacts destabilized the site by removing protective sediments and resulted in the continuous and ongoing degradation of the wreck through exposure

(i.e., *Teredo navalis* damage, erosion, etc.). Because of the limited amount of structural remains and the level of disturbance to the archaeological record, it was recommended that data and material recovery be designed as a systematic archaeological recovery including systematic site testing, and partial and full excavation and data recovery (Watts and James 2007).

As evidenced by the vessel component drawings above and the site plan below, the 2003 investigation clearly demonstrated that the site could be thoroughly and effectively investigated by experienced archaeological divers working the tidal windows, in addition to assessing site distribution and state of preservation.

In preparation of the current mitigation fieldwork carried out as part of SHEP, in February 2013 Panamerican conducted a high-resolution sonar survey on the site for the USACE, Savannah District while under subcontract to DCA/GEC. Advanced Underwater Surveys, Ltd. (ADUS), a Scottish-based company specializing in the survey and study of shipwrecks, performed the high-resolution multibeam sonar survey with TAR as subcontractors to and along with Panamerican. Dial Cordy and Associates, Inc. (Dial Cordy) performed the high-resolution sidescan sonar survey. The two sets of data that were gathered as a result of the investigation are complimentary, both enhancing the usefulness of the other. One key aspect of the multibeam survey is the ability to use it to identify exactly where significant artifacts, vessel components, objects, and features are on the site, to a relative accuracy of a few inches (even less in some instances), and an absolute accuracy of less than 1 foot. The sidescan data, while not as accurate, allows a different view of an object not seen with the multibeam, thereby enhancing the understanding of a specific component in question (Dean et al. 2013). It should be stated that a fourth heavy gun, presumed to be still on-site, was located by the 2013 investigation. Additionally, the survey indicated displacement of a number of substantial objects and the bending of four of the seven datum posts—all indications that the wreck had suffered further physical interference between 2003 and 2013.

The resultant geo-referenced site plans that have been produced as result of the 2013 investigation, both the 2D Digital Terrain Model (DTM) site maps and the 3D WreckSight map produced by ADUS, as well as positioning data, afford maximum effectiveness in future mitigation planning and actual field operations (Figures 3-08 and 3-09). The data, as will be shown below, was instrumental in designing the placement of work plants on-site as it related to their functional placement, safety, and site protection (i.e., mooring, vessels, barges, and their anchors), and offer necessary information required for engineering aspects such as the size and exact location of large vessel components (i.e., casemates) and artifacts (i.e., cannon) that will be recovered by crane. Furthermore, the maps and resultant positioning data now safely allow the mapping, recordation, and relocation by archaeological divers of any object on the riverbed, regardless of size, particularly as data recovery diving operations on the site intended to exploit the advantages of industry-standard acoustic tracking systems for divers interfaced with the maps in real-time.

Employing data from the Multibeam study (Dean et al. 2013), an Integrity Test and Test Lift (James and Watts 2014) investigation was conducted for the USACE–Savannah District by Panamerican, in concert with TAR and the U.S. Navy SUPSALV along with MDSU-2 to provide essential information about the structural integrity of the wreck remains relative to recovery techniques that could be implemented or required during the current mitigation. Performed in October and November of 2013, the information obtained from the study helped to shape a large part of the Research Design (James et al. 2014), as well as the methodology initially employed by SUPSALV/MDSU-2 and Panamerican/TAR during the current recovery of the larger casemate pieces and wreck components.

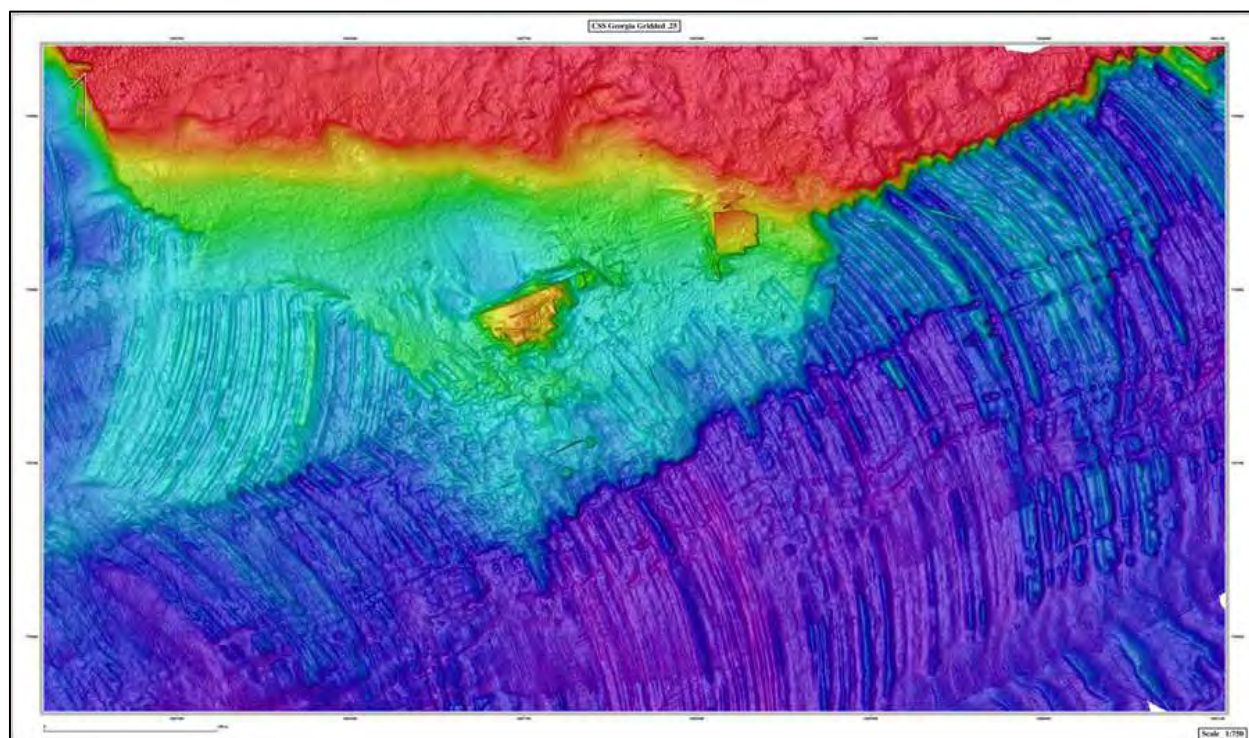


Figure 3-08. 2D DTM site map produced as georeferenced TIFFs.

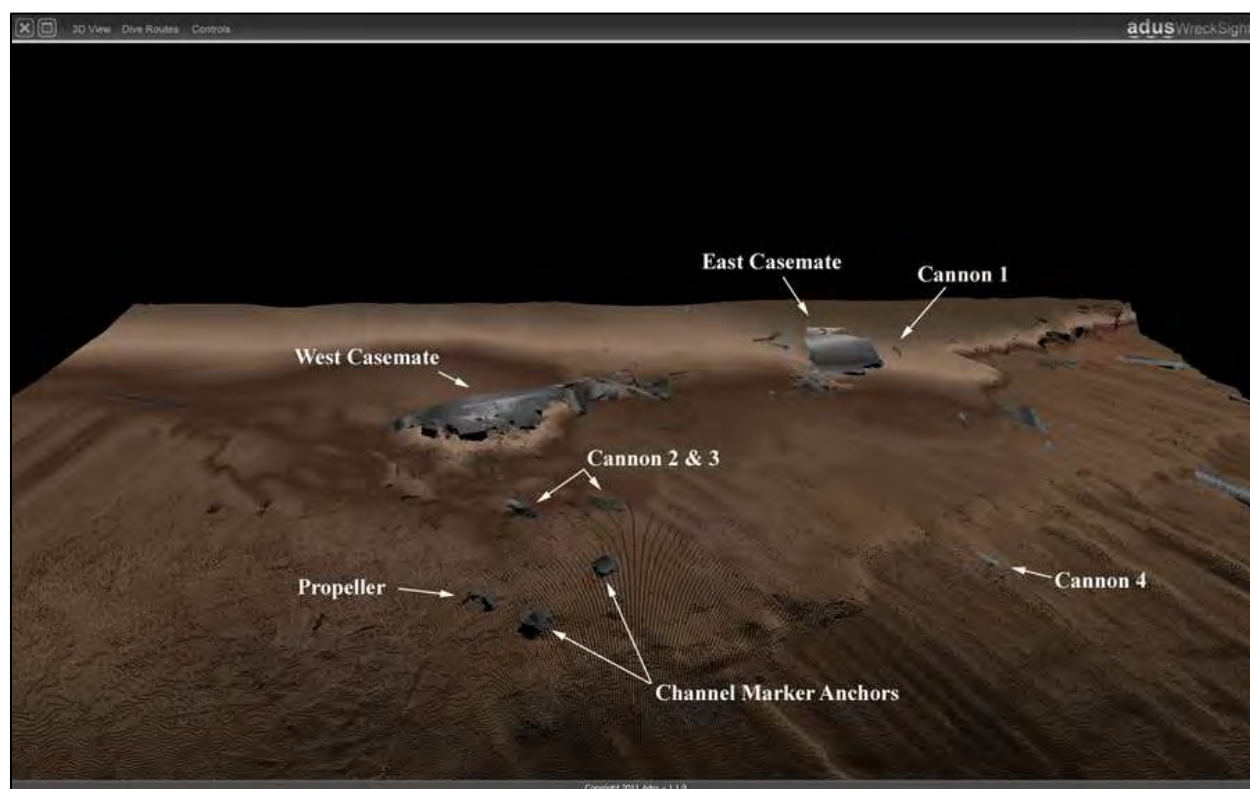


Figure 3-09. Labeled screen grab of the 3D WreckSight program. Note the newly discovered fourth heavy gun in the channel, "Cannon 4."

Planned to take four weeks, the Integrity Test and Test Lift investigation (James and Watts 2014) consisted of underwater recordation and tagging of a small section of casemate selected for recovery, reconnaissance of the wreck area for unexploded ordnance (UXO), mapping of UXO, tagging selected artifacts, recovery of the selected casemate section, integrity tests on the casemate section relative to future lifting and recovery requirements, and conservation of the recovered section. The project methodology entailed the following objectives:

1. Reestablish Baseline/Navigation web
2. Set Up of Ultra Short Baseline (USBL) Underwater Positioning System
3. *In situ* recordation of the Casemate Section to be Recovered
4. UXO detector trial and Location of Ordnance
5. Test Lift Oversight and Interface with SUPSALV/MDSU-2
6. Test Excavations
7. Conservation
8. Integrity Test and Samples

Conducted from October 21 to November 3, the Panamerican/TAR team conducted Objectives 1 through 4 above prior to SUPSALV/MDSU-2 arrival. Objectives 5 and 6 took place with all present from November 8 through 16. SUPSALV/MDSU-2 and their contractor Donjon Marine employed a 150-foot “spud” barge that was anchored for the period on the northern side of the site. The visible moorings on the East and West Casemates were employed to position the barge on site and ensured anchoring would not affect any portion of the site.

The first object of the Integrity Test investigation was to reestablish the site datums, main baseline, and additional transit lines, at the same time employing the USBL system to determine its effectiveness. Illustrated in Figure 2-16, the 2003 site datum were still *in situ* as were the baseline and some of the transit lines, although some of the lines required replacement as they had torn loose or had become mussel-covered, and were hard to see and transit along by the diver. Employed on all aspects of the investigation, the USBL system was put into operation and was found to expedite diver movement and reacquisition of previously mapped artifacts (i.e., Cannon 4), as it was highly accurate in underwater positioning. Comprised of a diver-mounted transponder and a vessel-mounted receiver integrated with Differential Global Positioning System (DGPS) positioning, the system allowed topside archaeologists to accurately direct the diver to previously mapped components or artifacts, as well as to determine the exact location of the diver at all times.

Initial inspection of the East and West Casemates and potential recovery candidates indicated the wreck had undergone a fairly dramatic change since last investigated in 2003. Explaining the reason for a lack of expected visual definition to wreck components in the multibeam image, site components and artifacts were found to be completely covered/carpeted in a 2- to 3-inch thick layer of mainly small mussels (a recent invasive and prolific species) making initial assessment difficult; however, it was quickly found that the mussels were easily removed by hand or mechanical means (i.e., water jet), the mussels coming off the casemate in large layers or swaths. While the presence of the mollusks will somewhat slow underwater measurements, the mussels will actually aid in the location of artifacts during area searches, as they adhere only to hard objects and not to the bottom sediments which are predominantly exposed Miocene clay.

In addition to the invasive mussels, inspection indicated casemate wood originally attached to and backing the railroad iron had deteriorated dramatically since 2003, most likely a result of increased *Teredo navalis* worm activity. Although the wood was found mostly to be intact in 2003 (i.e., both attached to the casemate and easily measured with original surfaces and faces,

and seemingly free of *Teredo navalis* worm damage, as it was not observed or noted), divers now could reach under the edges of both large casemate sections an arm's length and not locate intact or solid wood. What they did encounter felt rotten, "crumbly," and very irregular. Reasons for this advanced deterioration are unknown, but the wood condition will affect future recovery/lifting methodology for the casemate sections as the wood backing provided structural support for the railroad iron facing. The identification of the *Teredo* species will be determined during the upcoming mitigation phase, as will an assessment of its impact to site integrity.

As illustrated in the Figures 3-10 and 3-11, it was known from both the 2003 investigation (Swanson and Holcombe 2003) and Multibeam Survey (Dean et al. 2013) that two small sections of the East Casemate had been displaced from the larger casemate section. Panamerican selected these as the initial potential recovery candidates, as they were relatively small and were separated from the larger sections, making them easily recovered. Relative to the assessment by archaeologists of the two recovery candidates, the candidate section immediately to the south was deeply buried on its western and southern half, and covered with large wreckage fragments, mostly lengths of rail. Because of these conditions, this candidate was deemed unsuitable for recovery, as it could not be readily recorded and extensive excavation and wreckage removal from atop the section would be required prior to lifting.

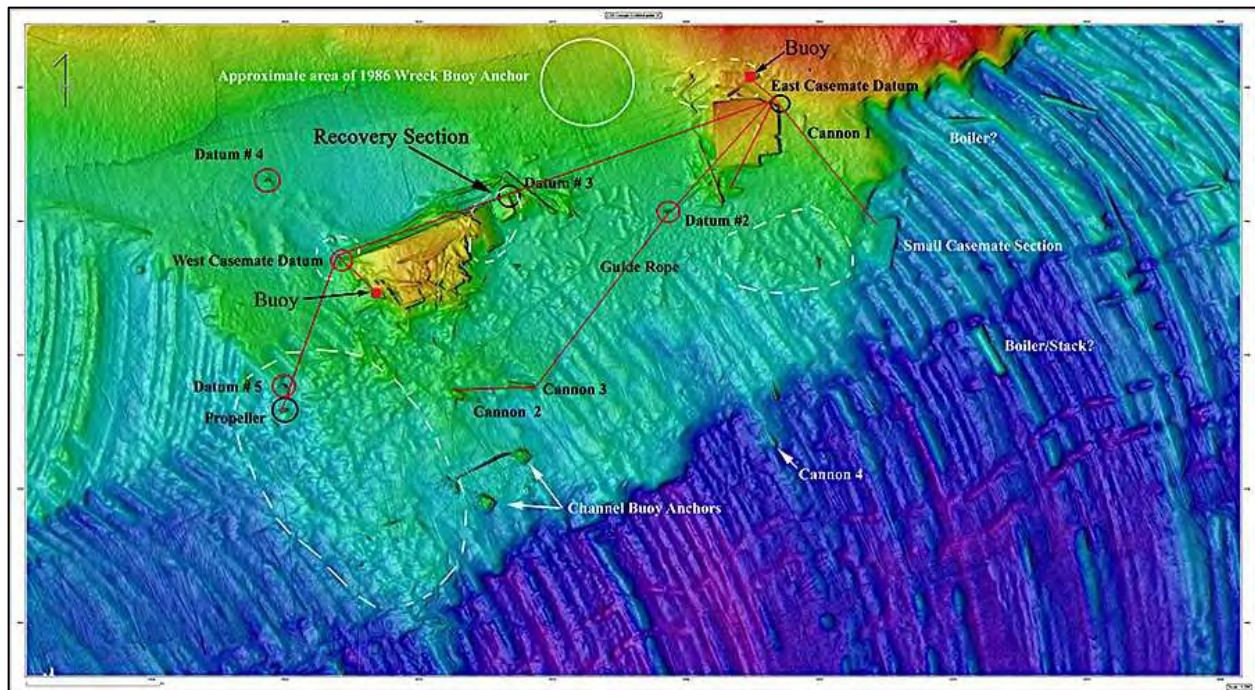


Figure 3-10. Site plan showing datum and baselines repositioned, the East Casemate where the original recovery candidates were located, as well as the subsequent Recovery Section adjacent the downriver side of the West Casemate. Left is upriver, right is down river.

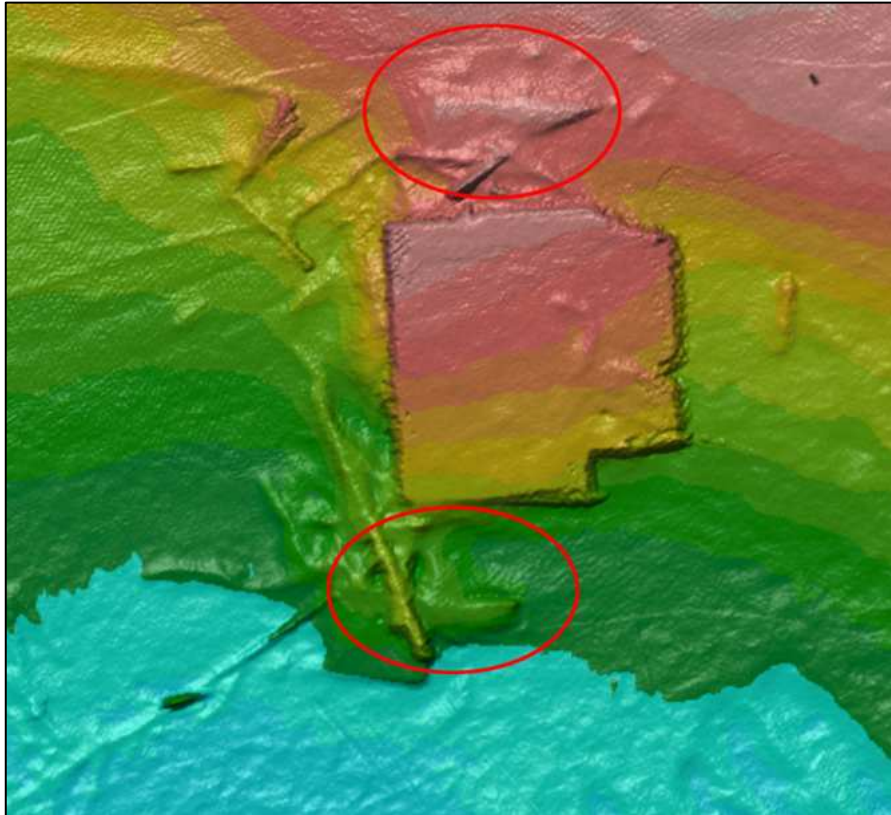


Figure 3-11. 2013 Multibeam image showing East Casemate with displaced sections. Sections at northern and southern ends were original recovery and Integrity Test candidates.

The potential section off the northern side of the East Casemate was also found to be unsuitable for recovery, but for different reasons. The section was found to be upside down with the iron rail down; however, the wood backing was no longer extant, and only numerous small bolts or spikes projecting up from the iron in various locations were present. Between 6 and 8 inches long, these originally fastened the railroad rails to the no longer extant wood. Retaining little structural integrity because of the lack of wood backing, this piece was deemed not suitable for testing.

A third section of casemate, labeled “Small Casemate Section,” was situated to the southeast of the East Casemate section. While not a recovery candidate, inspection of this piece indicated that it too lay iron-side down with what would have been the wood backing-side up. However, the wood was no longer present. This again was evidenced by numerous small bolts or spikes projecting up from the iron in various locations. Between 6 and 8 inches long, these bolts originally fastened the no longer extant wood backing.

Because the two potential recovery candidates adjacent the East Casemate were found to be unsuitable, the focus turned to the small square section on the eastern end of the West Casemate, a section thought to represent an area at and below what would have been a gun port (Figure 3-12). This section was relatively small, was separated from the West Casemate, was free of overburden, retained some wood underneath, and also appeared to best represent the current condition of both the West and East Casemate sections; therefore the section was selected as the best recovery candidate for determining integrity relative to future recovery requirements. It was documented by archaeologists prior to lifting by SUPSALV/MDSU-2 personnel. Specifically, the northern side of the piece was 6 feet 5 inches long, the eastern side was 7 feet 4 inches, the

southern side was 7 feet 5 inches, and the western side was 8 feet long with the western most rail projecting 16 inches past this length. The southeastern corner of the fragment was recessed approximately 6-x-20 inches. The fragment's western side lay adjacent to the West Casemate and was separated by a gap 20 inches in width at the southern corner and 4 inches wide at the northwest corner. Reaching underneath the railroad iron on the other three sides of the section for a distance of approximately 1.5 feet indicates some degraded wood was present. The wood, however, was highly eroded near the edges, had separated by several inches beneath the iron on the southern and eastern side, and was totally covered in a 2- to 3-inch thick layer of mussels. The estimated weight of the piece, assuming all wood to be intact, was 9,500 pounds.

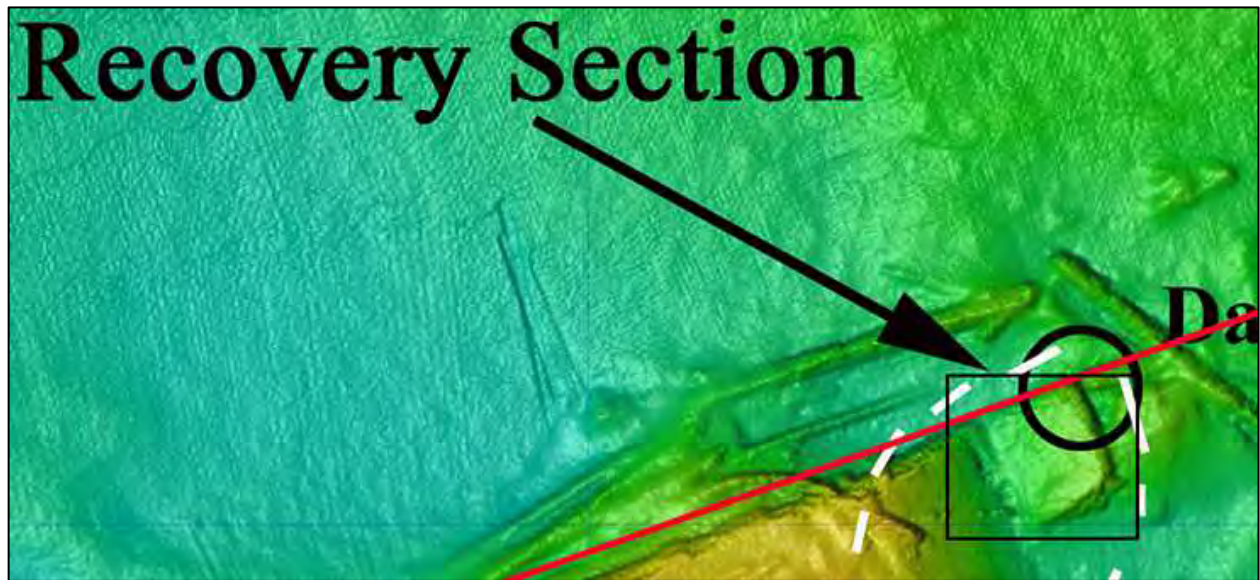


Figure 3-12. Subsequent Recovery Section located adjacent Datum 3 and the Baseline.

Upon completion of recordation of the proposed recovery section, archaeological divers conducted a test survey with a UXO detector to locate UXO associated with the wreck site if present. Utilizing the USBL system, two pieces of unknown ordnance, a shell and a round shot, were located down slope of Cannon 2 and 3 sitting exposed on top of the Miocene clay bottom. Cannon 4, originally located with the multibeam, was also inspected and confirmed as a large gun. It should be noted that while a complete survey of the area was not accomplished, the area in which the ordnance was found generally corresponds to the 1986 site map “ordnance locations” (see Figure 3-01). Illustrated in Figure 3-13, the use of the USBL system interfaced with the geo-referenced site map allowed divers to be guided accurately to known locations without the use of transit lines. It was an invaluable tool during the mitigation of the site, as it expedited diver travel time, ensure total coverage during site mapping, and ensure accurate artifact and component positioning.

Objectives 5 and 6 were performed with SUPSALV/MDSU-2 from November 8 through 16 aboard Donjon Marine’s rented 150-foot “spud” barge with crane. Illustrated in Figures 3-14, and 3-15, the barge was anchored on the northern side of the site employing the visible East and West Casemate mooring balls to position the barge in the correct location and alignment so as to first ensure anchoring would not affect wreck components, and secondly to afford optimum access to site components by MDSU-2 divers and recovery by crane. The mooring balls had been placed on-site by Panamerican archaeologists only for the duration of the project, and the barge anchoring location, besides not affecting the site, was well outside of the navigation channel.

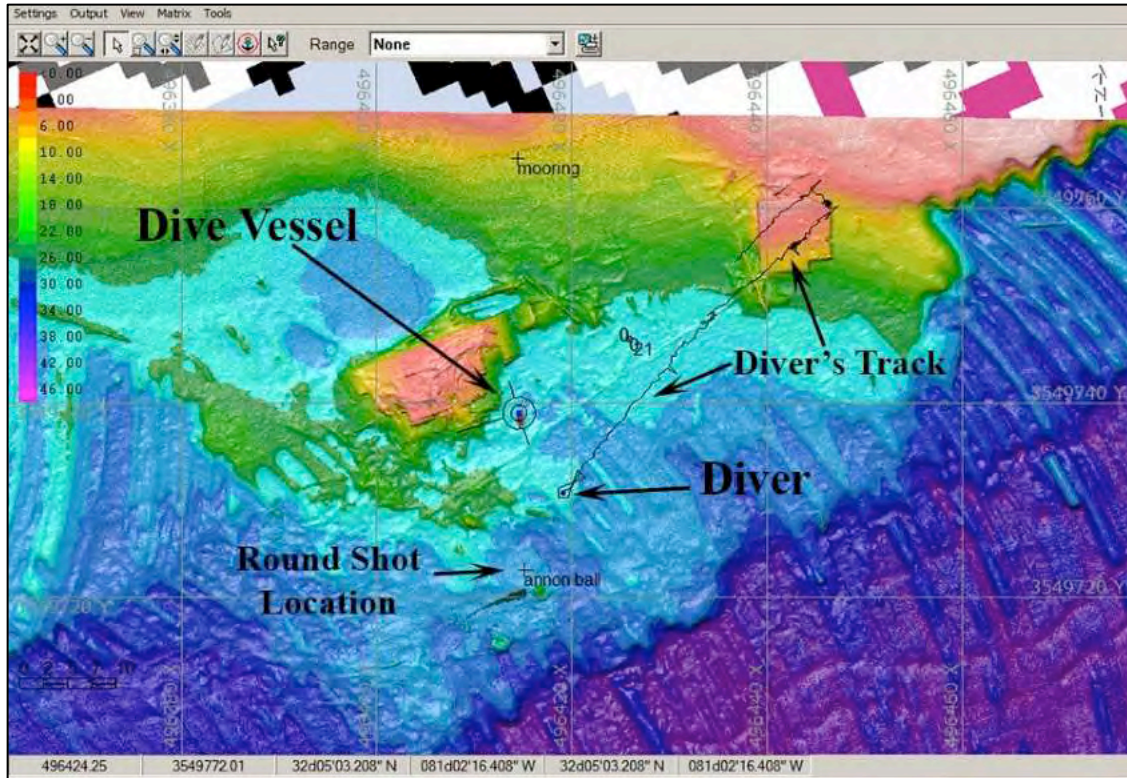


Figure 3-13. Navigation computer screenshot showing USBL system remote tracking interfaced on the geo-referenced multibeam site map. Image shows diver (fish symbol) transiting along “Transit Line” toward Cannon 3 and ultimately to the area where a round shot “cannonball” had been located during the UXO metal detector trial search. The diver would subsequently find a second piece of ordnance, a shell, near the round shot, the positions of both accurately positioned on the map with HYPACK navigation software.



Figure 3-14. Barge on site with lift crane. Note the small orange West (left) and East (right) Casemate mooring balls that were employed to align the barge on the northern side of the site. Crane body is directly opposite the recovery section.

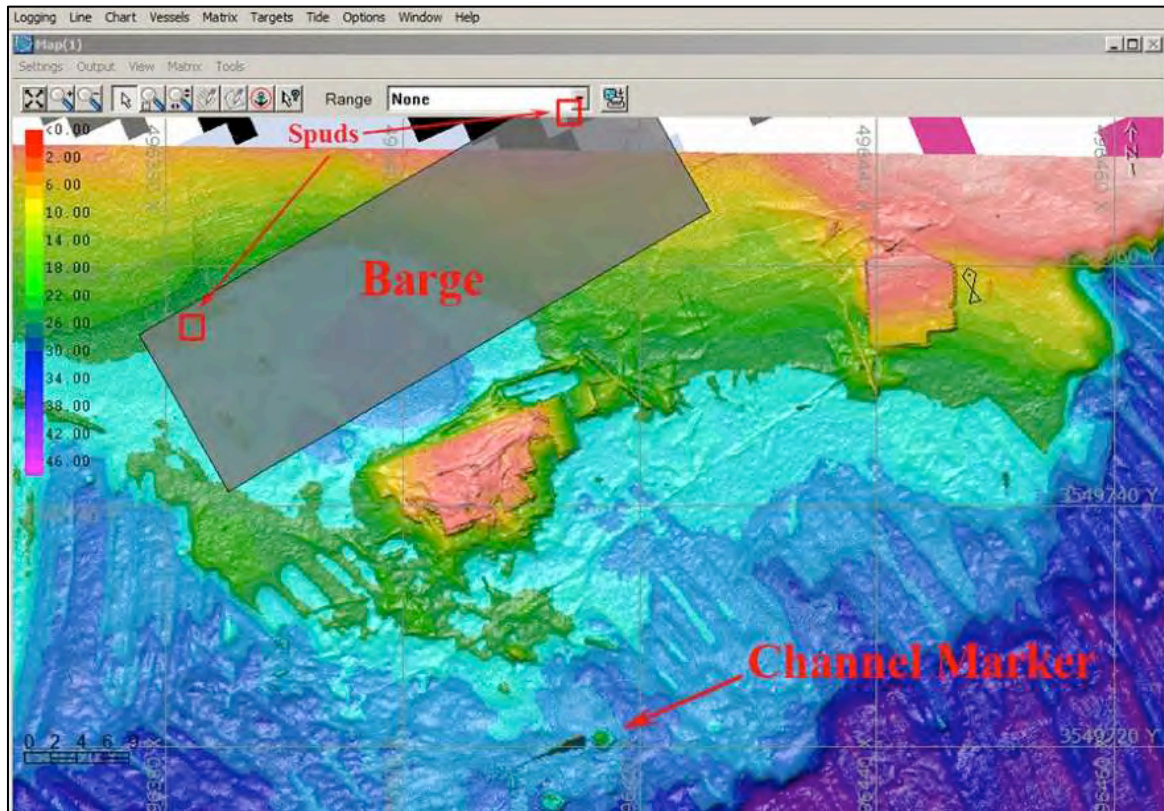


Figure 3-15. Site base map showing barge position to the north of the site. Note spud locations well away from wreck components, as well as the channel marker that can be seen in the figure above. Channel marker and dark blue channel to the south illustrate the location of the work barge well outside of the navigation channel.

Once the barge was anchored, assessment of the proposed recovery section by MDSU-2 divers commenced. The divers worked in pairs with one of the divers equipped with a USBL system transponder. The dives were conducted during the slack tide windows, and lasted from 1 to 2 hours depending on current strength with usually two tide cycles dived each day (i.e., an ebb and a flow). Divers initially assessed the section relative to overburden, wood backing, underlying sediment, and its position relative to the large West Casemate, as well as the tools required for clearance and lifting. During the subsequent dives, the overlying mussels were easily removed with a water jet and the sediment was cleared around its base. The space between the section and the West Casemate was also cleared by water jet for inspection and it was determined that the section was only attached to the West Casemate by one or two degraded timbers. Because the integral strength of the recovery section was unknown (i.e., would the iron rails stay together and would the wood backing stay attached?), MDSU-2 divers readied the section by clamping ratchet straps around both the iron and the wood. In preparation, divers jetted a series of trenches in order to lance under the section for subsequent placement of feeder lines that would be subsequently employed to pull ratchet straps underneath the section. Three of the sections' corners had ratchet straps placed around both the iron rails and wood backing in this manner. Additionally, two straps were placed around the entire body including the wood backing perpendicular to the rails—one near the center of the section and one near the southern edge. The ratchets were all tightened in place.

The lift cradle, constructed of iron I-beams, was then lowered onto the recovery section and attached to the either end of the section again with large ratchet straps (Figure 3-16). As seen in Figure 3-17, the recovery section was successfully lifted by this method. However, a small

section of rail did calve off the main section. This small section was shorter than the other rails, and had not been ratcheted together as the main section was. Also, as illustrated in Figure 3-18, the wood backing, for the most part, was in a highly deteriorated condition with little integrity and mostly detached from the iron rails.

After recovery, excavation of the sediments down to clay was conducted underneath where the recovery section had originally lain. Preceded by hand collection of all visible wood fragments and artifacts into a basket, excavation was conducted by MDSU-2 divers with a 6-inch venturi dredge powered by a large diesel water pump; however, as illustrated in Figure 3-19, very little was recovered other than small fragments of non-significant concretion and wood fragments. Several fastener fragments were also recovered.



Figure 3-16. Iron I-beam cradle being lowered down to the recovery section.



Figure 3-17. Recovery Section with the cradle removed (note ratchet straps). Small section of rail has broken away as evidenced by linear cracked seam.



Figure 3-18. Wood backing that detached from the Recovery Section. The wood for the most part was in a highly deteriorated condition with little integrity that fell away from the iron rails when unsupported.



Figure 3-19. Artifact recovery from excavation beneath Recovery Section. The majority, if not all, of the recovered artifacts were small fragments of non-significant concrete and wood.

Designed to help acquire data that was employed by SUPSALV engineers for the lifting of casemate sections during the current recovery phase (i.e., lift frame strength and design requirements, amount [weight and length] able to be lifted, purchase points, etc.), destructive testing was undertaken on the smaller of the two casemate sections in November 2014 (Figure 3-20). Focused primarily on the rails and to lesser degree on the fasteners, the following tests were conducted.

1. Transverse bending strength (one test).
 - A simple bending strength test to determine the bending strength of the rail/concretions. This will give an indication of what beams would have to be used under the existing casemate to prevent rupture along the concretion lines.
2. Rail cross section analysis.
 - Involves cutting off 8 inches of one end of both halved sections resulting from Test #1 above. This will include cross sectional area determination of each of the 14 rails in order to see the typical current dimensions of the rail typically are at present.
3. Chemical composition of three rails (from sections obtained in Test# 2 above).
 - Tests to see the composition of the rail material
4. Tensile tests.
 - Tests to determine the yield and ultimate strengths of the rails as well as modulus of elasticity. Tensile coupons will be obtained from Test #2 sections (one tensile test from three separate rail sections, from Test #2 above).
5. Charpy-V Notch (three sets of five tests on sections from Test #2 above).
 - A high-rate test that determines energy absorption during impact.

6. Longitudinal bending strength of rail segments (three tests on three separate rails).
 - Tests to determine the bending strength of the rails themselves



Figure 3-20. Initial profile cut of the small section of rail required for subsequent testing. This cut took six hours. Note that the rails look to be in excellent condition, with only minimal metal loss due to corrosion.

IV. RESEARCH DESIGN METHODOLOGY

The CSS *Georgia* falls under the purview of the Sunken Military Craft Act (SMCA), wherein the U.S. maintains right, title, and interest in and to all of its sunken military craft regardless of location or time of loss. The NHHHC's Underwater Archaeology Branch (UAB), as the stewards of these military craft, is responsible for their management, research, preservation, and interpretation. While the Department of Navy (DON) prefers that non-intrusive *in situ* research take place on sunken and terrestrial military craft, Federal regulations (32 CFR 767) provide for a process by which they may authorize disturbance, removal, or injury of sunken or terrestrial military craft under its jurisdiction for archaeological, historical, or educational purposes. With the implementation of SHEP and given the necessity for removal of the CSS *Georgia* remains, a research design based on systematic archaeological recovery was developed and submitted to the NHHHC as part of their permitting process under 32 CFR 767 (Appendix A).

The proposed research design focused on the *in situ* documentation, systematic recovery, and preservation of the archaeological record and surviving physical evidence at the wreck site. As will be seen in *Chapter VI: Investigation Results*, actual field requirements necessitated several changes to the methodology, all of which had to be approved with permit amendments. Furthermore, some aspects were not immediately accomplished, such as the recovery of the main East and West Casemate sections, which would be eventually recovered in 2017 with different methodology. Regardless, the research design, which is presented below, formed the foundation of what was a very successful undertaking.

The research design methodology contained numerous aspects and consisted of several phases of on-site activity. The initial phase was focused on the *in situ* documentation and systematic identification, mapping, and recovery of all small artifacts, vessel hardware, and fastenings, and the construction of an on-site web to facilitate subsequent relocation and recovery of large artifacts and vessel components including ordnance, machinery, and casemate structure. The second phase was the recovery of elements of steam machinery, ordnance, and other heavy objects, followed by the preparation and recovery of all three surviving sections of casemate. The third phase was mechanized recovery of any remaining iron and miscellaneous artifacts. The fourth phase was the archaeological clearance of the site, to be followed by the fifth and final phase, which is the redeposition and burial of selected artifacts and vessel components, the latter predominantly comprised of casemate structure.

In conjunction with the on-site archaeological data and small artifact recovery, conservation would commence. Recovered material would be cataloged, documented, and shipped to CRL's laboratory facilities for conservation. The same procedure would follow in conjunction with the recovery of elements of the CSS *Georgia*'s steam and propulsion machinery. On-site ordnance consisting of cannon and projectiles required special procedures. Cannon would be delivered to the USACE Engineer Depot on nearby Hutchinson Island for immediate transshipment to the conservation facility (even though possibly loaded). Ordnance (projectiles) would be taken to a location in the Dredged Material Containment Areas (DMCA) on Barnwell Island where temporary facilities were created to inert projectiles. Following safety procedures, recovered ordnance would be rendered inert, cataloged, documented, and then shipped to CRL's laboratory facilities for conservation.

Rigging and recovery of the three surviving sections of the CSS *Georgia*'s casemate structure would follow once the site was cleared of small artifacts, machinery, and ordnance. If possible the two eastern sections of casemate were to be cradled and lifted from the riverbed intact. Once raised, each section would be placed on a barge, photographed, and documented using detailed

measured drawings and AutoCAD 2-D and/or Rhino 3-D renderings. Once documentation was complete, each of the two sections would either be conserved for display or transported to a location in Back River for reburial. Conservation or reburial would be dictated by priorities and options for display, long-term curation, and available funding. The most critical issues in dictating the approach adopted for conservation and curation would be identifying options and establishing priorities for display of artifacts, machinery, ordnance, and sections of casemate.

The largest section of casemate, the western section, and possibly the eastern section would inevitably require some disassembly to accommodate recovery. Due in part to the lack of surviving structural integrity (i.e., degraded wood backing), and due in part to the complex, expensive, and potentially dangerous requirements associated with any effort to accomplish intact recovery, the structure would have to be sectioned and raised in manageable elements. Where the Western Casemate structure has broken into distinctly separate elements, those elements would be removed intact, if possible. Once those distinct elements were removed, the remaining casemate would be mechanically sectioned into manageable elements. All sections of the structure would be placed on a barge, photographed, and documented using detailed measured drawings and AutoCAD 2-D and/or Rhino 3-D renderings. Once documentation was complete, each of the casemate sections would be conserved for display or transported to a location in Back River in the SHEP vicinity for reburial. In the event that the option to rebury was selected, sections of the structure would be placed in a position, as close as possible, to their original pre-recovery configuration.

RESEARCH ISSUES

Because the CSS *Georgia* is already an NRHP listed shipwreck site, research issues were tailored to add information to the eligibility criteria the site has already met and has been nominated under. As stated in National Register Bulletin 20, *Nominating Historic Vessels and Shipwrecks to the National Register of Historic Places* (National Park Service 1985), criteria of eligibility are:

- A. Be associated with events that have made a significant contribution to the broad patterns of our history; or
- B. Be associated with the lives of persons significant in our past; or
- C. Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. Yield, or likely to yield, information important in prehistory or history [National Park Service 1985:5-6].

Although the CSS *Georgia* played a critical role in the Confederate defenses of Savannah, historical documentation associated with the ship is marginal at best. Design, engineering, and construction data are virtually non-existent. Life aboard the “floating battery” was apparently so mundane that most surviving correspondence from those aboard ship relates to dispersions associated with the vessel’s speed and handling or the miserable living conditions within the casemate and hull. Artistic representations reveal little, save the general configuration of the casemate. Collectively, surviving evidence suggests that among Confederate ironclads, the CSS *Georgia* was a unique adaptation reflecting varying concepts of armored steam vessel design, limited material and machinery for construction, shortages of skilled labor in the Savannah vicinity, and the time critical necessity to defend Savannah against attack from the sea.

Many questions associated with the design, construction, and operation of the *Georgia* may never be answered. Unfortunately, the archaeological record associated with the ironclad is as limited as the historical information. Shortly after the *Georgia* was scuttled and the war ended,

efforts to clear the Savannah River navigation channel resulted in highly successful, but destructive, efforts to salvage material and machinery from the wreck. As a consequence, only sections of the casemate of the “mud tub” survive along with some of the steam machinery and ordnance. Current and future research has been designed to focus on several issues that are potentially productive in light of previous historical investigation and the scope and nature of physical evidence at the wreck site. Those areas are as follows.

HISTORICAL RESEARCH

Perhaps the most potentially beneficial sources of data concerning the remains of the CSS *Georgia* are records associated with post-war salvage activity. Virtually all of the previous historical research focused on the construction, operation, and scuttling of the ironclad. Subsequent salvage received only superficial attention.

Records associated with salvage could be preserved in the Department of Treasury records in the National Archives. It is also possible that records associated with salvor Henry Welles and his company survive to be identified. In conjunction with continued archaeological investigation of the wreck, historical research will focus on identifying those records. Additional information concerning Wells’ activities could contribute significantly to understanding why so little of the original vessel structure survives. USACE records will also be reviewed to address the possibility of dredging having totally removed the lower hull.

In addition, research will attempt to determine the origin of railroad iron that was employed for cladding—locally seized, produced by local foundries, ripped up from existing railroads, etc. That said, research to date on this aspect has produced little useful information. As presented above in *Chapter II. Historic Background*, award-winning Savannah, Georgia historian and filmmaker Michael Jordon would research the salvage of the vessel.

ARCHAEOLOGICAL RESEARCH

Vessel Design and Construction

Archaeological data from the CSS *Georgia* Site could provide new insight into the design and construction of one of the most significant features of the vessel—the casemate. Among the Confederate ironclads, the casemate of the CSS *Georgia* appears to be unique. A detailed examination of the surviving elements of the casemate might support the hypothesis that it was designed to accommodate standard lengths of available railroad iron. That would have contributed to extensive savings in terms of time and labor that would have been required to cut standard lengths to produce a lower casemate profile and increase the angle of inclination without increasing the beam of the hull. Documentation of the rails employed in armoring the structure could provide evidence that would identify different types of rail used and provide insight into the companies that supplied that material. A detailed examination of the casemate structure would also identify methods of fastening the layers of pine and oak that supported the railroad armor.

Machinery and Performance

Studying the machinery preserved at the CSS *Georgia* site could perhaps provide insight into the problems associated with the lack of speed and maneuverability documented in the historical record. That issue had a significant impact on operation of the *Georgia* and the role the ironclad played in the defense of Savannah. Once recovered, the steam engines, propeller, shaft, and remains of the boiler could be used to support an assessment of the power available for propulsion of the ironclad. Evidence from the machinery could also shed light on the manufacturer.

Previous estimates of the design weight of that structure can be more accurately established using evidence preserved in the surviving sections of casemate. That would permit a more

accurate estimate of the displacement necessary to support its weight and consequently refine conjectural designs for the CSS *Georgia*'s hull form. Evidence from the casemate could also shed light on the sources of material employed, construction techniques utilized, and perhaps reveal design and construction criteria that reflect the industrial environment in which the vessel was built. Investigation of the casemate structure in 2003 suggests that the manufactured specifications of railroad iron used to armor the casemate may have influenced the design of both the casemate and hull form as a consequence of adaptive use that compensated for the lack of industrial facilities, labor, and time.

Examination of the inside of the casemate could identify evidence associated with the destruction of the ship. It could also provide insight into the design of interior structures such as decks and bulkheads. Interior fasteners, fittings, bulkheads, and other features could shed some light on living and working conditions aboard the CSS *Georgia*. Evidence of fire and explosion could also be preserved on the interior of the three casemate sections. Documentation of that kind of evidence could help define the final hours of the ship's existence. It could assist in determining how much damage could be attributed to Confederate destruction, post-war salvage, and modern century dredging.

Much of the ordnance complement of the CSS *Georgia* survives. In conjunction with pieces already recovered, analysis of ordnance from the site could shed light on adaptation of older smoothbore technology to more modern rifled technology. Several of the 32-pounders aboard the CSS *Georgia* reflect efforts to modernize smoothbore 32-pounders to fire more accurate rifled projectiles. Several are also banded to enhance their ability to withstand the increased pressures of a rifled cannon. In addition, a 24-pounder previously recovered from the wreck suggests that it was locally and crudely manufactured to meet the pressing needs associated with Savannah's wartime defenses. Recovery of a second small cannon at the site could contain design and casting evidence to support that hypothesis. Research will address whether specific foundries can be identified that made or altered the cannon in question.

NATIONAL REGISTER OF HISTORIC PLACES STATUS

The CSS *Georgia* was formally listed on the NRHP on February 10, 1987. The ironclad was determined significant at the national level for its association with events (Criterion A), people (Criterion B), architecture (Criterion C), and potential to yield significant archaeological information (Criterion D). NRHP Federal Programs Regulations, 36 CFR 60, contains specific guidance on removing properties from the NRHP. Conversations with the NRHP staff at Georgia Historic Preservation Division have concluded the archaeological data recovery of the CSS *Georgia* will not alter the status or listing of the site. The work to be performed does not meet the criteria for NRHP listing removal found at 36 CFR 60.15(a). Subsequently, the NRHP status of the site was not affected or changed.

PROPOSED ARCHAEOLOGICAL METHODOLOGY

As proposed, on-site operations in 2015 were broken down into five main phases (Figure 4-01). Phase I, the Archaeological Phase, was to be continued archaeological investigation designed to locate, map, and tag artifacts and site components; clear the entire site of observable small artifacts; and locate ordnance associated with the wreck. Phase II was the heavy lift recovery of site components, beginning with recovery of ordnance and followed by recovery of disarticulated vessel structure and machinery. Once the site was cleared of those elements, the three surviving sections of casemate were to be recovered, although as stated, recovery of the East and West Casemate sections were unsuccessful in 2015, subsequently being recovered in 2017. Phase III involved the mechanized clearance of remaining materials employing both a crane-operated grapple magnet and a clamshell (originally proposed, an electromagnet was employed on the USS *Westfield* recovery operations would not be utilized). Phase IV entailed an archaeological

clearance of the sight through remote sensing and diver survey. Phase V, the final phase, involved redeposition of selected artifacts and vessel components. Recovery efforts in 2017 would complete the Phases including East and West Casemates recovery (Phase II), burial of the casemate sections the final aspect of Phase V.



Figure 4-01. Archaeological phases (courtesy of the USACE, Savannah District).

During the main recovery effort conducted in 2015, Phase I was conducted by the Panamerican/TAR team. Phases II, III, and V, the Heavy Lift, the Mechanized Clearance, and the Redeposition phases respectively, were conducted by SUPSALV and Donjon, along with MDSU-2, all with archaeological oversight by the Panamerican/TAR team. The Panamerican/TAR team conducted Phase IV, the Archaeological Clearance Phase. The diving in any of the phases was conducted at slack tides and, owing to the tide cycles and how they fall within the daylight hours, some days would see diving during two cycles, while other days only one cycle was diveable. It was believed that Phases IV and V, the Mechanized Clearance and Redeposition phases, would not be affected by tidal current, and it was anticipated that this work would be conducted throughout the daylight hours. The 2017 efforts, focused mainly on the recovery of the remaining East and West Casemates, would be accomplished by SUPSALV and Donjon, along with archaeological oversight by the Panamerican/TAR team and on-site conservation by the CRL team. Mechanized recovery efforts were similar to that conducted in 2015, but with much less recovery, although recovery of the engines (as discussed below) underscored the positive results of the mechanized recovery methodology.

Presented below are brief descriptions of the methodologies initially proposed for the five phases and their respective objectives. While the methodologies often worked as proposed, many had to be modified to varying degrees (i.e., mechanized clearance, casemate recovery) or abandoned altogether for one reason or another (i.e., UXO detector, site excavations). A common occurrence in underwater investigations of this nature, some proposed methods either did not work as expected, did not work at all, were not expeditious enough, or were impossible to accomplish given the tools at hand, especially in the context of the extreme environment in which the site was located. For this reason the initially proposed methods are presented here as they formed much of the submitted Research Design. The actual methods employed are presented in Chapter VI.

I. ARCHEOLOGICAL DATA RECOVERY PHASE

Objective 1—Mooring Deployment

The first on-site objective will be to reestablish a system of anchors for mooring surface support vessels. The mooring system will be designed to provide convenient dive access to all areas of the site. Based on the vessel size employed at the time, it is anticipated that a mooring anchor of various weight will be placed north of the two major sections of casemate and two mooring anchor of various weight will be placed one upstream and one downstream outside of the navigation channel. Floats with painters will be attached to the anchors to facilitate mooring. Regardless of the number of anchors or their placement, Global Positioning System (GPS) positioning, tied to the site grid, will ensure that no cultural material is damaged during the anchoring evolution.

Objective 2—Baseline/Navigation Web Restoration

The second on-site objective will be to relocate the datums, ensure they are intact or replace them if not, and relay the baseline/navigation web segments with new polypro line. Strategic datums will be selected for site calibration using a USBL underwater positioning system tied to a DGPS reference. Calibration will insure the correct geographical location of casemate sections, ordnance, machinery, and other previously identified and newly discovered features. Calibration will register an electronic grid framework for systematic artifact location, mapping, tagging, and recovery. The 2003 on-site baseline/navigation web will be restored and expanded as archaeological investigation progresses. It is anticipated that once the original baseline/navigation web is restored, additional datum and transit lines will be placed on the site providing for safe and efficient diver navigation across the site, site mapping, and artifact recovery. Figure 4-02 below illustrates the datum employed in the 2013 Integrity Test (James and Watts 2014)

investigation and also illustrates the transit lines that were placed. These will be reestablished or replaced, as well as added to with additional lines.

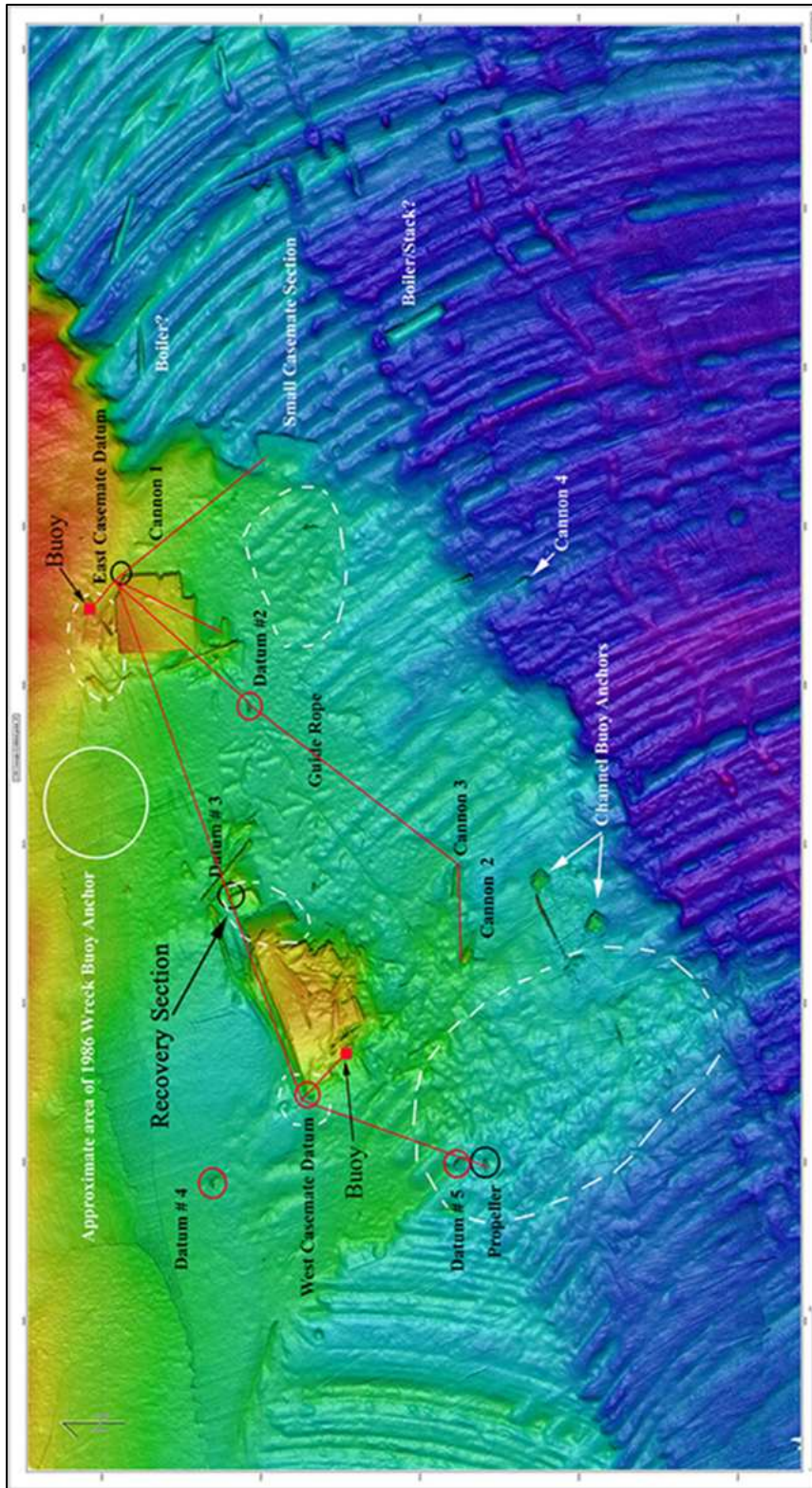


Figure 4-02. 2013 Georeferenced Multibeam Site Map. Shown are Casemates, Cannon, Propeller, Boilers (?), Mooring Buoy locations, Datum, and Transit Lines. White hatched areas were thought to be debris scatters.

Site conditions, in particular very poor visibility and strong currents, create adverse diving conditions that hamper all underwater work. Therefore, during all phases of on-site activity, efficient diver navigation and mapping will be critical to the project's success. In addition to the restored on-site baseline/navigation web discussed above, to effectively direct archaeological diver activity and systematically control and document artifact identification and provenience, a USBL system will also be employed. Comprised of a vessel-mounted acoustic transceiver interfaced with a DGPS system and a roving transponder affixed to the diver, the USBL system will provide real-time positioning coordinates for both the surface support vessel and divers working on the wreck. Hypack survey software interfaced with on-board Geographic Information System (GIS) computer systems will be employed to record diver movement, survey positioning, artifact location, mapping, and tagging. The site plan, produced in 2003 (see Figure 3-02), and both the 2D DTM and 3D WreckSight site maps, produced by the 2013 Multibeam Investigation, will be combined to provide the base map for the electronic grid used to ensure the site is thoroughly examined and all ordnance and cultural material are located, mapped, tagged, and recovered.

To maintain continuity and efficiency, the USBL positioning system will be available for all phases of on-site activity. Explosive Ordnance Disposal (EOD) personnel will be able to use the on-site baseline/navigation web and the diver positioning system to relocate and recover ordnance. SUPSALV and MDSU-2 personnel will be able to use those same systems for diving activity associated with relocation, rigging, and recovery of the casemate sections, other elements of vessel structure, and machinery.

Objective 3—Large Artifact/Vessel Component Location and Identification

There are numerous large objects downriver from the main wreck site that were recorded during the 2013 multibeam survey. It is unknown if the large objects are vessel-related (visible in Figure 4-03). The third objective of this phase will be to locate and identify the objects with a USBL-equipped diver. If they are wreck-related, they will be connected to a datum with a transit line for later recordation and subsequent recovery. If they represent non-wreck material (i.e., dredge pipe), they will receive no further work, but will be noted for subsequent dredging activity issues.

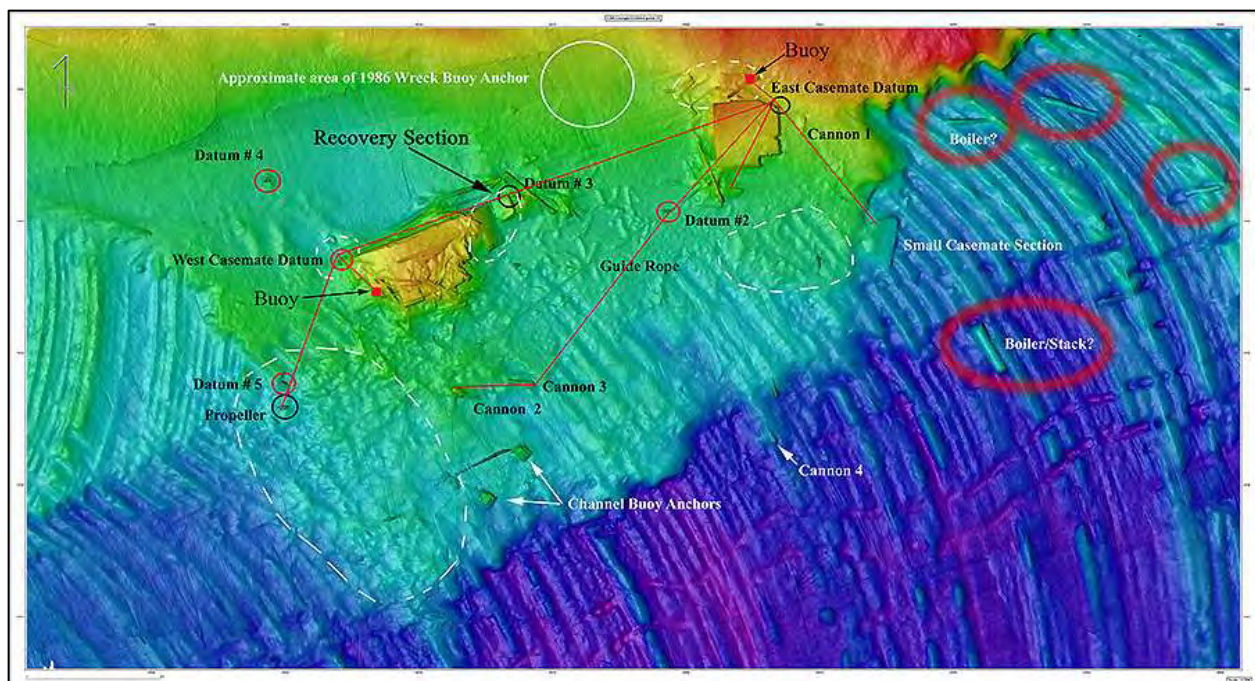


Figure 4-03. Circled in red, identification of large objects downstream are the focus of Objective 3.

Objective 4—Diver Remote Sensing, Artifact Mapping, and Small Artifact Recovery

Employing the USBL mapping system, the fourth on-site objective of the Archaeological Phase will be to locate and tag all visible artifacts and vessel components across the site. Divers will systematically survey the site employing a computer-based grid system, locating all known and unknown artifacts and wreck components including ordnance. They will use magnetometers and UXO detectors to locate wreck-related cultural material. Each artifact will be documented *in situ* using underwater video if visibility allows and its position on the site determined and plotted on a GIS-based site plan developed from the 2003 and 2013 surveys. Artifacts that do not require recovery by crane will be mapped, tagged on the bottom, and brought to the surface in baskets for cataloging, additional photography, and transportation to the conservation facility. UXO will be identified, mapped, and tagged for later recovery and rendering inert by EOD divers, which is discussed below. The Garrett Infinium LS detector will be employed to identify UXO at the CSS *Georgia* site. The Infinium LS detector operates on an advanced pulse induction principal and operates on 96 frequencies designed to minimize the influence of mineralized environments. All components are “O” ring sealed for underwater operation. Submersible headphones compensate for the lack of visibility in the Savannah River. TAR testing of the unit indicates that ordnance such as 8-inch shot and shell and 12- and 24-pounder shot can be detected at depths below the sensor of up to 4 feet. Where shot and explosive projectiles are identified, their location will be marked with fiberglass rods driven into the sediment and plotted on the electronic site map using the USBL system.

The surviving sections of armored casemate lie on a base of Miocene clay. This dense clay that forms the riverbed has and would prevent downward migration of virtually any material associated with the CSS *Georgia*. Each section of the casemate was found (in 2003) to be resting on top of a pedestal created by erosion and/or dredging of the adjacent clay deposit. Examination of the USACE, Savannah District’s annual survey bathymetry indicates that opening of the Back River channel in 1978 contributed to the erosion of the sand and mud that once protected the wreck, leaving the surviving vessel structure and associated material exposed on the bottom surface. Hydraulic probing to a depth of 7 feet around and in between casemate sections confirmed that no evidence of the hull is present below the Miocene bottom surface.

Similar to the two UXO located during the Integrity Test survey and that stood proud of the bottom atop the Miocene Clay with no overburden, it should be understood that the majority of artifacts on the site are exposed and rest on a hard Miocene clay bottom surface. There are areas of sand and silt build up around the casemate that may contain some artifactual material, but again the majority of artifacts at the site lay exposed on a hard clay bottom with no overburden. With that said, site components and artifacts were, during the Integrity Test, completely covered/carpeted in a 2- to 3-inch thick layer of mainly small mussels (a recent invasive and prolific species). However, the mussels can actually aid in the location of artifacts during area searches, as they adhere only to hard objects and not to the bottom sediments, which are, again, predominantly exposed Miocene clay, the presence of mussels indicating a hard object, most likely an artifact. Furthermore, they are easily removed for subsequent artifact assessment and documentation.

Large plastic indestructible tags will be fastened to all artifacts and components prior to recovery. The actual field tag “type” has yet to be determined, but will most likely be along the lines of a cow ear tag. These are made from a heavy-duty plastic, come in a variety of colors, and are pre-numbered. They are fairly large in size (3-x-4 inches), can be easily read underwater in low visibility conditions and can be attached to the artifact using zip-ties. The tag number will be put into the GIS mapping program for each artifact and/or component tagged and mapped and respective of their grid location. This will aid in artifact documentation during recovery, field stabilization, and accessioning.

Objective 5—In Situ Casemate Documentation

In advance of recovery, more detailed documentation of the three surviving elements of CSS *Georgia*'s casemate will be undertaken. The objective of additional documentation will be to record design and construction details that could be lost in conjunction with lifting and removal of each element.

Southeast Casemate

The southeastern section of casemate is the smallest measuring 18 feet 5 inches by 11 feet 6 inches. As such it is the section most likely to be recovered intact. Unlike the other sections, it appears to lie with the railroad armor on the bottom. None of the wood structure that supported the armor appears to survive.

Prior to rigging and lifting, sediment and fouling on the exposed surface of the section will be cleaned using high-pressure water and/or by manual means. Once the surface has been cleaned, it will be recorded using underwater video and/or underwater photography. The overall size and configuration of the southeastern section will be documented. Design and construction details will be recorded using measured drawings. Particular attention will be paid to fastener patterns and the lengths and patterns of the railroad rails.

East Casemate

The east section of casemate consists of at least four elements. The largest section measures 24-x-27 feet and lies with the wood structure underneath the iron railroad armor. Immediately north of that element, an 11-x-6-foot triangular section lies railroad iron down. That fragment represents the triangular extremity of the casemate. It broke away from the largest surviving section when the clump associated with a buoy marking the wreck was drug through the site. On the southwestern corner of the largest section of the East Casemate, another element measuring approximately 2-x-8 feet extends southeast to rest on the fourth element of the eastern structure. That element measures roughly 7-x-9 feet and likely was located underneath one of the gunports. It is possible that each of these elements of the East Casemate section can be recovered intact.

Prior to rigging and lifting elements of the East Casemate, sediment and fouling on the exposed surface will be cleaned using high-pressure water and/or by manual means. Once the surface of each element has been cleaned it will be recorded using underwater video and/or underwater photography. The overall size and configuration of the East Casemate elements will be documented. Design and construction details will be recorded using measured drawings. Particular attention will be paid to fastener patterns and the lengths and patterns of the railroad rails.

West Casemate

The western section of casemate is 68 feet in length and 24 feet in width except where disarticulated railroad iron extends as much as an additional 10 feet to the south. The wood structure lies underneath the railroad iron armor. A 7-foot 6-inch by 8-foot 2-inch disarticulated element of the West Casemate section was recovered in 2014 for structural analysis and testing. That fragment was likely located underneath one of the gunports. A small triangular fragment representing the end of the casemate lies adjacent to the western end of the casemate. Disarticulated railroad rails lie scattered on the bottom to the east and to a greater degree to the southwest of the West Casemate.

Prior to rigging and lifting elements of the East Casemate, a detailed examination of the West Casemate will be carried out to determine if the section survives intact or if it is broken into discreet elements that can be individually recovered. That examination will also focus on the nature and scope of disarticulated railroad rails east and southwest of the casemate.

The West Casemate and/or each element of the structure will be cleaned using high-pressure water and/or by manual means. Each cleaned element will be recorded using underwater video and/or underwater photography. The overall size and configuration of the West Casemate elements will be documented. Design and construction details will be recorded using measured drawings. Particular attention will be paid to fastener patterns and the lengths and patterns of the railroad rails. The extremities of disarticulated railroad rails will be mapped and both concentrations will be examined for associated artifacts and ordnance.

As stated above, all artifacts and components will be tagged, including the casemate sections. The sections will have multiple tags on each section and the tag locations will also be recorded, thus allowing recordation of the orientation of each section both on the bottom and on the surface after recovery.

Objective 6—Site Excavations

Prior to recovery operations, four excavation units will be carried out to assist in determining if artifacts associated with the officers, crew, and operation of the CSS *Georgia* are present at the site. One of the excavation units will be in association with the East Casemate section. That unit will likely be located immediately west or southwest of the largest structural element where bottom sediment has accumulated to a sufficient depth to cover small artifacts. Two excavation units will be associated with the West Casemate section. One will likely be south of the eastern end of the structure and the other will likely be south-southwest of the western end of the structure. The final excavation units will likely be located in the debris field southwest of the West Casemate section where a small amount of sediment has accumulated in the vicinity of the steam cylinders and propeller (Figure 4-04).

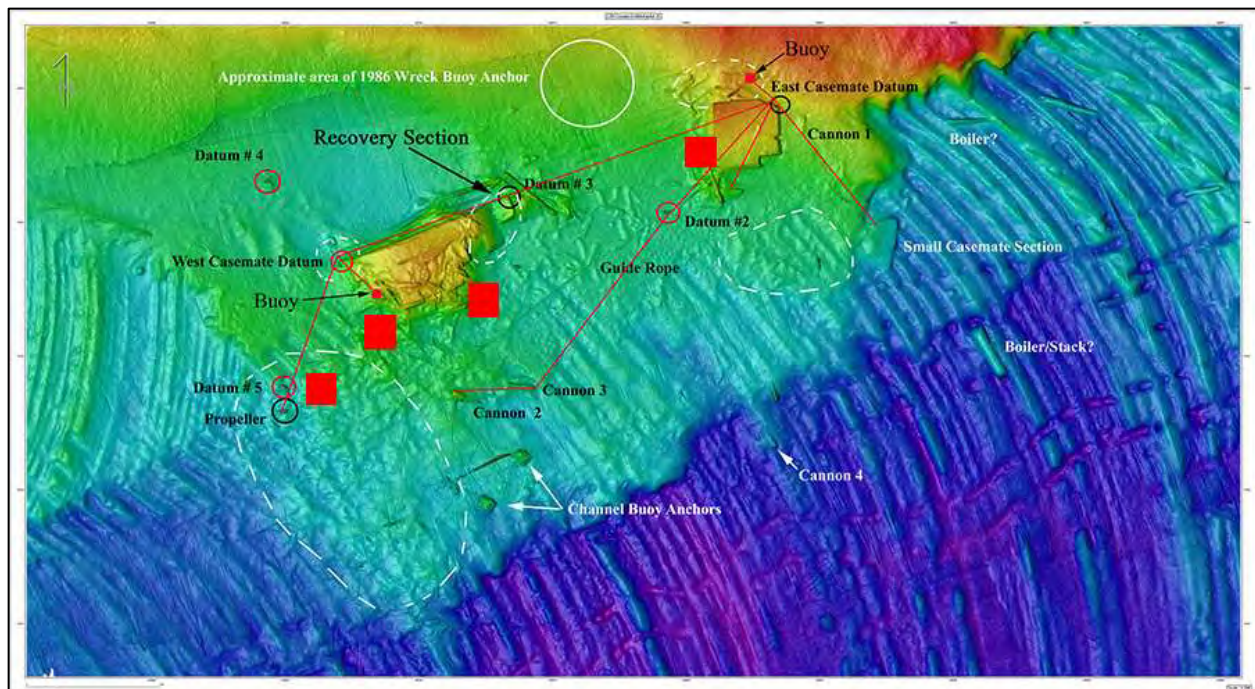


Figure 4-04. Location of the four proposed test excavations (red squares).

Excavation will be controlled by 10-x-10-foot electronic grids, each positioned in the GIS-based electronic site plan. Exposed material will be imaged using underwater television or photography visibility permitting, mapped *in situ*, and recovered for conservation. Sediment removal will be carried out using water-pump-powered induction dredges. Discharged material

from the dredges will be screened to recover small artifacts. Diver mounted lights will be used to improve visibility during excavation and mapping operations. Recovered material will be tagged on the bottom and brought to the surface in baskets for cataloging, additional photography, and wet transportation to the conservation facility.

It must be understood that the excavations are intended to be a sampling of the total percentage of the site areas containing overburden atop the Miocene clay, rather than a complete site excavation. Like most data recovery projects that seek to mitigate a site's destruction, 100% site excavation is rarely accomplished and it cannot be accomplished at the USS *Georgia* site, given the environmental constraints relative to available funding.

II. LARGE ARTIFACT RECOVERY PHASE

Objective 1—Engineering Coordination

The first objective associated with the Large Artifact Recovery Phase will be to inform personnel from SUPSALV, Donjon, and MDSU-2 of the nature and location of all vessel remains and associated machinery that require lifting prior to removal of the casemate sections. That information transfer will be carried out at a pre-fieldwork meeting following submission of a map and inventory of material requiring recovery prior to lifting the casemate sections. Based on those data, plans for site clearance and heavy recovery operations will be formulated, reviewed, and approved by the USACE and NHHHC. Furthermore, a briefing will be held at the start of each workday that details the objectives for the day's dives with attendees to include USACE, Panamerican/Tar archaeologists, SUPSALV, Donjon, MDSU-2, and NHHHC representative, if available. If there is a need to deviate from the plan or the day's objective, all parties will discuss and agree to the change prior to implementation. A debrief will be held at the end of the day to discuss problems or issues that require resolution prior to start of the next workday. It cannot be overstated that lines of communication will remain open at all times between the USACE, archaeologists, SUPSALV, Donjon, MDSU-2, and NHHHC.

Objective 2—Ordnance Recovery

Currently there are four known cannon and two UXO, a shell and a round shot. It is expected that additional UXO will be identified during the archaeological survey and mapping phase. The first phase of UXO recovery will be to inform the on-site EOD team of the nature and location of all ordnance previously discovered and mapped by archaeological divers (i.e., cannon, shell, shot). That information transfer will be carried out at a meeting following submission of a map and inventory of projectiles and cannon requiring EOD attention. Archaeological personnel will support the on-site EOD team during this phase by providing the diver tracking system that will be employed by the on-site EOD team along with the GIS-based site plan. EOD divers will be able to move within the on-site electronic grid and the on-site baseline/navigation web to return to and recover ordnance. The exact methodology and level of archaeological support will be determined in conjunction with communication with EOD personnel and based on the nature and scope of UXO identified during the survey.

It should be stated that the cannon should be lifted by the EOD team using 4- to 6-inch wide slings choked off around the barrel forward of the trunions and at the cascabel. The conservator or archaeologists will brief the divers on the best positioning of the slings, so as not to damage the brass gun sights if present (fore and aft), nor the firing mechanism on the breech swelling. Chain and/or cable shall not be used for the lifting operation, as this will damage the concretion/outer surface of the cannon.

Ordnance Inerting and Transportation

Historical ordnance will require special handling procedures. Cannon will be recovered and delivered to the USACE Engineer Depot for immediate documentation and transshipment to the

CRL facility in Texas. Ordnance recovered from the CSS *Georgia* site will be rendered inert by on-site military EOD personnel at a pre-determined location in one of the DMCAs on Barnwell Island. Disarming the UXOs (explosive shells only) will be carried out in the safest and least destructive manner possible. All safety procedures will be followed when recovered ordnance are cataloged, documented, and shipped to laboratory facilities for conservation and returned to appropriate museums for long-term curation and display.

Specifically, the cannon will be lifted from the riverbed onto the barge and immediately placed in purpose-built containers with watertight lids, which will allow continual and total submergence in water. Once all cannon are recovered, the barge will be moved to the USACE Engineer Depot where the containers will be crane-lifted directly onto a truck, located on the dockside for immediate transshipment. The cannon will be safely cradled on timber baulks within the container (or old car tires), covered appropriately, and fastened securely in a manner so as to prevent any movement or damage to the cannon while in its respective container and while aboard the truck. As there exists a risk that any of the cannon may contain UXO that could explode during conservation or inerting, the USACE, Savannah District will prepare and sign a Certificate of Risk Acceptance (CORA) that will be required prior to the cannon being transported off the archaeological site. The cannon are deemed safe if they are kept under water.

Relative to shell and shot, once removed from the wreck site, they will be stored in 5-gallon buckets filled with water. At the end of the day, they will be transported by way of Back River to the EOD inerting area. A 20-foot long International Standards Organization (ISO) container (with padlock) can be used for secure storage here, with a second container used for the EOD team's equipment. The EOD inerting location will be inside a secure USACE controlled area, with limited access through a locked gate. Once the shells have been inerted, they will be handed over to the archaeologists for processing and conservation. No CORA is necessary for the shells, as they are deemed safe once they have been inerted, and are then treated the same way as any other artifact.

It should be stated that CRL at Texas A&M University conservation specialist personnel will be on site and responsible for stabilization and initial documentation once ordnance are recovered from the river. Additionally, they will oversee packaging and transportation to their conservation laboratory at Texas A&M.

Objective 3—Large Artifact Recovery

Once all ordnance has been recovered, SUPSALV and/or civilian personnel will recover all vessel remains and associated machinery (i.e., propeller and shaft, engines, condenser, etc.) that require lifting prior to removal of the casemate sections. Archaeological personnel will support SUPSALV and MDSU-2 or commercial dive teams by providing the diver tracking system and GIS-based site plan. SUPSALV and MDSU-2 or commercial divers will be able to move within the on-site electronic grid and the on-site baseline/navigation web to return to and recover previously mapped and tagged machinery and disarticulated elements of vessel structure. The level of archaeological support will be determined in conjunction with SUPSALV and MDSU-2. It is assumed that rigging of artifacts will be conducted by SUPSALV and MDSU-2 or commercial dive team personnel. The Panamerican/TAR archaeological team will provide guidance as necessary to ensure the artifacts are not damaged during the recovery.

Similar to the ordnance recovery, once the artifacts are lifted onto the barge, they are to be kept wet at all times. River water is perfectly acceptable for this stage of the operation, and can be pumped/sprayed onto the artifacts. Once the barge is moved to the USACE Engineer Depot, the artifacts will be crane-lifted directly onto a truck, located on the dockside. The artifacts will be safely cradled on timber baulks (or old car tires), covered appropriately, and fastened securely in a manner so as to prevent any damage to the concretion/surface of the artifact. If artifacts are not

to be transported immediately, they will be placed in waterproof roll-off containers, chalked properly, and covered with water containing a 5% solution of sodium sesquicarbonate to prevent corrosion. Again, it should be stated that CRL conservation specialist personnel will be on site and responsible for stabilization and initial documentation once they are recovered from the river. Additionally, they will oversee packaging and transportation to their conservation laboratory at Texas A&M.

Archaeological Clearance

Following recovery of all visible cannon, steam machinery, and other large artifacts, archaeological divers will systematically survey the areas where the artifacts were recovered. They will identify, document, and possibly recover artifacts and vessel-related material that may be exposed by the previous recovery. Divers will be equipped with communications operating within a geo-referenced electronic grid by the USBL positioning system. They will search for additional wreck-related material or exposed artifacts that might be endangered such as organics. If present, such artifacts will be documented *in situ* employing the USBL system, its position on the site determined and plotted on a GIS-based site plan developed from the 2003 and 2013 surveys. Material will be tagged on the bottom and brought to the surface in baskets for cataloging, additional photography, and transportation to the conservation facility.

Objective 4—Southeast Casemate Section Recovery

Once the site has been cleared of ordnance and large artifacts, on-site activity will focus on recovery of the three major elements of casemate structure. SUPSALV will initiate casemate recovery operations by preparing, rigging, and lifting the southeastern section of casemate lying at the edge of the navigation channel. That section is the smallest and lightest of the three, and will be a test of the system and equipment employed in lifting the heavier sections. Intact recovery of the approximately 12-x-18-foot southeastern section will be the priority.

Based on design and construction data generated by the integrity testing of the railroad iron, as well as *in situ* documentation, a frame will be designed to support the section for lifting. Although ultimately the purview of the SUPSALV engineer, it is thought that the frame constructed for the Test Lift can be employed for some of the smaller sections, but that a larger frame will be required for sections of the East and West Casemates. Regardless of the size, the frame will be positioned and secured to the section. When lifted, the southeastern section will be placed on a barge, and design and construction data will be recorded using photography and measured drawings. Those data and that recorded *in situ* will be entered into AutoCAD and/or Rhino computer programs for 3-D reconstruction. When documentation is complete, the section will be transported to conservation facilities or a location in Back River suitable for reburial.

Problems encountered in rigging and removing the southeastern section will be resolved before recovery of the East and West Casemate sections.

Raising the small eastern section intact is realistic based on its small size and the lack of wood backing. The section may make a suitable piece for subsequent conservation and curation. The calculated weight of surviving concreted iron is 9.89 tons using the 116 pounds per square foot figure from the sample at Texas A&M University. With a lifting frame, “intact” recovery should be possible.

Objective 5—East Casemate Section Recovery

Following removal of the Southeast Casemate section, the focus of recovery will shift to the East Casemate section. That section consists of at least four elements. Three are small and will have to be recovered prior to lifting the main element. The small elements consist of an 11-x-6-foot triangular section that lies railroad iron down north of the large element. That fragment represents the triangular extremity of the casemate. It broke away from the largest surviving

section when the clump associated with a buoy marking the wreck was drug through the site. On the southwestern corner of the largest section of the East Casemate another element measuring approximately 2-x-8 feet extends southeast to rest on the fourth element of the eastern structure. That element measures roughly 7-x-9 feet and likely was located underneath one of the gunports. Each of these elements will be recovered intact using support frames designed similar to the Small Casemate above, and based on *in situ* documentation.

Once the small elements and all disarticulated railroad armor have been removed, the largest section, measuring approximately 24-x-27 feet, can be rigged for recovery. Although larger and heavier than the southeastern section, the main eastern section conceivably also can be recovered intact. Based on design and construction data generated by recently conducted integrity testing of the railroad iron, as well as *in situ* documentation, a frame will be designed to support the section for lifting. That frame will be positioned and secured to the section.

When lifted, each element of the eastern section will be placed on a barge, and design and construction data recorded using photography and measured drawings. Those data and that recorded *in situ* will be entered into AutoCAD and/or Rhino computer programs for 3-D reconstruction. When documentation is complete, the section will be transported to conservation facilities or a location in Back River suitable for reburial.

Problems encountered in rigging and removing the eastern section can be resolved before recovery of the West Casemate section (note that the recovery of the eastern or main section of the East Casemate was not successful in 2015; however, changes in methodology would allow its recovery in 2017).

The calculated maximum weight for the section is 56.78 tons. That weight is based on the weight of concreted railroad iron provided by CRL and weights for intact wet wood backing. We know that is not the case, as we believe a majority of the wood is no longer extant, but have little data to support a more realistic/accurate calculation. We will have much more additional data at the time of recovery, as it will have been fully documented prior to recovery. We now know that the railroad iron will likely support its own weight, and some portion of any attached wood, if a suitable frame is employed in recovery. With a lifting frame, intact recovery should be possible for this section and, while rather large, the section might make a suitable piece for subsequent conservation and curation (note that while the section should be able to be recovered intact, it will require disassembly at some point for subsequent conservation).

Objective 6—West Casemate Section Recovery

Following removal of the East Casemate section, the focus of recovery will shift to the West Casemate. The remaining section likely consists of more than one element. One small section of the West Casemate was recovered for structural analysis in 2013. That element measures roughly 7-x-9 feet and was likely located underneath one of the gunports. Another small section also appears to be broken off and may lie on the bottom at the western end of the structure. More detailed *in situ* documentation of the West Casemate will provide a more comprehensive understanding of the surviving remains.

Once any small elements of the West Casemate and all disarticulated railroad armor have been removed, the largest section, measuring approximately 68-x-24 feet, can be prepared for recovery. Because that section is both larger and heavier than the southeastern and eastern sections, the western section conceivably will have to be disassembled for recovery as discussed by all agency personnel at the conclusion of the Integrity Lift. We have employed this supposition to calculate the maximum weight of all of the “minimum” number of sections that could be recovered intact. That minimum appears to be seven sections; however, this is only an estimate and SUPSAL engineers will need to make their own calculations. The total weight of

all the sections is roughly 123.89 tons. The largest intact section is identified as E and would likely weigh 67.54 tons if the wood backing is in very good shape. That is a questionable assumption at best, as we know the wood is in an advanced state of deterioration. Separation of sections we have identified as C, D, F, and G would have to be made unless engineers determine that recovery of C, D, E, F, and G can be made intact. That would require a frame and lifting capability well in excess of 105.32 tons, which may be excessive. Again that is based on weights including that of intact wood backing—which we know is not the case.

Based on design and construction data generated recently by Integrity Testing of the railroad iron, as well as *in situ* documentation, a plan for disassembly and lifting will be formulated by SUPSALV engineers. A frame will be designed to support each element of the structure for lifting. That frame will be positioned and secured to each section. In discussions with SUPSALV, and again to be formalized by their engineers employing Integrity Test data, sections will be hydraulically separated along the parallel length of a rail prior to the section's subsequent cradling and lift (note that the recovery of the main West Casemate section was not successful in 2015; however, changes in methodology would allow its recovery in 2017).

When lifted, each element of the West Casemate will be placed on a barge, and design and construction data recorded using photography and measured drawings, and possibly Light Detection and Ranging (LiDAR). Those data and that recorded *in situ* will be entered into AutoCAD and/or Rhino computer programs for 3-D reconstruction. When documentation is complete, the section will be transported to conservation facilities or a location in Back River suitable for reburial.

It should be emphasized that once sections of each casemate are recovered, archaeologists will study and document each one to record elements of design, construction, and evidence of operational activity. The level of documentation will be based on decisions about the ultimate disposition of each section. Where sections will be slated for conservation and display, documentation will be limited to nondestructive recording. More detailed recording will be carried out in association with disassembly and conservation. Where sections will be reburied, documentation will include sufficient disassembly to expose and record construction features associated with design, assembly, and fastening of the casemate.

Archaeological Clearance

After recovery of the casemate sections, archaeological divers will systematically survey the areas where the casemates were recovered. All wood structure not raised in conjunction with the associated railroad armor will be documented *in situ* using underwater video, photography, and measured drawings. Surviving wood will then be recovered as intact as structural integrity permits. Timbers or sections of casemate backing that are still present will be tagged for provenience, and orientation will be documented. All recovered wood structures will be placed on a barge, and design and construction data recorded using photography and measured drawings. Those data and that recorded *in situ* will be entered into AutoCAD and/or Rhino computer programs for 3-D reconstruction. When documentation is complete, each section will be transported to conservation facilities or a location in Back River suitable for reburial.

The footprint of recovered material will also be systematically searched to identify, map, and recover small artifacts. The Garrett detector will also be used to locate and identify any buried ferrous material and ordnance. Small artifacts will be mapped and recovered.

Artifacts will be transported wet to USACE facilities on Hutchinson Island for additional documentation and determination of conservation or reburial priorities. All ordnance will be identified and the location marked for the subsequent recovery by civilian or military personnel.

All ordnance will be handled in accordance with established procedures and transported to the appropriate facilities for inerting and conservation.

Objective 7—Excavations Post Casemate Recovery

Within the footprint of each section of recovered casemate, a 10-x-10-foot excavation will be carried out to determine if artifacts are present. Where that proves to be the case, exposed material will be mapped, documented, and recovered. Where artifacts are identified in the initial excavation, the excavation unit may be expanded if time allows, a decision that will be made in the field.

Again, it must be understood that the excavations are intended to be a sampling of the total percentage of the area beneath each removed casemate section, and not a 100% excavation. Furthermore, it is felt that the southeastern section rests atop Miocene clay with little, if any, sediment beneath. However, if high densities of artifacts are encountered, additional excavations will be undertaken after discussion with all parties.

III. MECHANIZED RECOVERY PHASE

The third on-site phase will be mechanized recovery of remaining iron and “miscellaneous” artifacts through the employment of a crane-operated grapple, followed in succession by an electromagnet and environmental clamshell. These are being implemented to recover all miscellaneous site material and ensure site clearance of all remaining artifacts, and are predicated by a time frame and monetary ceiling cap that will not allow total recovery by divers.

Reflecting the recovery method recently employed on the USS *Westfield* shipwreck site mitigated for the USACE, Galveston District under an NHHC permit (Borgens and Gearhart 2009), the nontraditional methods of clamshell and magnetic recovery were implemented at that site as the “safest and most practical method of artifact recovery...due to heavy tidal currents and extensive ship traffic” (Gearhart 2009; Borgens and Gearhart 2009:32-33). While the same environmental factors apply at the CSS *Georgia* site—strong tidal currents, low visibility, being at and in a highly transited shipping channel—these are not the same reasons for implementing mechanized recovery at the USS *Georgia* site. To be conducted only after completion of months of rigorous and systematic archaeological recordation, and artifact and vessel component recovery by traditional means, this methodology is to be employed in order to ensure total recovery of the remaining artifacts (that are expected to be miscellaneous iron concretions) and the numerous disarticulated rail sections.

While one can argue the deficiencies and/or merits of the employment of these methods on the USS *Westfield* (see Borgens et al. 2010:165-171), the differences between the two sites (i.e., the majority of the USS *Westfield* artifacts were buried, while it was thought that the majority at the CSS *Georgia* site are exposed atop Miocene clay—this would prove to be incorrect), and the differing reasons for applying mechanical means at each site cannot be overstated. While a single USS *Westfield* artifact, the firebox, was crushed when lifted by the electromagnet, this will not be the case on the CSS *Georgia*, as all artifacts and vessel components that are worthy of careful retrieval will have already been mapped *in situ* and recovered by divers—with, of course, the exception of those in small areas where sediment is present. The majority, if not the totality, of artifacts that will be mechanically recovered are expected to be miscellaneous iron concretions and the numerous rail sections (this statement also would be proved incorrect).

As the authors of the USS *Westfield* Data Recovery report stated, the “methods proved an imperfect solution to a complex problem, and they are not recommended as a substitute for traditional archaeological mapping and artifact recovery when those options are available” (Borgens et al. 2010:172). At the USS *Westfield*, traditional methods could not or were not able to be implemented, and the mechanized tools were employed for almost all recovery. Again, this

is not the same application at the CSS *Georgia* site, where a comprehensive plan of archaeological mapping and artifact recovery will have been conducted prior to final recovery and “clearance.”

Objective 1—Grapple Recovery

Upon removal of the casemate sections and subsequent wood recovery and excavations, the site will still be littered with various lengths of disarticulated railroad iron. Visible in Figures 2-08, 2-09, and 2-17, the iron rails are located predominantly on the southern and eastern sides of the West Casemate, between the West and East Casemates, and on the northern, western, and southern sides of the East Casemate. Because of the time constraints relative to tidal window bottom time and recovering each rail by diver and a crane, Objective 1 will comprise the recovery of the remaining disarticulated railroad iron with the use of a crane-mounted four-finger “orange-peel” grapple. Like the methods employed recently on the USS *Westfield* shipwreck site mitigation, the technique will include acoustic positioning and GIS mapping of all recovery locations, EOD monitoring for UXO, and collection and processing of all artifact material present. Each “load” will be placed on the barge, and all recovered artifacts will be tagged, documented, and catalogued according to excavation provenience. Sections of rail will be readied for subsequent redeposition, while any unique artifact will be taken to the temporary facility on shore for further documentation, stabilization and transfer to the CRL.

Objective 2—Magnetic Recovery

When removal of the disarticulated railroad iron is completed, the magnetic recovery of remaining miscellaneous iron artifacts (i.e., small casemate and machinery fragments, remaining railroad iron, buried UXO, etc.) with the use of a crane-mounted magnet will commence. Reflecting the USS *Westfield* recovery by an electro-magnet, a magnet capable of holding (magnetizing) 5,000 pounds of iron will be employed. The magnet recovery techniques would include acoustic positioning and GIS mapping of all recovery locations, EOD monitoring for UXO, and collection and processing of all artifact material present. With respect to the screening of material, the material from each bucket will be deposited onto a roll-off container that is fitted with three tiers of screens. The first tier is a 6-inch screen designed to collect larger artifacts including ordnance. These will be removed immediately with the soil matrix and remaining artifacts falling through to the next 3-inch tier atop the 0.5-inch screen. The box will then be taken ashore for subsequent matrix and artifact processing by a crew of archaeological technicians. All recovered artifacts will be documented and catalogued according to excavation provenience. It should be stated that is expected that numerous roll-off containers will be filled, each with its own excavation material, prior to transport to the shore processing facility.

Again, note that on the USS *Westfield* shipwreck site mitigation project, the “purpose of the magnet was to remove known artifacts that were too large for recovery using the clamshell yet too numerous to recovery by diving,” but the magnet damaged some artifacts (Borgens et al. 2010:156, 171). Conversely, use of the electromagnet on the CSS *Georgia* site will be conducted only after completion of months of rigorous and systematic archaeological recordation, and artifact and vessel component recovery by traditional means. This methodology is only to be employed in order to ensure total recovery of the remaining small artifacts, the majority of which are expected to be small miscellaneous iron concretions. Furthermore, if it is found that the method does not work or is detrimental to artifact preservation, its use will be immediately discontinued. As previously stated, this proposed methodology was not employed because of the success of the trial runs of the grapple and clamshell, as well as questions with the magnet’s applicability and functionality.

Objective 3—Clamshell Recovery

Upon removal of the miscellaneous iron, most of which is composed of various lengths of disarticulated railroad iron, Objective 3 will comprise the clamshell recovery excavation of the

remaining sediments. Currently these areas would include sediment matrix under the West and East Casemates and the Debris Field area as identified on the 2003 site plan (see Figure 2-09). The Integrity Test excavation indicated approximately 2 feet of remaining sediment. Reflecting the USS *Westfield* excavation and recovery, a 3-cubic-yard environmental clamshell bucket designed to retain all sediments will be employed. The clamshell removal techniques would include acoustic positioning and GIS mapping of all excavation locations, storage, and screening of all matrix, EOD monitoring for UXO, and collection and processing of all artifact material present. With respect to screening of material, the material from each bucket will be deposited onto a roll-off container that is fitted with three tiers of screens. The first tier is a 6-inch screen designed to collect larger artifacts including ordnance. These will be removed immediately with the soil matrix and remaining artifacts falling through to the next 3-inch tier atop the 0.5-inch screen. The box will then be taken ashore for subsequent matrix and artifact processing by a crew of archaeological technicians. All recovered artifacts will be documented and catalogued according to excavation provenance. It should be stated that is expected that numerous roll-off containers will be filled, each with its own excavation material, prior to transport to the shore processing facility.

IV. FINAL ARCHAEOLOGICAL CLEARANCE PHASE

Objective 1—Remote Sensing Survey

Following mechanized recovery, a remote sensing survey of the wreck site will be conducted. Employing sidescan sonar and a marine magnetometer, the site will be resurveyed to identify any remaining vessel-related material that was not recovered during mechanized recovery. If present, their locations will be placed on the geo-referenced site map for subsequent diver evaluation.

Objective 2—Archaeological Diver Clearance

Following the remote sensing survey, archaeological divers will locate and recover any remaining artifactual material, if identified during the remote sensing survey. Magnetometers, UXO detectors, and the USBL system will be used to locate the material. Then each artifact will be documented *in situ* and plotted on a GIS-based site plan developed from the 2013 surveys. Recovered material will be tagged on the bottom and brought to the surface in baskets for cataloging, additional photography, and transportation to the conservation facility.

V. REDEPOSITION OF SELECTED COMPONENTS/ARTIFACTS PHASE

Artifact and vessel component conservation or reburial will be dictated by priorities and options for display, long-term curation, and available funding. For purposes of selecting artifacts and vessel components for either conservation and curation or reburial, all artifacts and vessel components will be categorized in accordance with the following classification system:

- Group 1. Individual artifacts or components valuable for future research or museum display (i.e., ordnance, cannon, propulsions system components, personal items, etc.);
- Group 2. Representative samples of artifacts and artifact fragments recovered in large numbers (such as iron railroad rails and fragments, casemate fasteners, iron plates and plate fragments, boiler plate sections and fragments, etc.); and
- Group 3. Artifacts and components with low or no research significance and/or that are too impractical for conservation and curation. The casemate sections fall into this latter group and will comprise the majority of redeposited material. The artifacts with low or no research significance include numerous railroad iron segments, miscellaneous iron fragments, and small concretions. These artifacts and vessel components will be redeposited and buried. It should be stated that the

final decision on the disposition of the casemate sections and other materials will precede redeposition and will be validated by the on-board NHHC personnel.

The artifacts and vessel components in all three groups will be documented and catalogued, the resultant artifact database compatible with NHHC standards and practices. Once documentation is complete, those artifacts and vessel components in Group 3 (i.e., casemate sections, redundant railroad rail, miscellaneous artifacts, and concretions) will be transported to a location in the Sediment Basin immediately opposite the wreck site for reburial (Figure 4-05). The basin extends in Back River from Station 2+000 to 13+300, and is 11,300 feet in length and 600 feet wide. It was dredged to 40 feet deep with its base Miocene clay, but has filled in considerably. Bathymetric surveys completed by USACE in 2014 indicate considerable sedimentation has occurred and depths now range from 14 to 29 feet. The purpose of the trap was to capture sediments before they travelled into the main channel to reduce dredging costs and frequency in the main navigation channel. It was part of a larger sediment control system that was constructed in the 1970s, but has been inoperative since the 1990s. Back River is not open to commercial navigation.

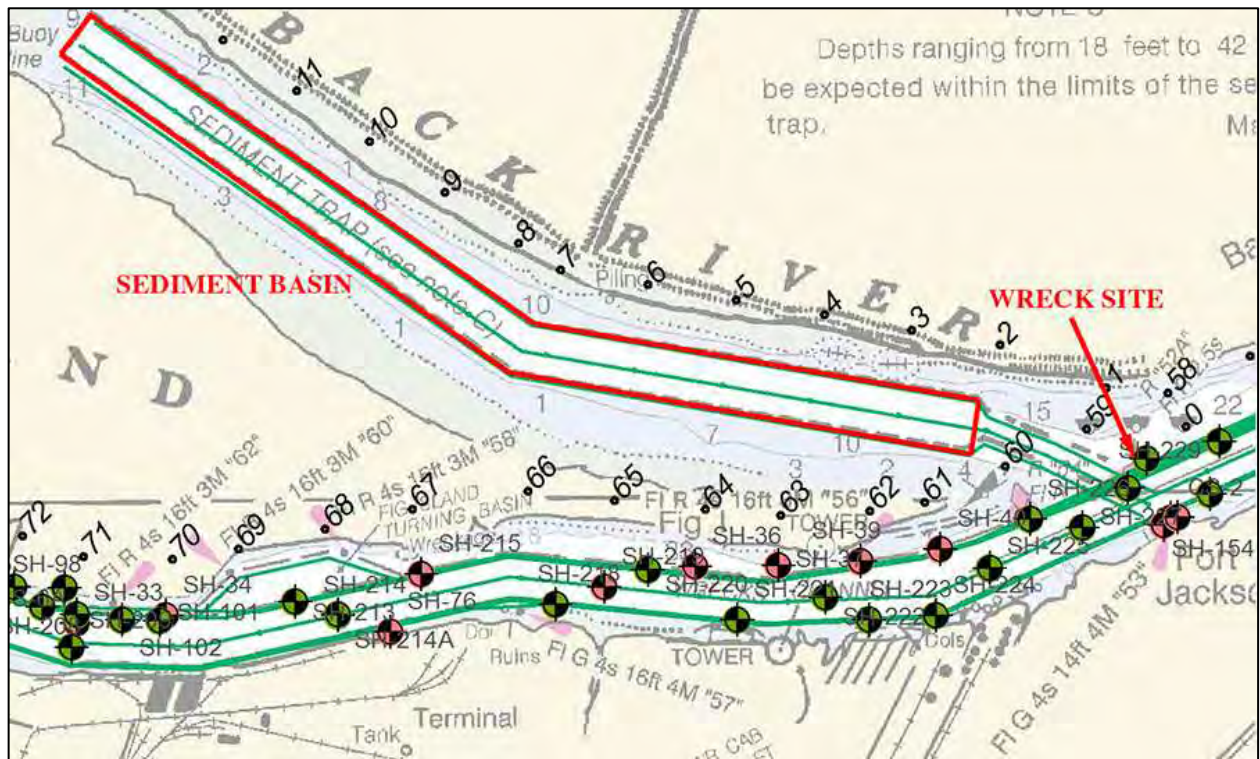


Figure 4-05. Sediment Basin selected for reburial location.

Prior to implementing the redeposition and burial phase, profiles and analyses of the bottom sediments will be analyzed to determine the best redeposition location within the Sediment Basin. Based on those data, the excavation of a suitable pit for deposition will be made and the site prepared. During redeposition of sections of the casemate, disarticulated railroad iron, and selected artifacts, the location of each will be acoustically positioned and a GIS map will be produced. Once that has been accomplished and the precise geographical coordinates of the pit and contents have been established, the storage pit will be refilled with suitable sediment. That will ensure the surviving remains of CSS *Georgia's* casemate are preserved, protected, and accessible in the event that future priorities and available funding make removal, conservation, reconstruction and display possible.

The Sediment Basin in Back River is located within the State of Georgia. While the feature itself is maintained by the USACE, Savannah District, the lands are owned by the State. Therefore, coordination with the USACE and State of Georgia in addition to the U.S. Navy would be required if future work were to be conducted on the buried items.

Future monitoring of the burial site will be conducted at an agreed upon time interval to periodically measure dissolved oxygen, pH, and other factors that might indicate either degradation or continued preservation; however, it is believed that burial by sediments can only help to preserve the redeposited site components (see Godfrey et al. 2011). Currently exposed in an area of high current and in an aerobic environment that is host to destructive organisms such as the *Teredo navalis*, burial with sediment will create an anoxic environment for the artifacts and components that does not allow the presence of the *Teredo navalis*, as well as rust-inducing dissolved oxygen.

Currently, apart from representative samples of railroad iron, diagnostic artifacts, and potentially another small section of casemate, it is the intention to redeposit and bury the majority of recovered casemate sections along with wood fragments, disarticulated railroad iron, and miscellaneous artifacts (i.e., fastener and metal fragments, concretions, etc.). Again, it should be stated that the final decision on the disposition of the casemate sections and other materials will precede redeposition, and will be validated by the on-board NHHC personnel.

PROPOSED CONSERVATION METHODOLOGY

ARTIFACT FIELD STABILIZATION, ACCESSIONING, STORAGE, AND SHIPMENT

The USACE, Savannah District has generously provided the project access to the USACE Engineer Depot facilities on the Savannah River. This facility is a short distance upstream from the wreck-site and is in a good central location. The plan is to use the Survey Shack, an approximately 50-x-23-foot area, as the conservation field office and artifact-accessioning lab. This space is ideal for the project's needs, in that it is located in a secure building on facility grounds with 24-hour security patrols, has adequate space with heating, ventilation, and air conditioning (HVAC), electricity, running hot and cold water, and secure lockable storage lockers. Space is also available in the adjacent 80-x-40-foot warehouse building for wet artifact storage. There is no electricity in the warehouse, but that is not an issue, as it will be used for secure storage. Space has also been made available at either end of the USACE Engineer Depot's concrete dock on the Savannah River. The large 25-yard roll-off containers can be placed here, and this will not impact large vehicle access to the USACE Engineer Depot. The concrete dock was built to handle heavy lift cranes, which will be necessary to lift the cannon off the barge and into the roll-off containers (Figures 4-06 to 4-09).

The Survey Shack will be suitably outfitted and supplied as a field artifact processing facility. The main room will be utilized as the artifact work area; the back office, at the right-rear from the front door, will be used as office space; and the back-left room will be for secure storage (supplied with heavy-duty shelving), along with the wooden lockers in the main room.

The personnel that will be undertaking this part of the operation in the field are all trained in Nautical Archaeology and Conservation in the graduate program at Texas A&M University. They have prior experience in handling and identifying artifacts, and understand the requirements for suitable field storage. The material culture of these Civil War artifacts is well known to them, as they have previously worked on the USS *Westfield* artifacts.



Figure 4-06. Survey Shack work area.



Figure 4-07. Warehouse employed for wet artifact storage.



Figure 4-08. Artifact cataloging station in the Survey Shack. The building would be completely full of artifacts at the end of the 2015 investigation. Pictured are Parker Brooks with CRL (left), Jim Duff with Panamerican (center), and Dr. Gordon Watts with TAR (right rear).



Figure 4-09. USACE Engineer Depot dock.

Once the artifacts and the digital copy of the field database arrive at the field lab, they will be accessioned into the master CSS *Georgia* Artifact Database. The artifacts will be checked off against their field “cow tag” numbers, and entered into the database as being located “at the Field Lab.” Then artifacts will be given their new permanent identity (ID) accessioning number, which will be a numerically stamped “Dymo” tag (i.e., a 0.375-inch wide plastic tab). This numbered tag will stay with the artifact all the time, as its ID number. A lettered prefix (e.g., “CG”) could be added to signify that the artifact comes from the CSS *Georgia* wreck site. The tag will be attached to the larger iron artifacts using a 0.03-inch stainless steel wire, the smaller artifacts will be in a plastic bag along with the artifact number tied with nylon line. The name/description of the artifact will be updated, if necessary, and this information will be added to a new column—“CRL Notes.” The field archaeologists’ description, along with the field tag number, will stay in their separate columns, and will not be changed during the accessioning. This way the field archaeologists will always be able to come back and “search” for one of their original entries. It should be stated that the artifact database, which will be developed by the on-site CRL team with input from NHHC, will be compatible with NHHC standards and practices, and will be submitted for approval prior to implementation. Furthermore, as with all records, the database will be backed up (i.e., copied) onto a secondary platform (i.e., external hard drive, cloud, etc.).

All of the artifacts will be assessed from a conservation standpoint, to determine if they need any immediate treatment prior to their shipment back to Texas. Generally speaking, all of the artifacts will be stored in a wet environment, specifically fresh water. The artifacts that are deemed fragile and in need of sequestering to prevent further corrosion will be stored in a 5% solution of sodium sesquicarbonate. Fragile artifacts will receive their own storage containers, with suitable packing material, so that they are not damaged by other artifacts jostling against them. All artifacts will be assessed on an individual basis, and there may be a few that need

more attention than others. The field crew will have the ability to liaise with the CRL in Texas, should problems arise. The majority of the smaller artifacts will be stored wet in plastic containers of various sizes, 5-gallon buckets and 30-/55-gallon drums, in the warehouse. Poly-tanks, 8 feet in diameter and 2 feet high round blue plastic water tanks, will also be used to store the more “intrinsically” valuable larger artifacts in the secure warehouse. The larger artifacts (greater than 6 feet in length) will be stored in the outside 25-yard roll-off containers on the dockside, which will be filled with river water. These will be covered with their roll-on/off tarps. The entire USACE Engineer Depot area is fenced, with a security surveillance system and after-hours security personnel.

When the individual artifacts are accessioned, they will be color photographed using a digital camera. This photograph is for field ID purposes and will be taken at a 90-degree angle and at a 45-degree angle if possible, to show most of the diagnostic features. These images will be of medium- to high-resolution and will show both a scale and the artifact number. These photographs, which will be entered into a project artifact photo log, will be labeled and stored by artifact number, so that they can be easily accessed. As time allows, the image will be printed onto an individual field artifact card, that will include the ID number, full description, dimensions (e.g., XYZ in centimeters/inches). These cards will also be scanned and entered into the database. All files including the artifact photo log will be backed up on a daily basis and onto an external hard drive so as to provide two separate locations. It should be stated that CRL will actively maintain the artifact photo log along with the artifact catalogue.

ORDNANCE—PROPOSED PROCESSING

All of the ordnance will be located, identified, and tagged by the archaeological divers. This information will be entered into the master database, so that the artifacts can be tracked. EOD personnel will lift these artifacts, yet to be identified. The shells (along with their field ID tags) will be stored wet, in 5-gallon buckets. The buckets are of a suitable size to adequately handle one 9-inch or 6.4-inch shell. The smaller shells can be stored in multiples, in the same bucket. The draft plan is that the team will move these items daily to a secure location, just off the Back River, and stored in a locked ISO container in the secure USACE work area. At a later date, a U.S. Marine Corps EOD team will inert all of the shells and return them to the custody of the archaeologists. Once they are inert, they are considered safe and can be handled by the archaeologists. Then they will be processed the same way as the other artifacts.

The cannon will be lifted by the EOD team and shipped directly by barge to the USACE Engineer Depot. They will be crane-lifted from the barge and placed in one or two 25-yard roll-off container(s) on the dockside. A CORA will have to be “in hand” before this takes place. The draft plan is that the cannon will be shipped to Texas as soon as possible after the initial lifting.

ARTIFACT SHIPMENT TO THE CONSERVATION RESEARCH LABORATORY, TEXAS A&M UNIVERSITY, COLLEGE STATION, TEXAS

The exact details of how all artifacts are going to be shipped to Texas have yet to be finalized. Considered to contain live ordnance, the cannon will be shipped totally submerged in water in purpose-built containers. They will have to be adequately cradled on car tires and cribbing, so that the surface of the concretion/metal is not damaged. Attachment points will have to be welded onto the interior of the containers, so that the cannon can be securely “ratchet-strapped” down, to prevent movement during transport. Chains cannot be used here, nor during the lifts, as they will damage the surface of the cannon. A CORA will have to be applied for, along with all of the necessary permits allowing them to be transported across five states, each with differing rules and regulations. The smaller artifacts could be moved via secure ISO container, inside buckets/barrels, all kept submerged or wet, and these then placed in roll-off containers. The larger artifacts will be dealt with on a case-by-case basis; most likely they will be wrapped or covered in wet material (i.e., towels, straw, etc.) with a layer of plastic wrap to keep them wet,

and shipped in roll-off containers, as well. The casemate section(s) also will be in this category, as we have not yet decided how much is going to be conserved. These sections could very easily make up their own load, in a separate truck and shipped in roll-off containers for the smaller sections (Figure 4-10).

It should be stated that a Conservation Loan Agreement will be obtained by the CRL from the NHHHC for the duration of artifact conservation treatment.



Figure 4-10. Roll-off containers full of artifacts being offloaded from the materials barge onto a flatbed truck at the USACE Depot dock for transport to CRL. The majority of the artifacts would be shipped in roll-off containers, including cannon.

ARTIFACT CONSERVATION

The Conservation Research Laboratory at Texas A&M University

The artifact field stabilization, storage, and ultimate conservation will be conducted by the CRL, with conservation handled under a separate contract with the Savannah District. The CRL is part of the Center for Maritime Archaeology & Conservation, at Texas A&M University. The CRL is one of the larger artifact conservation facilities located in the U.S., and has been in continuous operation since it started in 1978. Since 1996, the CRL has been involved in more than 120 different projects, and has cleaned and conserved more than 1.75 million artifacts. The CRL is the oldest continuously running shipwreck conservation lab in the country and is the only one with experience involving live ordnance and loaded cannon, including those recovered from the CSS *Georgia* as well as the CSS *Alabama* and the USS *Westfield*, both Civil War shipwrecks similar to the *Georgia*.

Directed by Dr. Donny Hamilton and run by Mr. Jim Jobling, the CRL is the only lab in the country with UXO experience. They have conserved hull remains and thousands of artifacts from numerous shipwrecks including ordnance from the *Georgia* recovered in 1980. Apart from their extensive conservation experience, CRL has worked on a number of projects involving live ordnance, including the CSS *Alabama* and the USS *Westfield*. The lab at the CRL has conserved 28 cannon over the last 16 years, from a small wrought iron swivel gun and three brass cannon recovered from the wreck of the *Belle* (1686), to a large, loaded 9-inch Dahlgren from the *Westfield* (1863; the cannon was loaded with an inverted shell that the lab successfully removed).

The CRL is located at a satellite campus away from the main university, in two adjoining conservation buildings (6,800 square-feet). The CRL is fully equipped to conserve artifacts from both underwater and land sites, with more than 40 power supplies for electrolysis, a 350 peak kilovoltage industrial x-ray unit with a digital Computed Radiography scanner, the largest archaeological freeze dryer in North America (> 2,000 cubic-feet), a 6-foot Faro Arm digital scanner, etc.

Artifact Conservation

Artifacts and ship remains from the CSS *Georgia* were subjected to long-term inundation in the Savannah River. Parts of the wreck were buried and others exposed, and these remains were also affected by the periodic dredging operations in the freshwater river. With the gradual deepening of the shipping channel over the years, this exposed the remains to salt water. This introduced new species of marine life, including mussels, oysters and *Teredo navalis* worm that have affected the artifacts in different ways. Each material type comprising the artifacts and ship remains was thus differentially affected by various physical and biological processes, necessitating research and the evaluation of comparative techniques to identify the best techniques to be applied to this collection. This research and analysis will be a critical and significant component of the conservation process. CRL will continue to research the different types of conservation techniques that may be needed, and compare the application of these techniques as needed, based upon the research results, and apply the best treatment to individual artifacts. In the case of large artifact collections, CRL also researches the effects of treating similar artifacts in bulk, so that a more streamlined and effective method of conservation can be achieved for the large collections.

The artifacts recovered from the CSS *Georgia* will be conserved following the basic guidelines outlined in the CRL Conservation Manual (Hamilton 1998 [available online]).

Iron artifacts will be mechanically cleaned and then be put through an electrolytic reduction process to remove the chloride ions. Sodium hydroxide is used as the electrolyte. They will then be rinsed in a series of boiling de-ionized water baths, to remove the remaining chlorides. Three coats of tannic acid will be applied to the surface of the iron while it is still hot, to form a corrosion-resistant layer of ferrous tannate. For these larger artifacts, the surface will then be sealed using an alkyd low-luster black paint, to form a water resistant barrier.

Copper alloy (bronze and brass) artifacts are generally treated using electrolysis, to remove the chlorides; they also go through an initial mechanical cleaning. Artifacts will then be rinsed in a series of boiling de-ionized water baths, polished using a fiberglass brush and baking soda, and chemically treated using a solution of benzotriazole in ethanol. The chemical treatment imparts a corrosion-resistant layer to the metal, which is then sealed using methacrylate. If the condition of the artifact dictates a milder chemical treatment and not electrolysis, then staff will follow this route with the artifact's preservation being the priority.

Lead artifacts will be mechanically cleaned and then placed in a hydrochloric acid solution to remove any marine and surface calcareous deposits. The lead will then be rinsed in de-ionized

water to neutralize the acid. A solution of ammonium acetate will be used to chemically treat the lead and remove the corrosion products. The artifact will then go through a series of boiling rinses to remove any remaining salts and chemicals. Microcrystalline wax will be used as the final sealant.

Glass and ceramic artifacts will go through a series of fresh water rinses, to make sure that there are no salts present in the glass. The glass will then be dehydrated/dried and treated with PVA. If the artifacts are stained in any way, the CRL staff will attempt to remove the staining from the artifact.

The chloride levels will be monitored on a weekly basis and recorded on the Conservation Card. This will give the conservator an accurate assessment as to how the conservation regiment is proceeding. The chlorides are usually monitored using a simple wet chemistry titration technique, as written up in the Conservation Manual. Other techniques will be researched and evaluated, so as to streamline the process. The sponsor will be included in all decisions regarding these artifacts and the process of treatment.

CRL is equipped with an x-ray machine and smaller artifacts will be scanned as needed. The information will be recorded in the database and on artifact conservation cards. A digital x-ray file will be furnished to the USACE at the end of the project. CRL is currently researching into the accuracy of using radiography to record concreted artifacts; this is an ongoing project, as the measurements from the x-rays are being checked against the artifacts as they are being removed from the concretions.

All photography conducted during the conservation process will be in digital color and will be of a medium format, with sufficient resolution so that they can be adequately enlarged without undue pixilation.

CRL staff will provide the USACE, Savannah District with brief quarterly reports that will include an outline of the current progress of the artifact conservation treatment. Reports will be sent in digital format and will include images when necessary to show the status of treatment.

Transportation of the artifacts to and from CRL is the responsibility of the USACE. CRL staff will pack and have the artifacts ready for transportation at the end of the treatment. In case of large artifacts, CRL staff will assist with the loading of artifacts onto/into the vehicle transporting them to their identified curatorial facility.

On completion of the artifact conservation, CRL will provide a Final Report to USACE, Savannah District. This will document the process, including a detailed listing of material and chemicals used to conserve the artifacts, and detailed recommendations concerning the annual maintenance required for the long-term upkeep of the artifacts. This report shall include a discussion of research conducted during the conservation process and the results. The final report will include the final inventory listing, artifact conservation cards, digital images and x-rays, and drawings. This will be done with one hard copy and two digital copies in either CD or DVD format and will be compatible with NHHC record protocols.

CURATION OF ARTIFACTS AND RECORDS

Both the USACE and the Department of the U.S. Navy must comply with federal regulation "Curation of Federally-Owned and Administered Archeological Collections (36 CFR Part 79)." Part 79 contains the definitions, standards, procedures, and guidelines to preserve collections of prehistoric and historic material remains, and associated records. A collection as defined in 36 CFR Part 79 is "material remains that are excavated or removed during a survey, excavation or other study of a prehistoric or historic resource, and associated records that are prepared or

assembled in connection with the survey, excavation or other study.” All artifacts of historic and research significance recovered from the CSS *Georgia* will be conserved and accessioned in the U.S. Navy collection. It is estimated the CSS *Georgia* collection will consist of 11,671 cubic feet of artifacts, of which 7,555 cubic feet represent casemate, some or all of which may be reburied.

The USACE is undertaking the SHEP, and thereby is required under Section 106 of the NHPA to mitigate adverse effects on historic properties, in this instance through conducting the data recovery of the CSS *Georgia* prior to harbor expansion construction activities at the wreck site. Mitigation of the CSS *Georgia* is addressed in the PA that was executed for SHEP. The PA was signed by the USACE, Savannah District, the Georgia and South Carolina SHPOs and the NHHHC. NHHHC’s comments are limited to the CSS *Georgia*, as accountability of the resource currently falls and will remain under the U.S. Navy, not the USACE. Stipulation 7 of the PA states, “The Savannah District shall ensure that all materials and records resulting from survey, testing, and data recovery are curated in accordance with 36 CFR, Part 79.”

Long term curation of the CSS *Georgia* collection and associated costs will be the responsibility of the U.S. Navy, the agency accountable for the CSS *Georgia*. Engineer Regulation (ER) 1105-2-100, Appendix C. “Cultural Resources” (dated April 2000, page C-34) notes that in an effort such as SHEP, USACE only interrupts the owner’s control of a collection as long as there is a USACE interest. In this case, the USACE, Savannah District will provide for inventory of the collection, conservation of the artifacts, and transport of the conserved artifacts to the curation repository chosen by the U.S. Navy. Detailed stipulations regarding conservation, curation, and transportation of the artifacts will be addressed in a Memorandum of Understanding prepared by the USACE and signed by the USACE, Savannah District and NHHHC.

The U.S. Navy will be responsible for selecting the curation facility (or facilities) and the U.S. Navy will enter into long-term curation agreements with the facility (or facilities), if a repository managed by other than the U.S. Navy curates the collection. The U.S. Navy will be responsible for executing temporary loan agreements with other museums or facilities wishing to exhibit the artifacts (the curatorial or display facilities must meet 36 CFR 79 and NHHHC loan standards).

Along with artifacts, all records associated with the investigation including, but not limited to, artifact inventories, artifact catalogues, Situation Reports (SITREPs), Principal Investigator daily logs, photographs, GIS, and remote sensing data, will also form part of the collection to be curated. Records will be submitted in a format compatible with NHHHC standards and practices.

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V. SITE FORMATION

As stated previously, in 1969, U.S. Navy divers examined the site and reported that the “superstructure and upper works had deteriorated and collapsed; the gun deck had collapsed and the engines were determined to be in the same approximate position as when *Georgia* was scuttled. It was also reported that the vessel was covered with 12 to 16 feet of silt and the hull was believed to be intact” (Garrison et al. 1980:35). Ten years later, during Texas A&M University’s 1979 archaeological investigation and engineering assessment, results of coring indicated that no more than 1.5 feet of sand over dark gray clays surrounded the wreck site (Garrison et al. 1980:101). While the 1969 amount of silt coverage is most likely incorrect, the difference in silt or overburden depths in just ten years could also suggest major on-going environmental site formation processes, most likely culturally induced (i.e., dredging, wing-dam construction, etc.). A review of hydrographic data correlated with maintenance and construction activities illustrates the changes in the river channel adjacent to the wreck and the wreck site area itself.

The Chief of Engineers 1872 report states the CSS *Georgia* wreck “lies on the north side of the channel abreast of Ft. Jackson and has occasioned accident. It has now 11 feet over it at low water, with a sand-bar forming around it on the north side and west end” (Garrison et al. 1980:35). Figure 5-01 illustrates a section of an 1867 survey map produced immediately after the war. Shown opposite Fort Jackson, the “Ram Georgia” is located in 21 to 26 feet of water with little if any shoaling noted. However, Figure 5-02, a survey map that mirrors the 1872 report, shows dramatic shoaling immediately adjacent to and north of the wreck, as well as an increase in the main channel depth to the south. Shoal depths to the north are 10 feet versus the 21 feet five years earlier.

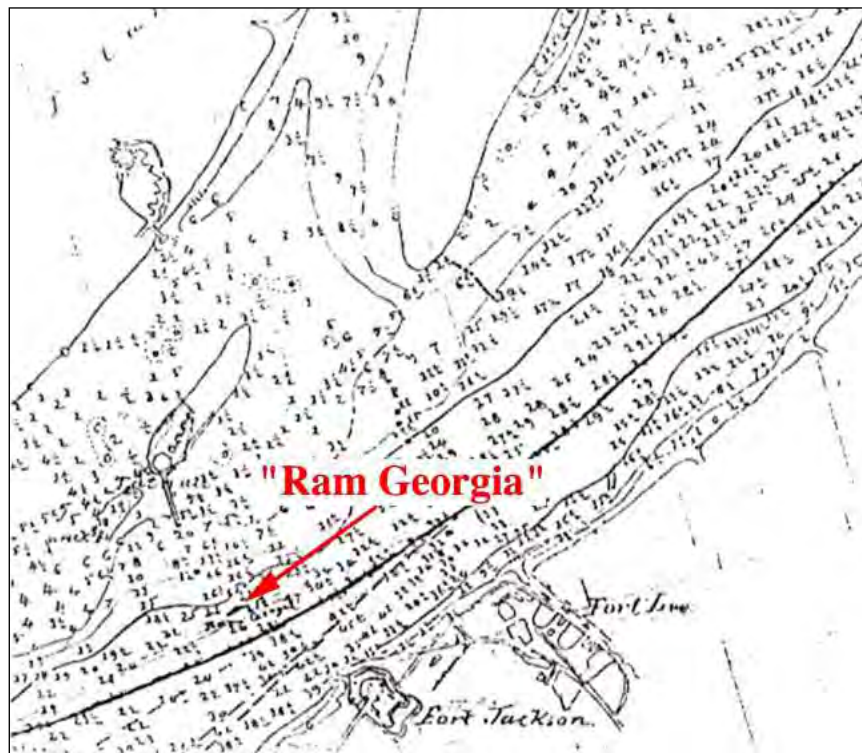


Figure 5-01. Excerpt from 1867 U.S. Coast Survey map of the Savannah River showing wreck of the “Ram Georgia” opposite Fort Jackson (as presented in Duff and Simmons 1995:2-35).

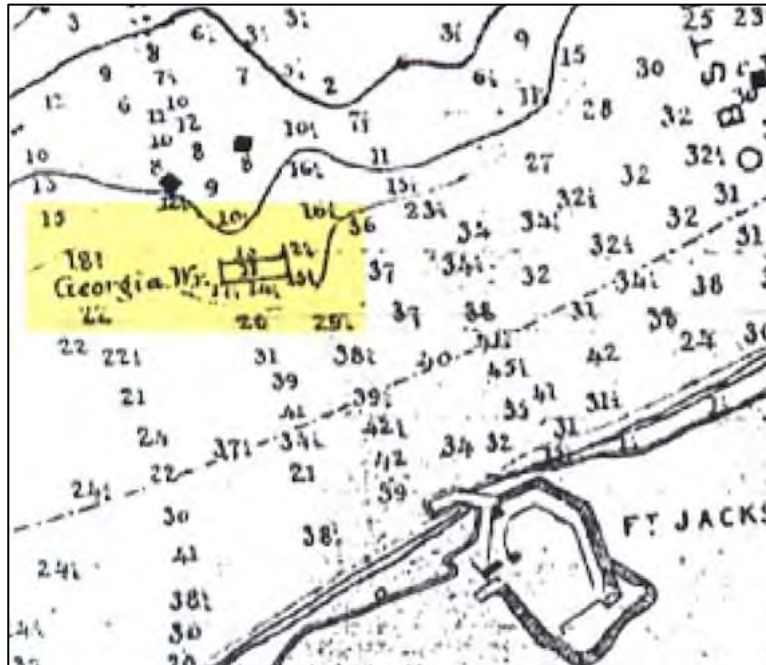


Figure 5-02. Excerpt from the 1871 Gillmore and Ludlow Map showing the shoaling on the northern side of the wreck site (as presented in Swanson & Holcombe 2003:96).

Dated one year after the Gillmore and Ludlow map, the 1872 U.S. Coast Survey map shown in Figure 5-03 mirrors the earlier map depicting shoaling around the wreck. However, the shoaling does not appear as pronounced, differing some 5 feet deeper on the northern side of the wreck while the main channel depths correspond. After this date, the wreck site disappears from historic maps, possibly as a result of its “clearance” by Wells, or because the focus turned to the control of the main channel, the wreck lying outside the channel to the north as it does today. Whatever the case, perhaps the greatest known effects on the wreck site can be attributed to the results of these continued efforts at channel improvements, improvements that continue to this day. The current archaeological work on the CSS *Georgia* wreck site, a component of the most recent channel enlargement, illustrates this fact.

Channel improvements and harbor maintenance efforts began in the colonial period when it was determined that the Fig Island Channel, flowing between Fig Island and Hutchinson Island, caused a shoaling problem in the main channel of the river, creating the problematic Garden Bank directly across from Savannah. Shoaling was also a problem at the downriver end of Fig Island where both the Back and Front rivers came together to form the main channel, the present location of the CSS *Georgia* wreck site. Basically, all improvement efforts attempted to focus the tidal current into one channel by closing all others, with the increased water speeds theoretically keeping the single main channel free of shoals. Illustrating this thought, in 1891 a Chief of Engineers’ report was published to show the advantages of improving Savannah’s harbor. It was entitled “A Plea in Behalf of the South and West for Deep Water at Savannah, Georgia.” On July 22, 1890, the Secretary of War approved the project for a 26-foot depth of water and on September 19, 1890, Congress appropriated \$350,000 to begin the work (U.S. Army Corps of Engineers 1891:4). Lieutenant O.M. Carter of the USACE submitted a project for the improvements to Savannah Harbor and River to obtain a channel depth of 26 feet. The culmination of many years of effort on the part of the citizens and businesses of Savannah, Lt. Carter’s project called for a combination of dredging and construction of retaining walls and jetties. Lt. Carter based his project on surveys that had begun in 1889. The surveys provided

data to explain the volumes of water that flowed down Front and Back rivers. Lt. Carter goes on to explain that the survey data showed:

“...the effect of Cross Tides dam is strikingly illustrated...Previous to its construction two-thirds of the entire volume of Savannah River passed through Cross Tides into Back River, and only one-third passed down Front River. Now the situation is precisely reversed...The results of the survey appear to indicate that a mean ebb velocity of about 2 feet per second is required to secure permanence of the channel. The general aim of the revised project will be to mold the river bed from Cross Tides to the sea in such a way as to allow the free ascent of the flood tide, and to secure throughout, as far as practicable, the above uniform mean velocity of ebb flow” [U.S. Army Corps of Engineers–Savannah District 1891:7-10].

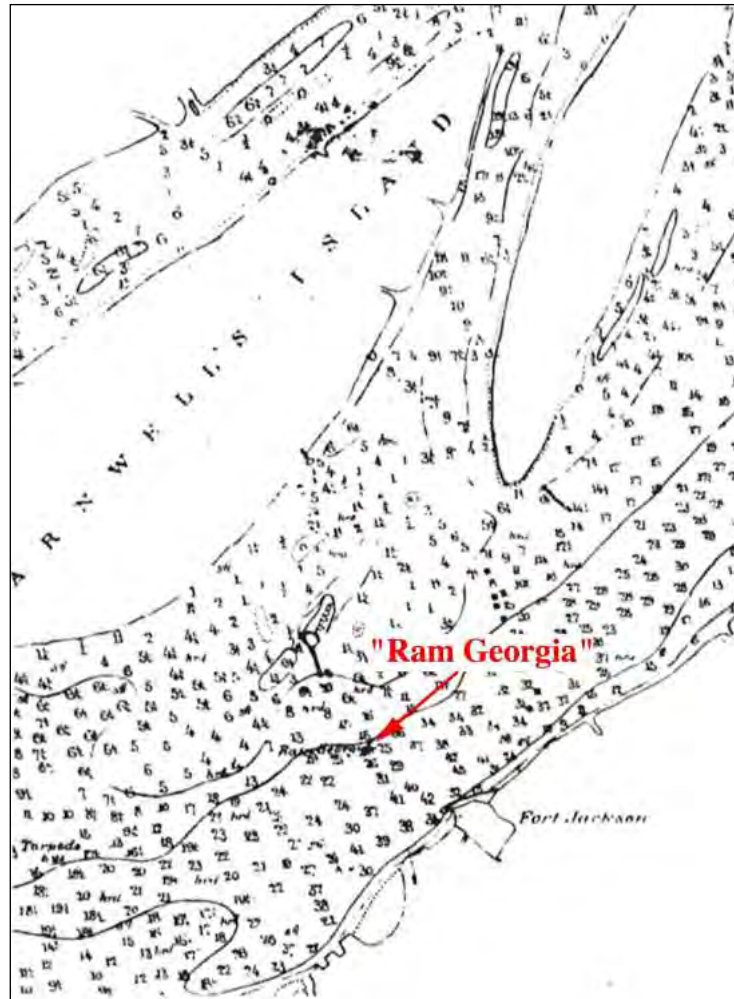


Figure 5-03. Excerpt from the 1872 U.S. Coast Survey map of the Savannah River (as presented in Duff and Simmons 1995:2-36).

Lt. Carter produced a map in 1891 to accompany the Annual Report of the Chief of Engineers. While little specific wreck information is presented, including an absence of any indication of the CSS *Georgia* wreck site, the map is the first to show both Hutchinson and Fig islands as one land mass. Furthermore, it illustrates the funneling of the tide through the main channel by the construction of numerous features including the Cross Tides Dam (1937) at the north of Hutchinson Island and the Fig Island Training Wall at the southern end of the Fig Island, just to the west of the wreck site (Figure 5-04).

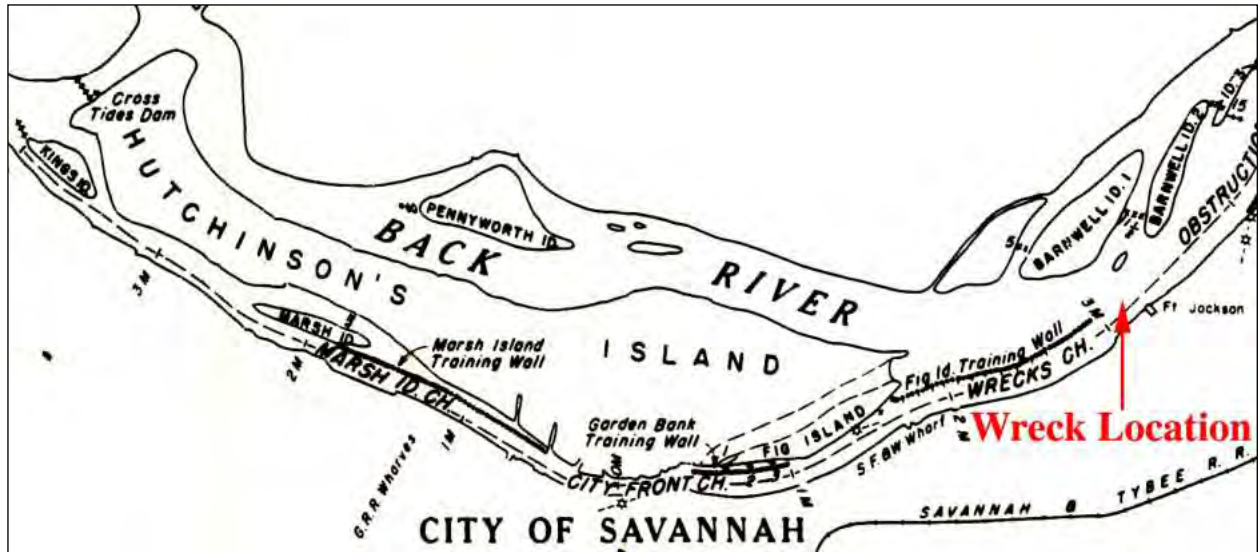


Figure 5-04. Excerpt from the 1891 survey map of the Savannah River by Lt. O.M. Carter (as presented in Granger 1968).

After implementation of these improvements, it was found that the Wrecks Channel, south of Fig Island and adjacent to the CSS *Georgia* site:

“...had maintained its depth reasonably well. The silting that had taken place was believed to have accumulated on the ebb tide from Back River across the shoal of the old channel. It was planned to build a training wall downstream from the lower end of Fig Island parallel to the new channel, and it was believed that with this concentration of the ebb tide and the increased flow from the Cross Tide dam, ‘The Wrecks’ channel [Front River - navigation channel] could be maintained” [Granger 1968:46].

Begun in 1882, the Fig Island Training Wall extended 5,000 feet from the extreme lower eastern end of the island, and the wall ran due east toward the CSS *Georgia* wreck site. In 1883, it was extended another 1,000 feet downstream to counteract shoaling at its end, in 1887, another 750 feet were added, and it was rebuilt in 1940 (Barber and Gann 1989:104; Granger 1968:46-50).

The Emergency Rivers and Harbors Act of 1900 called for the survey of Savannah Harbor by the USACE to determine if the harbor should be deepened to 28 feet mean high water. This had been proposed in 1886, and reported on in the 1888 Annual Report of the Chief of Engineers, although it was never adopted. But after the District Engineer Cassius E. Gillette responded favorably to the idea, a special board of engineer officers was appointed to review the 1888 project to recommend any changes. Due to Savannah’s potential for increased maritime commerce, the board recommended the 28-foot depth and a width varying from 350 to 500 feet. The work area was from the city waterworks to the sea and was to be accomplished primarily by dredging with government equipment or by contract (Barber and Gann 1989:90-91).

Owing in part to continuous shoaling, expanding commerce, and the increasingly more numerous and larger vessels, requests had been repeatedly made for further channel deepening and widening. The harbor was deepened to 34 feet in 1947 and 1949, and by 1985 the area up to the entrance of the Sediment Basin in the Back River was dredged to 38 feet. The Harbor or Navigation Channel presently stands at a depth of 42 feet Mean Low Water (MLW) and a width of 500 feet (Barber and Gann 1989:355).

Little channel morphology change is noted on maps up to and through the turn of the century for the area surrounding the CSS *Georgia* wreck site. However, as illustrated in Figure 5-05, by the first quarter of the 1900s, through the use of dikes and or dams, Barnwell Island No. 1 and Island No. 2, located just to the north of the wreck site, are starting to merge into one land mass. With the addition of dredge material in filling, by the 1940s the islands have completed their transformation and comprise the solid northern (or South Carolina) bank of the river. Illustrated in Figure 5-06, a 1940 map represents the general topography of the area as it exists today.

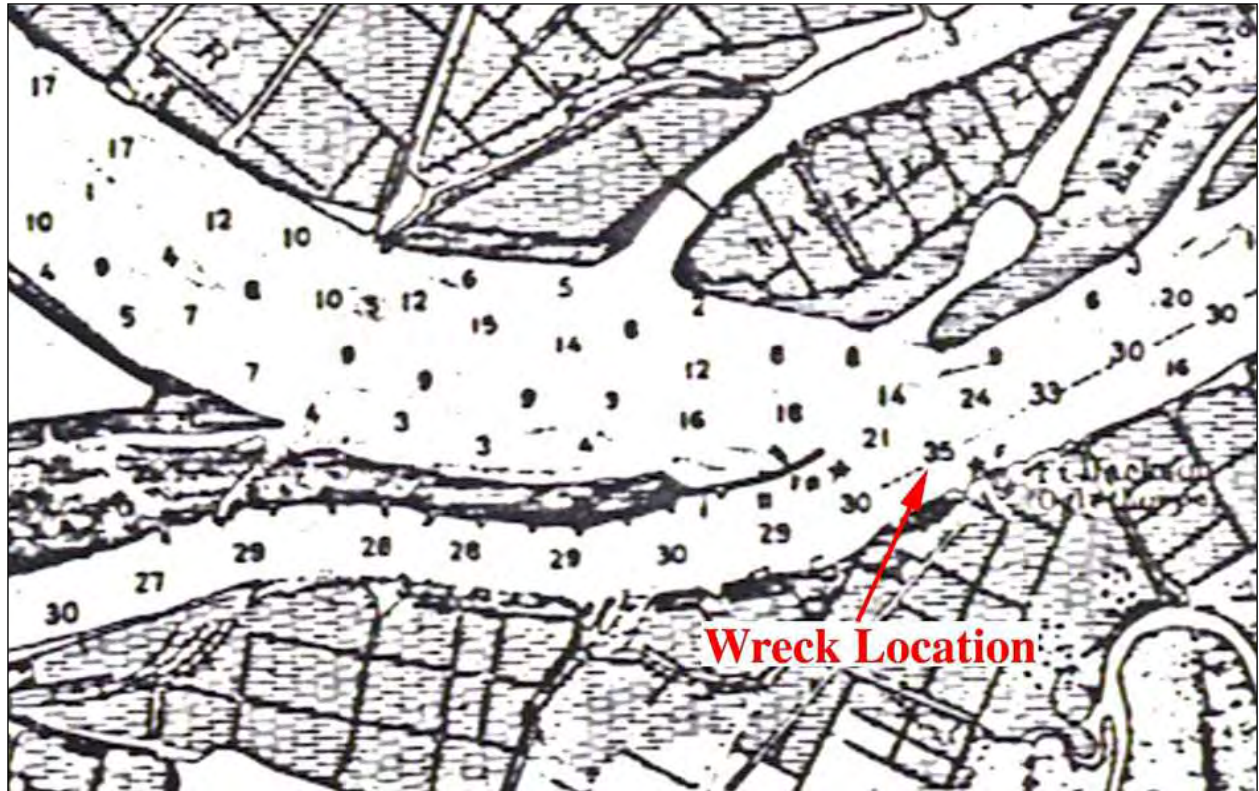


Figure 5-05. Excerpt from the 1923 U.S. Coast and Geodetic Survey map of the Savannah River (as presented in Watts 1992:68).

Although impacted by the contract dredge *St. Louis* in 1968, maintenance dredging by the U.S. Pipeline Dredge *Bacon* continued along the northern side of the channel adjacent to the wreck of the CSS *Georgia* in September 1969, September 1970, and August 1974. Since 1974, it was anticipated that no additional maintenance dredging would be necessary at this location due to the installation and operation of the Tide Gate and the construction of the Sediment Basin (U.S. Army Corps of Engineers 1983:III-4). However, it was again dredged in 1982, as well as the 1983 advance maintenance dredging that dredged into the site. Specifically, the 1983 activities included box cutting of side slopes and excavation of 4 vertical feet of channel bottom for the advance maintenance dredging (Judy Woods, personal communication 2003). The USACE–Savannah District’s 1992 Final Comprehensive Impact Statement states that the “vessel was impacted in 1969, 1970, 1974 and 1983 (U.S. Army Corps of Engineers–Savannah District 1992:46). Besides cutting or “chewing” into the wreck, dredging impacts destabilized and exposed the site by removing protective sediments resulting in continuous and ongoing degradation to the wreck through exposure (i.e., *Teredo navalis* damage, erosion, etc.).

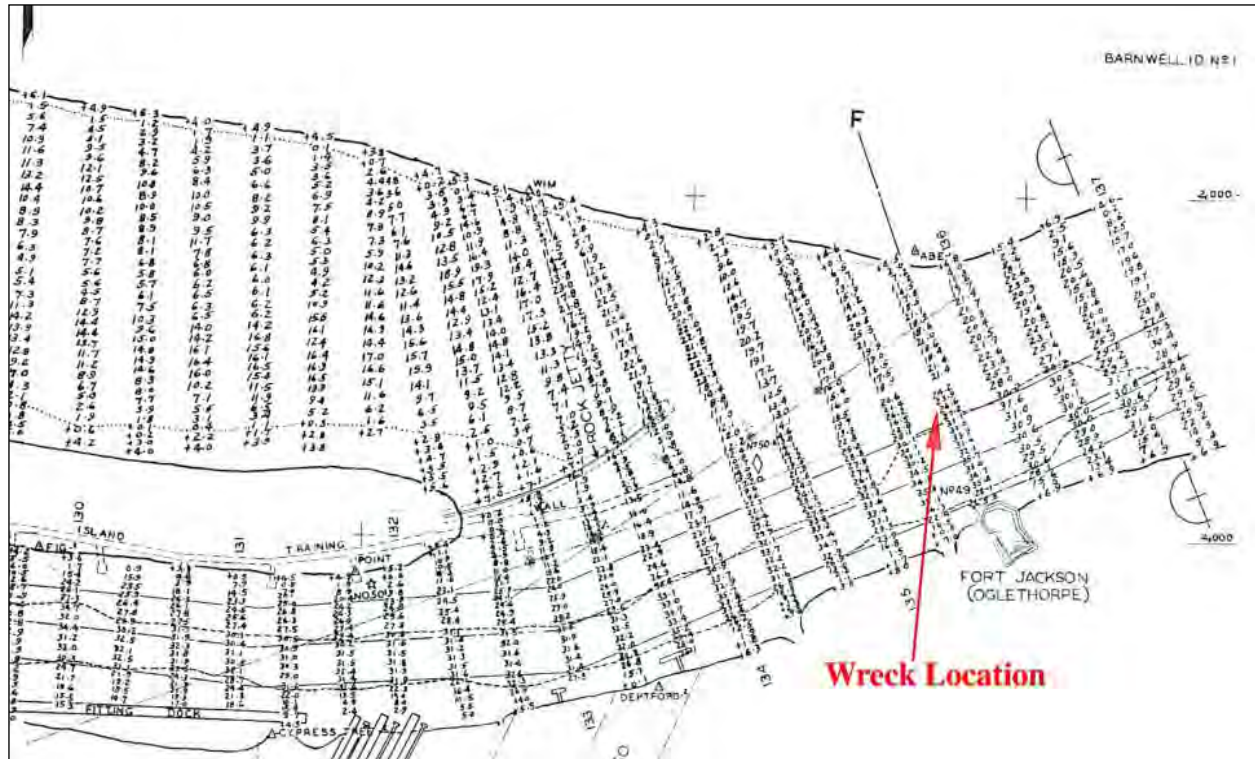


Figure 5-06. Excerpt from the 1942 U.S. Army Corps of Engineers–Savannah District *Annual Survey – 1942, Savannah Harbor, Georgia* showing Barnwell Island as a complete landmass with South Carolina.

In addition to dredging impacts, between December 24, 1981 and January 3, 1982 a vessel fouled the wreck buoy marking the site, dragging it and its 10-ton anchor approximately 300 feet downstream through the wreck site. A hydrographic survey was conducted to determine effects to the site, but no recognizable change in contours was noted. However, since the buoy was in an area of scattered debris, it is likely that some wreck components were impacted to varying degrees. The U.S. Coast Guard (USCG) wreck buoy and anchor were removed to prevent similar occurrences (U.S. Army Corps of Engineers 1983:III-5, 6, VI-10).

Another probable, but less documentable, impact to the site is associated with the Tide Gate, which crosses the Back River approximately 2 miles from the CSS *Georgia* site, and the Sediment Basin, which comprises the 2-mile length of the Back River from the Tide Gate to Front River. Fully operational by 1977, as planned and constructed, the Tide Gate would allow incoming tides to pass through but would shut automatically on ebb tides, with the overall effect being to trap sediments in the Sediment Basin that normally would collect in the Front River. The sediments could then be economically dredged into nearby disposal areas (Barber and Gann 1989:356-359). Since its operation, the Tide Gate changed the shoaling pattern in the Savannah Harbor with a marked increase in the shoaling rate in the basin, a corresponding decrease in shoaling in the navigation channels, and an increase in Front River velocities (U.S. Army Corps of Engineers 1983:VII-2). Conversely, the USACE–Savannah District took the Tide Gate structure out of operation in 1991 due to concerns that the elevated salinity levels in the Back and Little Back rivers were having adverse effects on freshwater marshes in the surrounding National Wildlife Refuge (NWR) and striped bass habitat (U.S. Army Corps of Engineers–Savannah District 1991). Protruding slightly into the northern side of the navigation channel, it is assumed that the resultant increased velocities would serve to clear sediments from the wreck, while at the same time having a greater negative effect due to these increased velocities (i.e., wood degradation).

An analysis of detailed hydrographic survey maps for the CSS *Georgia* site area for the period prior to construction of the Tide Gate, its period of operation, and after its removal from operation was conducted in order to ascertain temporal presence or absence of sediments. While factors such as extended periods of low or high river levels associated with drought or flood were not accounted for, the period from 1990, just prior to the closure of the Tide Gate, to 1992, the year after its closure, saw in some locations increases in depths of 5 to 9 feet. Suggesting loss of sediments due to increased currents, the question of the affects to the site can only be postulated.

Bathymetric maps and images were also analyzed in an effort to characterize the site and identify any changes over time such as sediment buildup or loss. Figure 5-07 is a 2002 Reson Bathymetric image of the site that graphically illustrates the site and its surrounding environment. The dark pinks indicate the deepest portion of the dredged channel, with actual linear dredge marks visible. The West Casemate appears as an isolated green pedestal surrounded by slightly deeper blue, indicating a surrounding uniform depth. The greens and yellows indicate shallower water as you go north toward the South Carolina bank.

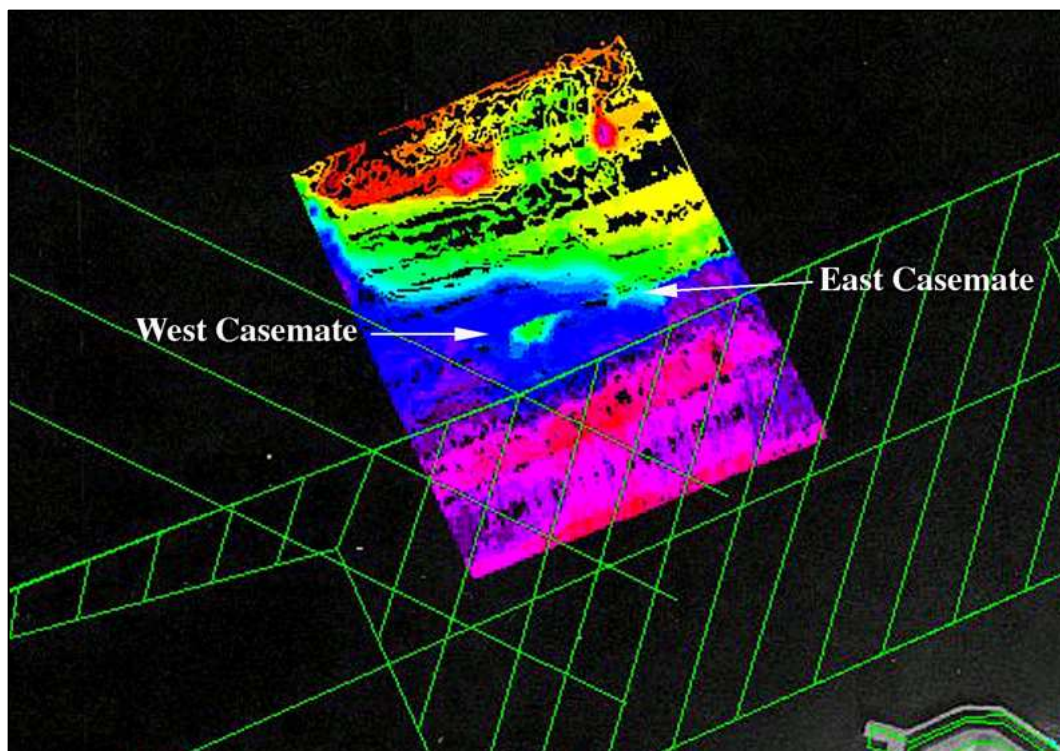


Figure 5-07. 2002 Reson Bathymetric image that graphically illustrates the site and its surrounding environment (courtesy of the U.S. Army Corps of Engineers–Savannah District).

Figure 5-08, a 2003 Reson Bathymetric oblique image of the site taken just before diving investigations, illustrates the West Casemate similarly pedestaled on a uniform surrounding bottom. Like the 2002 image, depths can be seen to increase as one moves down slope from the East Casemate towards the West Casemate and into the channel proper. This is graphically illustrated in Figure 5-09 below, a close up image of the East Casemate. Furthermore, when both the 2002 and 2003 images are contrasted with the 1979 sidescan image below, the wreck sections do not appear to be buried, suggesting little if any sediment was present at the site at this early, pre-Tide Gate Closure date (Figure 5-10).

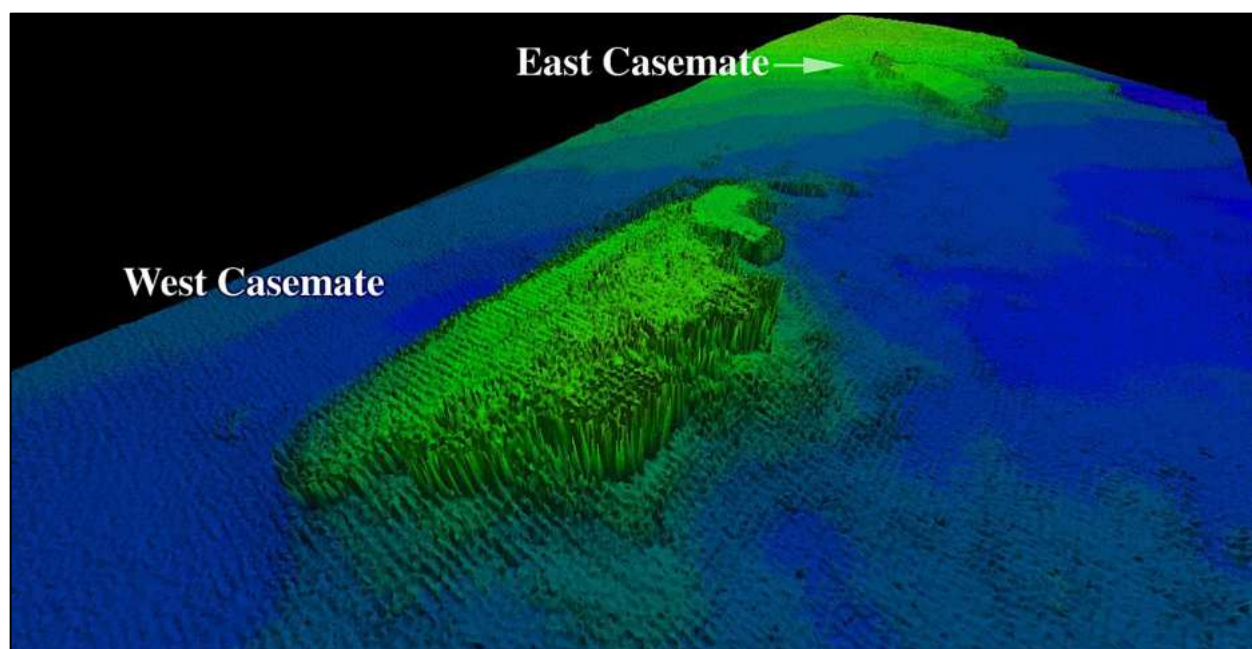


Figure 5-08. 2003 Reson Bathymetric oblique image of the site looking down river. Note deep dredge cuts to the left of the East Casemate (courtesy of the U.S. Army Corps of Engineers–Savannah District).

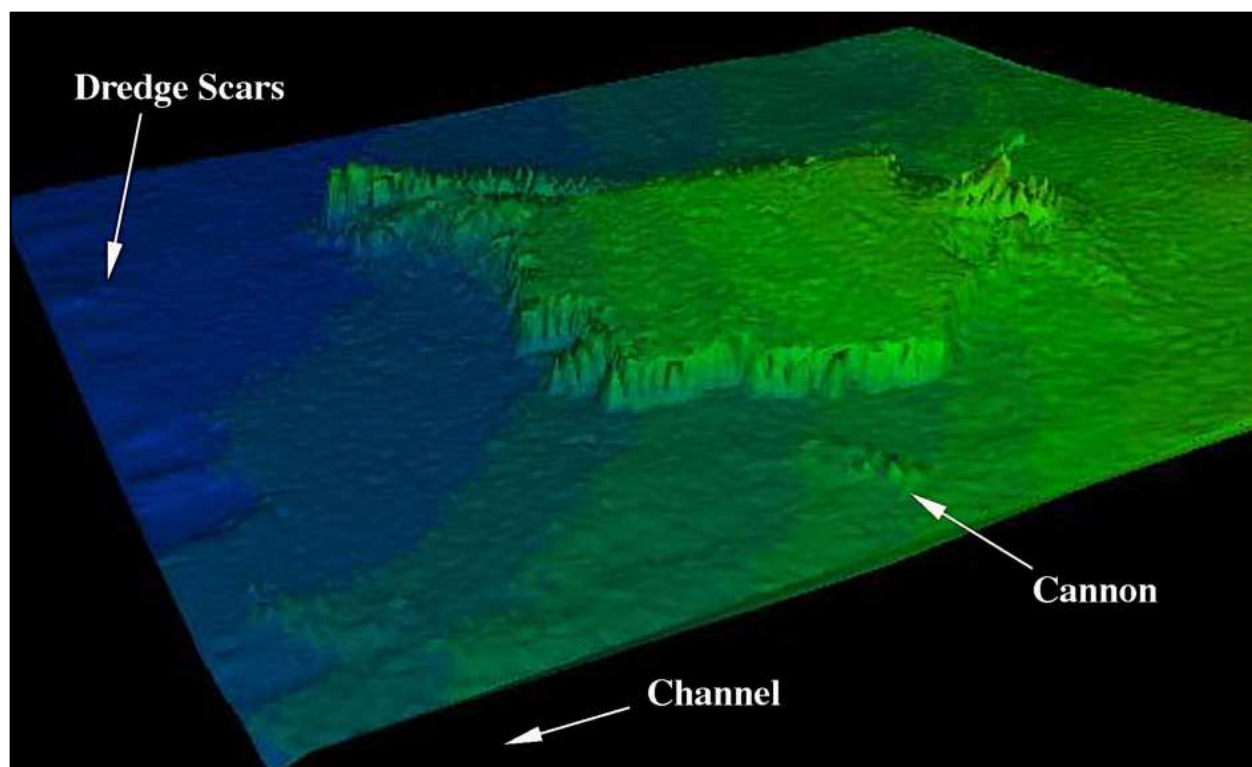


Figure 5-09. 2003 Reson Bathymetric image of the East Casemate section showing slope of site bottom and proximity of dredge cuts (courtesy of the U.S. Army Corps of Engineers–Savannah District).



Figure 5-10. Excerpt from the 1979 acoustic sidescan image showing casemate sections with little if any surrounding sediment (as presented in Garrison et al. 1980:Figure 39).

While data indicate environmental factors, historic salvage, fouled buoy anchors, and the closure of the Tide Gate have all played a role to varying degrees in the degradation of the wreck, there is no question that past dredging has caused the most detrimental and adverse affects to the CSS *Georgia* site. Employing the most recent remote sensing records, dredging impacts can be clearly seen in many of the sidescan sonar images and some are quite striking. Illustrated in Figures 5-11 to 5-13, dredging scars can be seen on the southern or main channel side of the site, with no evidence of dredging to the north. Figure 5-11 is an acoustic image of the wreck site looking downriver or east. Clearly visible, the linear dredge scars that are cut into the Miocene clays run just up to the West and East Casemate sections. The South Casemate section of wreck and an “unknown,” later identified as a culvert pipe, lie in the deep scars within the channel. Again looking downriver to the east, Figure 5-12 shows the depth or height of the dredge cuts, and the face that the cuts leave in the Miocene clay bottom. An acoustic image of the wreck site looking down on the West Casemate, Figure 5-13, shows the linear dredge scars running in multiple directions. Known as the “Debris Field,” the dredged area to the left of and below (south) the West Casemate contains propulsion machinery (i.e., engines, propeller, shaft, etc.) and cannon. While it is unknown if the multiple scar directions indicate different episodes of dredging (by the *Bacon* or *St. Louis*?), it is known this area of the wreck, including the West, East, and South Casemates, has been heavily and adversely impacted by dredging operations.

A comparative analysis of sidescan images from the 1986 study and the 2003 study, a period of 17 years, shows virtually the same site composition and reveals, in some instances, severe degradation to the resource. Taking into account technological advances and directional movement in the survey vessel or tow fish, both the 1986 image (Figure 5-14) and the 2003 image (Figure 5-15) depict the West and East Casemate sections with only slight differences. Figures 5-16 to 5-19 are close-ups from both the 1986 and 2003 images showing comparative differences or changes to each casemate section highlighted in red. The changes in the 2003 images are all thought to be a direct result of the 1982 incident.

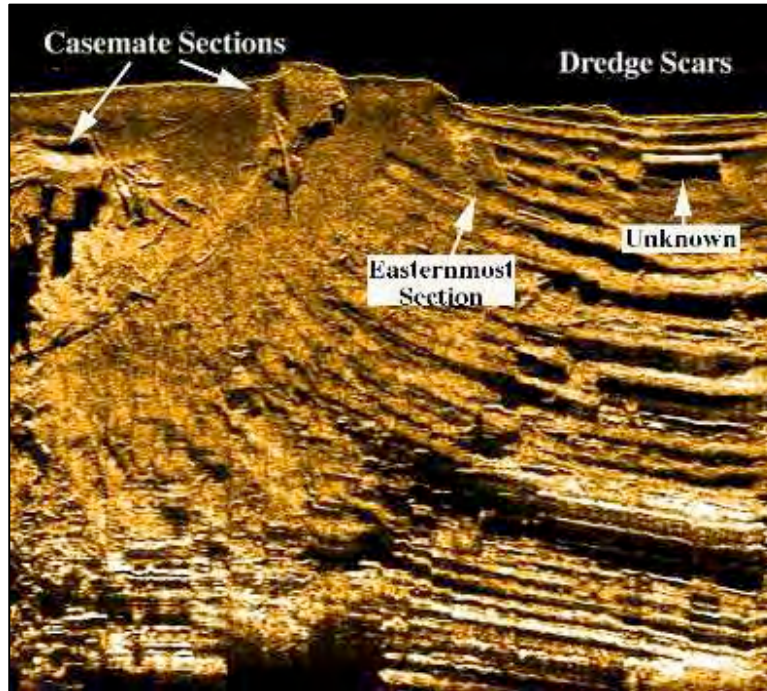


Figure 5-11. Acoustic image of the CSS *Georgia* wreck site looking downriver (east). From left to right is the West Casemate followed by the East Casemate, then the South Casemate (labeled as “Easternmost Section”), and at far right an “Unknown” (culvert). Note linear dredge scars going just up to the Eastern Casemate; the “Easternmost Section” and “unknown” rest in the scars.

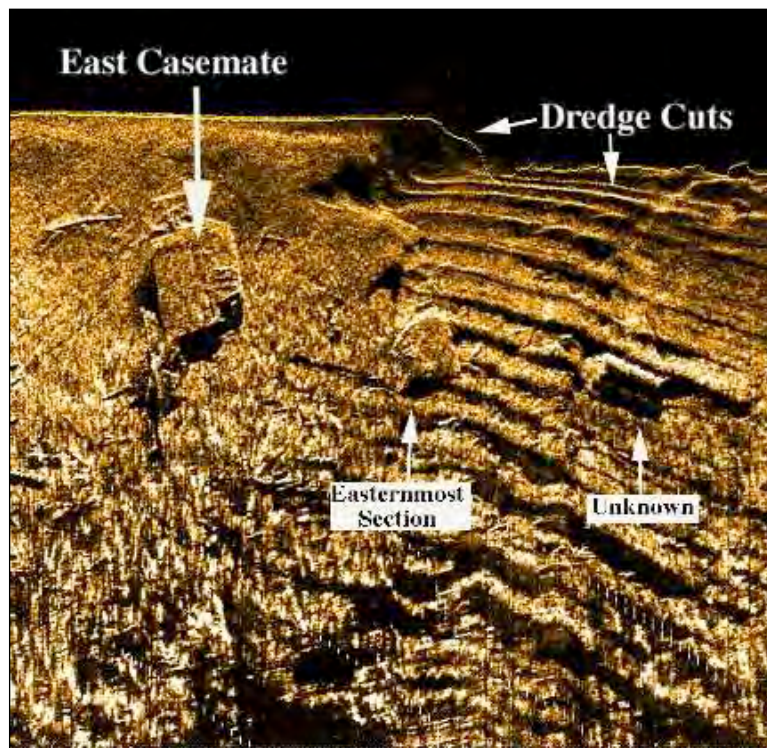


Figure 5-12. Acoustic image of the CSS *Georgia* wreck site looking downriver (east) showing depth or height of the dredge cuts. From left to right is the East Casemate, then the South Casemate (labeled as “Easternmost Section”) and at far right an “Unknown” (culvert). Again, note linear dredge scars going just up to the Eastern Casemate; the “Easternmost Section” and “unknown” rest in the scars.

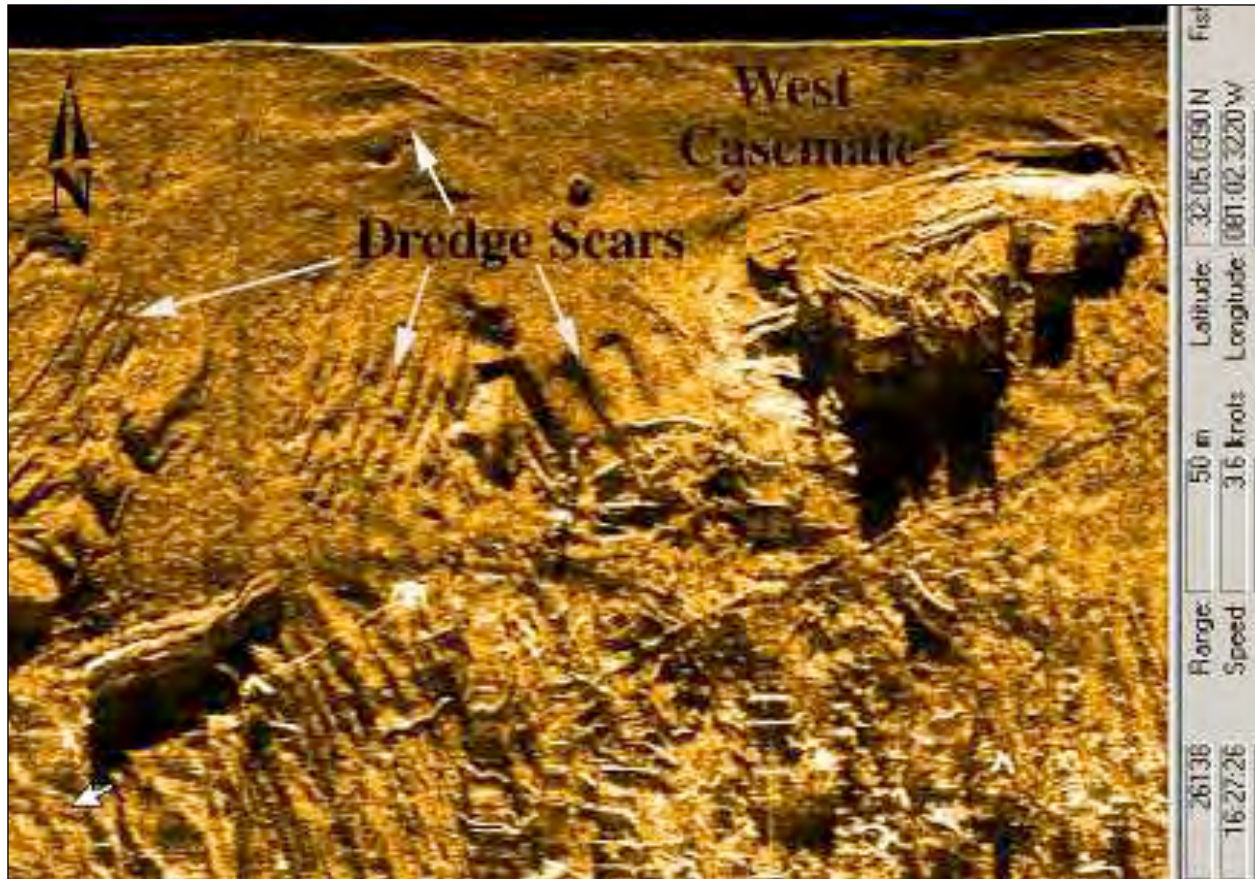


Figure 5-13. Acoustic image of the CSS *Georgia* wreck site looking down on West Casemate. Note linear dredge scars running in multiple directions. Known as the “Debris Field,” the area to the left of and below (south) the West Casemate contains propulsion machinery (i.e., engines, propeller, shaft, etc.), and cannon that have been heavily and adversely impacted by dredging operations.

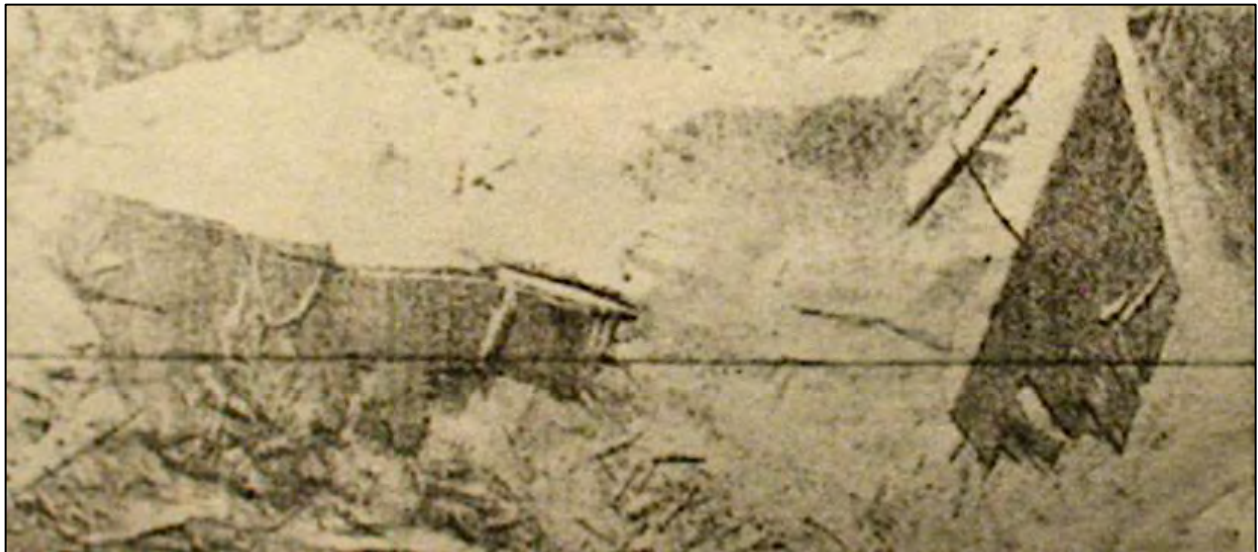


Figure 5-14. 1986 acoustic image of the CSS *Georgia* wreck site depicting the West (left) and East (right) Casemate sections. The rectangular opening on the East Casemate’s southern end was identified as a gun port (courtesy of the U.S. Army Corps of Engineers–Savannah District).



Figure 5-15. 2003 acoustic image of the West (left) and East (right) Casemate sections. Note the two linear drag scars at the top left of the East Casemate projecting toward the West Casemate, and a second fainter set running toward the channel to the right of the West Casemate. Also note 6-pownder cannon to the right of the East Casemate's midsection.

The 1986 image of the East Casemate shows its northern tip to be complete (Figure 5-16), and the 45-degree as-built angle depicted on this image is evidence that this section originally formed one end of a side of the vessel's casemate (port or starboard?). However, a comparison of the 2003 close-up shows that the section's northern tip, once complete, has been severely impacted with the tip now laying separated a slight distance from the section (Figure 5-17). A result of the fouled anchor, the drag scars are clearly visible and they indicate that the anchor was drug either from the east across and through this section transiting toward the West Casemate and then down toward the channel, or from the reverse direction.

In addition to the changes on the northern edge of the East Casemate section, the opposite or southern end of this section is also damaged or degraded. A rectangular gunport is clearly visible on the 1986 image and was later identified as such during a brief inspection of the site in 1987 by Watts and Wilbanks (Gordon Watts, personal communication 2004). The reason for the changes to this end is unclear and it is uncertain if the change represents a natural process or recent man-made damage. The latter is more likely, as the 1986 image indicates this area was well preserved and intact, and this amount of natural disintegration is unlikely. It is quite possible that this damage resulted from a second adverse impact episode not associated with the fouled wreck buoy.

A comparison of the 1986 and 2003 close-up images of the West Casemate section shows that a length of the section's eastern end has been impacted (Figures 5-18 and 5-19). Thought also to be a result of the fouled anchor, diving inspection of this area in 2003 indicates that this short length of the casemate has fallen or been crushed downward onto the clay bottom from its original position. The remainder of the West Casemate section appears to have undergone little, if any, degradation or damage over the 17-year period.

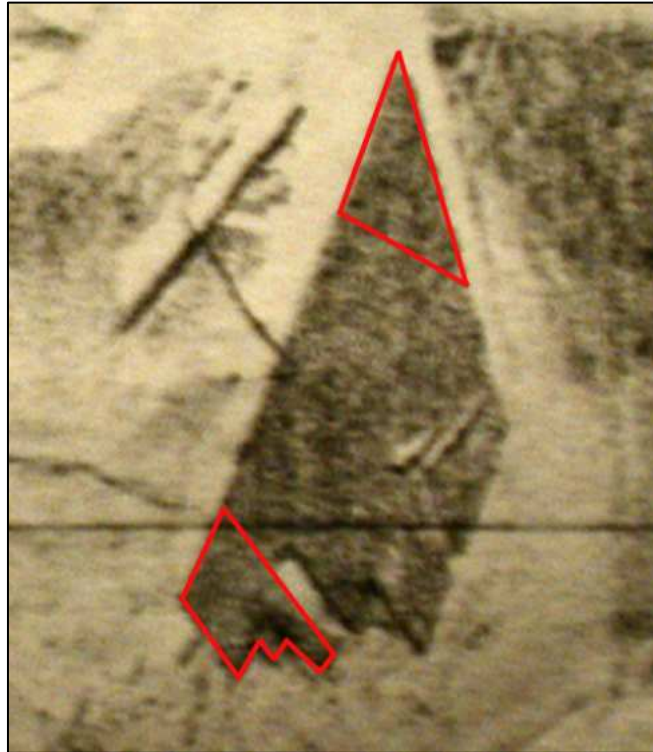


Figure 5-16. 1986 acoustic image excerpt showing the East Casemate section and missing or damaged areas (bordered in red). The rectangular opening on the East Casemate's southern end was identified as a gun port.



Figure 5-17. 2003 acoustic image of the East Casemate section. When compared to Figure 5-16 above, the damaged areas on both ends and the linear drag scars are clearly evident.

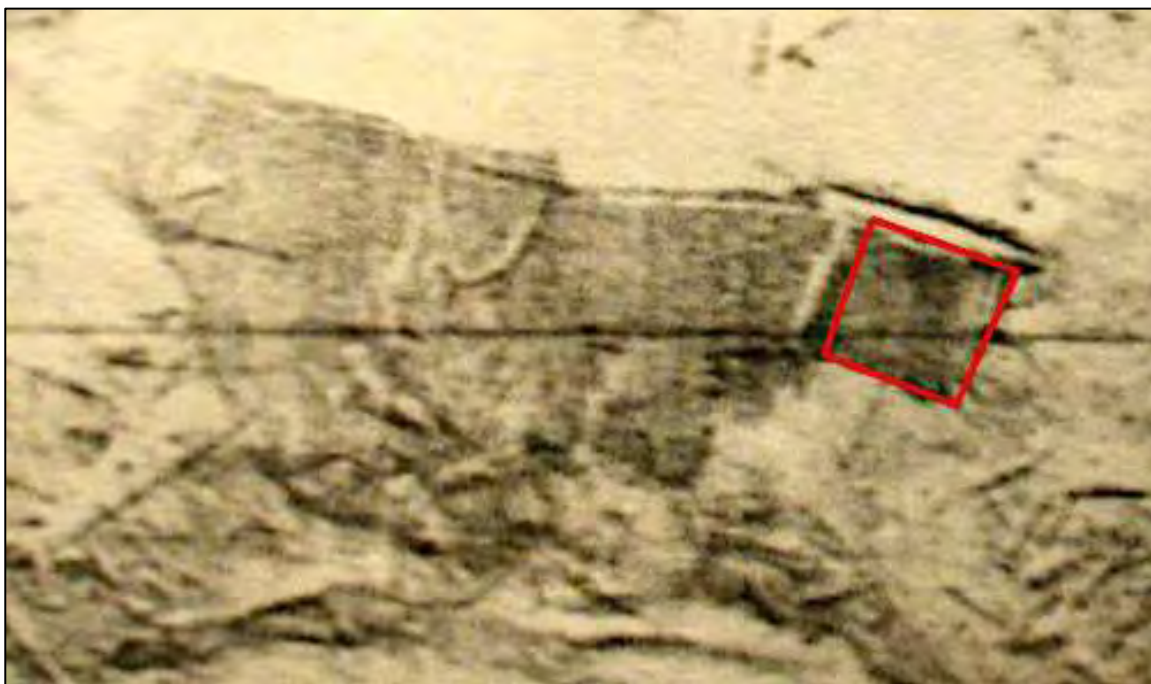


Figure 5-18. 1986 acoustic image excerpt showing the West Casemate section and missing or damaged areas (bordered in red).

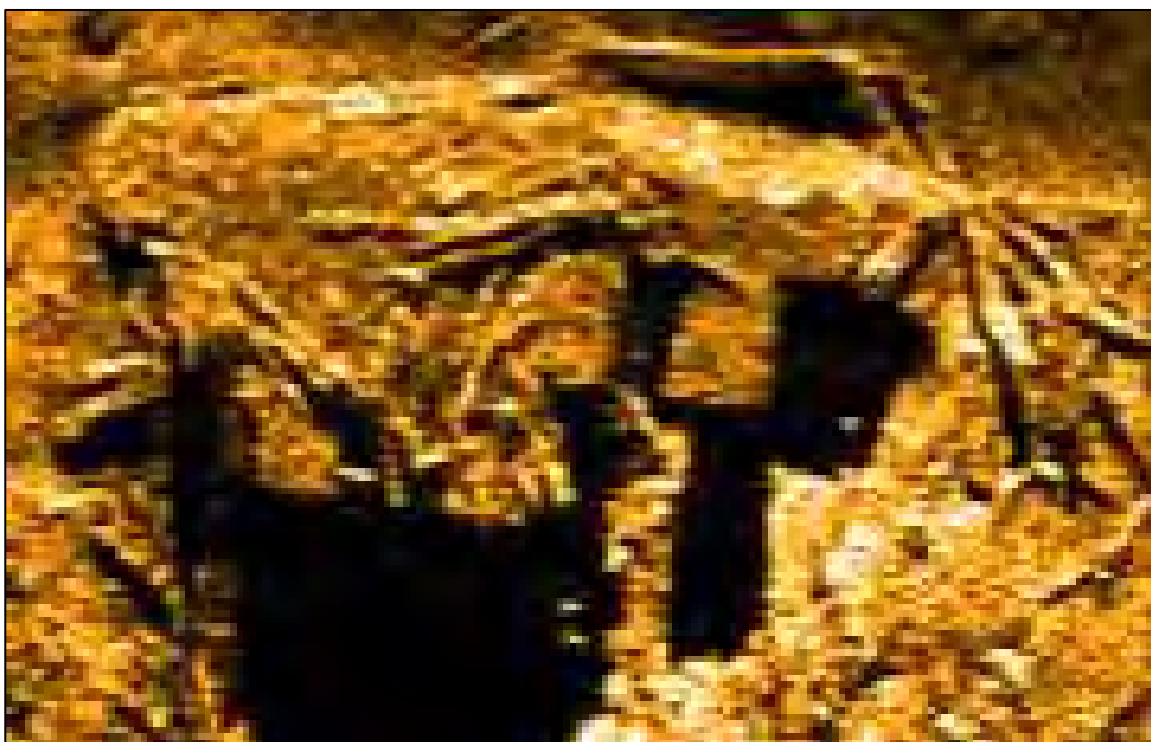


Figure 5-19. 2003 acoustic image of the West Casemate section. When compared to Figure 5-18 above, the damaged area on the right or downriver-end, thought to possibly be a result of the fouled wreck buoy, is clearly evident.

VI. INVESTIGATION RESULTS

PROJECT PERSONNEL

Conducted from the beginning of January to the end of October in 2015, and then again from mid-June to the end of July 2017, the archaeological investigation of the CSS *Georgia* and recovery of artifacts, ordnance, machinery, and vessel structure required trained and experienced personnel, appropriate and reliable equipment, and a proven plan of on-site operations. Numerous teams and phase-specific personnel contributed to the success of the project (see *Appendix B: Project Personnel*). Listed by phases with their respective participants and dates, they are as follows. Note that the 2017 recovery effort did not include a Phase I, and the Phase II Large Artifact Recovery was focused on only recovery of the East and West Casemates.

2015 OPERATIONS

- Phase I: Archeological Data Recovery—January 10 to June 6, 2015

- Panamerican

- Stephen James
 - James Duff
 - Will Wilson
 - Jeff Pardee
 - Loren Clark
 - Matt Elliot
 - Andy Lydecker
 - Michael Murray

- TAR

- Dr. Gordon Watts

- CRL

- Jim Jobling
 - Parker Brooks

- Phase II: Large Artifact Recovery—June 22 to September 10, 2015

- Panamerican/TAR and CRL teams
 - USACE Archaeologist Julie Morgan
 - SUPSALV and Donjon Marine
 - MDSU-2
 - NHHC Representatives

- Phase III: Mechanized Recovery—September 11 to October 23, 2015

- Panamerican/TAR and CRL teams
 - USACE Archaeologist
 - SUPSALV and Donjon Marine
 - NHHC Representatives

- Phase IV: Final Archaeological Clearance—October 25 to 28, 2015

- Panamerican/TAR and CRL teams
 - USACE Archaeologist
 - SUPSALV and Donjon Marine

- Phase V: Redeposition and Burial of Selected Artifacts and Vessel Components—October 25 to 28, 2015
Panamerican/TAR and CRL teams
USACE Archaeologist
SUPSALV and Donjon Marine

2017 OPERATIONS

- Phase II: East and West Casemates Recovery—June 18 to July 2, 2017
Panamerican/TAR and CRL teams
USACE Archaeologist
SUPSALV and Donjon Marine
NHHC Representatives
- Phase III: Mechanized Recovery—July 3 to July 27, 2017
Panamerican/TAR and CRL teams
USACE Archaeologist
SUPSALV and Donjon Marine
- Phase IV: Final Archaeological Clearance—July 28 to 29, 2017
Panamerican/TAR and CRL teams
USACE Archaeologist
SUPSALV and Donjon Marine
- Phase V: Redeposition and Burial of Selected Artifacts, Vessel Components, and East and West Casemates—July 23, 24, and 31, 2017
Panamerican/TAR and CRL teams
USACE Archaeologist
SUPSALV and Donjon Marine

PHASE I: ARCHEOLOGICAL DATA RECOVERY

As stated, field operations were broken down into five main phases with Phase I implemented only during the 2015 recovery effort. Listed below are the methods *actually* employed and the results for each are discussed separately.

OBJECTIVE 2—ESTABLISH MOORINGS, BASELINE, AND PRIMARY ON-SITE DATUMS

Following Objective 1, which was the mobilization of crew and equipment, Objective 2 was conducted from January 10 to June 6, 2015. Operating from the 40-foot *Offshore Retriever* (Figure 6-01), the first task was mooring placement for ease of daily boat positioning and diver access to the site. Two moorings were placed on-site by the archaeological divers, one on the West Casemate and one on the East Casemate, both comprised of large “Norwegian” balls (i.e., floats with tag lines) with the floats tied to the casemates with lengths of 1-inch polypro chained to the casemate. Short lines were then run from these locations to the baseline at the West and East Casemate datums for diver access and immediate orientation. This system allowed the boat to be rapidly positioned each day between the moorings with its bow and stern tied to the tag lines, either bow upstream or downstream, thus allowing all areas of the site to be easily accessed by the divers.

Prior to this phase of the project, a Dive Operations Plan (DOP) was submitted to the USACE–Savannah District. The DOP outlined procedures to (1) ensure the safety of project divers; and (2) effectively and efficiently complete project goals and objectives. Diving operations for this project met all Federal requirements for safe diving. All diving activities were in accordance with the strictest provisions of the USACE, U.S. Navy, and Panamerican diving safety manuals and diving guidelines. During all diving operations, all persons diving and working under the auspices of Panamerican abided by this DOP.



Figure 6-01. Offshore Retriever moored at both bow and stern waiting for tide to turn to begin diving operations. USBL system pole is being fastened vertically aft of black bumper. Looking toward the CSS Georgian shore, red channel/wreck marker is just opposite the bow.

Surface-Supplied Air (SSA) was chosen as the most efficient and safe method of conducting investigations within the Project Area. Divers employed a Kirby-Morgan KMB-27 or Superlite-17 dive helmet connected to a SSA source, radio communications cable, safety tether, and pneumo hose (Figure 6-02). On the surface, various individuals and pieces of equipment ensured safe diving operations. A dive tender was required to aid the diver in donning and doffing equipment and to tend the diver while submerged and moving about the sea floor. The radio communications operator kept in constant contact with the diver and relayed messages between the diver and the surface support team. A suited, standby diver was required on-site in the event of an emergency situation that would require aid to the primary diver. Finally, a dive supervisor was present on-site at all times to coordinate the activity of the diver and surface support team to achieve the project goals.



Figure 6-02. Archaeologist preparing to enter the water with Surface-Supplied Air diving equipment. Note black USBL system transponder attached to the bailout SCUBA tank. Fort Jackson in background left.

Air for SSA diving was provided by a cascade system of two 240-cubic-foot compressed air cylinders, opened to supply air one at a time. Pressure gauges and check valves were included in the air supply system. Illustrated in Figure 6-03, two levels of redundant backup air supply were used, including a second on-deck 240-cubic-foot compressed air cylinder, and a 50-cubic-foot aluminum SCUBA cylinder worn by the diver and connected to the dive helmet. The dive supervisor acted as timekeeper, monitoring the depth, time, and air supply system during each dive to ensure that air pressure was correctly maintained and adequate reserve air was always available, as well as make notes of diver descriptions of environmental data and target or feature data. A certificate of air quality was obtained from the air supplier and submitted to the USACE–Savannah District Diving Coordinator for approval prior to commencement of diving activities. And prior to commencement of each day’s diving operations, a Pre-Dive Safety Meeting was held with all members of the dive team and vessel crew. All safety and diving procedures were discussed in detail. Diving commenced upon completion of the meeting.



Figure 6-03. Dive station looking aft towards dive tender. Stern mooring ball in the left background. Note redundant yellow air cylinders, dive radio in drawer in front of air manifold, and computer monitor for tracking USBL-equipped diver above. Suited standby diver at right.

Once the moorings were established, the second objective was to reestablish the site datum, main baseline, and additional transit lines. Employed on all aspects of the investigation, the USBL was put into operation at this point, its effectiveness in directing diver movements paramount in the success of the entire project. Comprised of a diver-mounted transponder and a vessel-mounted receiver integrated with DGPS, the system allowed topside archaeologists to accurately direct the diver to previously mapped components or artifacts, map the location of newly identified artifacts to within 1-foot accuracy, and to determine the exact location of the diver at all times, especially during unit mapping and artifact recovery. Specifically, the system includes an Applanix POS MV320 with internal Real Time Kinematic (RTK), a Trimble R8 Base Station with TX data radio, data collector and vessel RX data radio, a Sonardyne Scout Pro USBL system, and two diver-held Sonardyne 8071 Wideband Transponders, all interfaced with HYPACK navigation software with respective geodata, in this case the 2013 Multibeam Site Map. Figure 6-04 shows the onboard computer station and operator responsible for ensuring an accurate signal between the vessel-mounted USBL system receiver (Figure 6-05), and the diver-mounted transponder (see Figure 6-02). Figure 6-06 is a screenshot showing the USBL system in action, with the diver transiting from the East Casemate Datum to Cannon 3 along a transit line, all processed in HYPACK and projected onto the 2013 Multibeam Site Map.



Figure 6-04. Navigation computer operator ensured input of USBL system data, and output onto the 2013 Multibeam Site Map monitor observed by the topside dive supervisor. Operator was also responsible for recording and labeling on the site map the locations of all artifacts observed.



Figure 6-05. Yellow Sonardyne Scout Pro USBL system vessel-mounted receiver lashed amidships during transit to and from the site. Once the vessel was moored up, the receiver would be lowered into the water until vertical (see Figure 6-01).

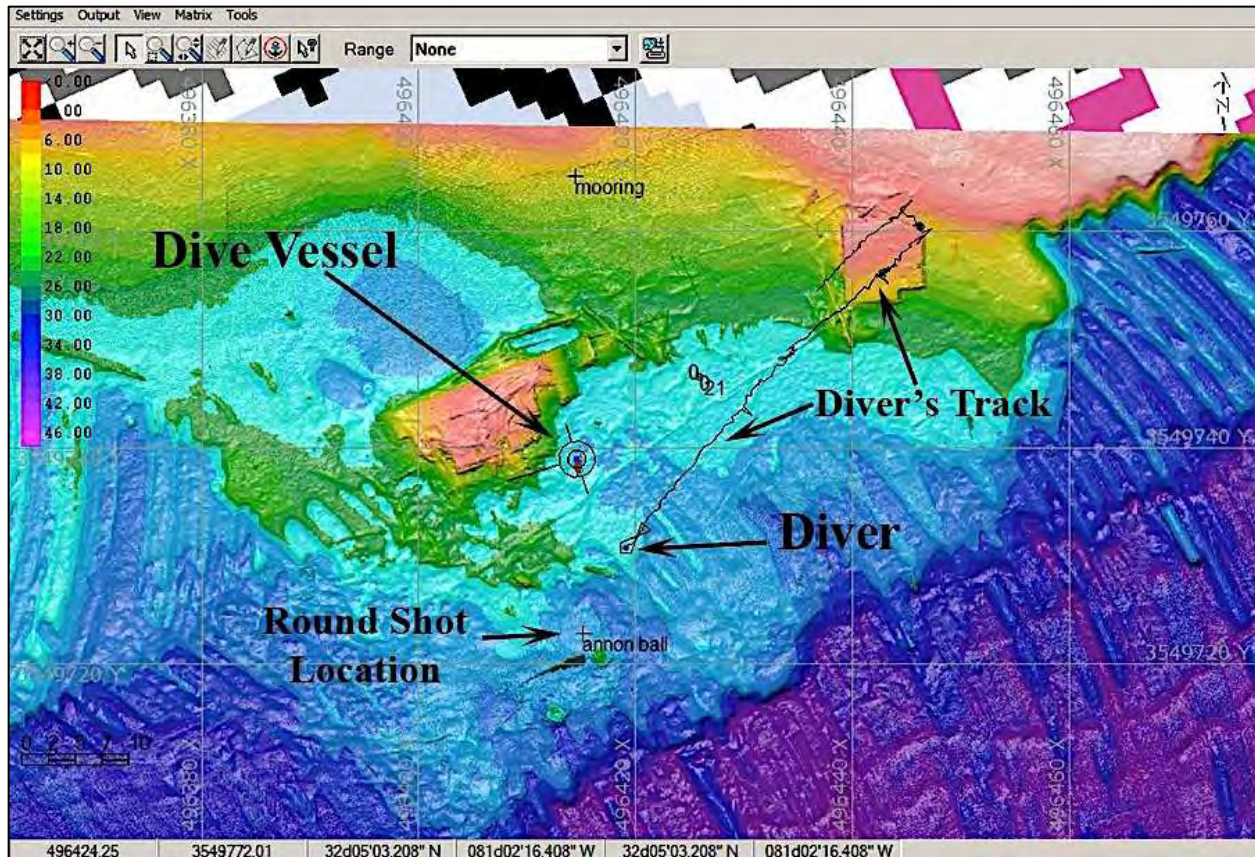


Figure 6-06. Navigation computer screenshot showing USBL system remote tracking interfaced on the geo-referenced 2013 Multibeam Site Map. Also projected onto the Dive Station monitor for topside diver direction, image shows diver (fish symbol) transiting along “Transit Line” toward Cannon 3.

Illustrated in Figure 6-07, and again based on the 2013 Multibeam Site Map, the site datums were found by the divers to still be *in situ*, as were the baseline and some of the transit lines, although some of the lines required tightening or replacing (as they had torn loose), or had become mussel- or weed-covered, which made them hard to see and transit along by the diver. Additional lines were tied to Cannon 4 in the channel and to a piece of machinery in the area of the steam cylinders. These were the only lines placed on-site as it was often easier and quicker to just “walk” the diver to a location with the USBL system rather than having them transit on the lines.

It should be stated that Phase I was accomplished over a five-month period, from winter to summer, and 153 dives were conducted. Adverse winter weather was initially present and affected diving with strong winds and at time, brutally cold air temperatures. Water temperatures at the beginning of the project were in the mid-40-degree range and necessitated dry suits, while summer diving could be accomplished in a thin wet suit or just coveralls. Besides adverse weather and brief dive tidal window, ship traffic was at times an issue. Illustrated in Figures 6-08 and 6-09, huge container ships transited by the site almost daily, as the site sits on and in the northern side of the channel. If a dive was ongoing during ship transit, the diver was usually brought back along the bottom to below the boat away from the channel. When working in the channel, as in the area of Cannon 4, diving obviously took place when ships were not present.

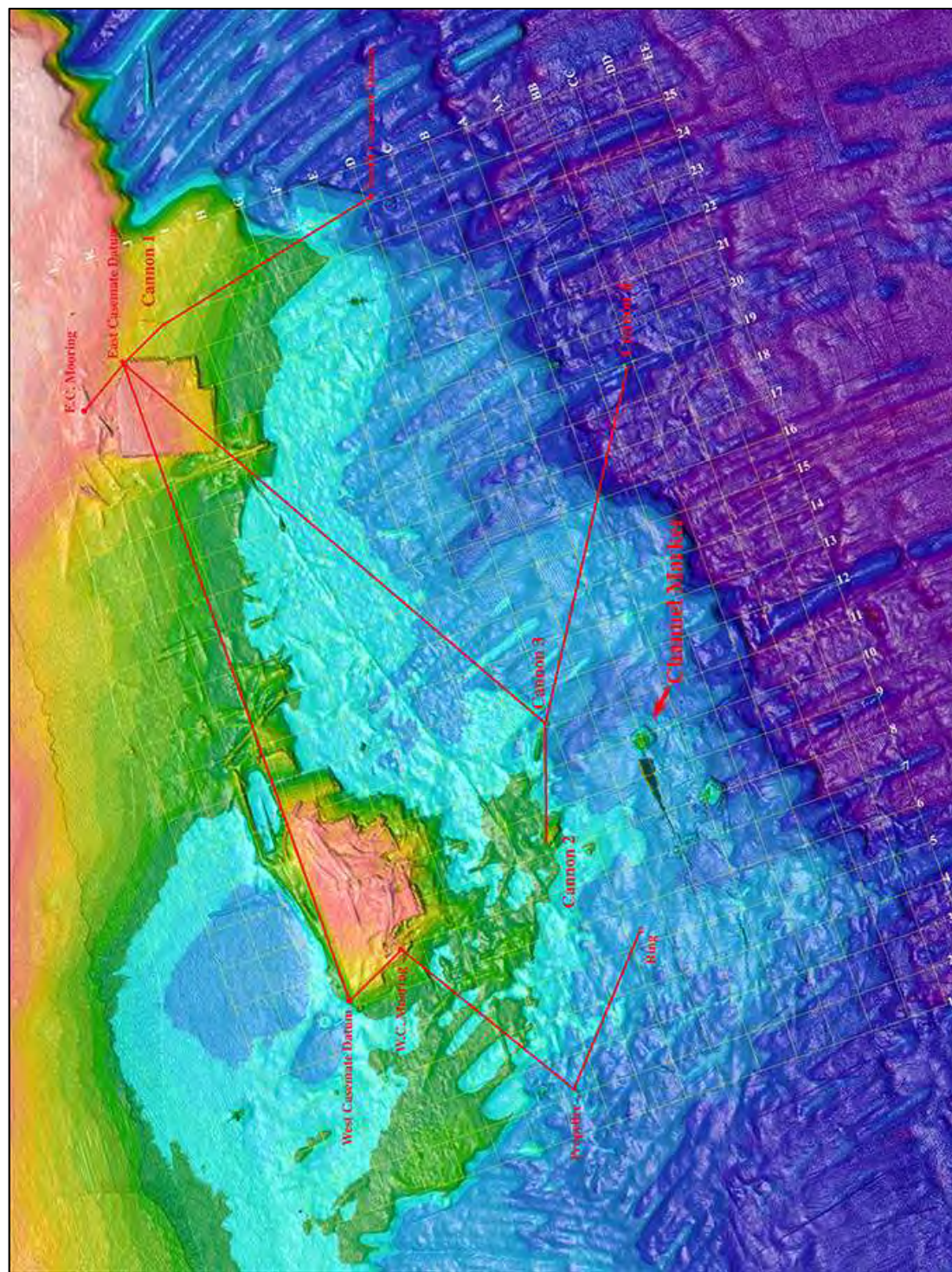


Figure 6-07. Site plan showing mooring buoy locations and transit lines from each to the West and East Casemate datums, respectively; baseline between East and West Casemate datums; and transit lines to Cannon 1, 2, and 3 and the propeller. All placed in 2013, the lines were replaced or tightened, with new transit lines connected to Cannon 4 and a large "ring" in the area of the steam cylinders.



Figure 6-08. Huge container ships transited almost daily by the site, as the site sits on and in the northern side of the channel. If a dive was ongoing during ship transit, as in this case, the diver was usually brought back along the bottom to below the boat away from the channel.



Figure 6-09. This is a photo of a close call where the container ship just barely missed the Red Wreck Buoy and only then with the help from a tug. Note that the southern portions of the wreck site are directly below the ship.

OBJECTIVE 3—LARGE ARTIFACT/VESSEL COMPONENT LOCATION AND IDENTIFICATION

Objective 3 was to locate and identify numerous large linear objects downriver from the main wreck site that were recorded during the 2013 Multibeam Survey (Figure 6-10). The USBL-equipped diver was “walked” to their location by topside personnel where the four northern linear items could not be relocated after extensive searching. Presumed to be logs, they are thought to have migrated offsite. The large linear object downslope (or south) of the South Casemate, thought to be a boiler or a stack was still present. Lying in a dredge scar, it was found to be a 5-foot diameter, 20-foot long, corrugated culvert pipe, most likely galvanized. Other than obtaining gross dimensions, it received no further work, but was noted for subsequent dredging activity issues.

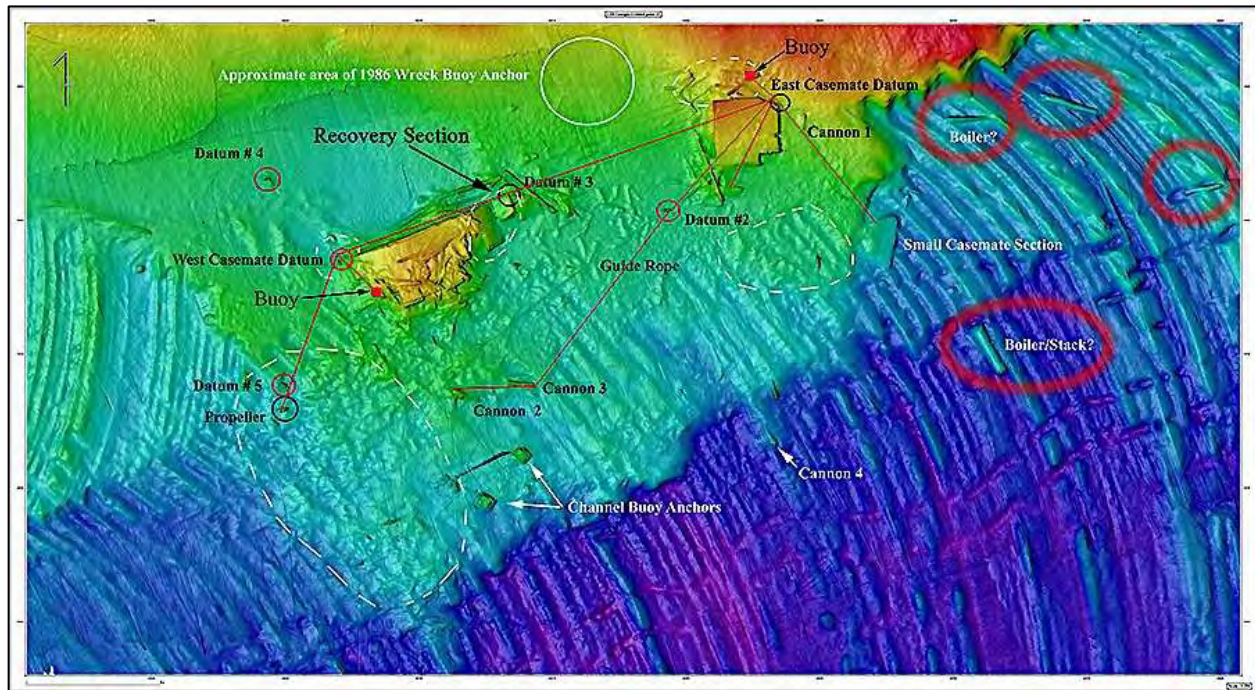


Figure 6-10. Identification of large objects downstream (circled in red) were the focus of Objective 3. The northern linear objects were no longer present and presumed to have migrated offsite. The large linear object downslope (or south) of the South Casemate, thought to be a boiler or a stack, was found to be a 5-foot diameter, 20-foot long, corrugated culvert pipe.

OBJECTIVE 4—DIVER REMOTE SENSING, ARTIFACT MAPPING, AND SMALL ARTIFACT RECOVERY

Once the large downstream artifacts had been identified, the fourth on-site objective of the Archaeological Phase was to locate and tag all visible artifacts and vessel components across the site including UXO. Employing a computer-based grid system, divers systematically mapped the site locating all known and unknown artifacts and wreck components including ordnance, with the USBL system employed to plot and record artifact position on the topside, GIS-based site plan. Essentially, a 10-x-10-foot grid was overlaid in GIS onto the electronic 2013 Multibeam Site Map. Labeled alphabetically A through N (south to north), and numerically 1 through 25 (west to east), Figure 6-11 illustrates the initial site grid. As mapping and survey progressed, it became clear that wreckage was spread into the channel to the south of the grid. Subsequently, additional grid units were required to the south of “A.” These were labeled alphabetically “AA,” “BB,” and so on.

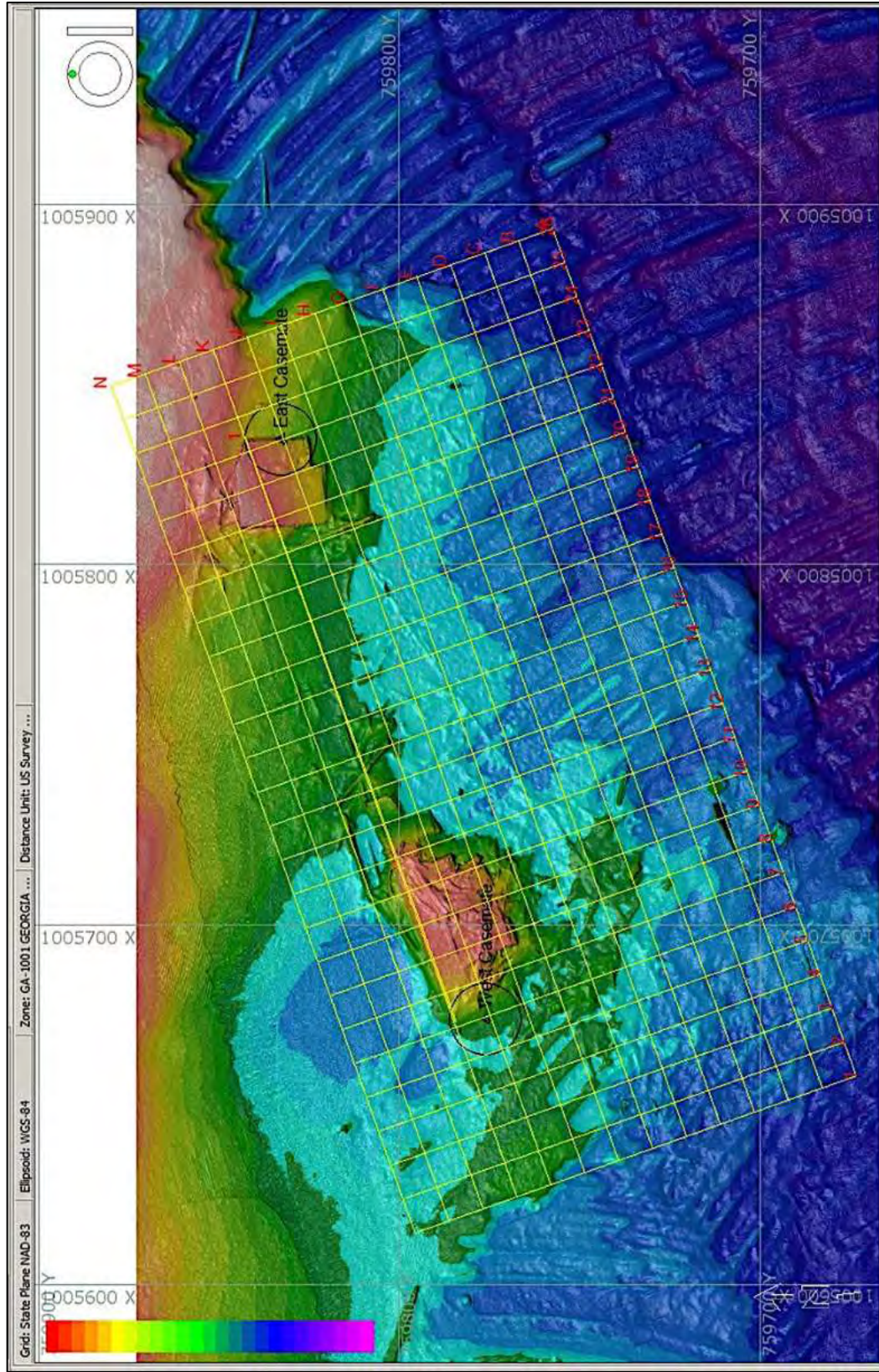


Figure 6-11. Initial site grid. Essentially, a 10-x-10-foot grid was overlaid in GIS onto the electronic 2013 Multibeam Site Map. Divers mapped each unit with the location of all artifacts recorded topside. Subsequently, additional grid units were required to the south of "A." These were labeled alphabetically "AA," "BB," and so on.

Employing the electronic grid, units were systematically mapped. This entailed the USBL-equipped diver being directed to the center of a unit with a weighted Artifact Retrieval Basket (Figure 6-12). The diver, working from the basket out to a distance of no more than 5 feet, moved in either a clockwise or counterclockwise direction from the basket until encountering an artifact. Again, all in absolute zero visibility, the diver described each artifact's approximate location in reference to the basket, for example, "cannon ball at 2 feet from basket at 12 o'clock." A topside archaeologist recorded the type and location of each artifact described onto a "Unit Form." In this manner the unit was completely mapped. Figures 6-13 and 6-14 present completed artifact recovery unit forms showing the type of data recorded. The Unit 8-D site form shows the basket in the center next to Cannon 2 along with the 8-foot "Condenser" on the opposite side (Figure 6-13), while the Unit 14-A site form shows a dozen UXO, both ball and shell (Figure 6-14).



Figure 6-12. Artifact Retrieval Basket being brought to the surface, a very simple yet productive system.

All artifacts small enough to recover were placed into the Artifact Retrieval Basket and brought to the surface by rope (see Figure 6-12). Bigger artifacts, if present, were mapped in with rough measurements and positioned electronically. Upon completion of mapping and artifact recovery of a unit, the archaeologist would be directed to the center of an adjacent unit to begin the process again. At the end of the dive day, all artifacts were taken to the Field Lab at the USACE Engineer Depot and processed by CRL personnel.

95

CSS Georgia Data Recovery Project 2015

Artifact Recovery Form

Grid Square 14-A Date 5 MAY 15 Recorder GLW/TH

Dive # 115 Tide LOW/FALLING Depth -42'

Diver LAURSA Sediment SAND & SILT OVER CLAY

Comments 1607 DIVER IN CURRENT SLACKING 1646 CURRENT
RAISING, FINISH SQ @ 1708,

Assigned Artifact Tags WOOD EXT @ 23, EXT 23, 2x2 EXT @ 23, WOOD @ 4'23, 20 23,
CONC @ 0223, CONC FIRST 5 @ 17, 6x3\"W @ 0216, 1/3\"x116, 30\" EXT @ 15, 100 @ 13,
WOOD CONC @ 13, PERC @ 13,

Figure 6-14. Completed Unit 14-A Artifact Recovery form shows a dozen UXO, both ball and shell.

During the small artifact recovery objective, 198 units were mapped and 1,700 artifacts were recovered (*Appendix C: Artifact Database*). From prehistoric pottery to gun carriage hardware to iron fasteners, recovered artifacts represented a broad spectrum of types. Figures 6-15 to 6-17 illustrate glimpse of the types of artifacts recovered during this Objective. In addition to those recovered, many artifacts or components that were too big to lift, such as machinery, as well as UXO, were mapped *in situ*. It should be noted that several vessel components located in 2003 could not be reacquired. Specifically, the two steam cylinders located and mapped during the previous investigation could not be relocated even after extensive searching. Triangulation techniques using the 2003 data were employed, as were extensive diver sweeps in the previously mapped locations. Regardless of these efforts, they were not found during this phase, but would be recovered during the 2017 Mechanized Clearance some 90 feet from their original 2003 mapped location. The issue of artifact movement will be discussed in more detail below.



Figure 6-15. Maritime archaeologist James Duff with recovered bronze Brooke shell sabot and a bronze wing nut recovered in Unit 10-D.



Figure 6-16. Various artifacts recovered during mapping of a unit. Shown are leg irons, a bronze firing hammer for one of the large guns, and a bronze lid (possibly for a powder can) all recovered in Unit 8-C.



Figure 6-17. Floor jack-like hand pike for a Marsilly gun carriage recovered in Unit 13-B.

Figure 6-18 is the 2013 Multibeam Site Map with the 198 unit maps superimposed. As it illustrates, many of the units were not mapped. Several of these were not mapped due to a known lack of material, like those to the immediate east and southeast of the East Casemate. Others, like the majority of those units in the channel in the “AA, BB, and CC” rows, were not mapped due mainly to a lack of time. Those units in the channel surrounding Cannon 4 were mapped as they were found to contain numerous DMM. In total, 72 DMM, consisting of Brooke Shells, Dahlgren Balls, and Bolts were located and mapped *in situ* (Figure 6-19). As discussed below, during later recovery of the mapped DMM by MDSU-2 divers many more DMM would be located.

It should be stated that it had been initially proposed, based on findings from the Integrity Test (Stephen and Watts 2014), that magnetometers and UXO detectors would be employed to locate wreck-related cultural material during this Objective. It was also initially proposed that large plastic indestructible tags would be fastened to all artifacts and components prior to recovery for provenience, and that each artifact would be documented *in situ* using underwater video. Furthermore it was proposed that the location of all DMM would be marked with fiberglass rods driven into the sediment and plotted on the electronic site map using the USBL system. These proposed methods were not implemented during Objective 4 for various reasons, the main one being the enormous number of artifacts that were encountered and the complete lack of visibility. The number of iron artifacts essentially negated the employment of the UXO detector, and because of the staggering amount of artifacts (16,000+ recovered) tagging each artifact was impossible given the time frame and complete lack of visibility. The decision was made that provenience would be grid or unit-specific, and would be recorded during manual recovery or mechanized recovery. Additionally, given the complete lack of visibility, marking DMM locations with rods (for visual location), and performing any underwater video was quickly seen as impossible.

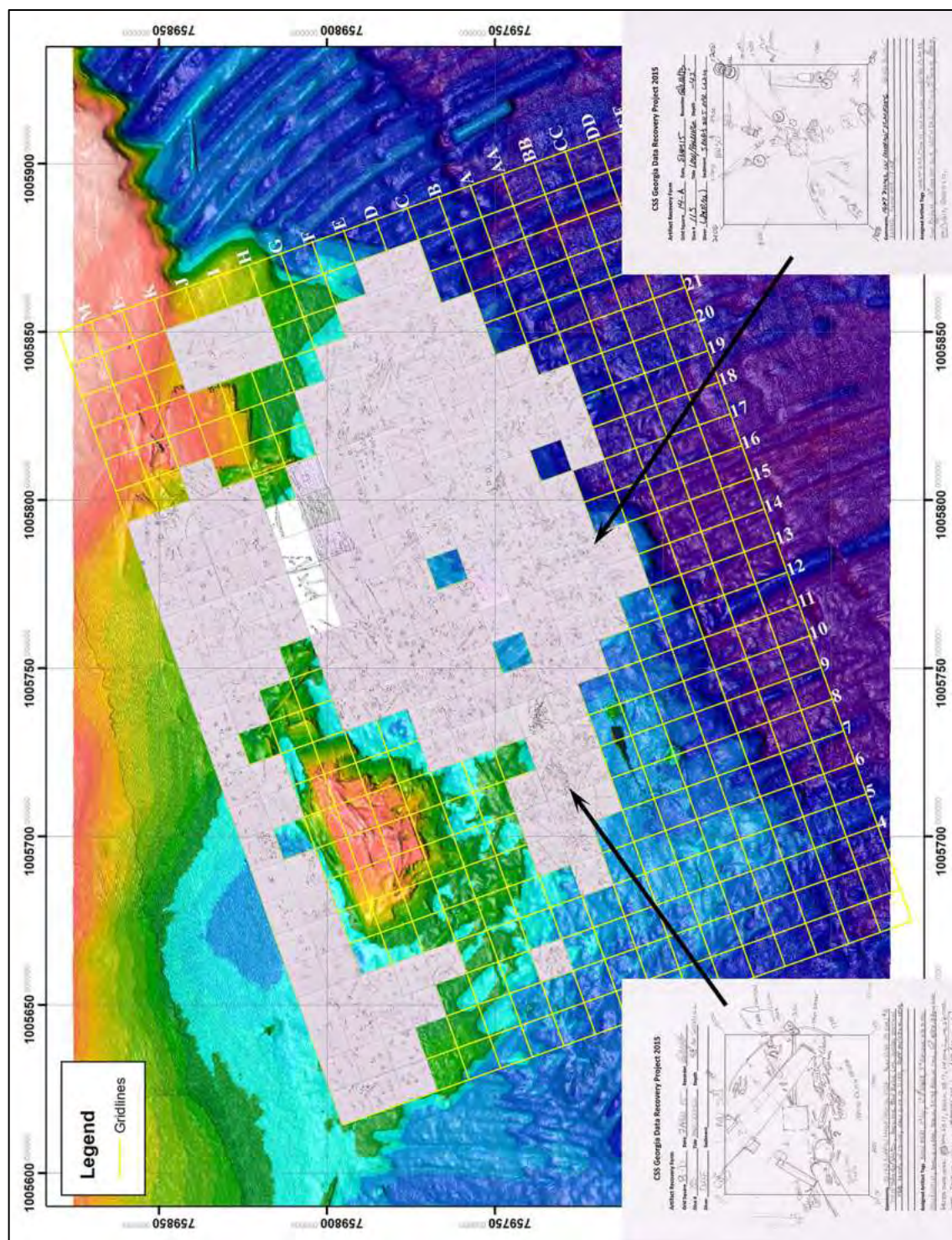


Figure 6-18. 2013 Multibeam Site Map with the 198 unit maps superimposed. Locations of completed Unit 8-D (left) and 14-A (right) Artifact Recovery forms are shown (see Figures 6-13 and 6-14 above).

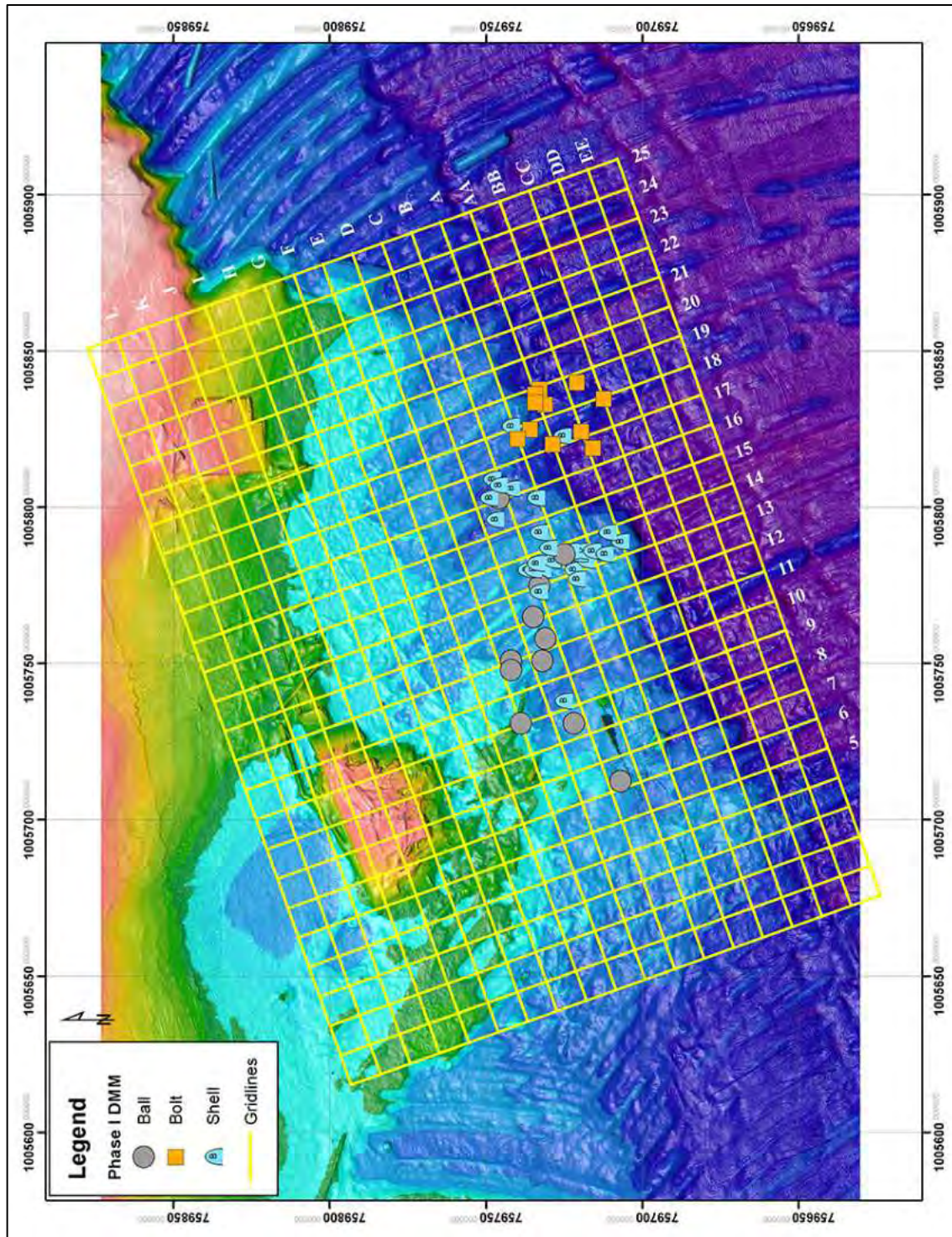


Figure 6-19. In total, 72 DMM were located and mapped during Objective 4. These included Brooke shells, Dahlgren balls, and non-explosive solid Bolts.

OBJECTIVE 5—IN SITU CASEMATE DOCUMENTATION

The surviving sections of armored casemate lie on a base of Miocene clay. This dense clay that forms the riverbed has and would prevent downward migration of virtually any material associated with the CSS *Georgia*. Each section of the casemate was found (in 2003) to be resting on top of a pedestal created by erosion and/or dredging of the adjacent clay deposit. Examination of the USACE–Savannah District’s annual survey bathymetry indicates that opening of the Back River channel in 1978 contributed to the erosion of the sand and mud that once protected the wreck, leaving the surviving vessel structure and associated material exposed on the bottom surface. Hydraulic probing to a depth of 7 feet around and in between casemate sections confirmed that no evidence of the hull is present below the Miocene bottom surface.

In advance of recovery, more detailed documentation of the three surviving elements of CSS *Georgia*’s casemate was undertaken. As initially proposed, the objective of additional documentation was to record design and construction details that could be lost in conjunction with lifting and removal of each element; however, due to a total lack of visibility, measured drawings were not generated, underwater video and/or underwater photography was not employed, nor were the casemate sections cleaned using high-pressure water and/or by manual means. The latter was deemed unnecessary due to the unexpected absence of the thick invasive mussel covering that was no longer present. What was accomplished was an assessment and recordation of the extent of wood backing in an effort to offer structural data relative to future recovery requirements. Presented in Table 6-01 are measurements taken by the diver who employed a calibrated pole that was inserted underneath each section of casemate in an effort to detect wood. The table presents the elevation or height of the rail off bottom—a measurement necessary for determining the placing of lifting mechanisms underneath. The table also presents findings related to the presence of the wood backing. The stations for each correspond to Figures 6-20 to 6-22.

East Casemate

At the time of recordation it was known that the east section of casemate consists of at least four elements. The largest section measures 24-x-27 feet and lies with the wood structure underneath the iron railroad armor, the 24-foot lengths of rail laying in an upriver downriver orientation. Immediately north of that element, an 11-x-6-foot triangular section lies railroad iron down. That fragment represents the triangular extremity of the casemate. It most likely was broken away from the largest surviving section by the clump weight associated with the channel/wreck buoy marking the wreck was drug through the site. On the southwestern corner of the largest section of the East Casemate, another element measuring approximately 2-x-8 feet extends southeast to rest on the fourth element of the eastern structure. That element measures roughly 7-x-9 feet and likely was located underneath one of the gunports.

As Table 6-01 and Figure 6-20 indicate, the western (or upstream) side sits 1 to 2 feet off the bottom while the eastern (or downstream) side sits 7 to 8 feet off the bottom. The casemate is pedestaled on a bed of Miocene clay, but sloping upward from west to east.

West Casemate

The western section of casemate is 68 feet in length and 24 feet in width except where disarticulated railroad iron extends as much as an additional 10 feet to the south. The 7-foot 6-inch by 8-foot 2-inch disarticulated element of the West Casemate section still seen on Figure 6-21 was recovered in 2014 for structural analysis and testing. Disarticulated railroad rails lie scattered on top of the casemate and on the bottom to the southwest of the West Casemate. As indicated in Table 6-01 the northern side is to 3 feet off the bottom while the southern side lies well off the bottom, in places up to 9 feet. The western (or upstream) end was heavily disturbed and generally a mass of twisted iron that made data recovery in this area difficult at best.

South Casemate

The southern section of casemate is the smallest, measuring only 18 feet 5 inches by 11 feet 6 inches (Table 6-01; Figure 6-22). Possibly representing the ironclad's forward casemate face, unlike the other sections, it lies with the railroad armor on the bottom, with short iron fasteners for the no longer wood backing projecting upward. None of the wood structure that supported the armor appears to survive with the exception of one small section on the northeastern corner. Thought to be the section most likely to be recovered intact, this would not be the case. As discussed below in Phase III, the section would be completely recovered but in several pieces.

Table 6-01. Casemate Section Wood Backing Data.

Station	Elevation*	Probe Depth†	Bottom Sediment‡	Observations
	Above Bottom	Under Armor		
East Casemate Section				
1	28"	7'	Soft mud	Clear to 7' No apparent wood structure
2	24'	8'	Hard clay	Clear to 8' No apparent wood structure
3	24"	7'	Hard clay	Clear to 7' No apparent wood structure
4	21"	7'	Soft mud	Clear to 7' No apparent wood structure
5	30"	8'	Clay	Clear to 8' length of probe
6	36"	7'	Clay	Clear to 7' under 24 inches of wood structure
7	32"	8'	Soft mud; clay	No apparent wood structure
8	24"	1'	Wood structure on clay	Wood immediately under armor at 1'
9	24"	1'	Soft mud	Wood immediately under armor at 1'
10	28"	5'	Clay	Clear to 5' No apparent wood structure
11	24"	2'8"	Soft mud	Deteriorated wood under armor
12	14"	0'	Wood structure on clay	Intact wood under armor
13	12"	0'	Wood structure on clay	Intact wood under armor
14	12"	6"	Wood structure on clay	Intact wood under armor
15	24"	6"	Gravel; shell-hash	Intact wood under armor
16	24"	1'	Soft mud	Intact wood under armor
17	24"	4'6"	Soft mud	Possibly deteriorated wood at 3'
18	24"	3'	Soft mud	Possibly deteriorated wood at 3'
19	34"	5'	Soft mud	Thick mud at 5'
20	38"	8'	Sand and mud	Clear to 7', No apparent wood structure
21	26"	5' 6"	Soft mud	Thick mud at 5'
22	31"	4'	Soft mud	Possibly deteriorated wood at 5 feet
23	19"	3'	Soft mud; gravel	Mud and possibly clay at 3'
24	24"	5'	Soft mud	Possibly deteriorated wood at 6 feet
West Casemate Section				
1	1'	1'	Soft mud	No fasteners within a 1' of armor edge
2	3' 4"	1'	Fine sand	No fasteners within a 1' of armor edge
3	3'6"	3'	Soft mud	Wood structure 8" below armor
4	4'	2' 6"	Soft mud	Wood structure 18" below armor
5	5' 6"	3'	Fine sand	Wood structure 24" below armor
6	7'	1'	Soft mud	Wood structure 24" below armor
7	7'	4'	Soft mud	No wood structure

Station	Elevation*	Probe Depth†	Bottom Sediment‡	Observations
	Above Bottom	Under Armor		
8	5'	6'	Soft mud	Wood projecting from under armor
9	5'	7'	Soft mud	Wood structure 18" below armor
10	3' 4"	4'	Soft mud; sand	No wood structure
11	3' 6"	4'	Soft mud; sand	Deteriorated wood structure 6" below armor
12	4' 6"	2'	Soft mud	Wood structure 8" below armor
13	4'	4' 6"	Soft mud	Wood structure 8" below armor
14	1' 6"	0'	Soft mud	No access under armor
15	0'	0'	Silt on mud	No access under armor
16	0'	0'	Silt on mud	No access under armor
17	4"	1'	Soft mud	No fasteners within a 1' of armor edge
18	4'	5'	Hard clay	No wood under armor
19	18"	2'	Mud on sand	No wood under armor
20	2'	4' 7"	Sand	No wood under armor
21	3' 6"	6'	Soft mud	No wood under armor
22	4'	3'	Silt on sand	No wood under armor
23	3' 6"	9'	Mud on sand	No wood under armor
24	18"	7'	Mud on sand	No wood under armor
25	1'	7'	Gravel and sand	No wood under armor
26	0'	0'	No data	No data
27	3' 6"	9'	Soft mud	No wood under armor
28	4'	7'	Silt over sand	No wood under armor
29		9'	Silt over sand	No wood under armor
South Casemate Section				
1	0'	0'	No data	No data
2	14"	6"	Soft mud	No Wood Structure on Top
3	1'	2'	Soft mud	No Wood Structure on Top
4	18"	3'	Soft mud	No Wood Structure on Top
5	6'	5'	Soft mud	No Wood Structure on Top
6	3"	0'	Soft mud	No Wood Structure on Top
7	1'	0'	Soft mud on clay	No Wood Structure on Top
8	1'	1'	Soft mud on clay	No Wood Structure on Top
9	1'	1'	Soft mud on clay	No Wood Structure on Top
10	0'	0'		No Wood Structure on Top
11	7"	0'		No Wood Structure on Top
12	1'	2'	Mud on shell	No Wood Structure on Top
13	4"	0'	Mud on clay	No Wood Structure on Top
14	0'	0'	Mud on clay	No Wood Structure on Top

*Elevations represent the distance from underneath the railroad rail armor to the bottom surface

†Probe depth under armor represents that clear distance probed horizontally underneath the railroad rail armor

‡Bottom sediment represents the surface sediment immediately underneath the edge of the railroad rail armor

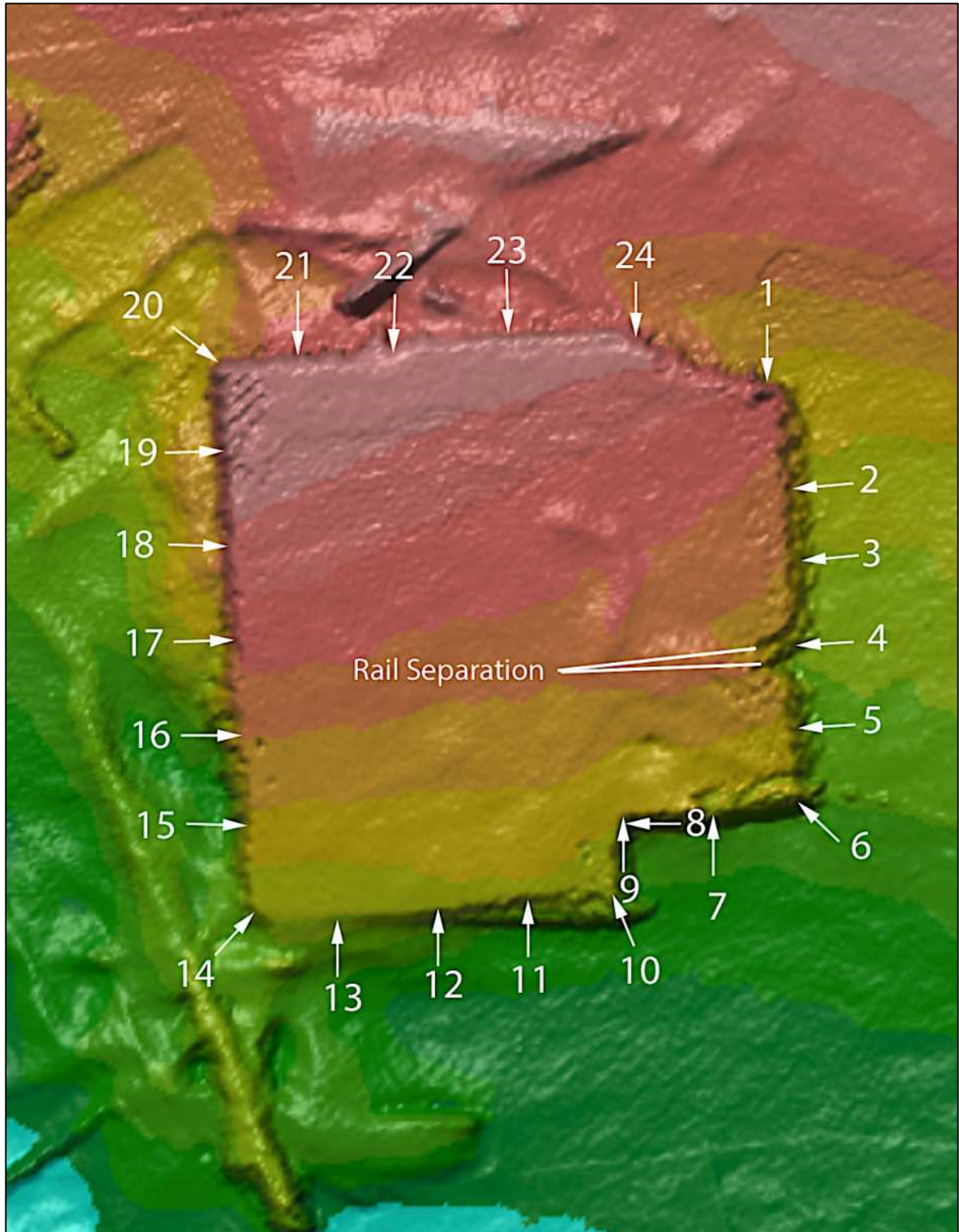


Figure 6-20. East Casemate data point stations. Note the triangular section just to the north of the main section, as well as the small section to the south. Downriver is to the right.

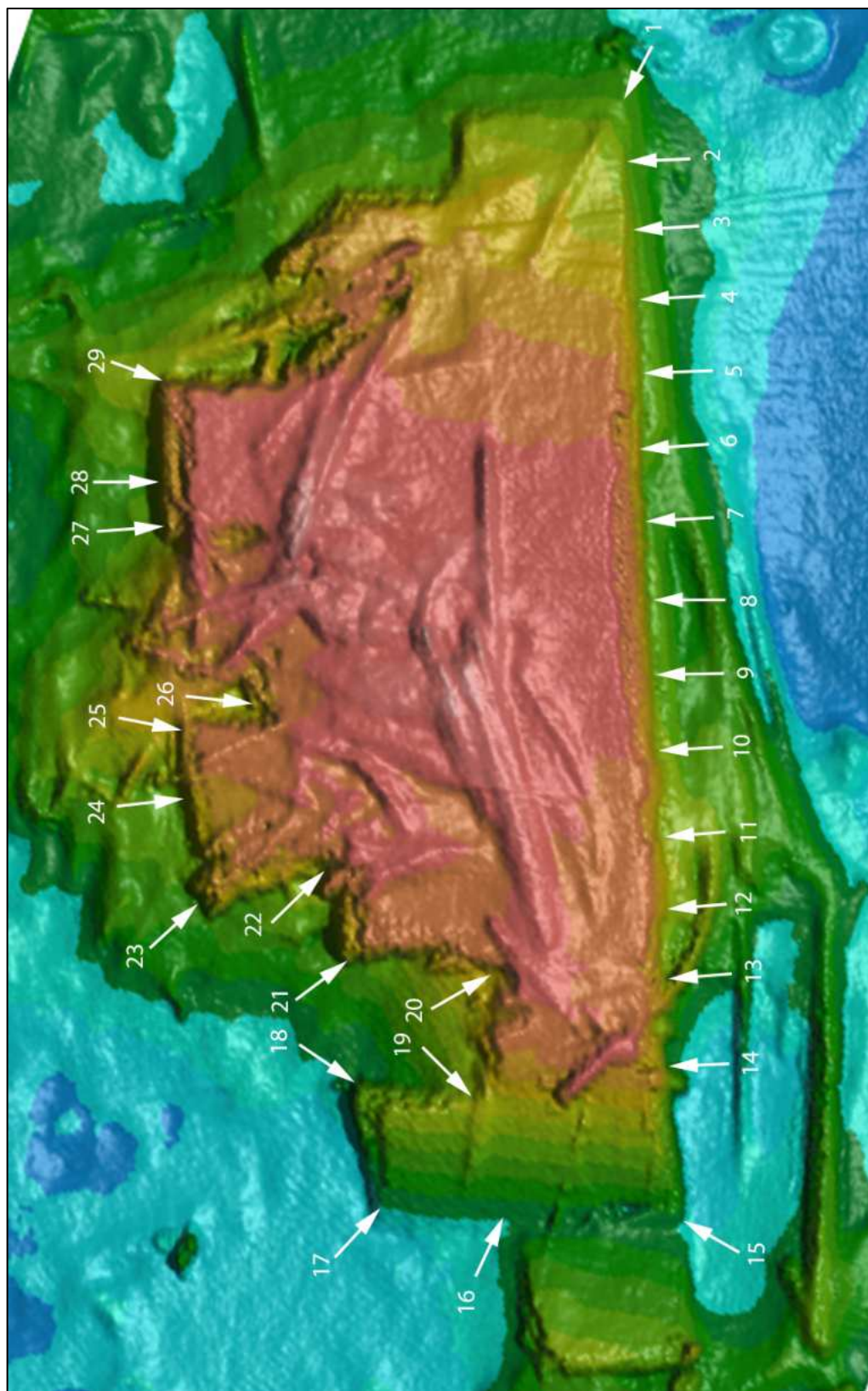


Figure 6-21. West Casemate data point stations. Note the numerous sections of loose rail on top of the casemate. Upriver is to the right.

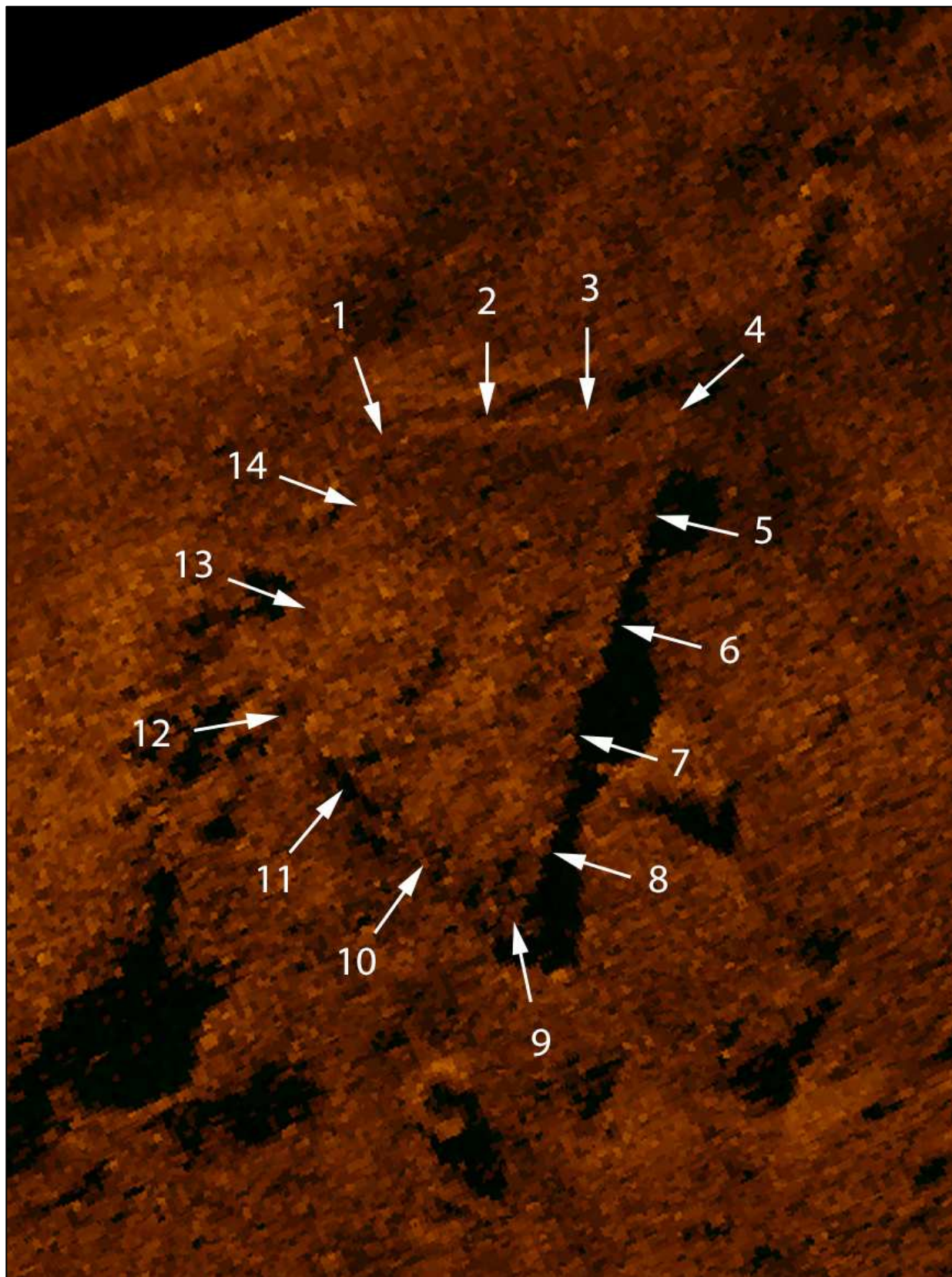


Figure 6-22. South Casemate data point stations. Hawse pipe can be seen under the number 7 station. North is upstream and downriver is to the right.

OBJECTIVE 6—SITE EXCAVATIONS

It had been proposed that prior to recovery operations four excavation units would be carried out to assist in determining if artifacts associated with the officers, crew, and operation of the CSS *Georgia* were present at the site. Illustrated in Figure 6-23, the units were proposed to be located in varying areas of the site and were intended to be a sampling of the total percentage of the site areas containing overburden atop the Miocene clay, rather than a complete site excavation. It was soon apparent during the small artifact recovery operations, and evidenced by the wealth of artifacts recovered, that the amount of artifactual material on the bottom far exceeded original estimates. Coupled with the reality of the enormous time requirements for hand excavation versus artifact recovery return, it was decided to forgo hand excavation with the belief that the accuracy of USBL system positioning during mechanized recovery would be such that artifact provenience would be assured. As is presented below in the Phase III findings, this would indeed be the case, both in the incredible amount and variety of artifacts recovered, but in the ability to accurately provenience them.

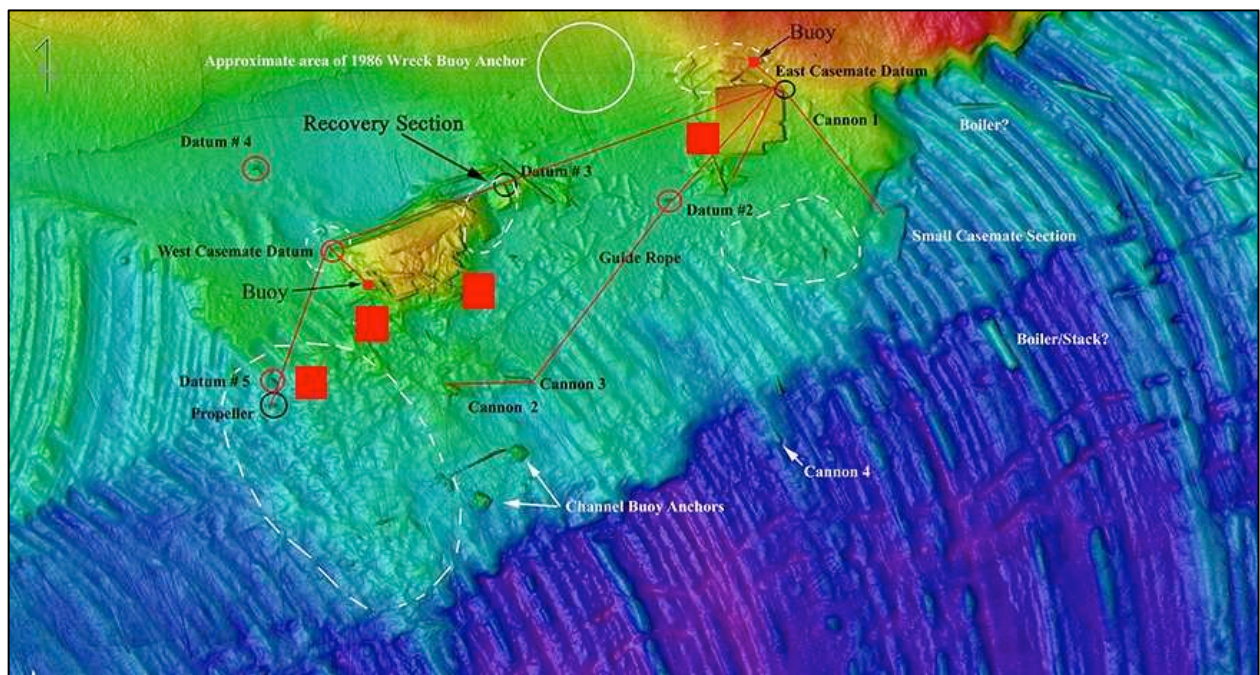


Figure 6-23. Location of the four proposed test excavations (red squares).

PHASE II: LARGE ARTIFACT RECOVERY PHASE

After a two-week hiatus from the completion of Phase I, Phase II commenced on June 22 and was completed September 10, 2015. Participants for this phase included the Panamerican/TAR archaeological team, CRL conservators, the USACE archaeologist, SUPSALV personnel, Donjon salvage contractor personnel, 17 MDSU-2 dive team personnel, and periodic NHHC representatives, the latter generally during casemate recovery objectives. Listed below, this phase included seven Objectives, most of which were successful, some which were only partially successful, and others, like Objective 7, were not undertaken for various reasons. Actual methods and results of each of the objectives are discussed in detail.

- Objective 1—Engineering Coordination
- Objective 2—Ordnance Recovery
- Objective 3—Large Artifact Recovery
- Objective 4—Southeast Casemate Section Recovery
- Objective 5—East Casemate Section Recovery
- Objective 6—West Casemate Section Recovery
- Objective 7—Excavations Post Casemate Recovery

OBJECTIVE 1—ENGINEERING COORDINATION

Illustrated in Figures 6-24 and 6-25, the work platforms for this phase consisted of two spud-barges that were generally positioned side-by-side or end-to-end from one another. The smaller of the two barges held the MDSU-2 dive station and the Command Center. It was 120-x-30 feet and equipped with a 75-ton crane. The second larger barge was 200-x-30 feet, equipped with a 100-ton crane, and employed mainly for artifact storage during this Objective.

The barges were moved into position with help from the tug *Little Bully*, and spudded in on the northern side of the site initially employing the visible East and West Casemate mooring buoys to first position the smaller dive station barge parallel to and just on the northern side of the mooring buoys. This ensured anchoring or spudding would not affect wreck components, and afforded optimum access to site components by MDSU-2 divers and recovery by crane, as the barges were well outside of the navigation channel. The second, larger barge usually was positioned adjacent to the northern side of the smaller dive barge, with access to the barges by way of a moveable gangway; however, depending on various Objective requirements, such as the need for the larger crane, movement of DMM, or access to the southern extent of the site, the barges would be moved accordingly.

During mobilization of the work platforms at the USACE Engineer Depot, an initial meeting was held to introduce all on-site project participants, and to familiarize them on the layout of the wreck, the diving environment, and the Phase II Objectives. More importantly, a meeting was also held at the start of each workday that detailed the specific task(s) for the day's dives and any safety issues, such as those associated with DMM recovery. Held in the Command Center, attendees included the USACE archaeologist, Panamerican/TAR lead archaeologists, CRL conservators, the SUPSALV Project Manager, the Donjon salvage contractor, lead MDSU-2 divers, and the NHHC representative, if present. If there was a need to deviate from the plan or the day's objective, such as was the case with the casemate recovery, all parties discussed and agreed to the change prior to implementation. A debrief was also held at the end of the day to discuss problems or issues that required resolution prior to start of the next workday.

Illustrated in Figure 6-26, besides being the site for briefings, the Command Center was also the onboard computer station for the USBL diver tracking system that proved invaluable to the success of the diving operations. Manning the station, the operator was responsible for ensuring an accurate signal between the barge-mounted USBL system receiver and the diver-mounted transponder, ensuring diver-tracking screen or image availability to the Dive Station, as well as marking or positioning into GIS any diver-recovered or noted artifact such as DMM or machinery. The temperature-controlled Command Center also served as the site for all computer related activities, the site for occasional meals, shelter for all during the numerous afternoon downpours, and the repository and in-coding station for field records during the subsequent Mechanized Recovery Phase.

Comprised of up to 19 divers working in shifts, MDSU-2 divers conducted all dives associated with this objective except for several clearance dives conducted by Panamerican. The divers worked in pairs, with one of the divers equipped with a USBL transponder (Figure 6-27). The dives were conducted during the slack tide windows and lasted from 1 to just under 2 hours, depending on current strength usually with two slack tide cycles dived each day, and occasionally three cycles.

As previously stated, underwater visibility during nearly the entire project was generally under 1 foot and more often than not 0 to 6 inches. Offsetting the lack of visibility was the diver equipped USBL system, as well as the Coda Octopus Echoscope (CODA) system, which was a barge-mounted, Real-Time, 3-D directional sonar system (Figures 6-28 and 6-29). While the USBL system was instrumental in diver tracking, as well as tracking equipment (i.e., DMM baskets, mechanized recovery tools), the echoscope was a 3-D image that substantially augmented diver tracking during both DMM and casemate recovery. Both USBL and CODA tracking was conducted at the Communication Station with the MDSU-2 Communications Operator assisted by the on-site Co-Principal Investigator present (Figure 6-30).

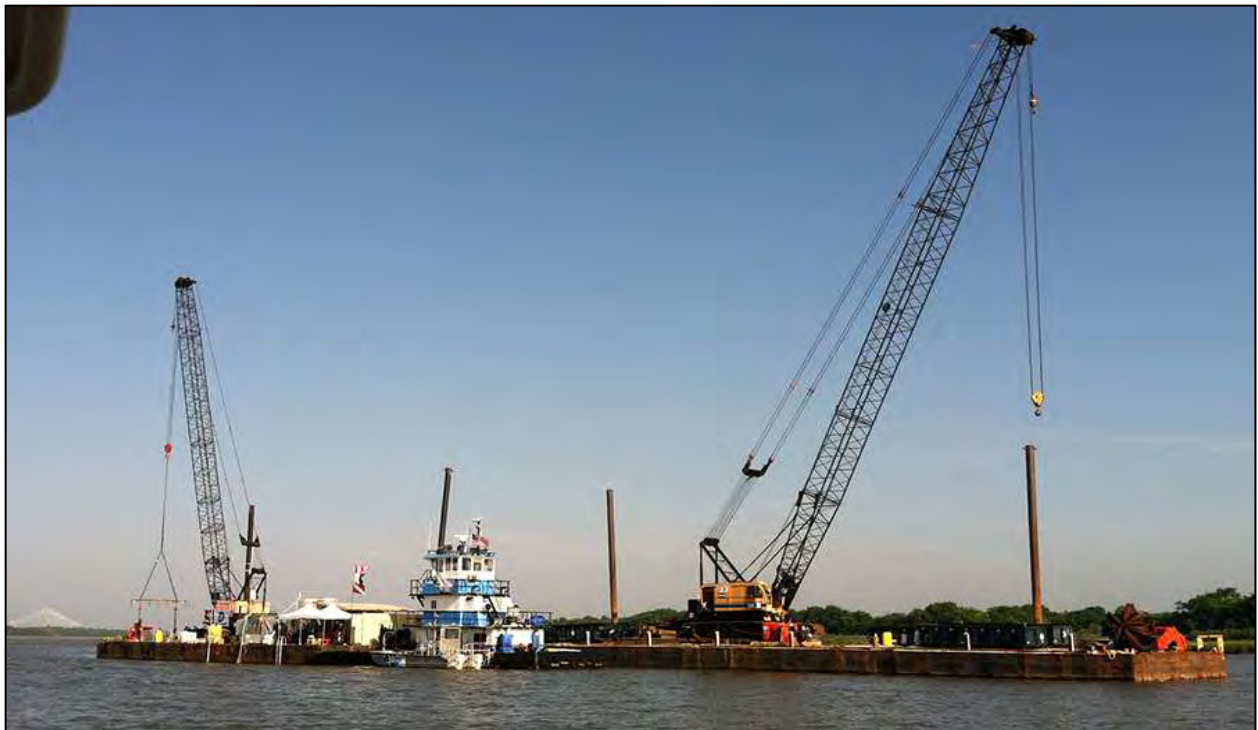


Figure 6-24. Barges on-site. The smaller Command Center/Dive Station barge with 75-ton crane at left, with larger artifact storage barge with 100-ton crane at right. *Bully Boy* is tied to end of the smaller barge.



Figure 6-25. The smaller barge with 75-ton crane. The Command Center is immediately to the right of the crane. The Dive Station is far right, marked by a dive ladder and two white tents. CODA system and equipment rooms are in CONEX boxes between the Dive Station and Command Center. The CODA system pole is to the left of the dive ladder, with the USBL transponder pole to its left. The CONEX box at far right next to dive flags holds a recompression chamber.



Figure 6-26. The Command Center. Archaeologist William Wilson and Co-Principal Investigator Dr. Gordon Watts are in center at navigation computer for the USBL diver tracking system. In radio communication with the Dive Station, Wilson was responsible for in-putting into GIS any diver-recovered or noted artifact such as DMM or machinery. At the lower left of the image is Erica Gifford, in-putting data from the Mechanized Recovery Phase.



Figure 6-27. The Dive Station. “Green Diver” in foreground is equipped with USBL. “Yellow” Safety Standby Diver is at left. “Red” Diver in background paired with Green Diver for dive.



Figure 6-28. CODA sonar head being readied next to the Dive Station. By turning the pole, the sonar head was easily directed to anywhere coverage was required.

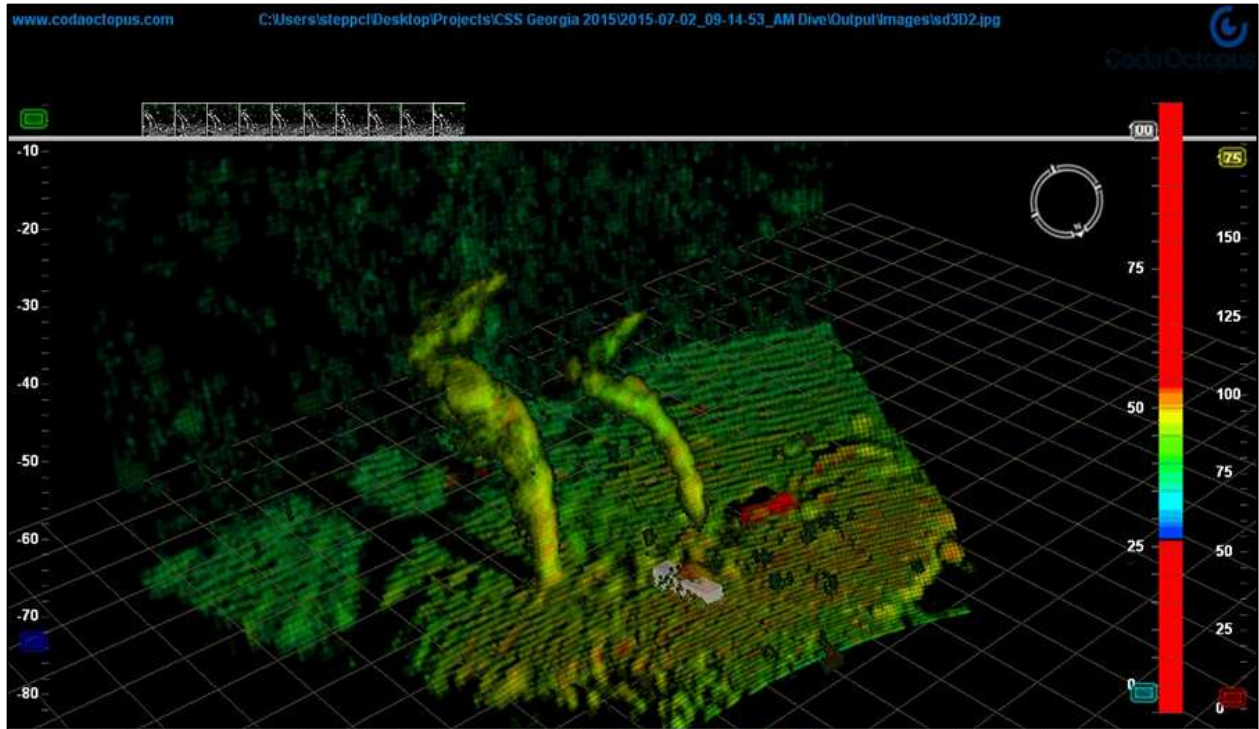


Figure 6-29. Screen shot of the CODA image. Shown are two air plumes marking the location of the divers, the one at the right is at the DMM basket. The diver at left is recovering DMM, which will then be placed in the basket. Each DMM recovery location was marked in HYPACK with the USBL system location and entered into the GIS product.



Figure 6-30. The Dive Station with USBL and CODA tracking monitors at the Communication Station (left monitor is for USBL tracking; right monitor is for CODA tracking).

OBJECTIVE 2—ORDNANCE RECOVERY

Prior to Ordnance Recovery, four cannon and 72 DMM had been located during mapping and left *in situ*. During Objective 2 the four cannon would be recovered along with 134 DMM—almost twice the DMM originally located. This was not surprising, and even expected given the zero visibility and amount of material on the bottom, divers could easily miss DMM to which they were immediately adjacent. This was underscored during Mechanized Recovery when another 100 DMM were recovered, as well as a fifth, unknown, buried Dahlgren cannon.

With a U.S. Navy EOD team, headed by Senior Chief Richard Bledsoe, on-site to ensure safety protocols, Objective 2 began with the recovery of DMM beginning near Cannon 2 and 3. DMM were placed into separate tagged buckets, nine buckets per numbered metal basket. The metal basket was lowered onto the bottom near the intended search and recovery location, and the divers were directed to its location with the use of the USBL system. When all nine buckets were filled, the basket was raised, swung to the opposite side of the barge, and placed on the river bottom. There its location was marked by a buoy at the top of its lifting rig. In total, 16 baskets were filled and lifted in this manner (Figures 6-31 to 6-33). These were subsequently recovered and all DMM were taken to the Inerting Site set up on the adjacent Disposal Island just a short distance from the site up Back River.

Starting with a hand grenade recovered under the cascabel of Cannon 3, 134 DMM were recovered during Objective 2. These included 83 Brooke shells, 45 Dahlgren balls, and six non-explosive solid Bolts. Many DMM were concreted together or to the bottom and could not be recovered. Others were located on one dive and mainly due to increased current or a lack of time, were noted as not recovered (“NR”). Upon return on a subsequent dive, several of the “NR”s could not be relocated. Illustrated in Figure 6-34, the majority of DMM were concentrated in the southern-central portion of the site. None was found in the northern half of the site, and although several single DMM were scattered near Cannon 2 and 3, the largest concentration was in an area covered by Units 13, 14, 15, 16, AA, A, and B. Interestingly, the Bolts seemed to be clustered near Cannon 4, with many located down in the channel.



Figure 6-31. Ordnance basket with enclosed DMM buckets as well as the USBL transponder employed for diver location of the basket.



Figure 6-32. DMM-filled basket and lifting rig.



Figure 6-33. Buoy field showing locations of DMM-filled baskets awaiting transfer to the Inerting Site.

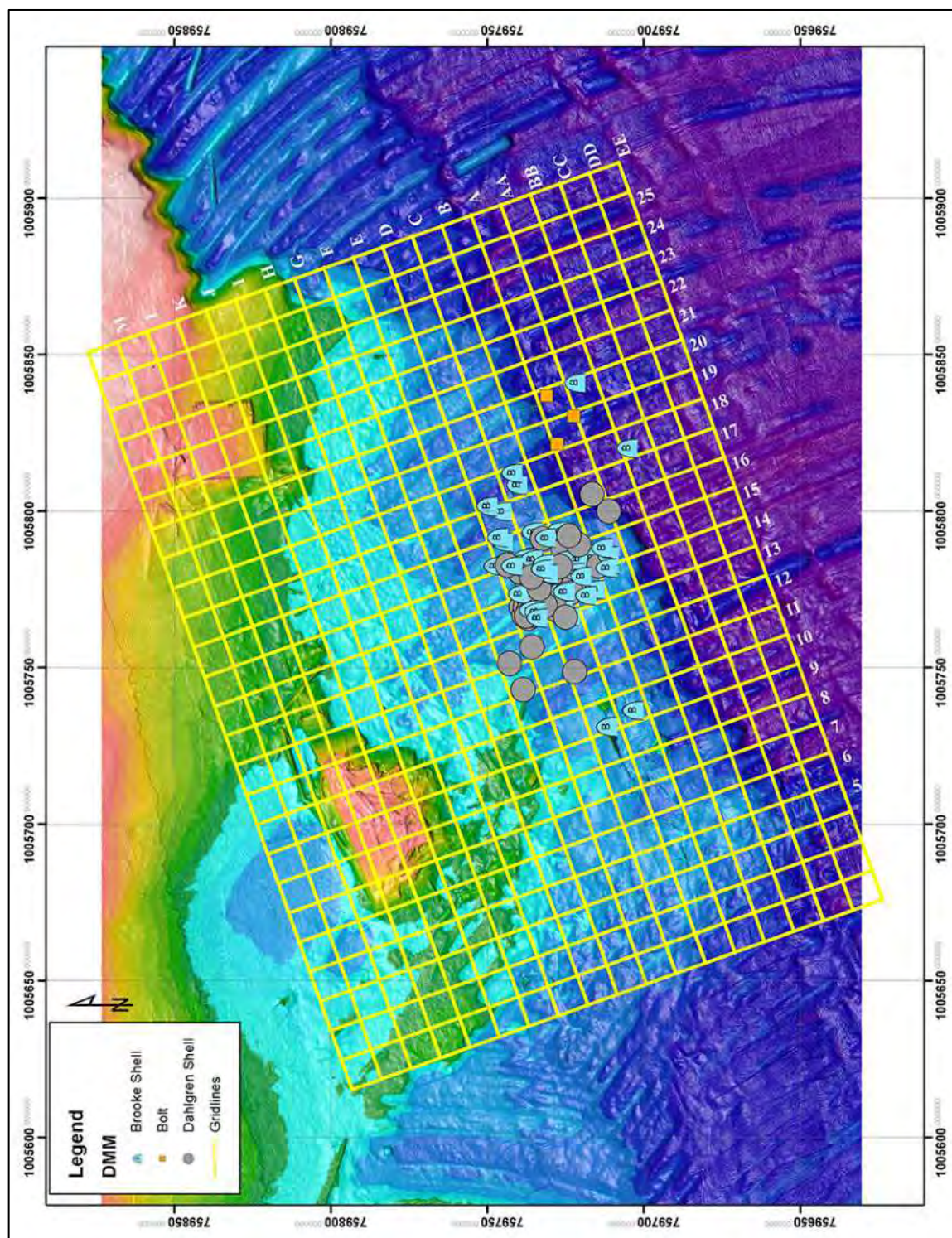


Figure 6-34. During Objective 2 134 DMM were recovered. These included 83 Brooke shells, 45 Dahlgren balls, and six non-explosive solid Bolts.

Upon completion of DMM recovery, cannon recovery began with the lifting of the guns from east to west, with Cannon 4 the last to be lifted (Figure 6-35). All cannon were raised with polyester “roundslings” attached to a USBL-equipped and positioned I-beam, some with chainfalls for leveling. The method is shown in Figure 6-36, where one roundslings was placed just aft of the muzzle, the other just aft of the trunnions.

Illustrated in Figure 6-37, Cannon 1 was the first to be lifted. The smallest gun on the site (a 6-pounder discussed below) and the furthest downriver was located adjacent to and just downriver from the East Casemate. With a total length of 6 feet 5 inches and a bore diameter of 3.5 inches (cleaned of concretion) it is thought to represent the Spar Deck Aft gun that was presented to the CSS *Georgia* by the Ladies of Rome, Georgia. A complete wooden box of round shot for the gun would be found during Mechanized Recovery (discussed below).

The second gun lifted was Cannon 3. Illustrated in Figure 6-38, and discussed in detail below, the cannon was thought at the time to be a banded and rifled 32-pounder. With a total length of 10 feet 8 inches, a maximum diameter of 2 feet 2 inches, and a flaring muzzle with a 5.5-inch bore diameter (concreted), the cannon had a gun sight still *in situ*. The gun has a single reinforcing band 25.5 inches in length around its breech and its cascabel has a 3-inch diameter hole through its center. Preliminary assessment (i.e., size, design, caliber, etc.) of the gun in 2003 suggested that the piece was a 32-pounder Model 1846 that was turned and banded (Watts and James 2007).

Cannon 2 was the next to be raised. Upon the gun breaking the water’s surface, it was surprisingly observed to be a Dahlgren (Figure 6-39). Up to that time it was thought to have been an unbanded, 8.5-inch, shell gun similar to a Seacoast-type. Cannon 2 has a total length of 11 feet 3 inches, maximum diameter of 2 feet, and ring on top of the cascabel. When brought on deck a partially exposed but illegible identifying number was observed on the breach and the Inspector’s identifying partial initial, thought to be “J.B....” was present on the end of a trunnion. Upon cleaning, if it turns out actually to be “J.R.,” depending on the muzzle number (if present) it will represent the No. 1 Port or No. 4 Port gun. This is discussed in detail below.

The final gun lifted during Phase II, Cannon 4, had been located during the 2013 Multibeam Survey. Positioned at the toe of the channel, the gun, also a banded 32-pounder, was observed by Phase I divers to have a broken muzzle (Figure 6-38). Interestingly, muzzle fragments were found on the northern extent of the site during the Phase III Mechanized Recovery. It will not be known until after conservation if they originated from Cannon 4. Historical evidence indicates two muzzle explosions on the CSS *Georgia*. One gun was the 7-inch stern gun, a 32-pounder. The second muzzle explosion was on the No. 1 32-pounder, single-banded rifle, which blew 18 inches off the muzzle. Produced at Tredgar in Richmond where most of *Georgia*’s guns originated, this gun was saved for testing 6.4-inch shells. While Cannon 4 most likely represents this gun, verification will be made after conservation when identifying marks should be visible after cleaning, all the CSS *Georgia*’s guns having various identifying marks (Swanson and Holcombe 2007 80-83). This cannon is discussed in detail below.

Also illustrated in Figure 6-35 is the location of a fifth, unknown, buried Dahlgren cannon that was recovered during the Mechanized Recovery Phase. It is discussed in detail below.

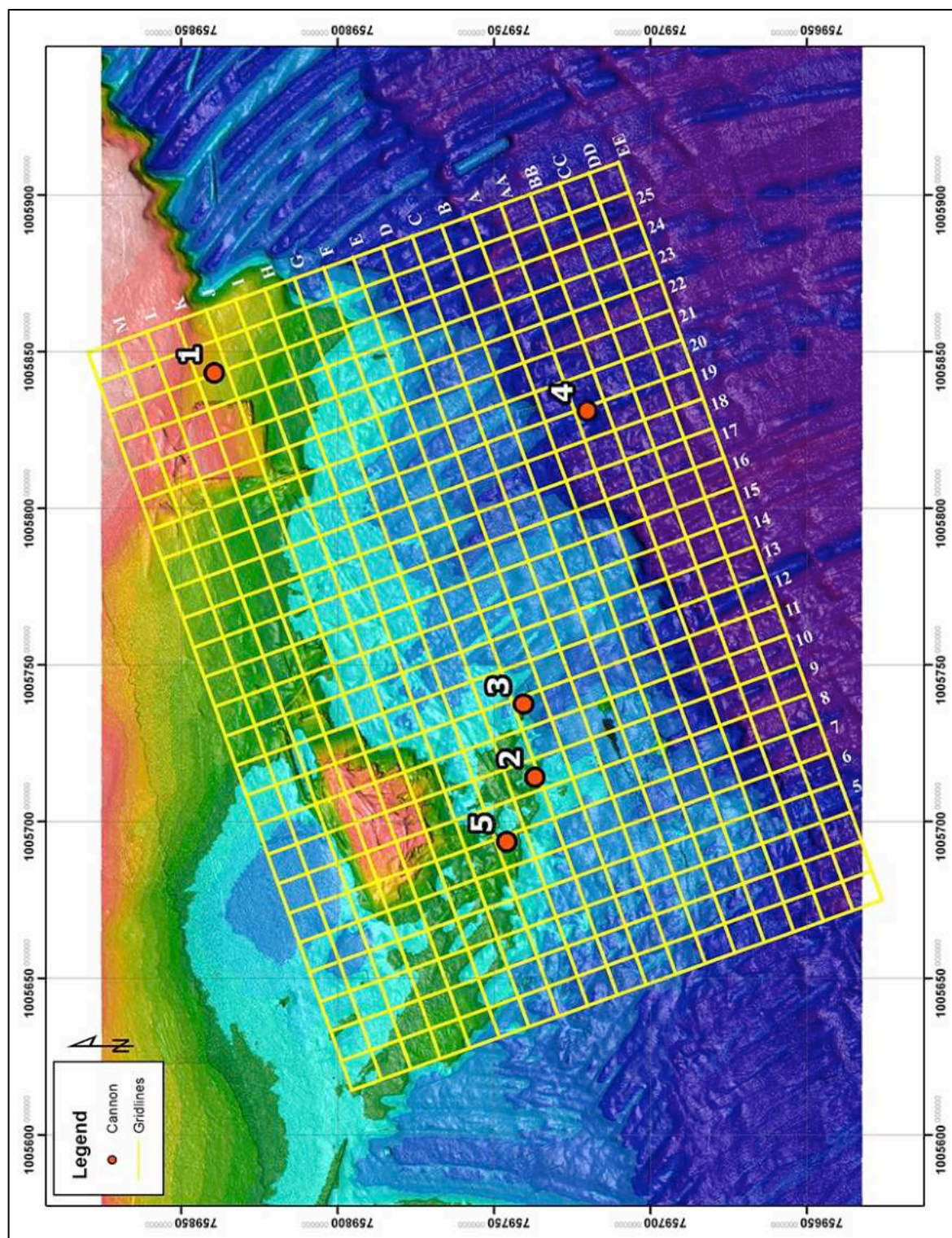


Figure 6-35. Location of the five cannon. The fifth cannon, a Dahlgren, was recovered during the Mechanized Recovery Phase.



Figure 6-36. Method of rigging cannon for lifting. Cannon 2 is shown being lifted, one “roundsling” placed just aft of the muzzle, the other just aft of the trunnions. Note the USBL transponder on the top center of the beam for positioning over the cannon for easy diver location.



Figure 6-37. Cannon 1, a 6-pounder, is the smallest gun on-site and was located adjacent to and just downriver from the East Casemate.



Figure 6-38. Cannon 3, a banded 32-pounder being examined by MDSU-2 divers who helped rig the gun for lifting. Note the 3-inch diameter hole through cascabel.



Figure 6-39. Based on its identifying marks, Cannon 2 is the No. 1 Port gun.



Figure 6-40. Cannon 4, a banded 32-pounder, with its broken muzzle clearly visible. Parker Brooks with CRL is checking the gun for DMM as the single-banded 32-pounder recovered in the 1980s from the site and now on display at Ft. Jackson was spiked and contained an inverted shell. During conservation at CRL it would be found that this cannon was not spiked, but the other 32-pounder (Gun 3), and one of the Dahlgrens (Gun 2) contained inverted shells.

Ordnance Inerting and Transportation

With the DMM safely on the river bottom, the four cannon were prepared for transshipment by placing them on wooden bunks in roll-off containers, wrapping them in wet blankets and a sprinkler hose followed by water-tight visquine, and then fastening them to tie-downs with a number of ratchet straps. They were then transported to the USACE Engineer Depot on the materials/equipment barge for immediate transshipment by truck to the CRL facility at Texas A&M University (Figure 6-41).

Although diver recovery of DMM was completed July 13, 2015, the baskets were not transhipped to Barnwell Island until August 16, when the Inerting Site was in place. Offloaded at Screvens Ferry Road, the inerting contractor MuniRem Environmental (MuniRem) took possession of the 134 DMM (Figures 6-42 to 6-46). During the Mechanized Recovery Phase another 97 DMM were shipped to their station and inerted; and another 15 DMM were sent to the U.S. Marines at Beaufort for inerting.

Inerting consisted of the shells being drilled in a blast-proof inerting “room” (see Figure 6-43) and then flushed of all contents. Once thoroughly flushed, the fuzes were then drilled and removed. In this manner both the shells and fuzes were inerted. They were then handed over to CRL conservators for cataloging and transshipment to their Texas A&M University facility.

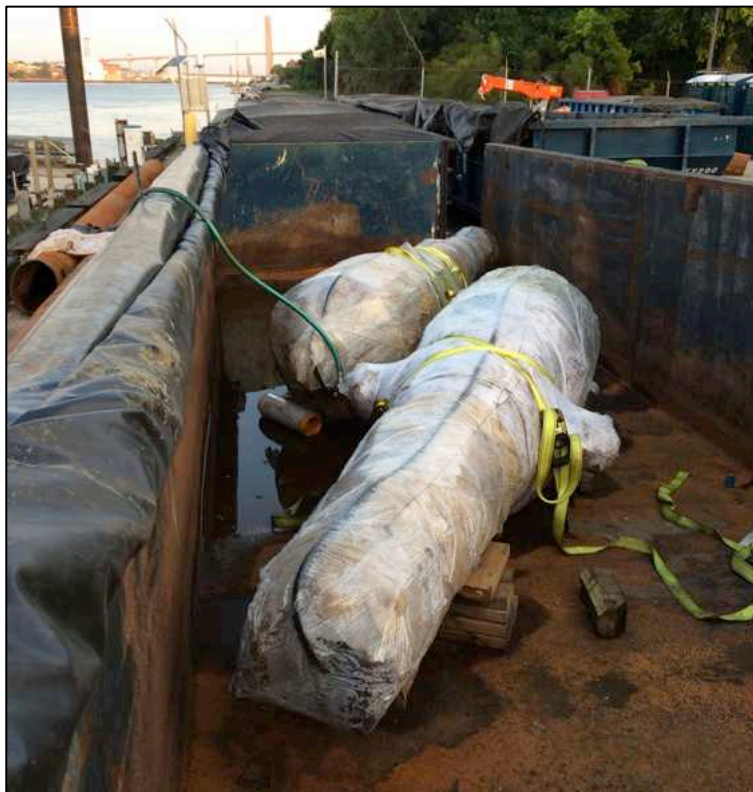


Figure 6-41. On the USACE Engineer Depot dock, Cannon 3 and 4 being readied for transshipment to the CRL facility at Texas A&M University.



Figure 6-42. A basket of 6.4-inch Brooke shells being unloaded at the Inerting Site. Note their projecting fuzes (courtesy of the U.S. Army Corps of Engineers–Savannah District).



Figure 6-43. Blast window looking towards sandbagged shell drilling “room” (courtesy of the U.S. Army Corps of Engineers Savannah District).



Figure 6-44. Archer fuze that has just been removed from a 6.4-inch Brooke shell (courtesy of the U.S. Army Corps of Engineers–Savannah District).



Figure 6-45. Inerted Brooke shell with hole drilled for removal of all contents. Note the fuze has not yet been removed (courtesy of the U.S. Army Corps of Engineers–Savannah District).



Figure 6-46. Inerted Dahlgren shell with hole drilled for removal of all contents (courtesy of the U.S. Army Corps of Engineers–Savannah District).

OBJECTIVE 3—LARGE ARTIFACT RECOVERY

Upon completion of cannon recovery, the focus shifted to the recovery of the large artifacts on the site. Located on the upriver edge of the site, the 6-foot diameter propeller was the first artifact lifted (Figures 6-47 to 6-49). The triple-bladed propeller is mounted on a 6-inch diameter shaft approximately 12 feet 6 inches in length. Because two of its three blades were buried, jetting was conducted to uncover the blades prior to lifting. Once lifted onto the barge deck, the shaft was cut free from the 8-foot blade with a saw for ease of transportation and conservation. As illustrated in Figure 6-49, the propeller has a single strut indicating the vessel would have had two propellers, and historical sources indicate that the CSS *Georgia* was powered by “a double engine and twin propellers” (Barnwell 1981:203, 206-208; Melton 2002:19).



Figure 6-47. Triple-bladed propeller being lifted onto the barge.

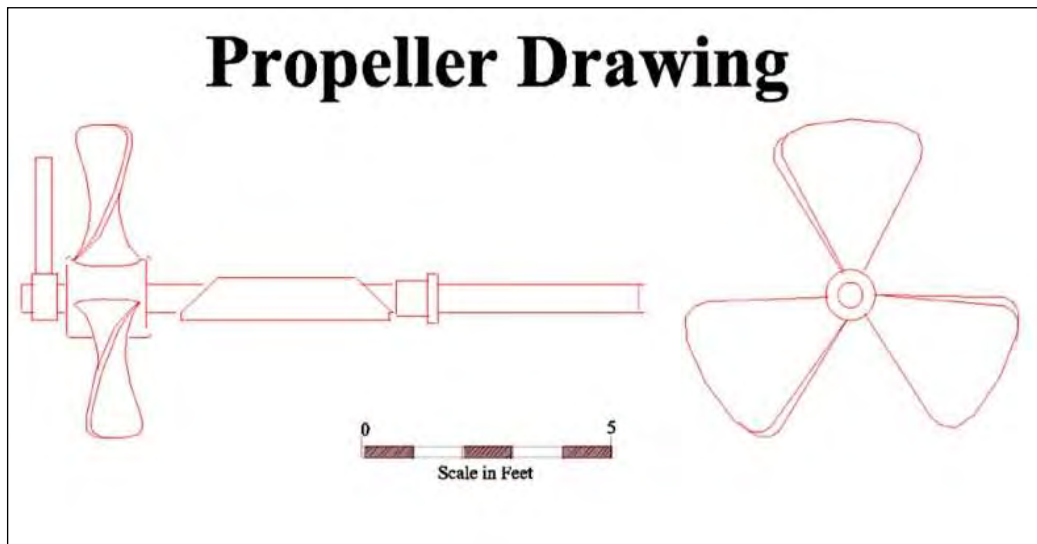


Figure 6-48. 2003 schematic of propeller showing the single strut (as presented in Watts and James 2007).



Figure 6-49. Propeller blade with strut at left.

The second artifact recovered, adjacent to Cannon 2, was at first believed to be a condenser. Like the propeller, it had to be jettied free from the bottom prior to lifting. Measuring 9 feet 4 inches in length and 20 inches in diameter, it is possible that the riveted cylinder represents a mud drum (Figure 6-50). Further analysis after conservation will be required to determine its function.¹



Figure 6-50. First identified as a condenser, it is possible that the riveted cylinder represents a mud drum.

¹ *Nota bene*: at the time of this Draft Report submittal the concreted artifact, along with numerous others, is still in a holding tank, precluding analysis.

After recovering the condenser/mud drum, the focus turned to the recovery of various large artifacts located generally on the southern upriver quadrant of the site (see Figure 6-52). Briefly recorded with field drawings, the following images present the majority of artifacts recovered by the MDSU-2 divers.²

Illustrated in Figure 6-51, a 3-foot diameter ring, thought to be a flywheel possibly from a nineteenth-century diver's air pump, was recovered. It was recovered along with a 3-foot long cast iron plate with an oval "slit" in its center. Possibly a hawsehole apparatus, its function is unknown.

In addition to these two artifacts numerous cast iron steam fittings and a brass steam pump were recovered during this Objective. Illustrated in Figures 6-53 to 6-56, the location and function on the vessel's steam machinery are discussed below.

Two large hawse pipes (not pictured) were the last artifacts recovered, one was located adjacent to the South Casemate and one near Cannon 4. Apart from these finds, no other large artifact was recovered—even after extensive searching in the area thought to contain the two steam cylinders. Although not recovered, assessment for the lifting of the boiler firebox was conducted. While jetting to expose buried portions of the boiler firebox, divers found extensive broken iron plating as well as numerous 4-inch diameter fire tubes. Other than a sample of the plating and a single 10-foot long tube, nothing else was recovered.



Figure 6-51. A flywheel possibly from a nineteenth-century diver's air pump at left, and a possible hawsehole plate.

² *Nota bene*: at the time of this Draft Report submittal these artifacts, along with numerous others, are still in a holding tank, precluding analysis.

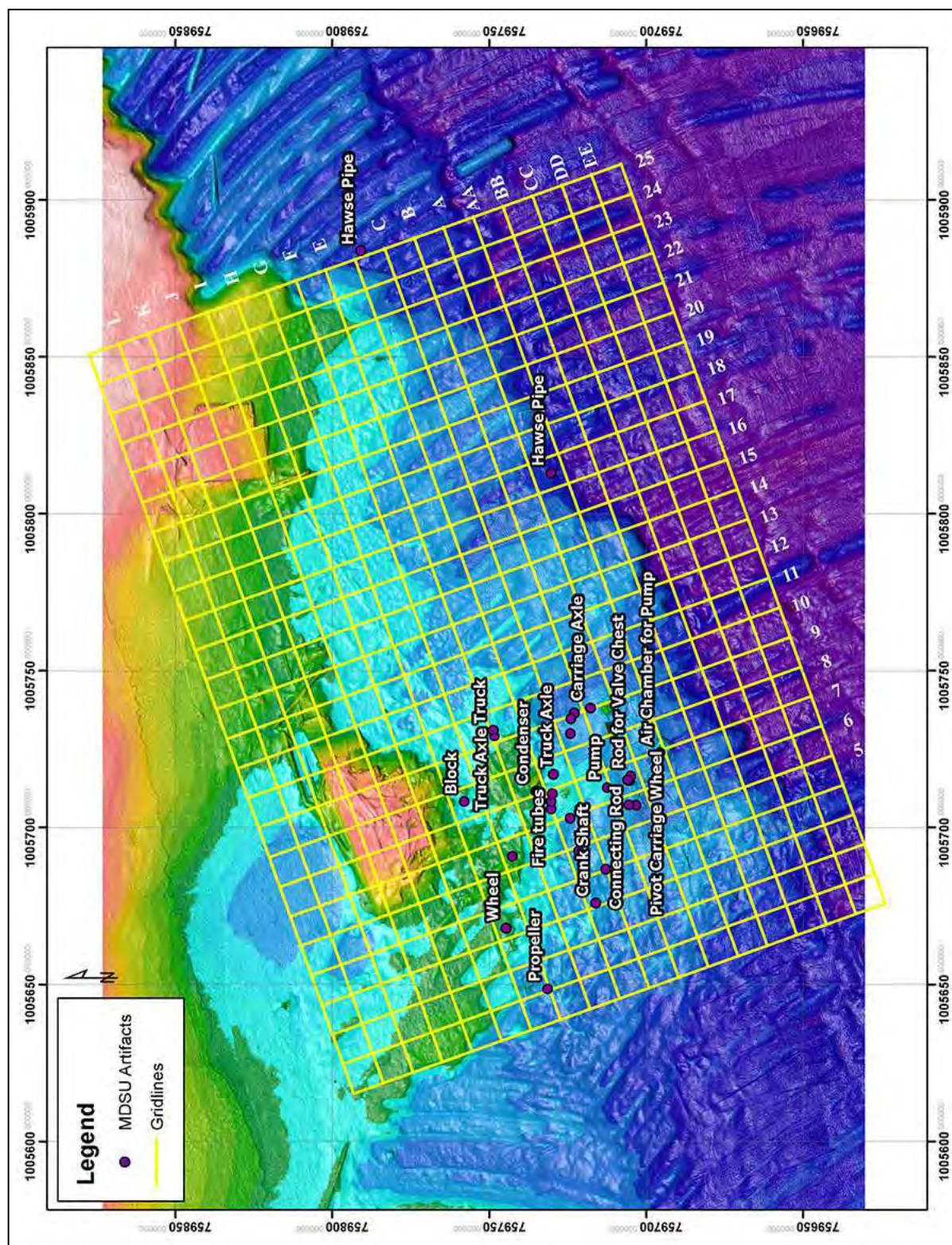


Figure 6-52. Map of Large Artifact Recovery by MDSU-2.



Figure 6-53. Steam fitting recovered during Large Artifact Recovery.



Figure 6-54. Steam fitting recovered during Large Artifact Recovery.



Figure 6-55. Brass steam pump recovered during Large Artifact Recovery.



Figure 6-56. Iron steam pipe recovered during Large Artifact Recovery. The ends of the 5-foot pipe are bent 90 degrees in opposite directions and fitted with 12-inch diameter flanges. The flanges are drilled for five bolts and gaskets; several bolts survive.

OBJECTIVES 4, 5, AND 6—SOUTH, EAST, AND WEST CASEMATE SECTION RECOVERY

With the completion of Ordnance and Large Artifact Recovery clearance, on-site activity shifted to the recovery of the three major elements of casemate structure, the largest being the West Casemate on the northwestern site boundary, the East Casemate on the eastern end of the site, and the smallest of the three, the South Casemate on the southern site boundary next to the channel. Because the methods and timeline for the recovery of all three casemates is so intertwined, they are presented somewhat together for ease and seamlessness of discussion. Although many small sections of casemate were retrieved after numerous attempts, different methods, and extensive planning discussions amongst all parties, initial attempts at complete recovery would not be successful for any of the casemates due to time and equipment constraints. The South Casemate would eventually be recovered during 2015 Mechanized Site Recovery Phase, and the East and West Casemates during 2017 recovery efforts.

South Casemate Section Recovery

Located near the channel and south of the East Casemate, it had been planed to raise the South Casemate first. This section of casemate is the smallest of the three measuring 18 feet 5 inches by 11 feet 6 inches and forming an uneven parallelogram (Figures 6-57 and 6-58). Lying with the railroad armor on the bottom, almost none of the wooden structure that supported the armor is extant. After several dives it was concluded that the South Casemate could not be safely recovered intact and would have to be disassembled on the bottom and recovered in sections or individual rails; however, all attempts by MDSU-2 to manually separate the rails with a crowbar and hydraulic jackhammer failed. While discussions were conducted on ways to best separate the rails on this small section, the focus shifted to the recovery of the East Casemate section. During recovery of disarticulated East Casemate sections, separation experiments were conducted on the West Casemate with a 7-ton rail separator affectionately known as “the Guillotine.” After being successfully employed on the West Casemate, it was then employed on the South Casemate after NHHC approval (see Final Phase 3 Permit in Appendix A).

The rail separator is essentially an 18-x-5-foot box frame that provides guides and support to a 20-foot long, 1.25-inch thick, steel plate (Figure 6-59). The steel plate acts as a “guillotine” when dropped on an object underneath the frame. The frame holds the plate in a vertical position as the plate slides down to hit the object. The end of the steel plate that contacts the object (rail sections) has a rounded point. The opposite end of the frame assembly has a large shackle on the frame (to hold the frame vertical during operations) and a shackle on the steel plate (used to raise and drop the plate).

The rail separator is operated by hooking the main crane block onto the large frame shackle and the single line “headache ball” hook onto the steel plate shackle. The separator assembly is raised to a vertical position by taking up on both hook and block simultaneously. Two tag lines are tied to the frame to allow positioning of the unit. A USLB transponder beacon is also attached to the frame to provide location data to the HYPACK navigation system.

The unit is suspended in a vertical position over the casement section, with a line tender forward and one aft on the barge to control the unit’s spin and horizontal movement. With CODA providing detailed location data above the casement section, the unit is slowly lowered onto the casemate, parallel to the direction in which the rails run. Care is taken to ensure the steel separation plate end remains inside the frame to ensure no point loads are accidentally applied to the casemate.

The unit is ready to operate when about half of its weight is on the casement section and half is on the crane block. Once its position is confirmed by both the USBL and CODA systems, the unit is ready to operate. When the signal is given, the steel plate is raised inside the frame to a pre-determined height (2 to 3 feet). On the crane, the headache ball line brake is released and the steel plate falls the short distance on to the casement in the hopes of fracturing the concretions

along a rail section. After the release, the casemate relief is viewed on CODA to see if there is any visible separation. Drops are repeated and/or placed as necessary.

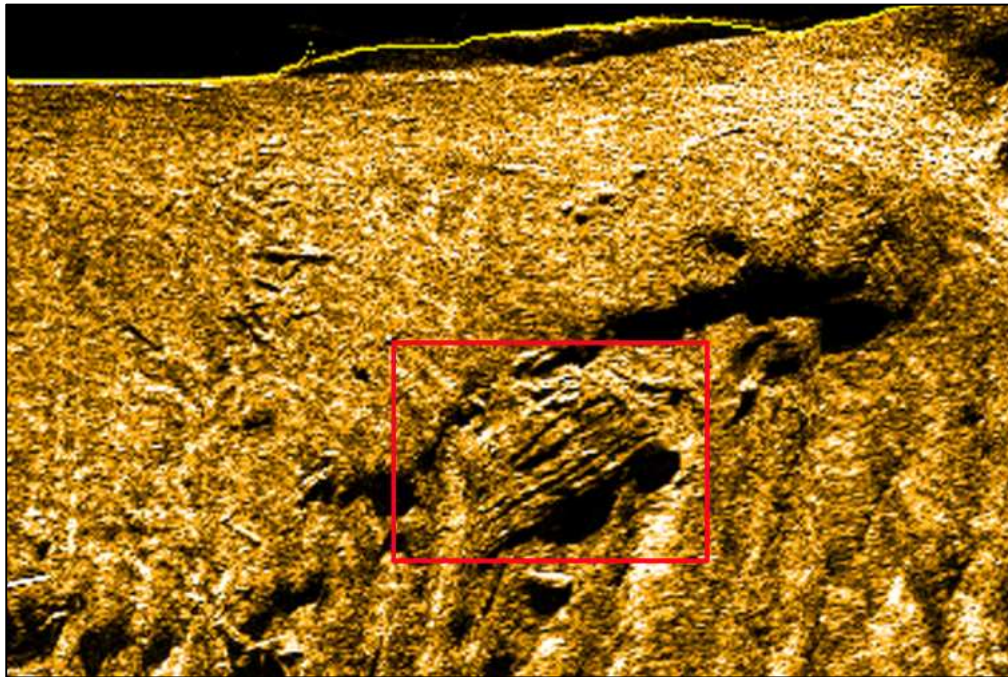


Figure 6-57. 2003 acoustic image of South Casemate showing rows of rail fully exposed and aligned side-to-side, lying with the no longer extant wood backing on top.

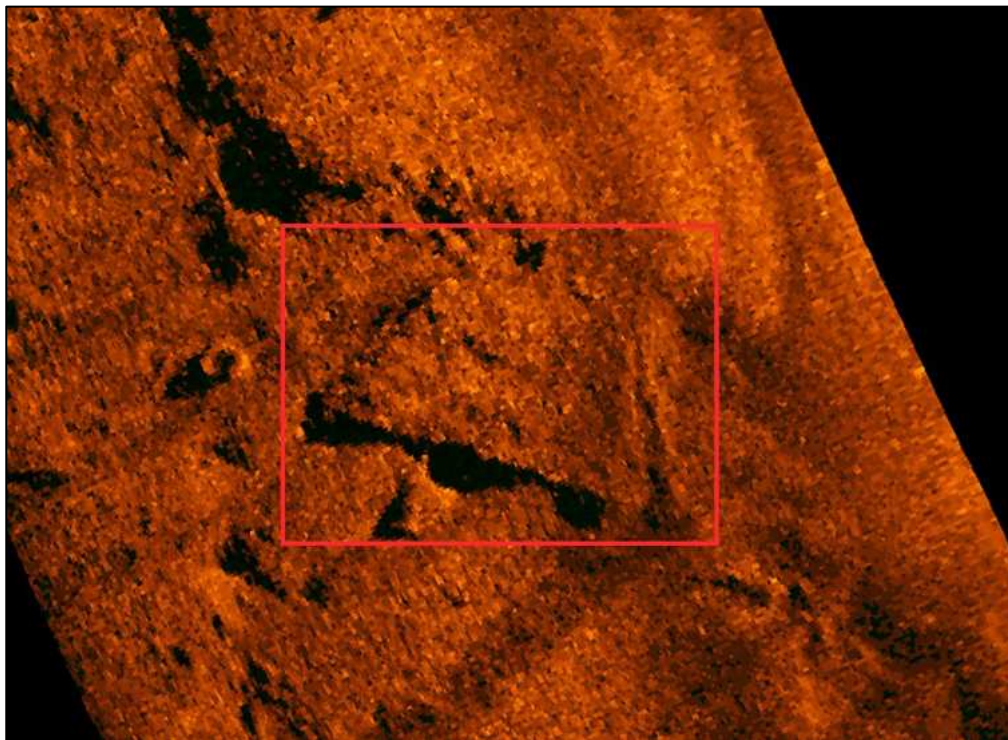


Figure 6-58. In the 2013 Multibeam Sonar Survey image of the South Casemate, an invasive mussel species covers the casemate muting the visible rails (as presented in Dean et al. 2016). Note the hawse pipe adjacent the southern edge, left of center.

The rail separator was employed on the South Casemate after the experimental West Casemate tests proved successful (Figure 6-60). Twelve drops were conducted, three each at four locations; however, when assessed by divers, rail separation was found to have not been achieved, most likely as a result of incorrect alignment of the blade with rail direction. After, one attempt was made to recover a section, but this proved unsuccessful, as only a small fragment of wood was recovered. It would not be until all attempts at raising the larger casemates had been discontinued, MDSU-2 divers demobilized, and Mechanized Recovery began that this section would be recovered.

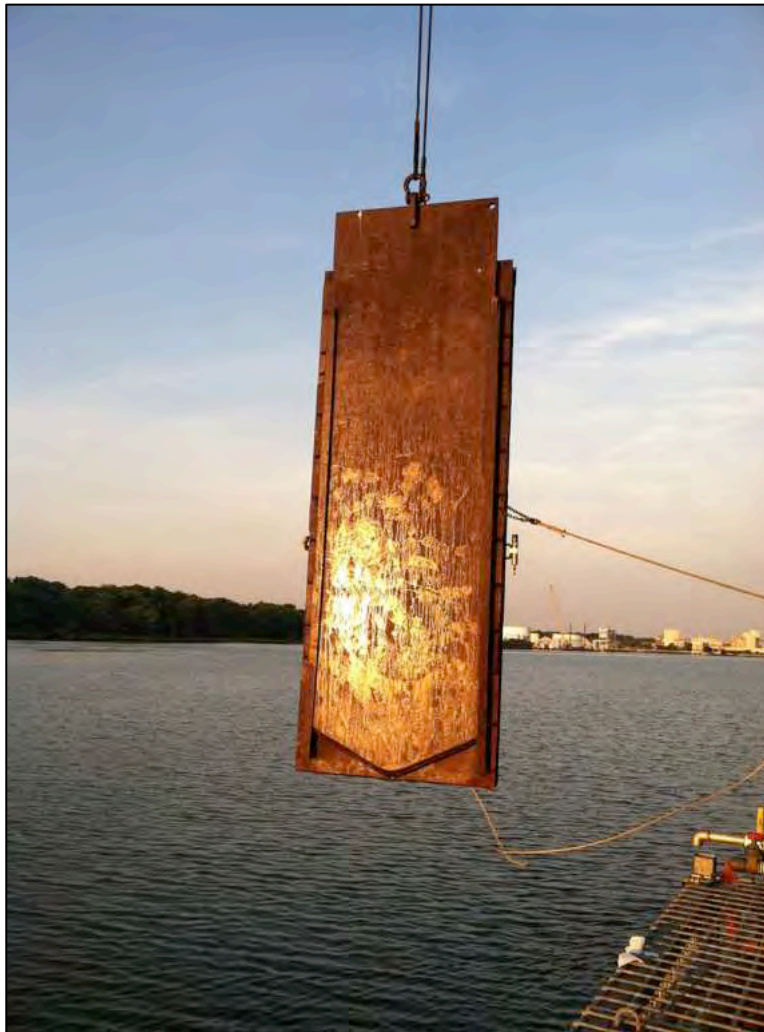


Figure 6-59. Seven-ton hammer blade affectionately known as “the Guillotine” showing sliding blade in its track. Note USBL transponder on mid-right side. When lowered into place using both the USBL and CODA imagery, the lines were employed to align the blade with rail lengths.

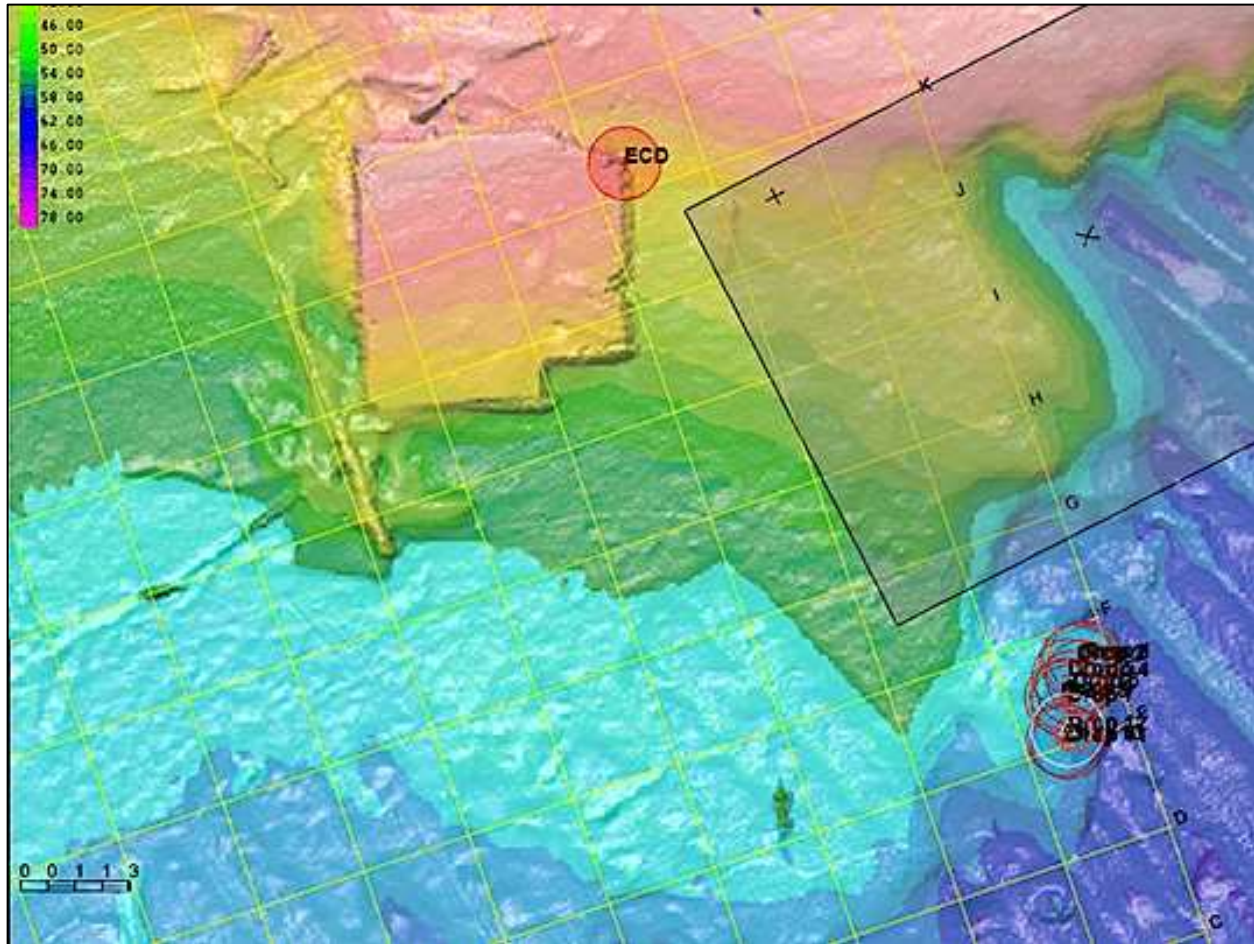


Figure 6-60. Rail separator drop locations on the South Casemate as recorded with the USBL system (red circles). Note barge position in relation to casemates. East Casemate is off its upriver end.

In addition to clearing the site of artifacts, the Mechanized Site Recovery Phase, which is discussed in detail below, was employed to recover the South Casemate, as the use of the grapple and clamshell were thought to be the only way to recover this casemate section after the unsuccessful rail separator and MDSU-2 diver recovery attempts (Figures 6-61 to 6-65).

Employing the grapple first, 28 grapple tests (SEC-1 to SEC-28) were conducted, the locations of each marked with the USBL system. The recovered rails were recorded according to their grapple test designate and bundled together, which allowed for proper documentation and reassembly after conservation. Figure 6-61 shows the second grapple test (SEC-2), and Figure 6-62 shows bundling of the rails.

With the last few grapple tests void of any casemate rail, clamshell grabs commenced using the designate label of “SECS” (South East Casemate Clamshell). Looking for rail, but collecting everything, 17 clamshell grabs (SECS-1 to SECS-17) effectively covered the casemate area. Recovery (two small segments of rail and several small fasteners) was only made in the first few clamshell grabs conducted.

Various aspects of the South Casemate were immediately apparent when processing the excavations, including:

- Grapple test recovery of the South Casemate was very successful, with complete recovery of what could be an excellent museum display piece
- Different sizes of rails were present; the angled sides of the casemate were clearly evident (see Figure 6-63)
- Sections originally sat on the river bottom with wood backing up, rails in the mud
- Very little wood remained and what was present was mostly highly eroded
 - two well-preserved pieces show that the rails were at a 30-degree angle to the wood (or vice versa) when built (see Figure 6-64)
 - most rails had either no wood or very little remaining
- Rails appeared to be in an excellent state of preservation with no evidence of damage from the previous Large Artifact Recovery Phase rail separation attempts and no bends observed

After complete coverage of the South Casemate area, and all the railroad iron had been cleaned, tagged, recorded, and banded, all bundles comprising the entirety of the South Casemate were placed in its own roll-off container for subsequent transportation to CRL for conservation (Figure 6-65).



Figure 6-61. The second grapple test recovery (SEC-2) on the South Casemate.



Figure 6-62. Bundling rails on the South Casemate. The angle of the side can be seen on the near end.



Figure 6-63. Angled side on the South Casemate.



Figure 6-64. One of the two pieces of partially intact wood from SEC-2. The timber, whose straight bottom edge is clearly visible and is only extant because of the iron concretion, shows the rail concretion impression and indicates the rails were at an approximately 30-degree angle when built.

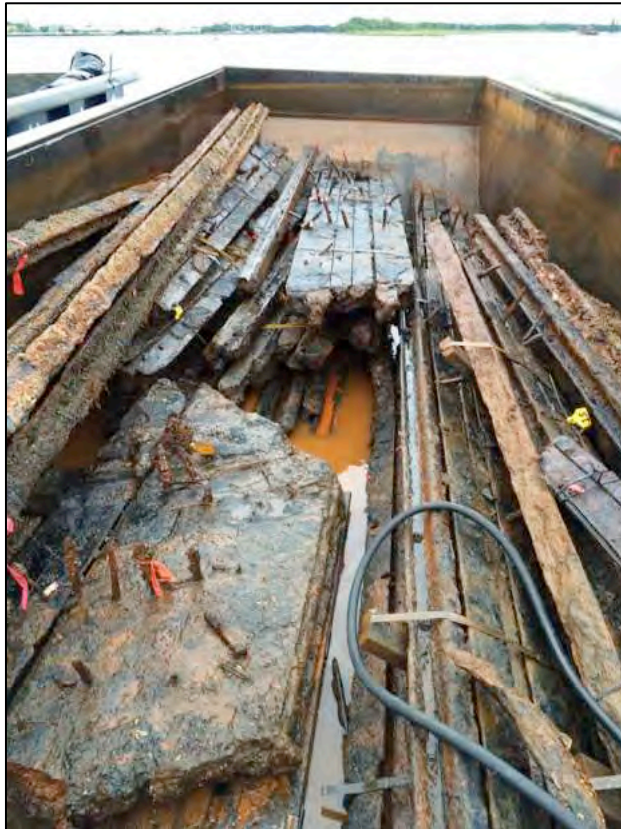


Figure 6-65. South Casemate bundles incorporated in a single roll-off container for transportation to CRL.

East Casemate Section Recovery

When initial efforts failed to recover the South Casemate, the focus shifted to the recovery of the East Casemate section (again intertwining the timeline, recovery of the South Casemate as discussed above would be conducted after recovery efforts of the East and West Casemate sections). Similar to the South Casemate, initial attempts by MDSU-2 to manually separate the rails on the main East Casemate section with a crowbar and hydraulic jackhammer failed. Subsequently, recovery focused on the large disarticulated sections.

The East Casemate section consisted of four elements, three small sections and the main section measuring approximately 24-x-27 feet. The small elements that would have to be recovered prior to lifting the main element consisted of an 11-x-6-foot triangular section that lay immediately adjacent to the northern side of the main casemate, railroad iron down, non-extant wood side up. That fragment represents the triangular extremity of the casemate. On the southwestern corner of the largest section another element measuring approximately 2-x-8 feet extended southeast to rest on the fourth element of the eastern structure. Somewhat “L”-shaped, the section measures roughly 16-x-8 feet, its extreme southern portion likely forming the lower side of a gunport. Figures 6-66 and 6-67 show these components in their 1980 and 2013 locations. Figure 6-68 shows the sequence in which the sections were recovered.

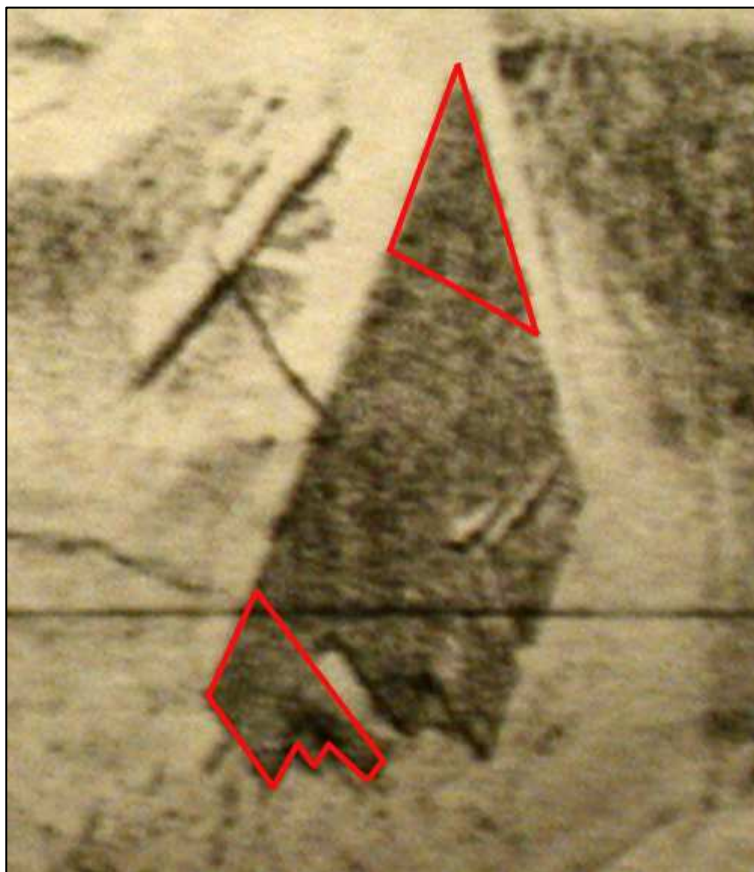


Figure 6-66. 1980 acoustic image showing sections that would be displaced outlined in red.

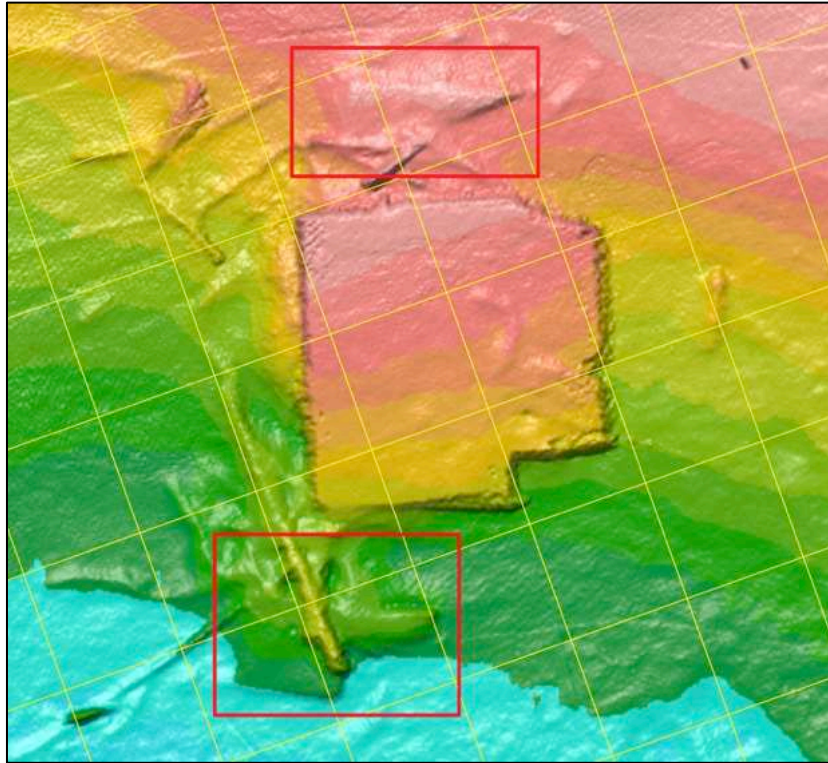


Figure 6-67. 2013 Multibeam Sonar Survey (Dean et al. 2016) image with displaced sections outlined. Note large linear piling that would be lifted off the East Casemate sections and placed on bottom just upriver.

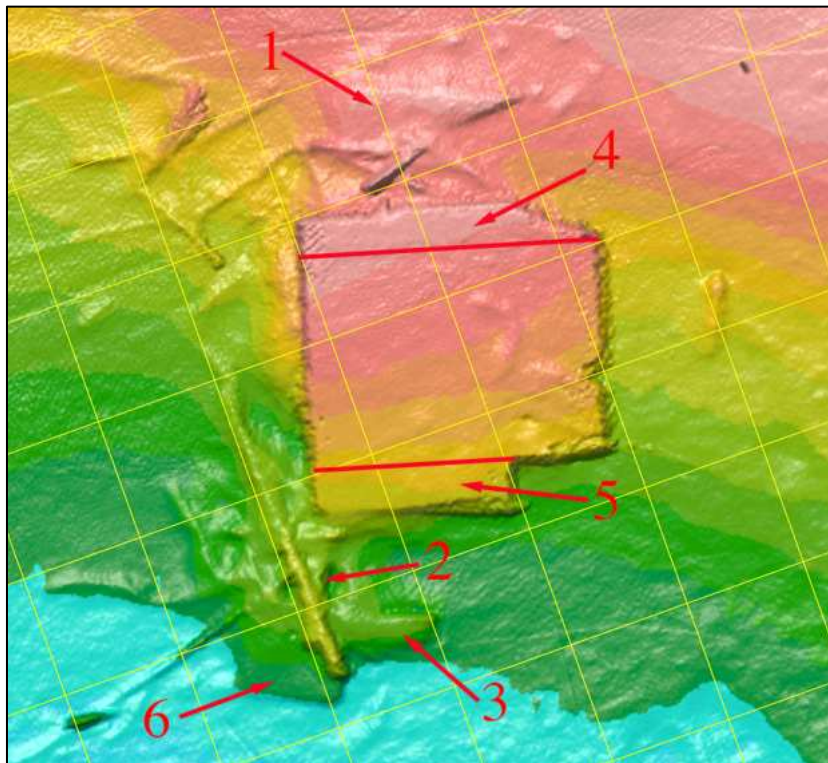


Figure 6-68. Site map of East Casemate sections showing sections recovered in 2015 and sequence. Section Nos. 4 and 5 were recovered after employment of the rail separator.

The triangular section on the casemate's northern side was lifted first (Figure 6-69). Intact sections, as well as sections purposely separated into manageable widths, were banded in order to keep them consolidated for transportation (Figure 6-70).

The triangular section was followed by the small, disarticulated piece (No. 2) on the southern side of the casemate that was approximately 2-x-8 feet in size (Figure 6-71). The third section (No. 3) separated into two pieces when initially raised, the larger 16-x-3-foot piece was raised first. When lifted, it was apparent that the rails were bent on the upper ends (Figure 6-72). Not an as-built feature, this bending is visible in the acoustic image (see Figures 6-67 and 6-68), and is also noted on portions of the West Casemate rails, possibly a result of salvage or a later impact. It is not a recent impact, nor did the rail separator cause it.

The next two sections recovered were sections divided with the use of the rail separator (Figure 6-73). Located on the northern edge of the main section (No. 4), and with its longest rail 24 feet in length, the segment has a descending rail angle on its eastern end. The triangular section (No. 1) originally attached to the upper (northern) edge of this section (Figure 6-74). Located on the southern edge of the main casemate section, the fifth section (No. 5) recovered was also parted with the rail separator. With no wood backing, the 24-foot long rails collapsed in on themselves when being raised (Figure 6-75).



Figure 6-69. Northern, triangularly shaped, first section recovered (No. 1) being readied for shipment. Note the lack of wood backing on the inner face, as evidenced by the spikes that would have attached the wood being visible.



Figure 6-70. Intact sections, as well as sections purposely separated into manageable widths, were banded in order to keep them consolidated for transportation. The sections were separated rail by rail once at CRL, a process required for conservation.



Figure 6-71. The second section raised (No.2); approximately 2-x-8 feet. The original, as-built location for this section is still being assessed.



Figure 6-72. The third section raised (No. 3). This piece calved off a smaller rectangular section when lifted. Note that the rails are bent on the upper end. Not an as-built feature, this bending is also noted on portions of the West Casemate rails, possibly a result of salvage or later pre-data recovery impact.

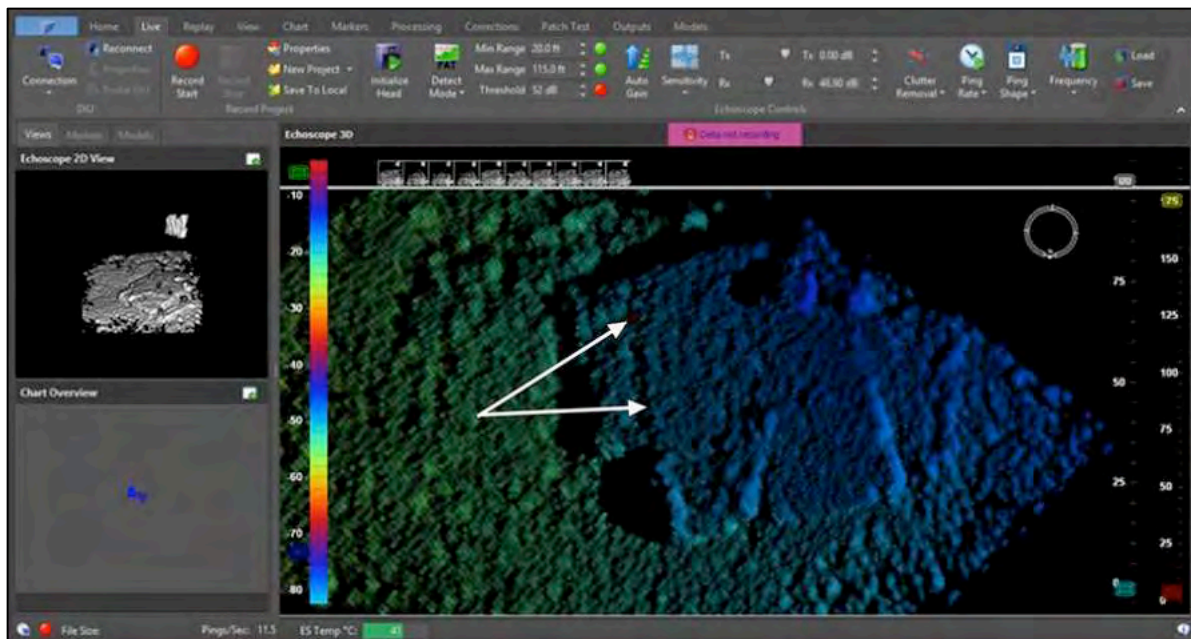


Figure 6-73. CODA screenshot showing (small, left screen) rail separator being placed on East Casemate and (large, right screen) cut made on the left side of the casemate to section off the No. 5 piece. Marked by white arrows, the cut can be seen clearly. The No. 4 section on the northern side was already been removed.



Figure 6-74. Fourth section of East Casemate raised. Separated from the main section with the rail separator, note the descending rail angle. The triangular section (No. 1) originally attached to the upper edge of this section.



Figure 6-75. The fifth section recovered, located on the southern edge of the main casemate section, was detached with the rail separator. With no wood backing, the 24-foot long rails collapsed in on themselves when being raised.

The sixth and last section recovered from the East Casemate was originally attached to the larger bent rail section (No. 3). This small, 6-x-4-foot section was at first thought to have formed the lower portion of a gun port (Figure 6-76). This would not be the case, as is discussed below.



Figure 6-76. The sixth section recovered from the East Casemate. It has been separated into two sections on deck and is being readied for banding and subsequent transportation. The visible spikes are the location of the (now mostly non-extant) original wood backing.

Once the six small sections had been recovered, and further attempts at separation of the main section with the rail separator were unsuccessful, the main section, measuring approximately 24-x-20 feet with a calculated maximum weight of approximately 76,000 pounds, was rigged and readied for recovery. It would later be found to weigh 47,000 pounds (see below). The barge was positioned so as to have as little crane boom as possible for the lift. After MDSU-2 divers ensured that the wire rigging was properly situated, the section was slowly raised. After it broke the surface, it was held stationary to enable engineers to check the rigging and general load for safety. Remaining in this position for just a few moments, several rails collapsed, the rigging came off one of the sides, and the entire section fell back to the riverbed (Figure 6-77).

With the advent of this unsuccessful attempt, focus shifted to the recovery of the small test sections of West Casemate previously separated. At the same time, discussions were held with all parties on the best method for East Casemate recovery. It was decided and approved by NHHC to build a rigging frame that would allow for a successful recovery of the casemate. The rigging frame was lowered onto the casemate and rigging wires placed under the segment for the lift (Figure 6-78). Similar to the first lift attempt, after it broke the surface, it was held stationary to enable engineers to check the rigging and general load for safety (Figure 6-79). Remaining in this position for several minutes, it was thought to still be too unstable to lift free of the water, as there was no wood backing on the northern half. It was lowered back to the riverbed and de-rigged, with a sonar survey conducted to assess its actual alignment and coordinate location (Figure 6-80). The consensus was that it could not be raised with the current on-site assets; however, its recovery would be accomplished in 2017 (see below).



Figure 6-77. The first attempt at raising the large, intact East Casemate section in 2015. Immediately after this photograph was taken, the sling at right slipped off the rail ends and the entire section fell back to the riverbed.



Figure 6-78. Rigging frame constructed that would hopefully allow for a successful second attempt at recovery of the casemate. This would not be the case.



Figure 6-79. Similar to the first lift attempt, after the casemate broke the surface, it was held stationary to enable engineers to check the rigging and general load for safety. Remaining in this position for several minutes, it was thought to still be too unstable to lift free of the water, as there was no wood backing on the northern half. It was lowered back to the riverbed and de-rigged. As discussed below, it would be recovered in 2017 employing a different lifting method.

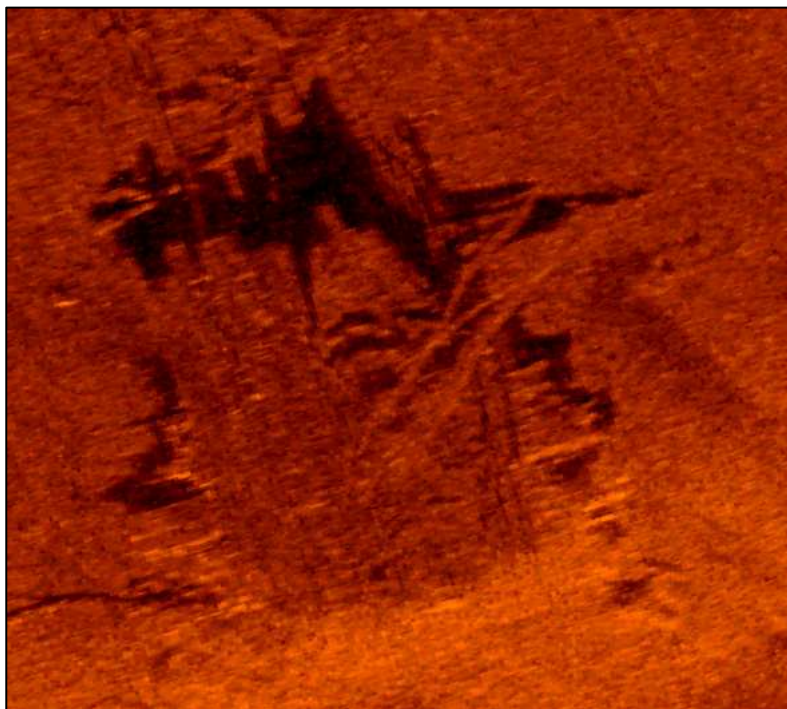


Figure 6-80. Acoustic image of the East Casemate on the riverbed immediately after the second failed attempt and de-rigging in 2015.

West Casemate Section Recovery

Following the first failure to lift the largest section of the East Casemate, the focus shifted to the recovering the small sections experimentally separated on the West Casemate with the rail separator, the separator drops seen in Figure 6-81. The original segment that was separated measured 16-x-7 feet with minimal wood beneath, and was clear of obstructions and disarticulated railroad iron. Once separated, it was thought there were two 16-foot long sections, one approximately 4 feet wide, the other slightly smaller; however, a third, shorter section was recovered as well. Their recovery locations are presented in Figure 6-82, the acoustic image of the West Casemate. Archaeological divers who first inspected the results found that the rails had successfully separated along their entire length where the blade had been dropped.

The first section raised was the lower portion of the 16-foot long section (Figure 6-83). Approximately 4 feet wide, the upper ends of the rails are bent. Not an as-built feature, this bending was also noted on portions of the East Casemate rails, possibly a result of salvage or later pre-data recovery impact. The No. 2 portion was then raised. Also with bent rail ends, this section was approximately 2 feet wide (Figure 6-84). The section was then followed by the recovery of the small, 8-x-2-foot, No. 3 section (Figure 6-85). At first thought to be the bottom of a gunport because of its squared-off top, it would be found that there were a line of fasteners at 8 feet resulting in many pieces having clean breaks at the this 8 foot mark.

Once the three small elements of the West Casemate had been removed, and based on the failure to raise the large East Casemate section, the consensus was that the remaining West Casemate section, measuring approximately 60-x-24 feet, could not be raised with the current on-site assets. Both casemates would be recovered in 2017 (discussed below).

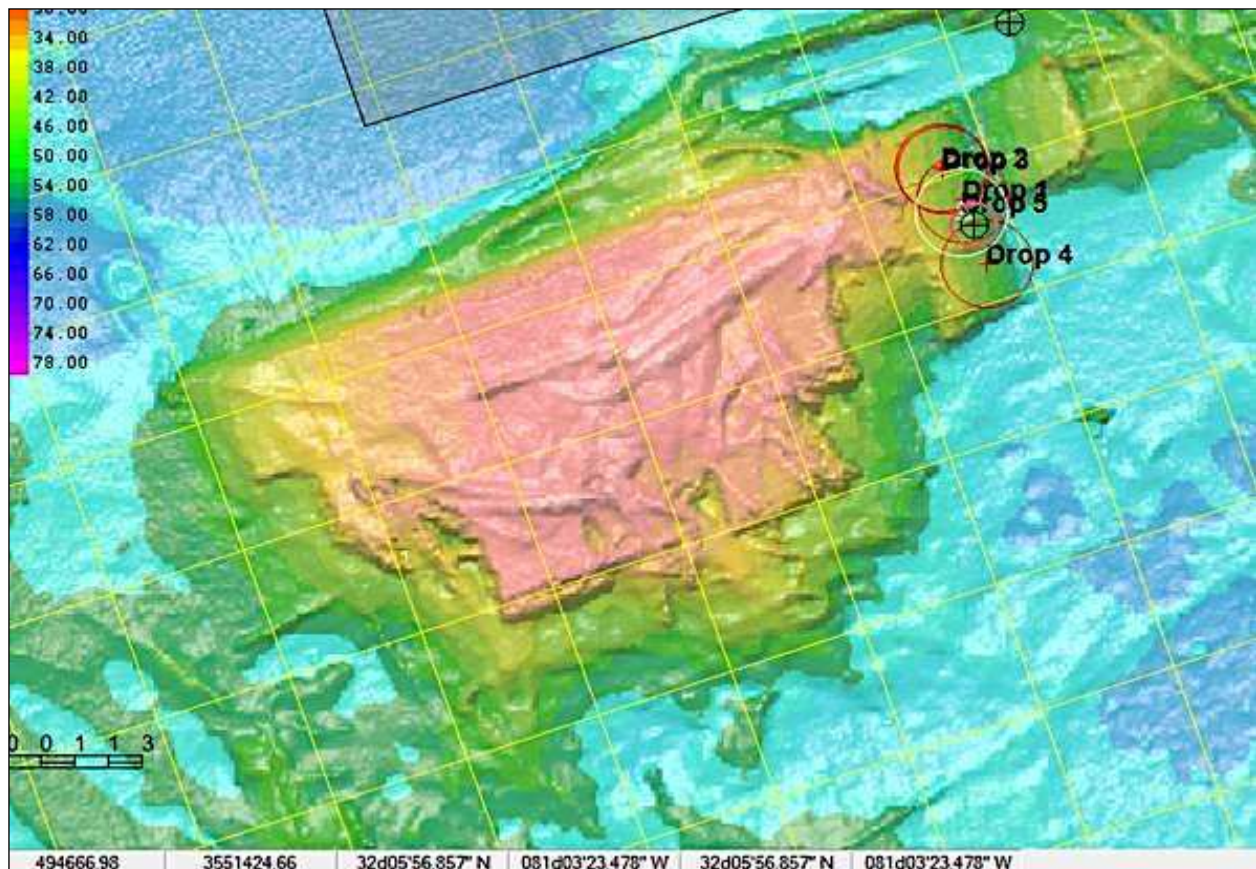


Figure 6-81. Sectioning locations on the West Casemate.

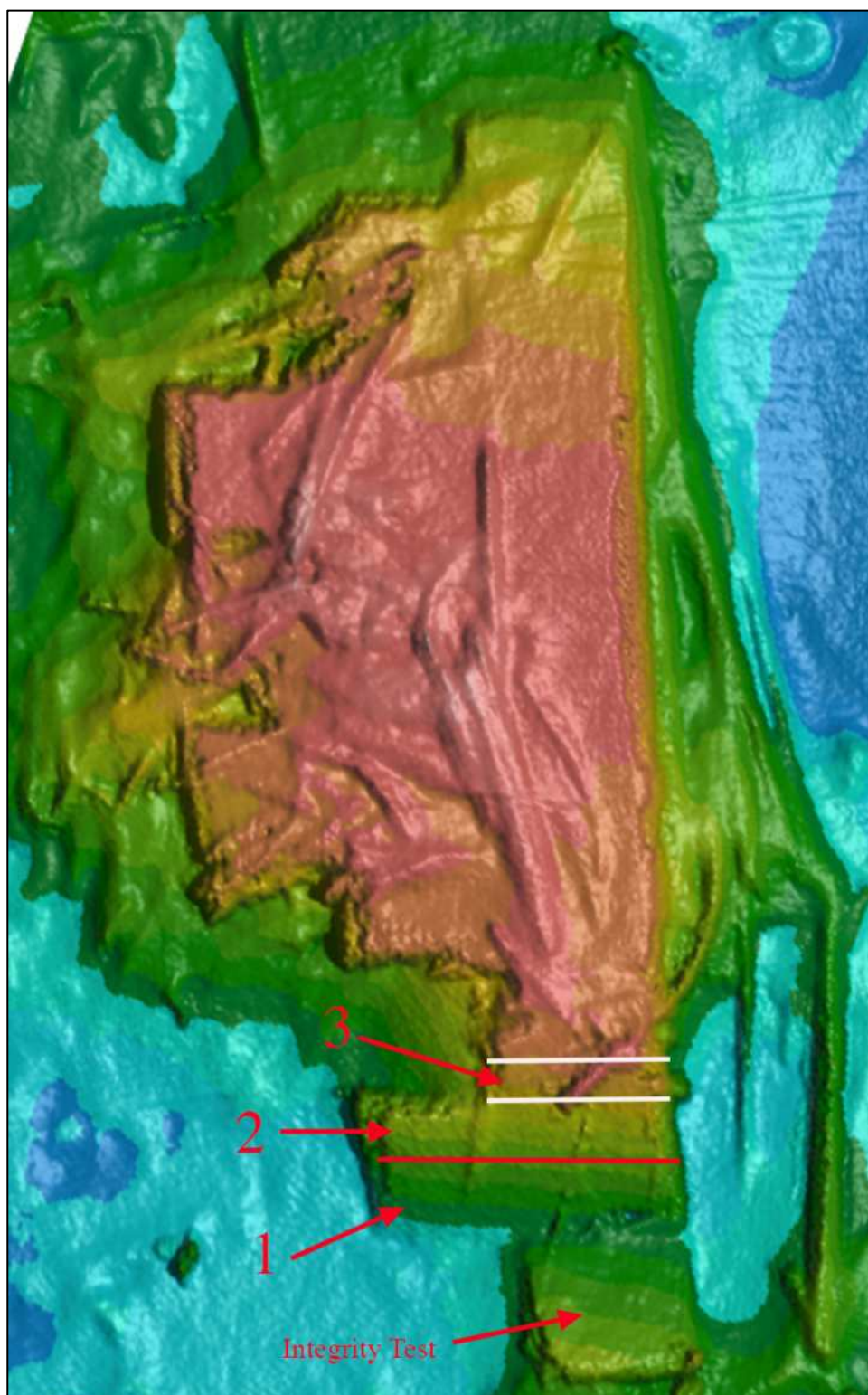


Figure 6-82. Recovered sections from the West Casemate (north is to right). The red line between numbers represents rail separator cuts. White lines are thought to be breaks caused by employing the rail separator, although the bottom break may have been present as the component containing sections Nos. 1 and 2 was slanted downward, as if it had already been broken away. Note bent rail ends at left of the Nos. 1 and 2 sections.



Figure 6-83. Larger (No.1) section recovered from the West Casemate. Note the bent rails at left, a feature clearly seen in Figure 6-77. Not an as-built feature, this bending was also noted on portions of the East Casemate rails, possibly a result of salvage or later pre-data recovery impact.



Figure 6-84. Smaller (No. 2) section adjacent to the right of the No. 1 section recovered from the West Casemate. Similar to No. 1 section, it has bent rail ends. Both have been banded and are ready for placement into a transportation container. Two loose rails from the same area are being lowered.



Figure 6-85. Small (No. 3) section recovered from the West Casemate. At first thought to be the bottom of a gunport because of its squared-off top, it would be found that there was a line of fasteners at 8 feet, resulting in many pieces having similar clean breaks at the this 8-foot mark.

Archaeological Clearance

After recovery of the casemate sections, archaeological divers were to systematically survey the areas where the casemates were recovered. As discussed, none of the large casemates were recovered, just small sections; however, the East Casemate was removed from its original location. Archaeologists then inspected this location and found it to be a hard, clay bottom with little to no sediment and no artifacts. Several concentrations of loose rail were identified on the periphery of where the East Casemate had originally lain. These were positioned with the USBL, subsequently recovered by MDSU-2 divers, and placed with previous East Casemate rail recovery sections. The absence of any material underneath the casemate is interesting and suggests that it was not in its original scuttling location, but had been moved; how and when is unknown. The absence of material would also be observed under the West Casemate in 2017.

OBJECTIVE 7—EXCAVATIONS POST-CASEMATE RECOVERY

As discussed, none of the large casemates were recovered in 2015, just small sections; however, the East Casemate was removed from its original location. As indicated above, archaeologists inspected this location and found it to be a hard clay bottom with little to no sediment and no

artifacts. This precluded the need for excavation. The same would hold true for the West Casemate in 2017.

2017 East and West Casemate Recovery

Having failed to recover them in 2015, the main focus of the 2017 Operation was the recovery of the East and West Casemates by Donjon divers. The recovery methodology and results of the 2017 recovery efforts are presented here. Analysis of the casemates is presented separately with other artifact analysis below.

The work platforms for the 2017 Operation recovery effort consisted of the Farrell 256 Crane and Dive Barge, the Witte 1403 Barge for casemate storage, and a smaller material barge for mechanized recovery and screening (Figure 6-86). The 200 x 56-foot Farrell barge was equipped with a two-story deckhouse on one end and a crane on the opposite end with a 120-foot boom and a lift capacity of 143 short tons. Anchored in place with a mooring winch system that allowed it to move around the site without lifting spuds or anchors, the Farrell housed on its deck the Dive Station and Communication Station. Accompanying the Farrell was the Witte barge, a 165-x-43-foot hopper-type barge that was used to hold the casemate sections. A third small material spud barge was also on-site for mechanized recovery.



Figure 6-86. The work platforms for the 2017 Operation recovery effort consisted of the Farrell 256 Crane and Dive Barge (right), the Witte 1403 Hopper Barge for casemate storage (center), and a smaller material spud barge for mechanized recovery and screening (right).

Accomplished from June 19 to July 2, 2017, the method proposed for casemate recovery was similar to that of the 2015 Operation recovery effort, but with one major difference—the employment of a large lifting frame for the artifact to rest on prior to lifting it from the river (Figure 6-87). The recovery sequence was to lay the large I-beam lifting frame on the bottom adjacent to the casemate, raise the casemate with wire slings, and place it on the frame, then lift the frame with the casemate and place it on the Witte barge. In order to allow the placement of slings underneath the sections airlifting of sediments around certain sides of each casemate would be required. This was accomplished with an airlift made of a 1-foot diameter 30-foot long iron pipe that was lowered into place by crane and then positioned by diver prior to beginning airlifting (Figure 6-88).



Figure 6-87. Iron I-beam frame for lifting casemate sections.



Figure 6-88. Airlift made of a 1-foot diameter 30-foot long iron pipe that was lowered into place by crane and then positioned by diver prior to beginning airlifting on both the East and West Casemates.

East Casemate Section Recovery June 18 to June 21

The East Casemate was the first to be recovered, with the initial dives to reconnoiter, followed by airlifting. Airlifting on the East Casemate was conducted on the northern, southern, and eastern (upriver) sides. This was followed by wire sling placement, the slings placed under the northern and southern sides. Once the slings were in place, the lifting frame was lowered to the bottom adjacent to casemate, its position observed by attached USBL beacons on its two corners nearest the barge, as well as by the CODA system. Once on the bottom the frame's lifting slings were unshackled and then the spreader bars were moved over the casemate, and the slings under the casemate were then shackled to the spreader bars. The casemate was then lifted gently and then inspected by divers to ensure everything was holding. It was then moved over and atop the lifting frame and gently lowered down onto it again using the USBLs and the CODA system in concert with the diver. Once positioned, the casemate slings were unhooked from the spreader bar and the lift frames slings were then reattached. The casemate was then lifted up to just above the waters surface (Figure 6-89). At this point the lift was visually inspected. Measured by the crane, the East Casemate was found to weigh 23.5 tons (43.5 tons with the lift frame), a weight easily within the crane's capacity. The crane then swung the casemate around to the material barge where it was placed on wooden bunks at one end. Note that from the first reconnoiter dive to recovery and placement on the barge was a period of only four days.

Once on the barge it was found that the casemate was covered by a thick mat of mud and invasive mussels (Figures 6-90 and 8-91). This had to be shoveled off prior to high pressure washing of the casemate for subsequent recordation including drone photography (Figures 6-92 and 6-93). Both casemates would be photographed for 3D modeling, and general photographs and measurements were taken as well (Figure 6-94).



Figure 6-89. East Casemate breaking the surface during recovery. At this point it was found to weigh 23.5 tons (43.5 tons with the lift frame).



Figure 6-90. Cleaning of the mud and invasive mussels on top of the casemate.

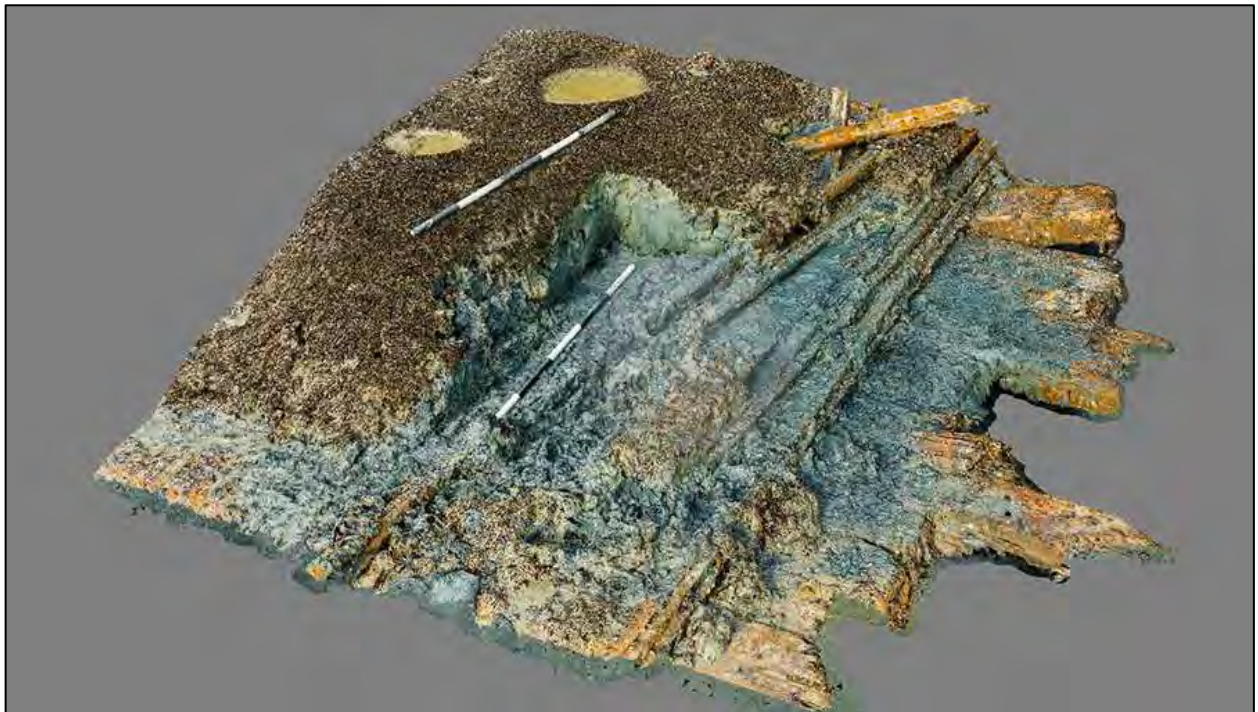


Figure 6-91. Isometric 3-D image of a section of the mussel and mud covering the East Casemate. Note that mussels were not present in 2003, instead the surface of the East Casemate was smooth and free of overburden as reported by divers. When the multibeam survey was conducted in 2013 it was found that no real crisp edges were apparent on the site, an indication that the invasive specie of mussels had covered the artifacts and casemates at the site between 2003 and 2013.

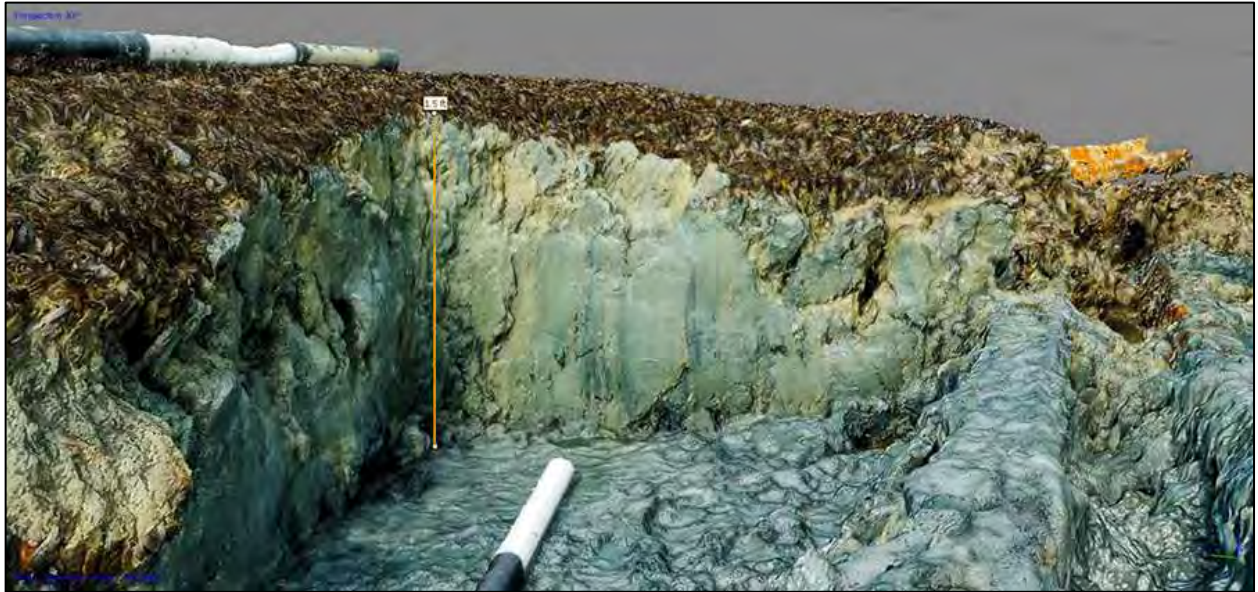


Figure 6-92. 3-D profile image of the mussel and mud covering the East Casemate showing coverage up to 1.5 feet. Note that both the mud and invasive mussels were not present on the casemate or the site in 2003. It is thought that the mussels contributed to the mud accumulation.

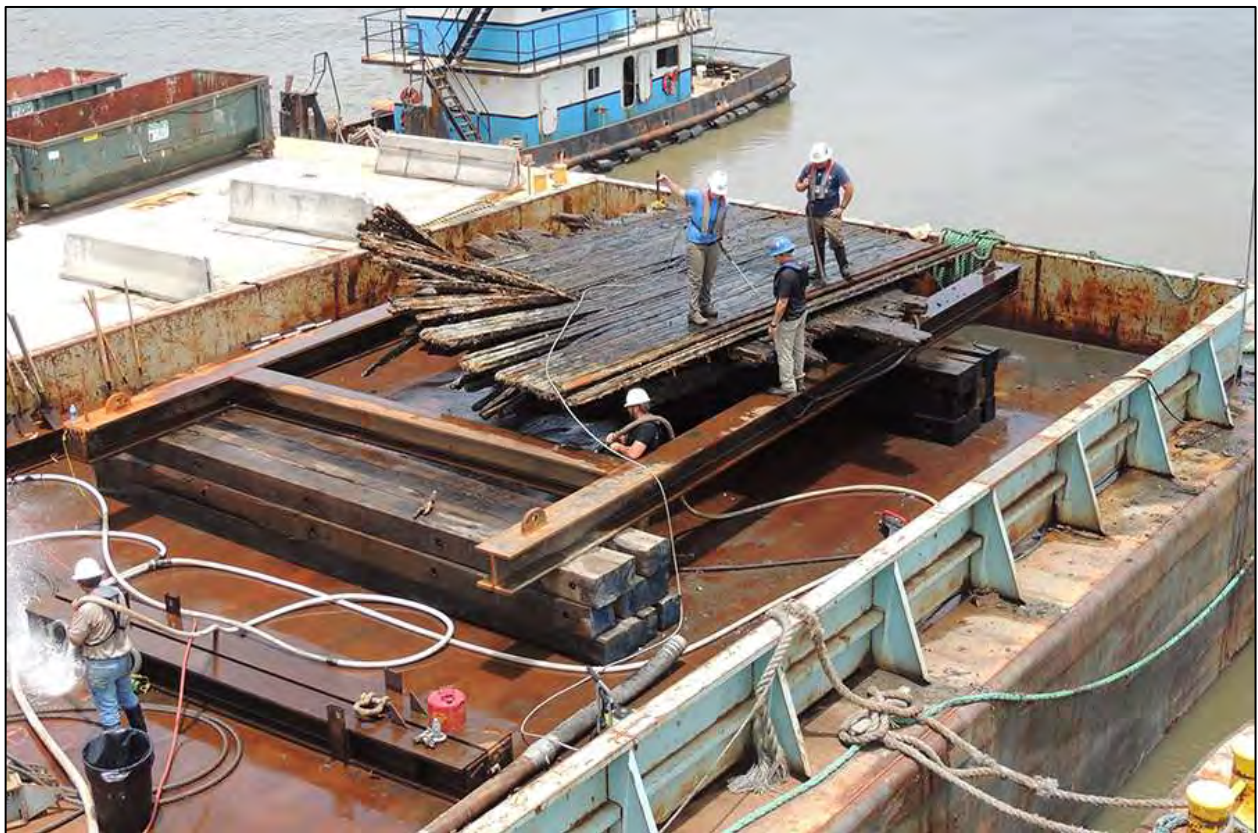


Figure 6-93. East Casemate after high-pressure washing on the Witte casemate barge, ready for recordation.



Figure 6-94. 3D isometric of the main section of the East Casemate. Note the bent rails and where they break at the line of fasteners.

West Casemate Section Recovery June 22 to July 2

While the East Casemate was a fairly quick operation, the West Casemate would be a much larger and longer undertaking. Divers airlifted around the southern, northern and western perimeters prior to lifting disarticulated rail sections and loose rail both on and off the casemate. Additionally, small sections that were still somewhat attached to the casemate were lifted off if it was deemed they could not be lifted intact. At times, airlifting uncovered sections or loose rail that would then be immediately lifted. The rails and sections were brought on board and photographed, recorded, bundled with strapping (if required), and then placed in a roll-off container similar to what was conducted on the East Casemate above. Figure 6-95 shows the multibeam map of the West Casemate labeled with the majority of lifts, several of which were very diagnostic and worth mentioning here. Lift sections WC-4 and WC-16 with their angled tops represent the end of the angled casemate. The angled end can clearly be seen at the top of WC-16 in Figures 6-95. The angled section WC-4, which was 4 feet wide by 8 feet tall at the top of its angle, was not apparent until it was lifted on deck (Figures 6-96 and 6-97). The fact that both the West Casemate and the East Casemate both have angled ends, suggests that together they form one entire casemate side, likely the port side of the vessel.

Illustrated in Figures 6-98 and 6-99, the second diagnostic section was WC-7 comprised of two notched sections approximately 7 feet long by 2 feet wide each. Fitting the sections together formed a 4-foot wide, 7-foot long piece with a 27-inch wide square cutout that is thought to represent a gun port. It will be found to be the only gunport on the entire length of the West Casemate, the lack of ports in this area suggesting the casemate opposite the engine and boiler in the stern of the vessel.

Airlifting and recovery of the small sections and loose rail was followed by wire sling placement under the remaining section, which was 32 feet east/west by 24 feet north/south. Similar to the East Casemate, slings were placed under the northern and southern sides. The crane conducted a trial lift and the West Casemate successfully came off the bottom, after which it was immediately lowered back to the bottom. Employing the same methodology as on the East Casemate, the lifting frame was lowered, the casemate was rigged, placed onto the frame, the frame re-rigged, and the lift begun. The casemate was lifted up to just above the waters surface as seen in the drone shot in Figure 6-100. At this point the lift was visually inspected. Measured by the crane, the West Casemate was found to weigh 40 tons (60 tons with the lift frame), a weight easily within the crane's capacity. The crane then swung the casemate around to the Witte barge where it was placed on wooden bunks at one end of the barge adjacent to the East Casemate where it would be cleaned and recorded (Figures 6-101 and 6-102). Figure 6-103 is a 3D isometric image of the cleaned casemate. Note that from the first reconnoiter dive to recovery and placement on the barge was a period of 11 days.

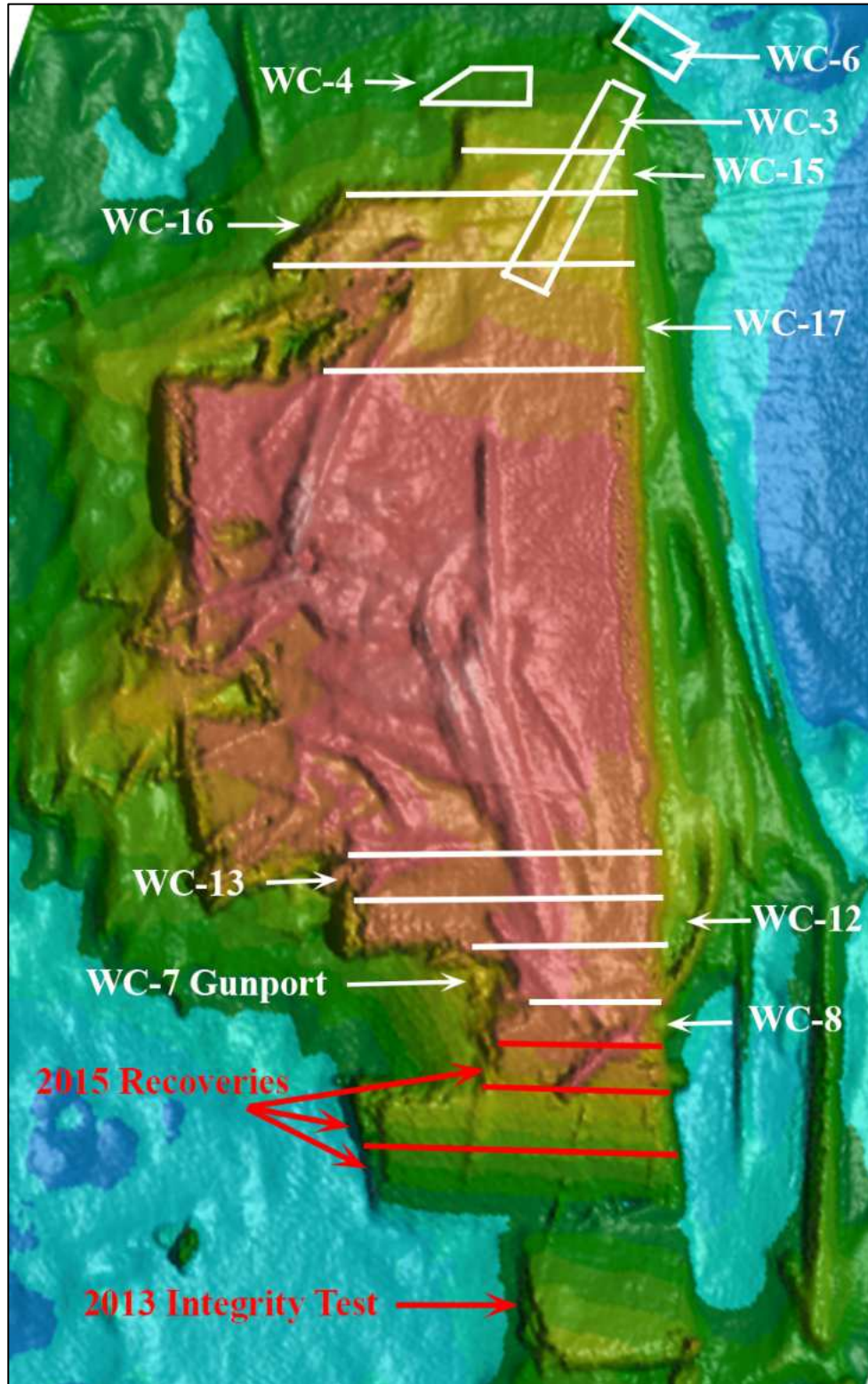


Figure 6-95. Multibeam map of the West Casemate labeled with the majority of 2017 lifts (in white), several of which were very diagnostic. Note the right side of the casemate attached to the hull, the left side the top of the casemate (north is right, upriver is up).



Figure 6-96. West Casemate section WC-4. Its angled top edge represents the end of the angled casemate.



Figure 6-97. West Casemate section WC-4. Its angled top edge after high-pressure cleaning.



Figure 6-98. Lift WC-7. Originally one 4-foot wide piece, together they form a square, 27-inch wide, as-built cutout thought to represent a gun port. It will be found to be the only gunport on the entire length of the West Casemate.



Figure 6-99. 3D-model of lift WC-7 after high-pressure cleaning.



Figure 6-100. Drone shot of West Casemate lift just breaking the surface. At this point it was found to weigh 40 tons without the lift frame. It will be lifted and swung around to the middle Witte barge (middle barge) where it will be placed on wooden bunks next to the East Casemate. Note the dive station CONEX box to the left of the crane, and grey command tent to the far left.



Figure 6-101. Drone shot of West Casemate placed next to the East Casemate on the Witte barge.



Figure 6-102. Drone shot of West Casemate prior to cleaning. Components of a gun carriage would be found under the mud in the left center atop the casemate.



Figure 6-03. 3D isometric of the main section of the West Casemate. Note the bent rails at top and middle section missing the top third of the 24-foot rail lengths. They have all broken away at a line of fasteners.

PHASE III: MECHANIZED SITE RECOVERY PHASE

Implemented to recover all miscellaneous site material and ensure site clearance of all remaining artifacts, the third on-site phase was the Mechanized Site Recovery Phase. Immediately after completion of the Large Artifact Recovery Phase, both barges were moved to the USACE Engineer Depot for demobilization of MDSU-2 equipment and reconfiguration for the Phase III operations. With equipment mobilization required from September 11 to 13, actual Mechanized Site Recovery commenced September 14 and was completed October 23 for the 2015 season, a period of five weeks. There were 35 workdays with the workweek comprised of six 10-hour days for the duration of the phase. Participants for this phase included the Panamerican/TAR archaeological team, CRL conservators, an additional 12-person team of archaeological technicians, the USACE archaeologist, SUPSALV personnel, Donjon salvage contractor personnel, and periodic NHHHC representatives. Listed below, this phase originally included three objectives.

- Objective 1—Grapple Railroad Iron Recovery
- Objective 2—Magnetic Recovery
- Objective 3—Clamshell Recovery

Because the methods and timeline for the three above objectives are so intertwined, they are presented together for ease of discussion; however, once on-site, Objective 2 (Magnetic Recovery) was not implemented, as it was felt that the mechanism would be redundant and inefficient when compared to the other two methods. As will be shown, the methods in Objectives 1 and 3 (Grapple Railroad Iron Recovery and Clamshell Recovery) were more successful than could be imagined.

It should be stated that Mechanized Site Recovery for the 2017 Operations would mirror the 2015 methods, albeit with only six of screening bays, half the number of mechanized recovery archaeologists, only three weeks in duration, and with far less recovery.

OBJECTIVES 1 AND 3—GRAPPLE RAILROAD IRON RECOVERY AND CLAMSHELL RECOVERY

During the latter part of the Large Artifact Recovery Phase and prior to the commencement of the Mechanized Site Recovery Phase, six grapple tests and six clamshell grabs were conducted on the southern side of the West Casemate in order to assess and refine the process and procedures as previously described in the Research Design (see *Chapter IV: Research Design Methodology* and Appendix A). The 14-ton, seven-finger grapple was used for six tests, followed by the clamshell “grabs,” in the same general locations with all 12 recoveries conducted deliberately to refine the process and recordation methods, both in personnel and procedures. The six grapple tests were processed and sorted on deck, while the six clamshell grabs were processed in a prototype screen (Figures 6-104 to 6-107). Over-built, the screen proved to be inefficient for the removal of soil matrix and made separation of artifacts for processing difficult and time-consuming; subsequently, the prototype was not employed. Based on the positive findings from processing the grapple test loads, it was decided to process all mechanized recovery on deck with simple screening bays that allowed for expeditious sediment removal and efficient artifact processing.

Apart from screening issues, both the grapple and clamshell worked exceptionally well during the first 12 excavations. Initially planned to be first employed to recover any rail road rails, the grapple often contained huge amounts of sediment along with rails, timbers, and assorted artifacts, and proved much more successful at full recovery than anticipated. The clamshell also worked well, though sometimes it contained little material if an object, such as a rail or timber, blocked closure of the bucket. This was not always a negative, as with the sixth clamshell grab (S-6). When the clamshell came up, it appeared to have only one timber in the mouth; however, when its contents were deposited on deck, it was found to be a gun carriage axle with both iron

wheels. The wooden axle appeared to have lain on its side on the bottom, only slightly buried in the mud, as the wood was heavily “worm-eaten” on three sides.

In addition to the surprisingly successful amount of recovery, the 12 test excavations were conducted in peak current, indicating the validity of conducting Mechanized Recovery throughout the 10-hour workday. This would prove crucial to enabling full coverage of the site by 2015 Mechanized Recovery in the allotted timeframe (35 workdays).



Figure 6-104. 14-ton, seven-finger grapple depositing initial test on deck. The sediment matrix was carefully hosed off the barge to the right and away from wreck site. The first six grapple tests were easily sorted and washed with no loss of material, even with the absence of a screen.



Figure 6-105. Clamshell grab being brought on board. Notice the timber disallowing closure of the mouth, with a resultant loss of sediment.



Figure 6-106. Initial processing of a clamshell grab. Over-built, the screen was difficult to access, affected processing efficiency, and raised safety concerns.



Figure 6-107. With the large 6-x-6-inch top grate raised, personnel had to enter the screen to wash sediment through two horizontal grates. The weight of the grates made them difficult to lift and clean, and the position of the screens was found to be inadequate, with numerous limitations on processing (i.e., removal of sediments, etc.).

Both the grapple and the clamshell were equipped with a centrally positioned USBL transponder that was employed to mark each excavation location on the topside GIS-based site plan. The six grapple tests were labeled G-1 through G-6 and the clamshell grabs initially were labeled C-1 through C-6 (Figure 6-108). When Mechanized Recovery commenced the clamshell designate “C” was changed to “S” so there would be no confusion during the recordation and processing of artifacts, as “C” could be mistaken for “G.” As shown in Figure 6-108, the footprint for each excavation was illustrated on the GIS site map as a circle that was slightly smaller than the actual mechanism coverage, with the grapple tests seen as 10-foot circles, and the clamshell grabs as 6-foot circles. This footprint designate allowed for immediate visualization of a specific excavation provenience as well as coverage obtained or still required in an area.

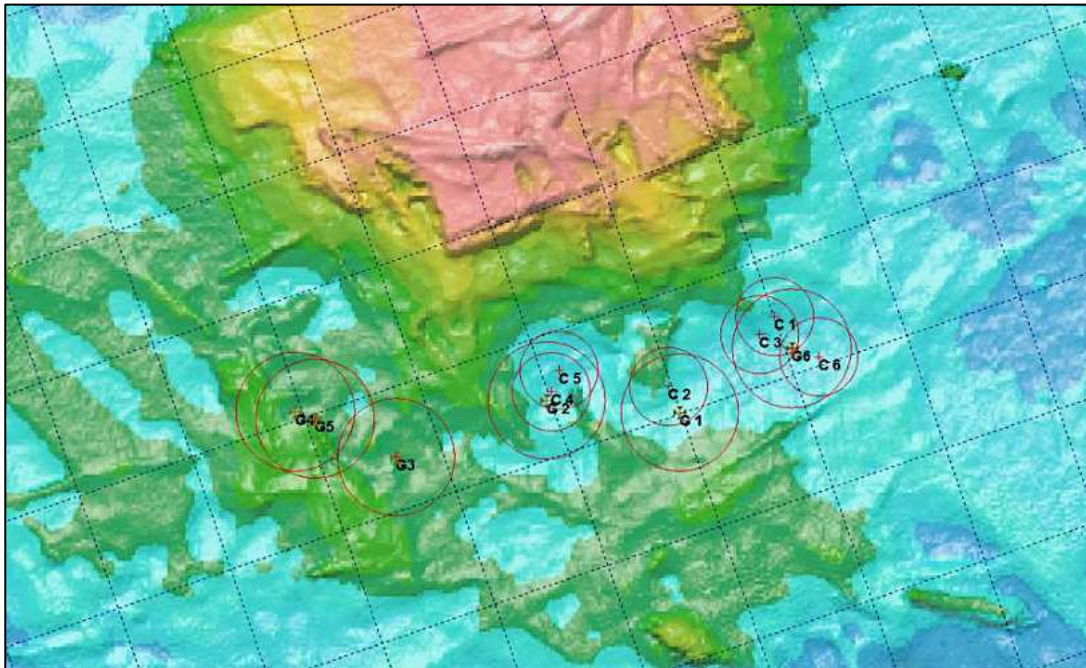


Figure 6-108. Locations of initial grapple and clamshell excavations south of the West Casemate. Note the differing footprint sizes (10-foot grapple tests and 6-foot clamshell grabs).

As would be the case throughout the Mechanized Site Recovery Phase, the excavations, be they grapple or clamshell, were not placed on the bottom until the mechanism was placed in the correct provenience position. The mechanism was lowered until just off the bottom, and when the mechanism was over the correct location or provenience, based on communication between the GIS-operating archaeologist and crane operator, the mechanism was lowered to the bottom. The provenience was marked via HYPACK with the excavation given a “G” or “S” label along with a consecutive number.

In total, 661 grapple tests (G-1 to G-661) and 1,441 clamshell grabs (S-1 to S-1,441) were conducted in 2015, although several came up empty (Figures 6-109 and 6-110). Grapple tests were conducted in an area followed by clamshell grabs until coverage was 100% and/or artifact recovery was negative for the area. The barge would then be moved to a different area of the site and the process would be repeated. More clamshell grabs were conducted, as more were required for the same area of coverage as the grapple tests. Mechanized recovery in 2017 would cover the East and West Casemates footprints, as well as expanded upslope and downslope coverage. For 2017, an additional 436 grapples (2G-1 to 2G-436), and 402 clamshell grabs (2S-1 to 2S-402) were conducted to complete mechanized recovery of the site.

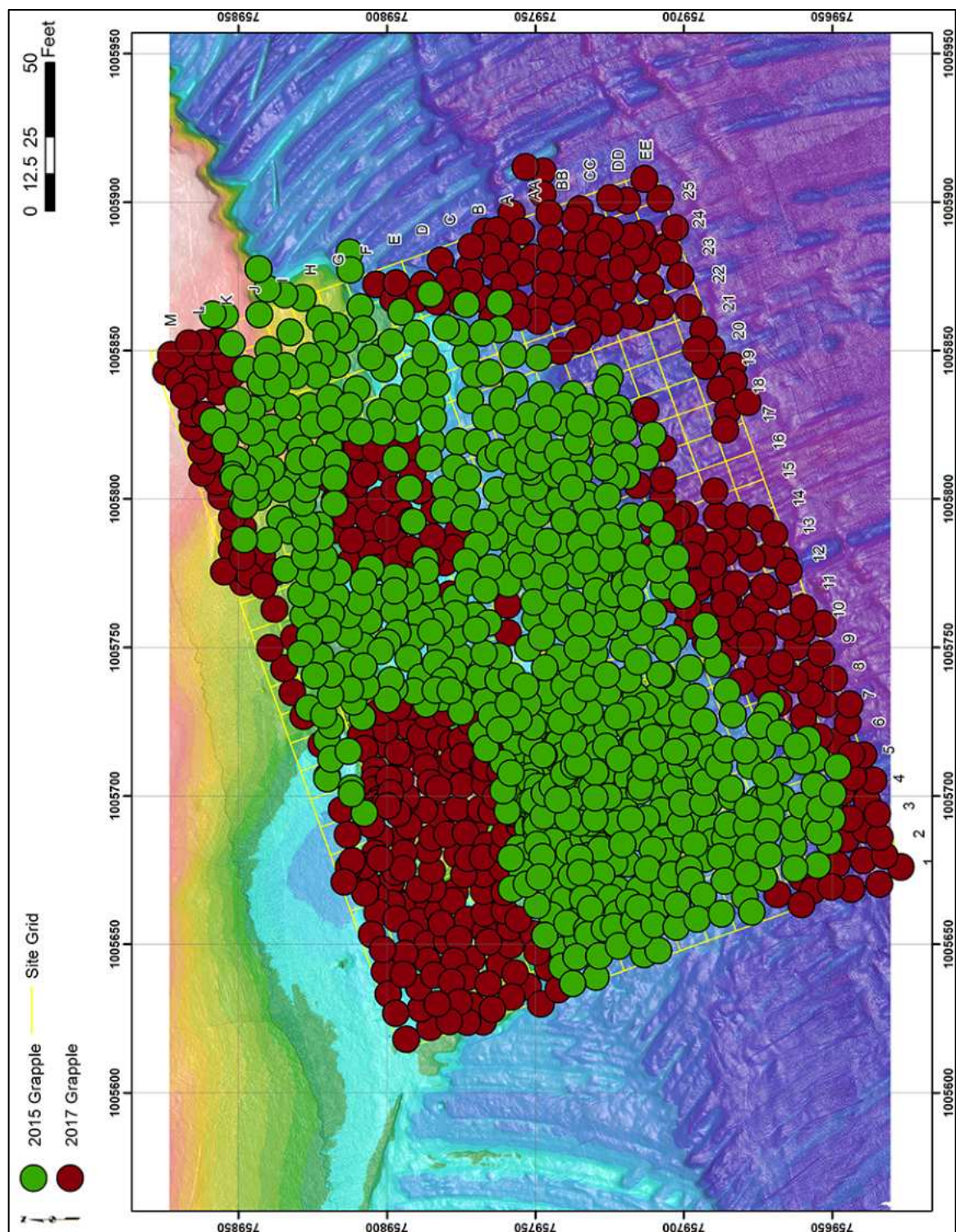


Figure 6-109. Grapple test coverage for 2015 and 2017 combined. Each test was numbered consecutively and covered a 10-foot wide area.

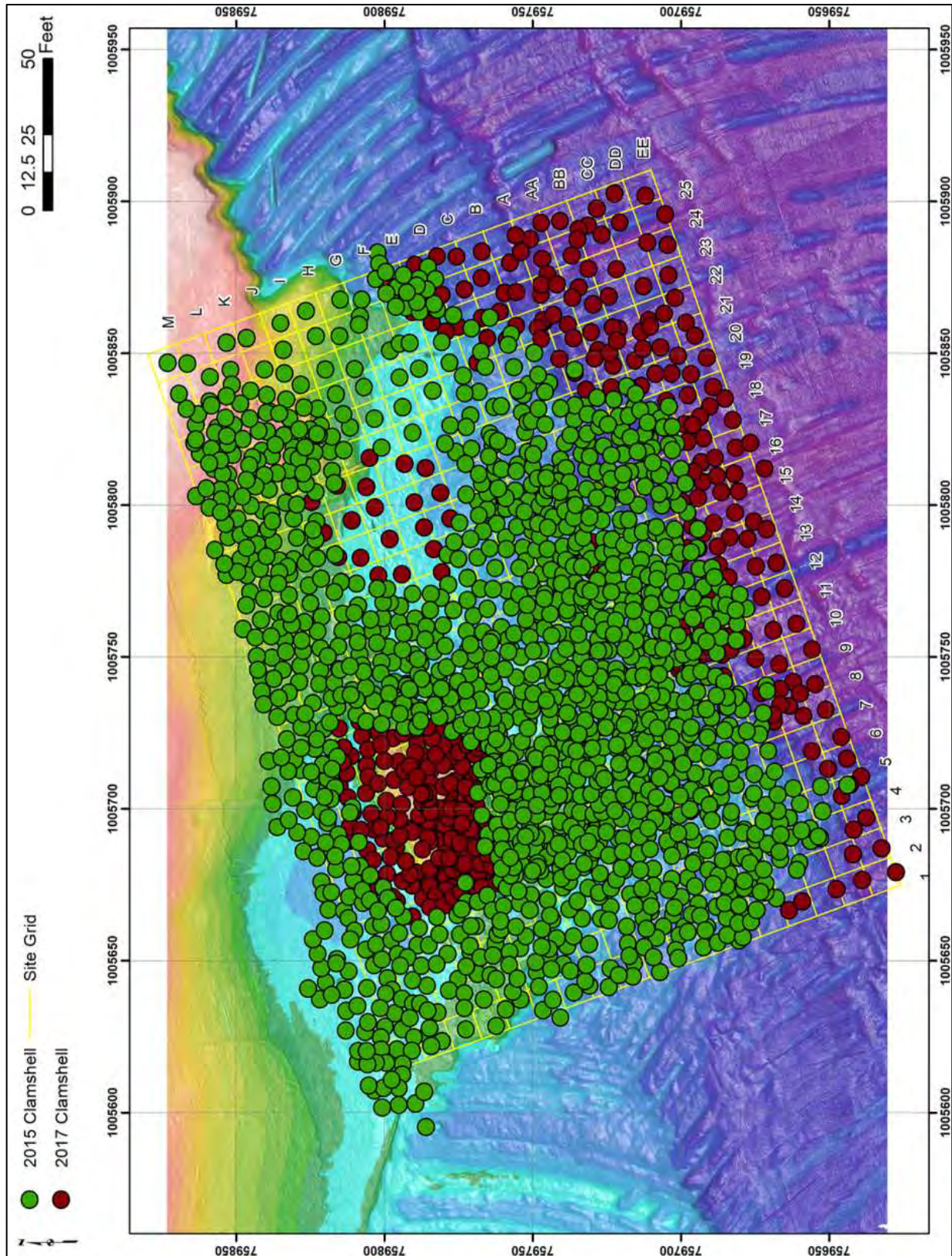


Figure 6-110. Clamshell grab coverage for 2015 and 2017 combined. Each grab was numbered consecutively and covered a 6-foot square area.

Based on findings from conducting and processing the initial 12 excavations, the final 2015 Mechanized Site Recovery Phase barge configuration saw the construction of eight simple, yet efficient screening bays, four on each side of the centrally located crane. The screening bays were located on what would be the northern side of the barge, with reburial roll-off containers lining the opposite side of the barge, along with numerous barrels and buckets for artifact collection (Figure 6-111). As presented in Figure 6-112, located at the edge of the northern side of the barge, the end of each bay had three screens, the two side screens angled into the main screen that could be raised easily after processing to wash over any unwanted shell or soil matrix. Wooden bunks divided screening bays from one another. In 2017, there would only be four screens on one side of the barge.

A storyboard (Figure 6-113) was placed on the roll-off container opposite each screening bay with the excavation's provenience designate (i.e., G-1 or S-149, etc.), then all artifacts recovered from that excavation were processed with that provenience number, employing it for photography, tagging, and cataloging. Illustrated in Figure 6-114, the excavations were processed by two teams of eight archaeologists that were further divided into two sub-teams. Each eight-person team processed two grabs each, each supervised by a designated crew chief. Prior to initial washing and sorting, the processing procedure commenced with four photographs being taken of the unprocessed grab, one from each side.

As outlined in the Final Phase III Permit (Appendix A) and as illustrated in Figure 6-115, after initial removal of the sediment matrix with high-pressure water hoses, rakes, and shovels, the artifacts were sorted into artifact groups and photographed. Then the crew chief, facilitated by the main conservator and Co-Principal Investigators, further sorted each artifact group into sets for reburial or conservation.

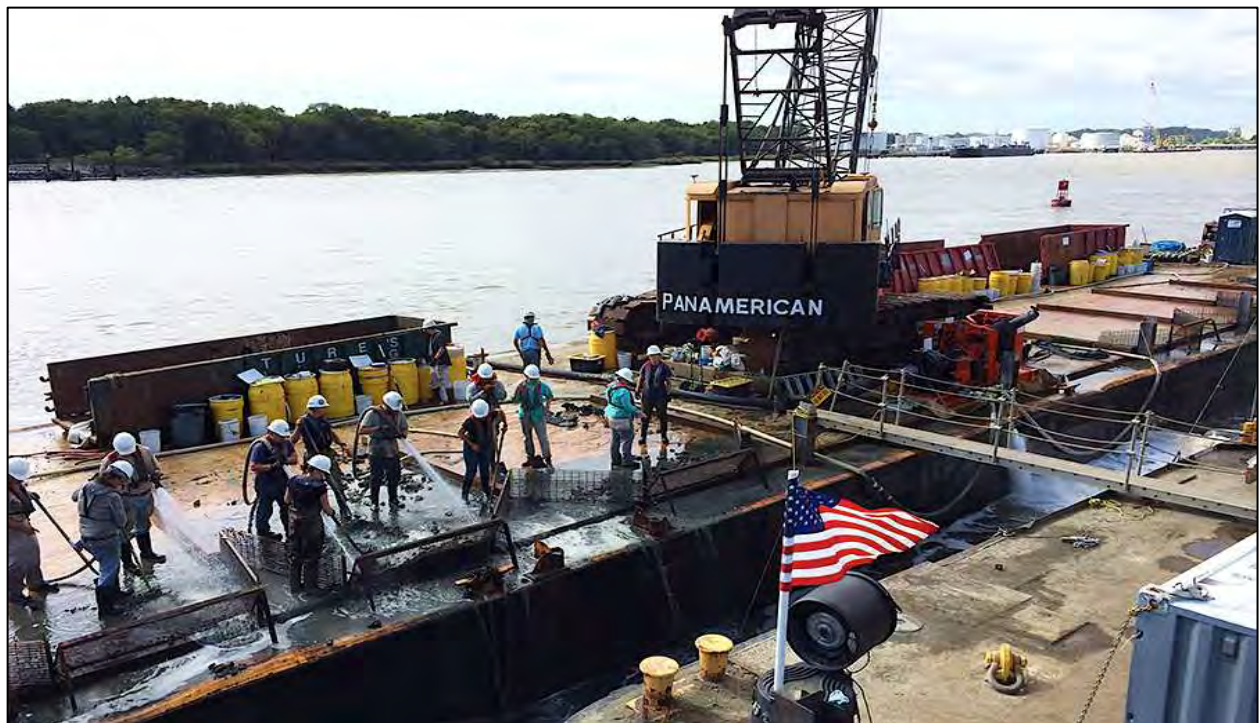


Figure 6-111. 2015 Barge layout with crane in the center and four screening bays on either side. The crane is depositing grabs on one side while the crew processes excavations on the other. Note that the sediment matrix was washed off the northern side of the barge while the excavations were taking place on the southern side. Also note the reburial roll-off containers, as well as the barrels and buckets for artifacts slated for conservation.



Figure 6-112. Close up of screening bay holding just-deposited clamshell grab S-14. Once deposited into the bay the sediment matrix was then hosed off the edge of the barge through three screens. Note the reburial roll-off containers, as well as the barrels and buckets for artifacts slated for conservation.

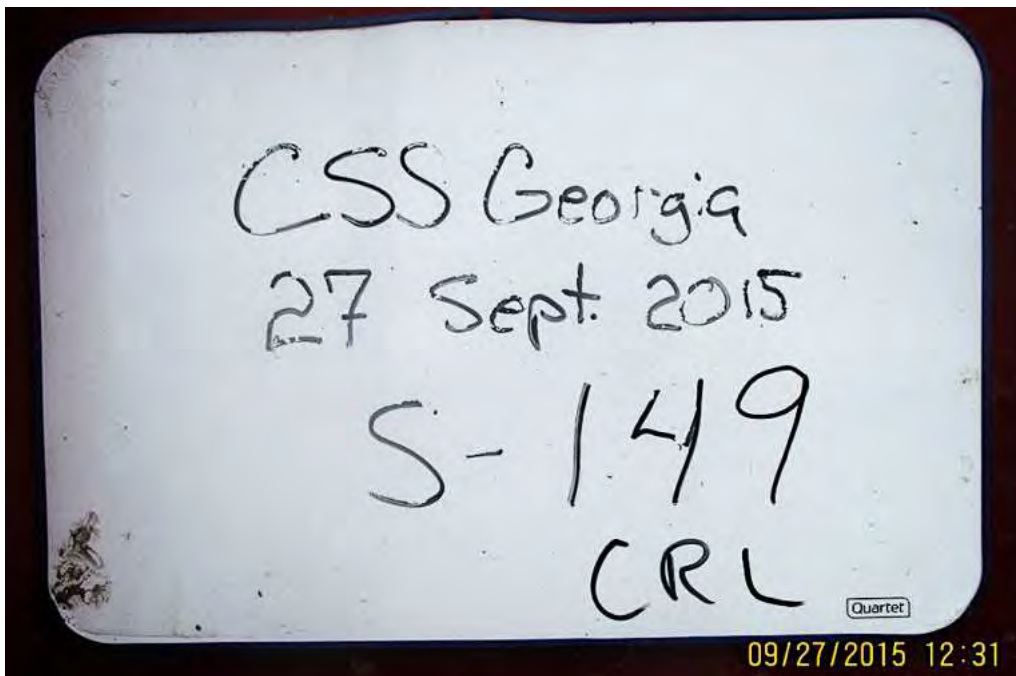


Figure 6-113. Storyboard for clamshell grab S-149. All artifacts recovered from an excavation were processed with that provenience number, employing it for photography, tagging, and cataloging. Note that “CRL” is present, indicating photographs are being taken of artifacts slated for conservation at CRL. The “CRL” would then be replaced with “RB” for those artifacts being processed for reburial.



Figure 6-114. Two teams of eight archaeologists processed the filled bays. Fire hoses powered by a high-pressure water pump were employed to wash the sediment matrix overboard while personnel with rakes and shovels identified, collected, and sorted material. Note the personnel at left sorting railroad iron.



Figure 6-115. After initial removal of the sediment matrix, the artifacts were sorted into artifact groups. The crew chief, facilitated by the main conservator and Co-Principal Investigators, further sorted each artifact group into sets for reburial or conservation. Shown here is material from grapple test G-187 slated for reburial. These artifacts were recorded as to type and number in the artifact catalog.

Unique items amongst those for conservation were photographed independently. Artifacts that comprised the conservation group were those that had diagnostic features such as tool marks, fasteners, fastener recesses, and design- and/or construction-related features. Artifacts sorted for reburial were those that had no diagnostic features, did not contribute to vessel structural analysis and reconstruction, nor contribute to a better understanding of life on the CSS *Georgia*. To aid in correct cataloging, when artifacts slated for conservation at CRL were ready for photographing, the letters “CRL” were added to the storyboard (see Figure 6-90 above) and a photograph of the storyboard would be the first photograph taken. The “CRL” would be replaced with “RB” before photographing those artifacts being processed for reburial.

An artifact catalog list was employed to record every recovered artifact regardless of being identified for reburial or conservation. All artifacts and material identified for reburial were tagged with provenience (i.e., G-54, S-145), photographed, and placed into roll-off containers. They were segregated by sheets of plastic, and/or placed in bags (Figure 6-116).



Figure 6-116. Roll-off reburial containers with tagged artifacts and groups segregated by sheets of plastic.

All clearly unique, significant, and diagnostic artifacts, all of which were kept for conservation, were counted, recorded on the artifact catalog, photographed, placed in containers (generally large 50 gallon plastic drums), and labeled with the recovery number (Figure 6-117). Similar artifact types (e.g., ceramics, glass, organics) were collected by type (Figure 6-118) and placed in labeled containers (i.e., small buckets; see Figure 6-117). All significant or fragile artifacts (i.e., pistols) were separated, accessioned with a unique number, photographed, recorded, and stored individually.

The project senior archeological staff made all decisions concerning assessment and sorting of miscellaneous rail, timbers, wooden artifacts, and other structural and nonstructural material

from the CSS *Georgia*. Detailed drawings and photographs were recorded for all diagnostic timber scantling using the Wood Recording form. Rails were similarly recorded (see Figure 6-119). The majority were tagged and placed in reburial containers, with some being retained for conservation as representative examples or for some unique feature.



Figure 6-117. Artifacts selected for conservation were placed into drums or buckets by group or class after initial recordation.



Figure 6-118. Example of small artifacts from an excavation being photographed. They were then separated by group (i.e., prehistoric ceramic, copper, etc.), bagged with provenience, and placed into buckets of similar artifact groups slated for conservation (see Figure 6-94).

In addition to recordation of timber and rail, any unique machinery was also photographed and sketched prior to it being placed into containers for transportation to CRL. Figure 6-120 illustrates what is believed to be a possible capstan base, a Brooke shell, and a Bolt from grapple test G-401 and Figure 6-121 shows the field drawing and initial postulated appearance/function.



Figure 6-119. Recording rail segments that will be reburied.



Figure 6-120. Initial photograph of G-401 showing machinery, a Brooke shell, and a Bolt (scale is in feet).

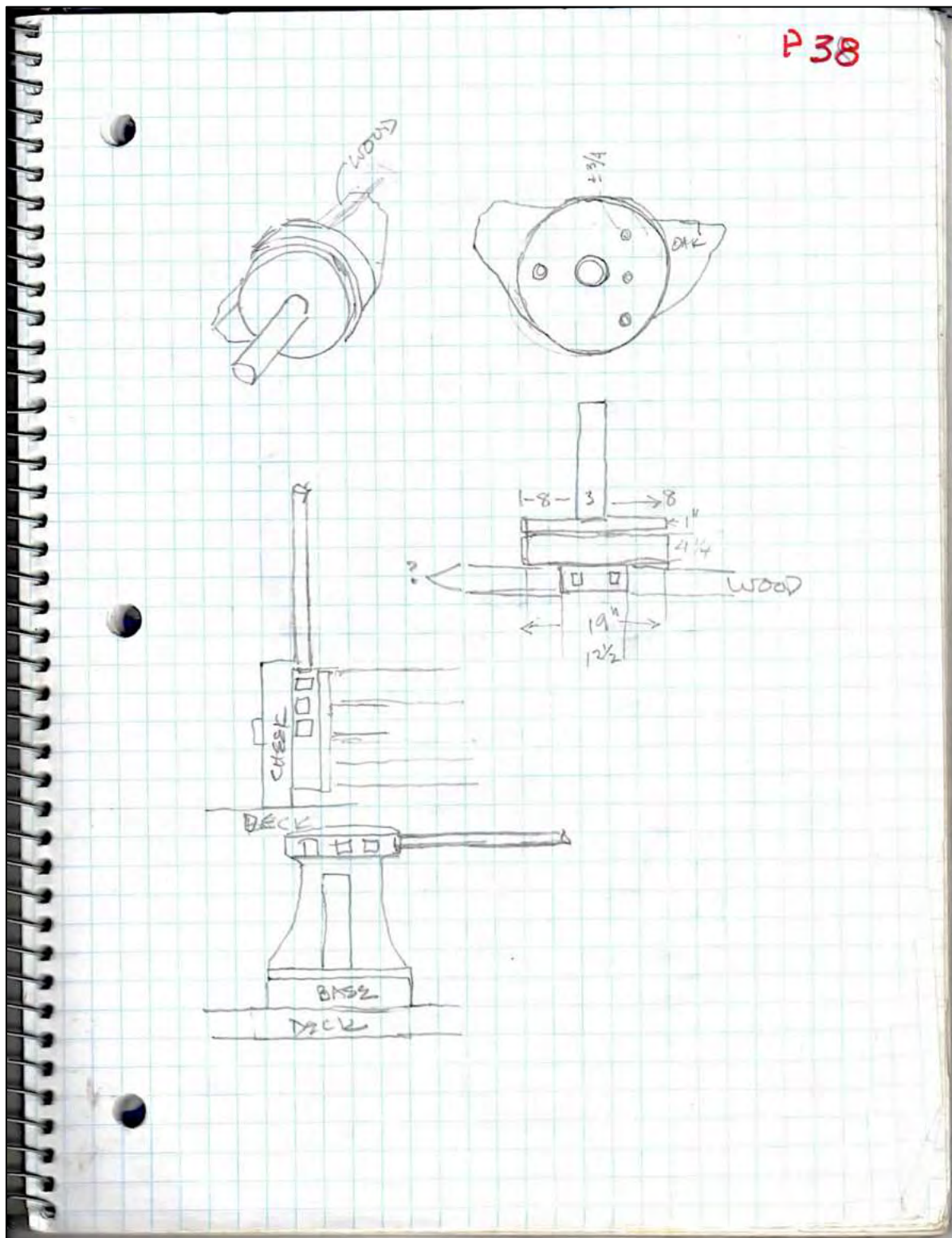


Figure 6-121. Field sketch of possible capstan base recovered in grapple test G-401. All field records including notes, sketches, catalog sheets, drawing forms, logs, etc., were photographed/scanned and made part of the electronic site record.

ARTIFACT RECOVERY AND ANALYSIS

The Mechanized Site Recovery methods were more successful than could be imagined, and the artifact recovery was literally amazing. In total, 29,718 artifacts were recovered during the 2015 Operations recovery efforts with over 27,000 coming from the Mechanized Site Recovery Phase alone. Whereas only 3,064 artifacts would be recovered in 2017. Of the combined recovered artifacts, 13,601 were shipped to CRL for conservation and 18,181 were reburied. The following *Artifact Recovery and Analysis* section illustrates the array of artifacts aspects of the site, and distribution patterns, which in itself is a very revealing site characteristic.

It must be stated that many artifacts could not be analyzed in depth because of two reasons, the nature of marine site conservation being a slow process and the sheer number of recovered artifacts. Many of the artifacts are still in various stages of conservation, and unavailable for analysis. This holds true for various pieces of machinery such as the steam cylinders, and cannon, which because of their size take a lengthy time in electrolysis. That said, thousands of artifacts have completed conservation and the images and analysis presented below offer a wealth of information on the ironclad.³

CLOTHING GROUP

Perhaps one of the more interesting classes of artifacts is the Clothing Group. Represented on the site by numerous uniform buttons, buckles, and medallions, there were also shoe parts and in one instance jewelry. Presented first, analysis and write-up of the buckle and medallion were performed by Jeffrey Pardee. Represented by one specimen each, these latter two items were both Union-issued and most likely the property of Union soldiers/officers who joined the Confederacy after succession, as was not uncommon.

Belt Buckle and Sash Medallion

Belt Buckle

Artifact 1878.1 is a Federal Eagles waist or sword belt plate (buckle), regulation 1851, issued to officers who carried swords or to those men in the cavalry (Figures 6-122 to 6-125). The buckle is made of cast brass and measures 85-x-56 millimeters (3.25-x-2 inches). On the front side is the design of an eagle with a shield that is holding both spears and olive branches in its talons. The eagle is within a wreath on three sides with a banner over top with the Latin phrase “E PLURBUS UNUM” (*out of many, one*). There are 12 stars surrounding the eagle with symmetrical rays above the banner. On the reverse side is a thin bent metal tongue meant to fasten the belt to a brass clasp or keeper. These were made beginning in the early 1850s in nearly all states and were continuously manufactured until the end of the Civil War. Besides slight design variations, the main composition of the Federal/Union eagle emblem did not change throughout the war years; however, militias did personalize their buckles with specific insignias or regimental numbers (Kerksis 1987: 370-376). Some smaller companies offered personalization and variation to the original design, but Artifact 1878.1 does not show any personalization. There were numerous variations of the design and our example resembles design 619 (O'Donnell and Duncan 2010). Union-issued, it was most likely the property of a Union officer that joined the Confederacy after succession.

³ *Nota bene*: as they become available 3-D artifact images can be viewed at <https://skfb.ly/6NUs6> courtesy of CRL.



Figure 6-122. Artifact 1878.1: (front) Federal sword belt buckle showing eagle and wreath, design 619 (courtesy of CRL, Texas A&M University).



Figure 6-123. Artifact 1878.1: (back) Federal belt buckle showing bent tongue (courtesy of CRL, Texas A&M University).



Figure 6-124. Example of the missing clasp (left) and how it would fit together (right; image courtesy of Harry Ridgeway, personal collection).

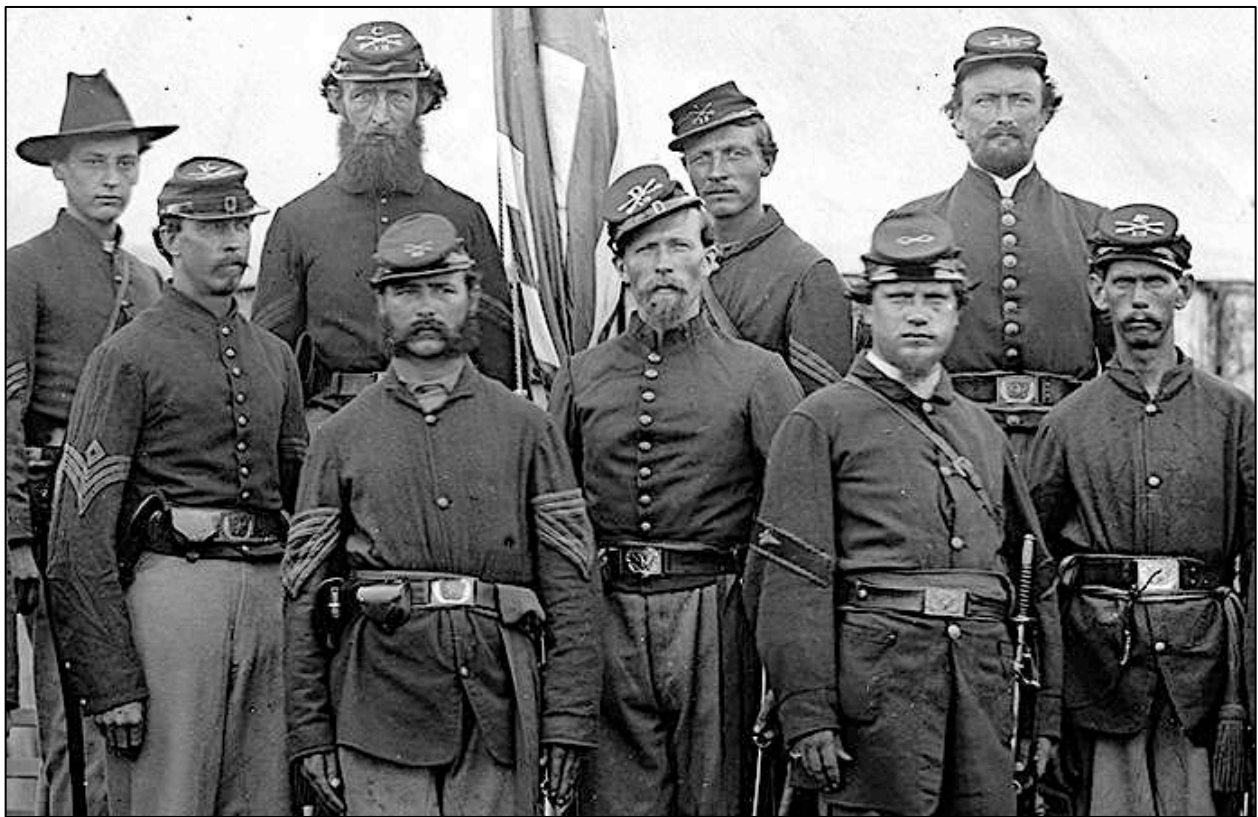


Figure 6-125. Historic Civil War-era photograph showing the 13th New York Cavalry wearing the type of Eagle Officers belt buckle recovered from the site (courtesy of Hanover Brass Foundry Reproduction Military Belt Plates 2019).

Eagle Breast Plate

Artifact 3284.7 is an eagle-embossed breastplate, regulation 1826, issued to Union soldiers (Figures 6-126 to 6-129). This artifact is made of cast brass measuring 66 millimeters (2.59 inches) across. On the front side, there is a depiction of an eagle holding arrows of war and olive branches of peace in its talons. On the reverse side, there are two sets of holes for the hooks that were necessary for attaching the plate to the cross-chest lanyard of a cartridge box.

These were made by multiple manufactures from the early 1850s to the end of the Civil War. Soldiers often referred to the plate as a “shoulder belt plate” (Lewis 2010:94-97). The maker’s mark is missing from the back of the artifact, making identification of the original manufacturer impossible to accurately determine.



Figure 6-126. Artifact 3284.7: (front) Federal eagle breastplate, regulation 1826 (courtesy of CRL, Texas A&M University).



Figure 6-127. Artifact 3284.7: (back) Federal eagle breastplate, regulation 1826 (courtesy of CRL, Texas A&M University). Note the two sets of holes where the original hooks would have been located.



Figure 6-128. Examples of what the hooks on the back of an eagle breastplate would have looked like and how they were attached to the sash belt of the soldier's cartridge box (images courtesy of Union Drummer Boy 2019).



Figure 6-129. Historic Civil War-era photograph showing the Federal eagle breastplate location attached to the sash belt of the Union soldier's cartridge box (image courtesy of Civil War Collector 2019).

Buttons

Twenty-four metal, glass, wood, bone, and composite buttons were recovered from the site (Table 6-02; see Figure 6-141). The buttons discussed in this chapter were identified using a combination of physical characteristics and analysis of their elemental composition. Karen Martindale and Kelsey Rooney performed analysis and write-up of the buttons.

Methodology

Since buttons have been a necessary part of everyday dress for centuries and have undergone a great deal of superficial change in that time, they can be very useful in dating sites. While some manufacturing processes have remained for decades or centuries, new methods were constantly created and old methods improved upon through time. Often, the image on the front of the button would only be used for a short period of time, changing with fashion trends or military regulations. Backmarks, whether the name of the manufacturer, location of manufacture, or describe the quality of the material, can further narrow the time frame in which they were manufactured. Where possible, the authors compared the decoration and backmark of each button from the site of the CSS *Georgia* to buttons in scholarly sources to find the closest match. In order to provide a *terminus post quem* for buttons without decoration or backmark, the authors referenced the typologies by Olsen (1963) and South (1964); together, they represent most of the common manufacturing methods from the seventeenth to nineteenth centuries.

Prior to conservation, ten buttons were tested with X-Ray Fluorescence spectroscopy (XRF) to identify the components used in their manufacture. XRF identifies the elements of which an object is composed (Artoli 2010: 1 – 15). Using x-rays to knock electrons near the nucleus out of orbit, the spectroscope then reads the energy created by other electrons falling into the vacated space; this is called “fluorescing” (Artoli 2010:1-15). Each element has a distinct level of energy, measured in kiloelectron volts.

While the visible peaks illustrated in the figures below are indicative of the intensity with which the elements return, this is a relative measurement. There are many factors that make XRF a qualitative rather than quantitative methodology. Several different interactions can determine how an element is expressed on the sensor. For instance, lead is not soluble in copper (Smith 2012), and can clump together to show a higher percentage of lead in specific areas of an artifact. Archaeological artifacts are often composite materials or non-uniform alloys (Smith 2012). As XRF was initially intended for modern manufactured goods, non-uniform alloys can present a challenge to capturing the full spectrum of materials present. In addition, a single button may be comprised of multiple materials. For metal buttons, it was common for a cheaper metal, such as brass, to be gilt in red or yellow gold, plated with silver or tin, or even painted (White 2005: 65). Two- and three-piece buttons could be made with front, back, and a shank that were all different metals, and the shanks were often brazed or soldered to the back die or a cast button (Olsen 1963, South 1964). Due to these practices, the elements present can vary along the button’s surface, and numerous places on each sample should be tested (Smith 2012:39-40). Since it can be difficult to test a variety surfaces on small objects, the alloys of both the front and the back of each metal button were established, then compared to reveal any difference.

Of the ten buttons tested prior to conservation, four were brass or another copper alloy; two were pewter; two were glass; one was iron; and one was wood. One button, decorated by wrapping textile around an iron base, was tested after conservation, as the degraded metal was too fragile to identify with magnets or other physical methods.

Predominantly, the elements found in the brass artifacts were copper, zinc, and iron. There were other trace elements such as manganese, nickel, antimony, and strontium present, but in such small amounts, it is unlikely these were purposely included in the alloying processes. Table 6-02 shows the components of all seven metal buttons tested. Elements with a significant presence,

represented as a high peak in the figures, are indicated by an “X” on the table; a “T” indicates there are only trace amounts of the element present.

Knowing the composition of the buttons is helpful not only in re-creating a timeline and source for the buttons, but also during conservation. Identifying the composite metals can help prevent the artifact from being incorrectly treated during conservation.

Civil War Buttons

Two identical copper alloy buttons with an eagle emblem (Figure 6-130) are the only buttons from the site that may represent the Union Army, specifically General Staff. The buttons depict an eagle facing to the right with a striped shield on its chest, grasping an olive branch in the right claw and three arrows in the left. Both are two-piece buttons.

Table 6-02. Physical Characteristics and X-Ray Fluorescence Spectroscopy Analysis of the Buttons.

Physical Characteristics					XRF Analysis									
Artifact	Material	Description	Backmark	Diam. (cm)	Sb	Cu	Fe	Hg	Pb	Mn	Ni	Sr	Sn	Zn
1853.9	Iron	Flat disc	-	1.8	-	T	X	-	T	T	-	-	-	-
1879.9	Copper alloy (Brass)	Eagle motif	● SCOVILL MFG CO ● WATERBURY	1.8	-	X	X	T	T	-	-	X	T	X
1883.2	Wood	4 holes	-	2.03	-	-	-	-	-	-	-	-	-	-
1910.11	Glass	White, 4 holes	-	1.5	-	-	-	-	-	-	-	-	-	-
2128.5	Copper alloy	Plain	TREBLE GILT COLOUR	1.3	-	-	-	-	-	-	-	-	-	-
2182.4	Metal and Textile	4 holes	-	2.0	-	-	-	-	-	-	-	-	-	-
2222.6	Copper alloy	Floral motif	-	2.0	-	-	-	-	-	-	-	-	-	-
2292.2	Pewter	“16” Rope border	-	2.4	-	T	T	T	X	-	-	-	T	T
2358.1	Copper alloy	“I” (Infantry)	-	2.2	-	-	-	-	-	-	-	-	-	-
2359.5	Glass	White, 4 holes	-	1.2	-	-	-	-	-	-	-	-	-	-
2369.1	Copper alloy	Floral motif	-	2.0	-	-	-	-	-	-	-	-	-	-
2443.1	Copper alloy	“I” (Infantry)	-	2.0	-	-	-	-	-	-	-	-	-	-
2493.13	Wood or Bone	4 holes	-	1.97	-	-	-	-	-	-	-	-	-	-
2591.2	Glass	White, 4 holes	-	1.0	-	-	-	-	-	-	-	-	-	-
2636.4	Copper alloy (Brass)	Georgia state seal	-	2.5	-	X	T	T	T	-	T	-	T	X
2694.5	Pewter	Plain	-	1.9	-	-	-	-	-	-	-	-	-	-
2701.4	Pewter	4 holes	-	1.7	-	T	T	T	X	T	-	T	X	T
2739.2	Pewter	Plain	-	1.9	-	-	-	-	-	-	-	-	-	-
2751.3	Copper alloy	Eagle motif	● SCOVILL MFG CO ● WATERBURY	1.8	-	-	-	-	-	-	-	-	-	-
2761.4	Copper alloy	Louisiana state seal	-	2.1	-	-	-	-	-	-	-	-	-	-
2767.9	Copper alloy	“I” (Infantry)	-	2.3	T	X	T	-	T	-	-	-	T	-
2794.9	Pewter	Fouled anchor, Rope border	-	1.9	-	-	-	-	-	-	-	-	-	-
3004.3	Copper alloy (Brass)	4 holes, recessed	J.H. DANIEL COL S. GA	2.3	-	X	T	-	-	-	-	-	T	X
3396	Pewter	Fouled anchor, Rope border	-	2.5	-	-	-	-	-	-	-	-	-	-

Key: antimony (Sb), copper (Cu), iron (Fe), mercury (Hg), lead (Pb), manganese (Mn), nickel (Ni), strontium (Sr), tin (Sn), and zinc (Zn).

In 1854, a general service button was specified for all enlisted men to simplify button procurement; the eagle device is similar to those previously employed, but no letter is on the shield—for example, an “I” indicating Infantry, or an “A” indicating Artillery (Tice 1997:140). The preponderance of Union Army buttons found in Civil War camps and battlefields are of this type (Tice 1997: 140). Albert (1963: 3) notes that because supplies were scarce in some areas, it was not uncommon for buttons to be removed from old uniforms and sewn onto new uniforms, so it is possible that they were reused on Confederate uniforms.

These two buttons are also the only military buttons retrieved from the site with backmarks. The backmarks read “• SCOVILL MFG CO • WATERBURY.” This backmark was produced between 1855 and 1860 (Tice 1997: 32). Buttons bearing a backmark with the Scovill name first appeared in 1811 (Tice 1997: 27). Originally based in Waterbury, Connecticut, the Scovill Manufacturing Company grew to become one of the largest button manufacturers on the east coast (Tice 1997: 39).

Given the design and the backmark, these buttons would be grouped into Tice’s (1997: 141-143) GEN215 series and Albert’s (1976: 40-41) GI 94A series. The front and back of CSSG 1879.9 were tested to determine if the compositions differed (Figures 6-131 and 6-132). The front returned strong results for copper, iron, and zinc. There were also trace amounts of mercury, lead, tin, and strontium. The back had the same elements present, although the iron was much less prominent, coming in fourth strongest. This is most likely due to the large ferrous staining present on the front face, rather than a difference in the alloying processes of the two halves.



Figure 6-130. Union general service buttons (courtesy of CRL, Texas A&M University).

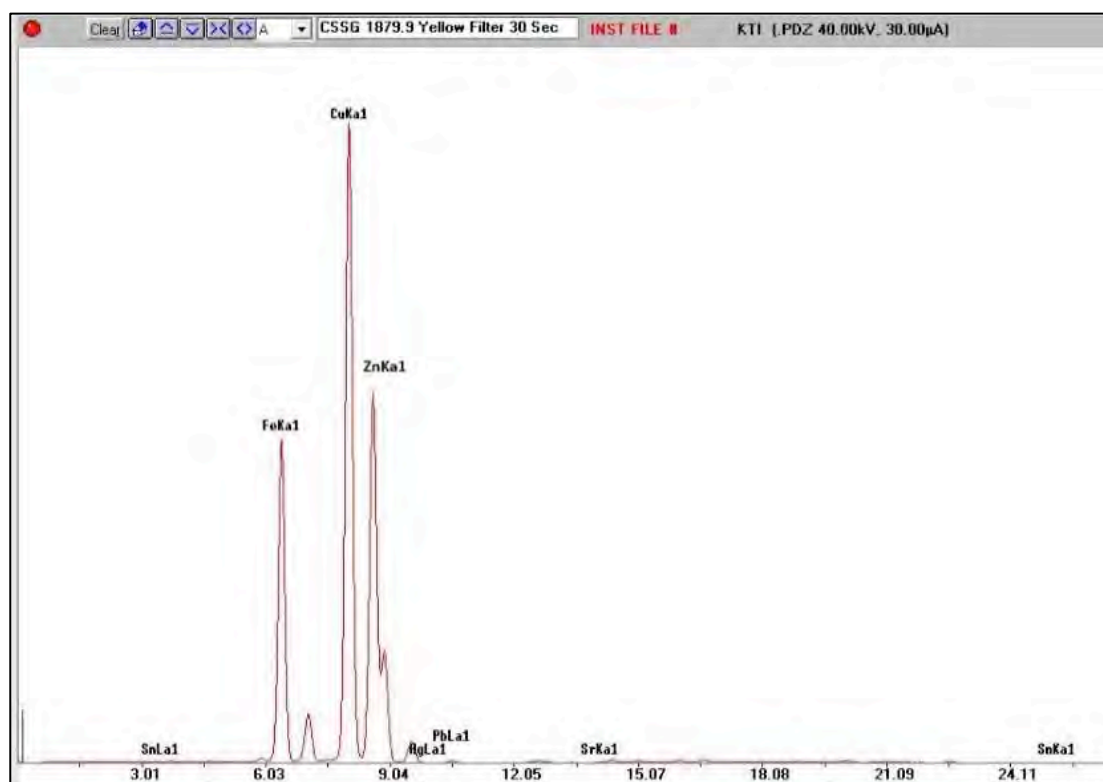


Figure 6-131. XRF results of the front of CSSG 1879.9 (courtesy of Kelsey Rooney, Texas A&M University, 2016).

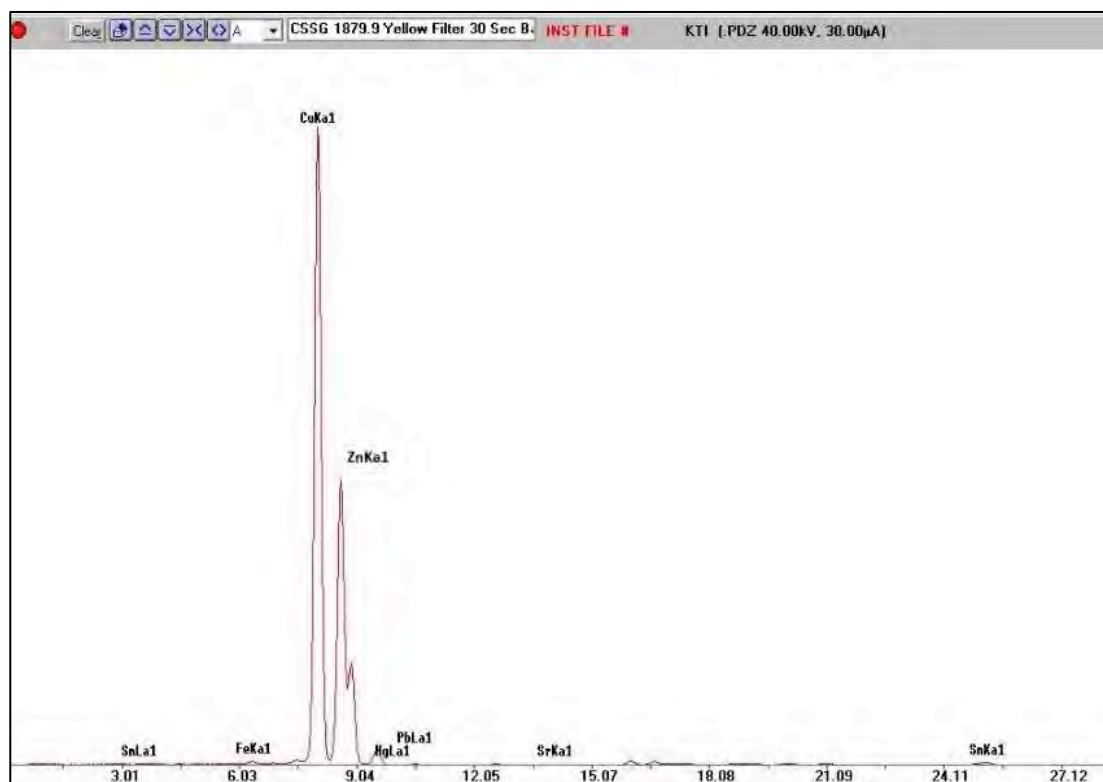


Figure 6-132. XRF results of the back of CSSG 1879.9 (courtesy of Kelsey Rooney, Texas A&M University, 2016).

Due to a lack of industrial development in the South and an effective Union naval blockade preventing many European goods from reaching the southern states, the Confederate forces employed small shops and home industries to provide goods such as buttons (Albert 1963: 2, Tice 1997: 2, 197). At the beginning of the war, most soldiers wore uniforms with metal buttons bearing letters or state seals, usually attributed to state militias; as the war continued, undecorated buttons of wood or bone were also common (Tice 1997:197).

Three Confederate Infantry buttons were found on the site (Figure 6-133). CSSG 2443.1 and CSSG 2767.9 are single piece casts with no backmarks. CSSG 2358.1 is the front die for a two- or three-piece button; since the back die is missing, no backmark is present. There may be several reasons the back die is not present, the most likely being that it was made of a material, such as iron, that degrades easily and simply corroded prior to excavation of the site; if separated on purpose, it is possible the front die was used as a mold for new buttons if a soldier needed a replacement in the field (Tice 1997: 2-5). CSSG 2767.9 was tested with the XRF spectrometer, revealing a copper alloy with trace amounts of lead, iron, tin, and antimony; the presence of tin and lack of zinc indicates that it is likely bronze rather than brass.

Because Infantry buttons are so common, without a backmark it is not possible to positively identify the manufacturer or a narrow date range for the three buttons.

Two buttons with state seals were found on the site, one belonging to Georgia and one to Louisiana. The Georgia legislature adopted the state's coat of arms in 1799. It depicts three pillars supporting an arch bearing the word "Constitution," representing the three branches of government supporting the constitution. Banners inscribed with "Wisdom," "Justice" and "Moderation" wind around pillars. A militiaman with his sword drawn symbolizes defense of constitution by state military forces (Albert 1963: 65, Tice 1997: 269).



Figure 6-133. Confederate Infantry buttons (courtesy of CRL, Texas A&M University).

CSSG 2636.4 (Figure 6-134 top) is a two-piece button made of a copper and zinc alloy with trace amounts of mercury, lead, tin, nickel, and iron; and there is no backmark. The closest match found at the time of publication is Albert's (1963: 65, 67) GA 61B.



Figure 6-134. Georgia (top) and Louisiana (bottom) buttons bearing state seals (courtesy of CRL, Texas A&M University).

Governor William Claiborne chose a brown pelican for the Louisiana seal between 1812 and 1815, though the symbol was not formally adopted until 1902. Native to the state, the bird is depicted injuring its breast to provide blood to nourish its young; according to Christian symbolism, the pelican embodies Christ's blood given in a sacrificial act for man's salvation.

During the latter days of the Civil War, the governor of the Confederate part of Louisiana, Thomas O. Moore, used a pelican seal with its head facing to its left, with many nestlings; the pro-union governor, George F. Shepley, used the seal with the bird's head turned to the right, with only four nestlings (Tice 1997: 286).

CSSG 2761.4 (Figure 6-134 bottom) is a two-piece button made of a copper alloy, with no backmark. The background is lined, and the pelican faces to the right, feeding at least four young, which are not well defined. It is most likely part of Tice's (1997: 292, 294) LA249 series, produced by Bellenot in New Orleans at the beginning of the war; it is one of the most common Louisiana militia buttons found on sites—in fact, so many buttons were made that the dies began to show wear, which may be why it is difficult to decipher fine details in this button.

Revolutionary War Buttons

Three buttons from the site can be traced to the Revolutionary War period (Figure 6-135). CSSG 2292.2 is a cast pewter button with the number “16” inside a rope border. The shank is missing, but a mold seam is visible on the back. This design was used for the British Army's Sixteenth Regiment of Foote. The regiment was stationed in Pensacola, Florida beginning in 1767 and sent out troops to other locations as needed; some troops were stationed in Savannah, Georgia between 1778 and 1782; the regiment returned to England in March 1782 (Troiani and Kochan 2012: 61-62). XRF tests show that CSSG 2292.2 is created from a lead alloy with trace amounts of zinc, tin, iron, copper, mercury, and strontium.



Figure 6-135. Revolutionary War buttons (courtesy of CRL, Texas A&M University).

There are two cast pewter buttons featuring a fouled anchor inside a rope border. The shanks are missing, but a mold seam is visible on the back of both buttons. These buttons were most likely used by the British Royal Navy; indeed, nearly identical buttons have been found on the 1758

ship of the line HMS *Invincible* (Bingeman and Mack 1997). However, according to Troiani and Kochan, it was not only the British Royal Navy who used these buttons:

“As early as 1748 specially designed buttons were authorized for different ranks of commissioned officers and midshipmen...Common seamen did not have standardized uniforms...Although there was no regulation for these ranks, it is known that various types of “anchor” buttons (in both metal and pressed horn) were sometimes worn. Such buttons could have been applied by individual or perhaps captain’s whim but are also known to have sometimes been furnished on the ‘slop clothing’ purchased by pursers or the Marine Society from various clothiers or ‘slop merchants.’ Due to the large number of captains’ and lieutenant’s buttons found it is evident that all do not relate to the Royal Navy and that civilians and merchant seamen probably also purchased them for private use.” (2012: 16-17).

Beginning in 1787, the British Royal Navy adopted a button design with an anchor inside a smooth oval ring, though it took several years for the style pictured above to completely disappear from uniforms (Wilkins 2005: 11-13).

Unidentified Buttons with Markings

Two identical buttons with a distinct floral motif and no backmark remain unidentified (Figure 6-136). At the center is a six-petal flower; this is wreathed by laurels, the outer circle is composed of alternating five-petal flowers and five-lobed leaves. Both buttons are copper alloys, single cast with spun backs and marks on the back where a wire would have been soldered. Spun-back buttons, characterized by the concentric circles on the backside, were used by both civilians and the military from the 1720s to the end of the Revolutionary War (Olsen 1963:552, South 1964:115, 117).

CSSG 3004.3 is made of a copper and zinc alloy. One side is blank, and the other has a backmark that reads “J.H. DANIELS / COL S. GA;” there are four holes in the center, which is slightly sunken. The authors have been unable to identify a source for this backmark. Pressed copper alloy buttons such as this were present from the 1830s (South 1964:115, 124). It was the only copper alloy button tested that does not contain lead, suggesting a later manufacture date.

CSSG 2128.5 is a copper alloy button with a copper alloy eye. The front has no markings, but there is a backmark, which reads “TREBLE GILT / COLOUR.” The backmark does not indicate any manufacturer in particular, but rather the quality of the button: it may have been gilt in red or yellow gold. According to Olsen (1963:552), these buttons are common finds in archaeological sites, but are difficult to date because of their simplicity and wide use by civilians and soldiers alike; they were even used as trade goods with local Native Americans. Buttons of this type, with the stamped backmark, have existed since at least 1800 (South 1964:115, 120-121).

Unmarked Buttons

Several buttons recovered from the site have no markings (Figure 6-137). Although it is not possible to determine exactly when the buttons would have been in use, it is possible to provide the earliest manufacturing date possible by the method of manufacture.

Two pewter buttons, CSSG 2739.2 and CSSG 2694.5, are single piece casts with mold seams at the back. There are also visible holes where an iron wire would have attached. According to Olsen (1963:553), buttons like these began to be manufactured around 1760.



Figure 6-136. Unidentified buttons with markings (courtesy of CRL, Texas A&M University).



Figure 6-137. Unidentified plain metal buttons (courtesy of CRL, Texas A&M University).

CSSG 1853.9, which did not survive conservation, was composed of iron and may be a single piece cast mold or the back of a two- or three-piece button. It is also possible it was the iron core of a textile-covered button like CSSG 2182.4 (described below).

A single pewter button, CSSG 2701.4, has four holes and a mold seam at the back. Buttons of this type began to be manufactured around 1800 (Olsen 1963:552-553). The XRF results of this button (Figure 6-138) show that lead and tin are the most prominent materials. The tin electrons were not only being knocked loose from the innermost level of electrons (SnKa1), closest by the nucleus, but also electrons from the level above (SnLa1), indicating that the tested area contained high levels of tin in contrast to lead, though lead is still prominent. Trace amounts of iron, strontium, mercury, and copper were also observed. This was consistent with the findings from the Revolutionary War button CSSG 2292.2. The strong presence of lead can be used to date the pewter before the twentieth century, when lead was a popular compound in pewter.

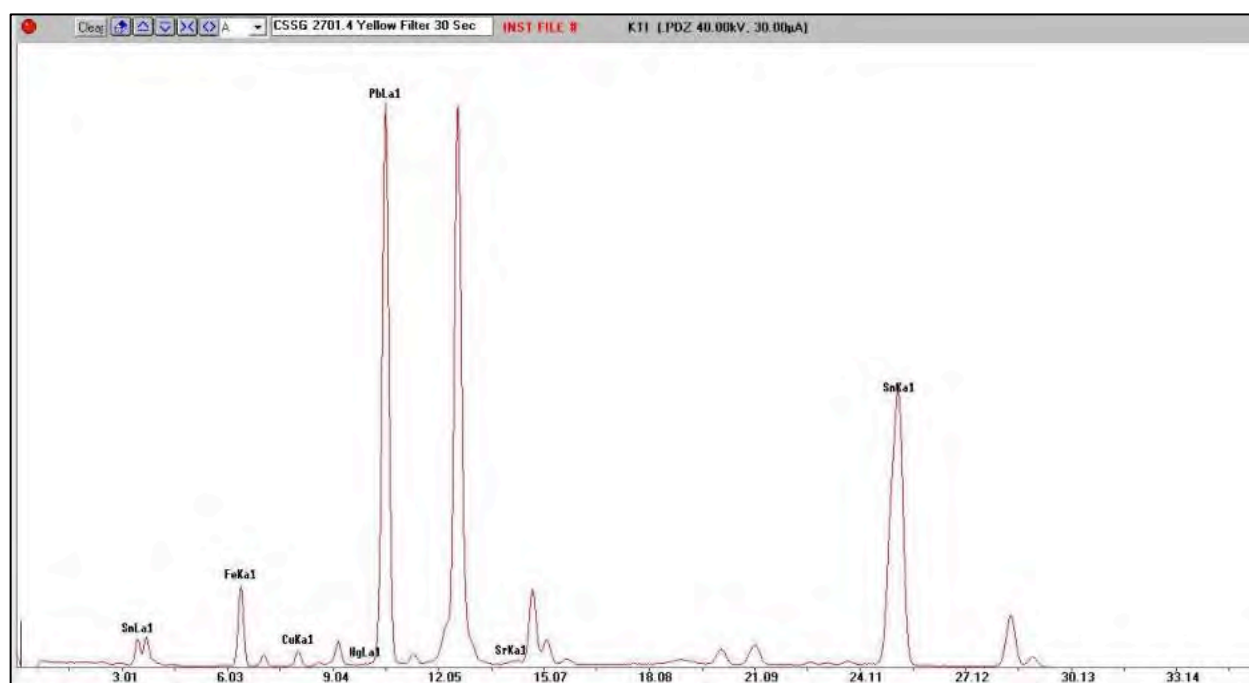


Figure 6-138. XRF Results of CSSG 2701.4 (courtesy of Kelsey Rooney, Texas A&M University, 2016).

In addition to the unidentified metal buttons, there are two wood or bone buttons, a textile-covered button (Figure 6-139), and three milkglass buttons. Wood and bone were two of the earliest materials to be made into buttons, and could easily be worked in any home, whether used on their own or covered in textile or thread (Marcel 1994:8, 15, White 2005:69-72). Both the wood and glass buttons would have been used for utilitarian purposes, such as fastening underclothes or shirts (Marcel 1994:14-15, White 2005:69-72).

The three milkglass buttons (see Table 6-02) are all convex with four holes. Although glass buttons were present in small amounts in the eighteenth century, plainer, more utilitarian buttons such as these became more popular in the nineteenth century (Marcel 1994:5, 14, White 2005:72).

The composite button, CSSG 2182.4, appears to be comprised of a metal disc covered in textile. XRF analysis (Figure 6-140) shows a strong presence of iron and nickel. Iron was probably used to construct the disc; while the amount of nickel present could indicate nickel-plating to the disc.

Nickel may have been present in the textile, but is not commonly used for pigmentation; it also bonds well with iron atoms and may have come from another object underwater (Christopher Dostal electronic communication, 2017). Textile-covered buttons, most popular in the eighteenth century, were usually made with a wood or bone core, but some of the earliest were made with a wire core; although any textile could be used, the pattern was usually chosen to match an article of clothing (White 2005:65-66).



Figure 6-139. Wood and composite buttons (courtesy of CRL, Texas A&M University).

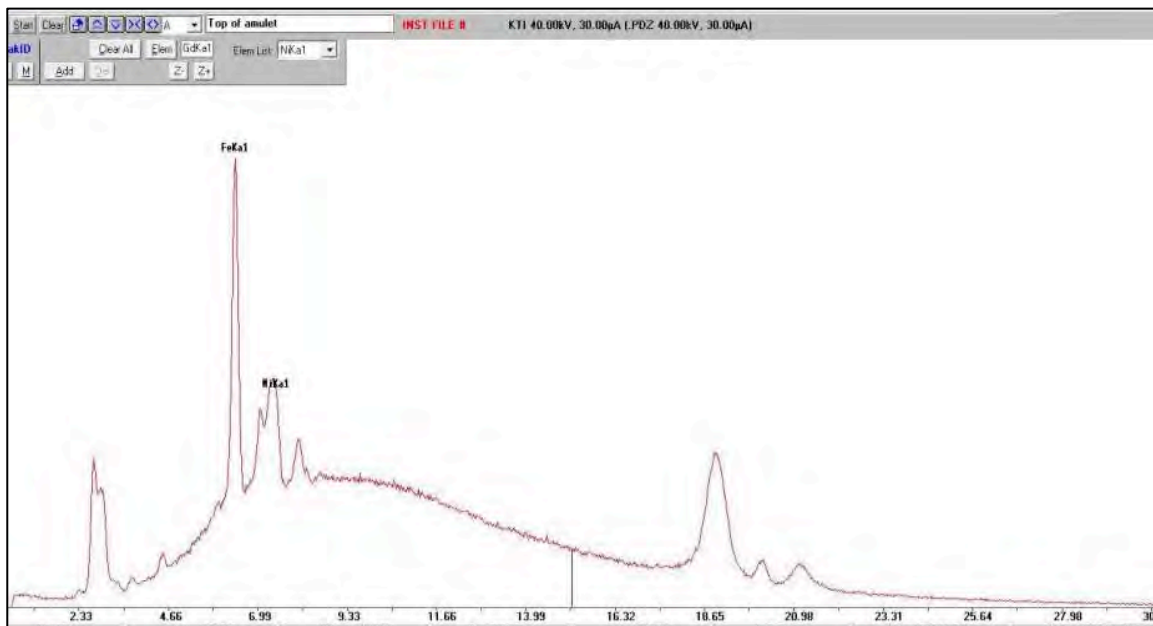


Figure 6-140. XRF results of CSSG 2182.4 (courtesy of Christopher Dostal, Conservation Research Laboratory, Texas A&M University, 2017).

Summary

CSS *Georgia* was a Confederate vessel, scuttled before the Union forces could capture it. Such a site is expected to be a time capsule of Civil War artifacts, but analysis of the buttons shows that the site itself has a much broader time range, as three of the identified metal buttons can be traced to the Revolutionary War period, and several of the unidentified buttons could have been manufactured decades prior to the Civil War. Additional research into personal accounts, troop movements, and nearby archaeological sites with buttons could identify some of the unmarked buttons, determine whether the two eagle motif buttons were more likely used by Union or Confederate forces in Savannah, or answer the question of why a Louisiana militia button was found on the site. XRF analysis was used in this chapter as a qualitative tool, to determine the elements present in each button in order to determine the best conservation treatments and to analyze buttons too fragile for other means. Should a comparative library of cupreous alloys be created, a quantitative analysis could be used to further refine the XRF data. This may clarify the quality of the metal used to create the buttons, echoing the availability of metal types in the resources-starved South, and may serve to narrow the date range for the tested buttons. In a site without stratigraphy to develop a relative dating system, even the smallest artifacts can provide context.

Footwear

Their general site provenience shown in Figure 6-141, 68 boot or shoe fragments, were recovered from the site. Most are small fragmentary pieces of leather with no complete shoe or boot, the soles of several examples being the most intact portion of recovered footwear. In-depth analysis was not conducted on these, as the majority is still in conservation. However, the most complete examples that allow for a visual analysis and illustrate variation in the sole shape and composition are presented in Figures 6-142 to 6-145 below.

Jewelry

Two small pieces of jewelry were recovered from the site. Artifact 2521.4 is a small cast gold piece just under 1 inch in length. As illustrated in Figure 6-146, the piece has a setting for a stone that is now missing. The opposite end has what appears to be solder of some type on the back, possibly indicating a hook location. If this is correct, the piece could possibly represent an earring or small pendant. The second piece classified as jewelry, Artifact 2436.2, is actually an ornate buckle. With a 2.5-inch diameter, the cast bronze circular floral wreath buckle was recovered from Unit 14-B. Presented in Figure 6-147, it has a tang at right center on the back of the buckle used for fastening.

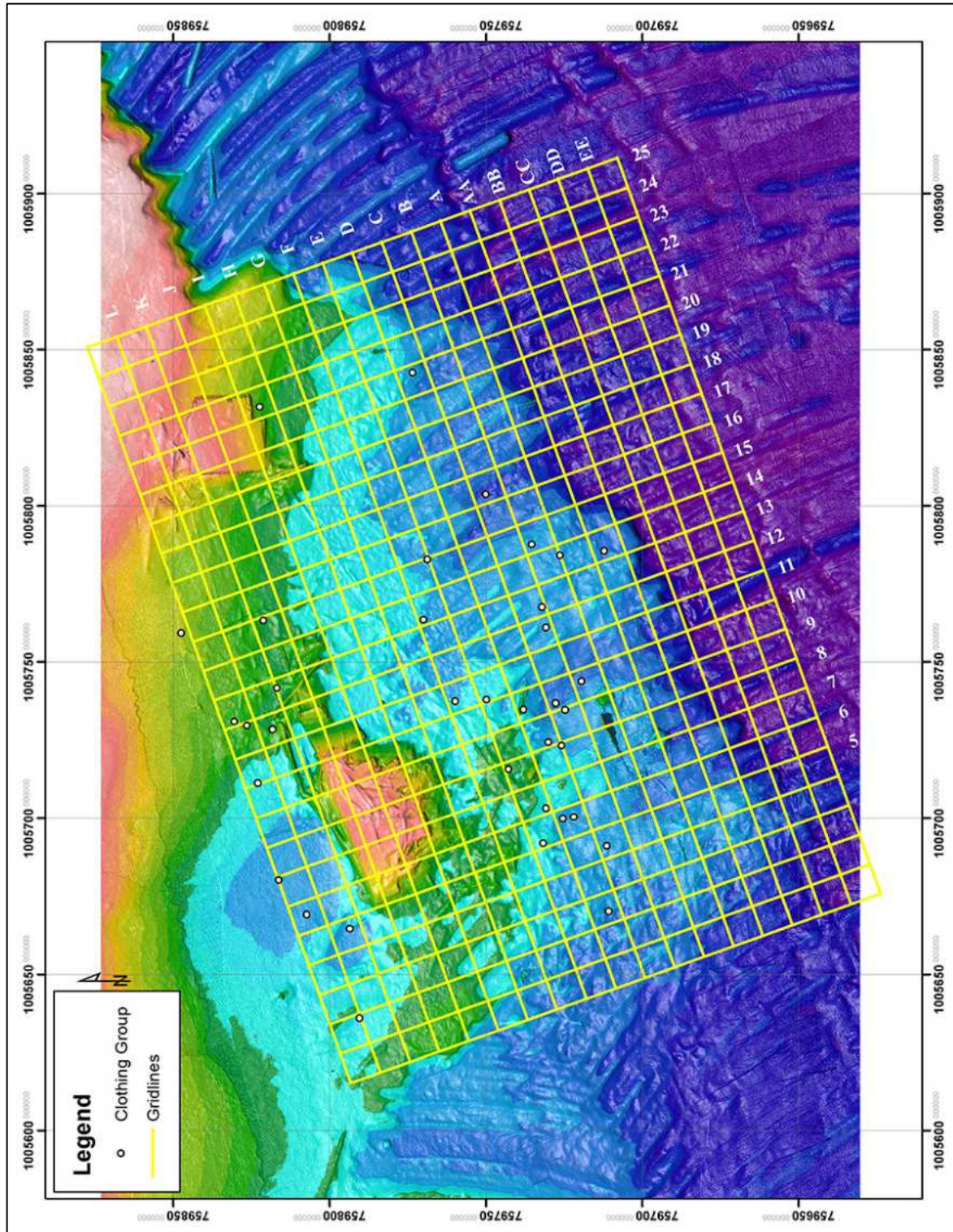


Figure 6-141. Map of Clothing Group artifacts showing a general distribution.



Figure 6-142. Side view of Artifact 1812.1, a mostly intact sole with a little side leather remaining.



Figure 6-143. Bottom view of Artifact 1812.1, a mostly intact sole with a little side leather remaining. Composition is clearly visible.



Figure 6-144. Top or interior view of the sole of Artifact 1819.3, the toe of which is very square.



Figure 6-145. Top or interior view of the sole of Artifact 2944.2, the toe of which is rounded.



Figure 6-146. Ornate piece of gold jewelry (stone missing), Artifact 2521.04, recovered from Unit 11-D.



Figure 6-147. Artifact 2436.2, the 2.5 inch diameter, bronze circular floral wreath buckle was recovered from Unit 14-B. Note the tang at right center on the back of the buckle used for fastening.

GLASS

Another class of artifact is glass. Represented on the site mainly as small fragments, but with several whole bottles present, 1,925 glass artifacts were recovered. Figure 6-148 below, Mechanized Recovery from Unit G-133, shows an assortment of artifact types including six small glass fragments (right side), along with prehistoric and historic ceramics, metal, and a DMM fuze. This recovery is representative of the type and size of glass generally recovered. Illustrated in Figure 6-149 is one of the few whole bottles recovered during Mechanized Recovery. The provenience of glass is presented

in Figure 6-150 and interestingly shows a distribution that is almost a copy of the historic ceramics. Similar to the prehistoric ceramics presented below (as well as historic ceramics), it is possible that much of the glass is intrusive and is washing into the site. Written by Loren Clark, this section will describe the glass identified from the *CSS Georgia* recovery.



Figure 6-148. Recovery from G-133 that shows an assortment of artifact types including six glass fragments (right), a dozen small ceramic sherds (center), along with, metal, prehistoric ceramics, and a DMM fuze. This assortment is representative of the type and size of glass, as well as ceramics generally recovered.



Figure 6-149. One of several whole bottles recovered during Mechanized Recovery.

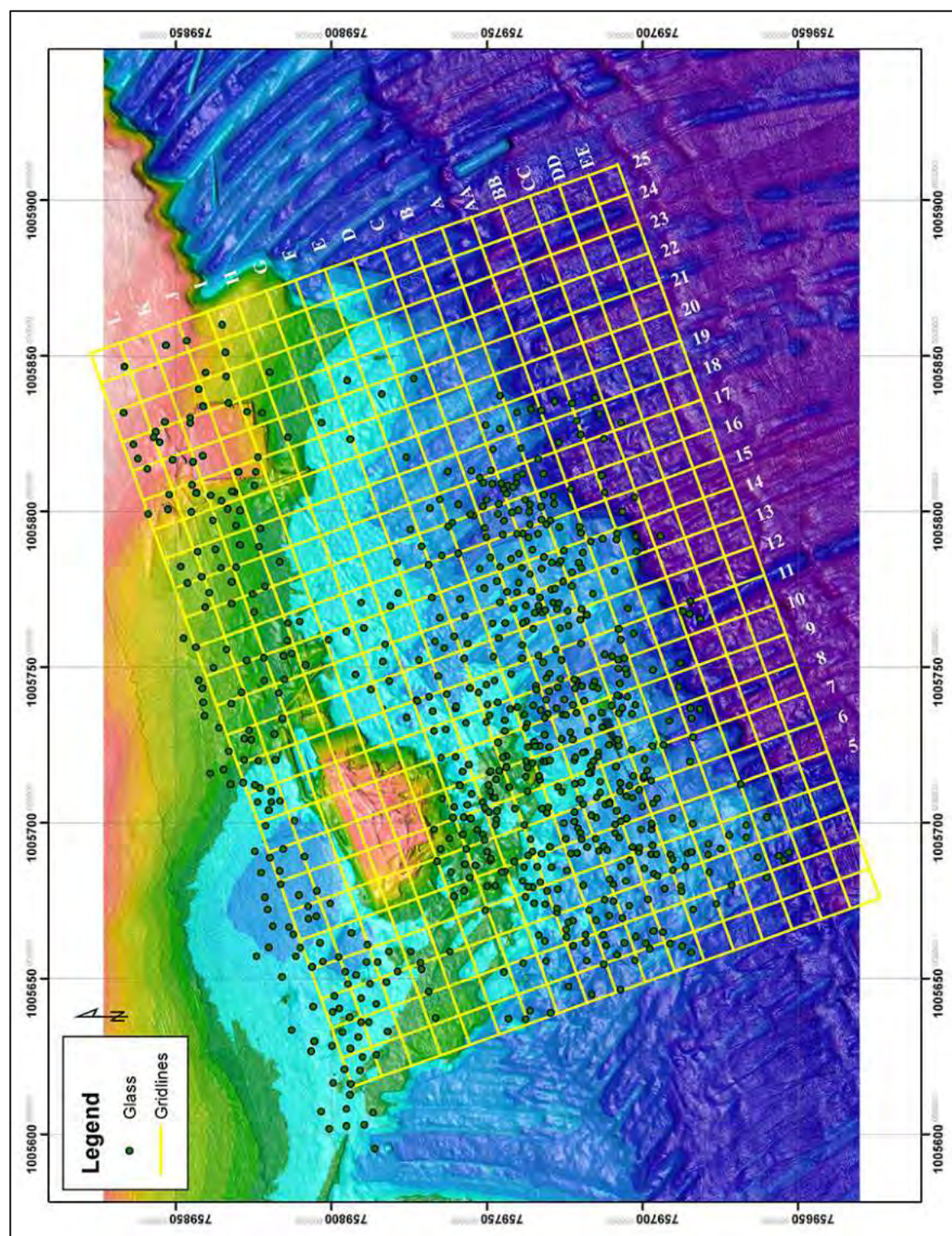


Figure 6-150. Distribution map of glass showing an almost site-wide distribution. Compare this distribution to the historic ceramics (below).

Glass recovery was analyzed and split into categories based on age and type of glass. The types and counts for the historic glass artifacts are as presented in Table 6-03.

Also reflected in the glass assemblage are 68 fragments and bottle sections that were later to be determined as very modern intrusion to the site (i.e., Budweiser beer bottles with screw cap). These artifacts are not reflected in the table above but are included in the overall glass artifact count.

With historic glass, the color and thickness of the glass can aid in the determination of a date range. Within the assemblage from the *CSS Georgia*, there are multiple colors and types of glass represented (Table 6-04; Figure 6-151).

The most abundant color noted was clear. Clear glass became very popular in the 1860s and 1870s due to the ability to view the contents immediately and without distortion (Fike 1987). While this timeframe fits with the building and eventual scuttling of the *CSS Georgia*, most sites with an abundant clear glass collection are more commonly dated post-1880. This may be due to the dynamic nature of the river in relation to nearby historic sites, which will be discussed in more detail later in this section.

Table 6-03. Glass Categories and Counts.

Artifact Category	Sub Category	Count
Glass	Case Bottle	6
Glass	Liquor Bottle	15
Glass	Pane Glass/Undifferentiated	73
Glass	Pane Glass/Pharmaceutical	4
Glass	Pane Glass/Wine Bottle	14
Glass	Pharmaceutical/Undifferentiated	12
Glass	Pharmaceutical/Wine Bottle	8
Glass	Pressed Glass	1
Glass	Wine Bottle/Undifferentiated	28
Composite	Glass in Concretion	2
Glass	Undifferentiated	1,694

Artifact categories named and categorized according to the Texas A&M University Conservation Research Lab protocols.

Table 6-04. Glass Color Types & Counts.

Artifact Category	Color	Count
Glass	Amber	33
Glass	Aqua	10
Glass	Black/Brown	14
Glass	Blue	27
Glass	Clear	338
Glass	Green/Olive	287
Glass	Yellow	1
Glass	White	3
Glass	Misc.*/Undifferentiated	1142

*Multiple colors noted (small fragments and shards documented together)



Figure 6-151. Examples of assorted glass colors recovered from the wreck. Note the fragment stamped with “NAVY” in the bottom photo.

Green/Olive glass ranks next in the assemblage. Olive glass is considered to be one of the older types of glass and was commonly used in the eighteenth and nineteenth centuries for alcoholic beverages and mineral water before 1870 (Fike 1987). It is also possible that some of the green glass represented on this site can be attributed to later types of bottles including the trademark “Georgia Green” Coca-Cola bottles that were introduced in the early twentieth century.

The next three most prevalent glass colors include blue, aqua, amber, and brown glass. Amber/Brown glass is also seen quite readily on sites dating to the 1860s. It had wide usage in alcohol bottles, mineral water bottles, and containers for general household compounds (Fike 1987). Aqua and blue glass have a wide range of uses and have been used since the introduction of glass bottles.

The remaining glass colors make up a small portion of the assemblage, including milkglass, yellow glass, and mirrored glass fragments. It is possible that some of these small shards could be from modern refuse, but without further testing, it will be difficult to tell.

While many of the artifacts in this assemblage are fragmentary in nature, this report will focus on some of the more diagnostic glass types, including examples with makers' marks and brand indicators.

Intact Bottles and Makers' Marks

Due to the dynamic flow of the Savannah River, it is unsurprising that there are only a few examples intact bottles within the *CSS Georgia* assemblage (excluding modern bottles; Figure 6-152). However, there are some sections of bottles that show makers' marks and other identification indicators.



Figure 6-152. Artifact 5061, intact bottle, plain, recovered during Mechanized Recovery of Artifacts.

Roughly 246 glass artifacts had some marking or diagnostic indicator. Most of these examples are small fragments with only one or two letters visible. Lack of any other indicators on these artifacts makes identification problematic at best. However, there are some examples of well-preserved text that provides a glimpse at some of the uses of the historic glass bottles. One such bottle is from John and Margaret Ryan's Excelsior Bottle Works in Savannah, Georgia. Founded in 1852 in Savannah, Georgia by John and Margaret Ryan, both from New York, Excelsior Bottle Works became a regional southern supplier of soda water and other drinks with bottles in various colors, their most recognizable being cobalt blue glass. Since there was limited glass works in Antebellum Georgia, many of their bottles were sourced from Philadelphia, Pennsylvania, which is reflected on many of their bottles (Baab 2016). An intact Ryan Port bottle was recovered from the *CSS Georgia* and embossed with "JOHN RYAN PORTER & ALE PHILADA XX 1859" (Figures 6-153 and 6-154). While this bottle may predate the wreck and might be included in the set of intrusive glass, the date and location of the company make it possible that this artifact is directly associated with the site.



Figure 6-153. Artifact 2070.4, whole bottle embossed with “JOHN RYAN PORTER & ALE PHILADA XX 1859.”



Figure 6-154. Artifact 2070.4, from an angle showing “PHILADA XX 1859.”

An additional example of a fairly intact artifact with local origin is the Jas Ray mineral soda bottle. Most likely employing a Hutchinson-type stopper (post-1879), this specific bottle also dates to the 1880s with a tooled-blob style top and thick base. The text “JAS RAY SAVANNAH GA” can be seen on the bottle side as well as “C-24” stamped on the base (Figure 6-155). Its post-scuttling manufacture date again underscores the intrusion of glass, as well as other artifacts into the site.



Figure 6-155. Artifact 1806.1, “JAS RAY SAVANNAH GA” mineral soda bottle.

Potential Intrusion and Site Environment

As with other assemblages from the *CSS Georgia* site, like brick and ceramics, it is important to note that it is likely that a substantial part of the glass assemblage is intrusive to the site. There are multiple historic sites upriver that display similar glass types found on the *CSS Georgia*, including the historic sections of the City of Savannah, which could explain the presence and wide color variety and types of glass fragments represented. The casemates and other large artifacts on the *CSS Georgia* site are ideal places for smaller artifacts that have been transported by tidal flow to lodge. Some of the specific examples on this site of other historic glass intrusion include bottle fragments from the Owens-Illinois Glass Co. (founded 1929) and Old Mr. Boston distillery (founded 1933). That is not to say that all the glass found on the site is intrusive, but this option must be considered with such large historic sites in the immediate vicinity and the site location in a high-energy tidal river.

The glass artifacts pose an interesting problem relating to directly connecting these artifacts to the ship itself. Even the glass dated to the same time period in which the *CSS Georgia* was operating could have easily washed down from the city proper or any of the other local historic sites. However, a wide variety of glass was recovered from the site and these artifacts cannot all be simply dismissed. Glass is a common indicator of a historic site, and the site of the *CSS Georgia* is no exception. There are two glass fragments, Artifact 1814.2 and 2356.2, that most likely originate from the *CSS Georgia*. Illustrated in Figure 6-156 is one of the fragments, both glass fragments that representing the side of a small panel bottle. Both are embossed with “NAVY” on the panel and resemble embossing on a panel bottle shown in Figure 6-157 recovered from the *CSS Cairo*, as well a similar bottle originating from the *USS Monongahela* that grounded on St. Croix in 1867 during a hurricane (Figure 6-158). Possibly standard issue, the bottles are marked “US NAVY” on one side panel and either PEPPER or MUSTARD (Figure 6-159), depending on the contents, on the other (as presented at Antique-Bottles.net and Peachridge Glass.com).



Figure 6-156. Artifact 2356.2, 2.5-x-1.5-inch fragment of a panel from a glass bottle embossed with “NAVY.” Not shown, Artifact 1814.2 is an almost identical fragment retaining only “NAVY” as well.



Figure 6-157. Recovered from the CSS *Cairo* and on display at the Vicksburg National Military Park, panel bottled embossed with “US NAVY” on one side panel and either PEPPER or MUSTARD on the other (as presented at Antique-Bottles.net).



Figure 6-158. Similar bottle originating from the USS *Monongahela* that grounded on St. Croix in 1867 during a hurricane (as presented at Peachridgeglass.com).



Figure 6-159. Opposite panels showing either “PEPPER” or “MUSTARD” (as presented at Antique-Bottles.net).

HISTORIC CERAMICS

One of the most numerous artifact types found on-site was historic ceramics. Mainly represented by small fragments, 1,299 were recovered and include creamwares, pearlwares, whitewares, stonewares, porcelains, ironstones, etc. (Table 6-05). Illustrated in Figure 6-160 are examples of the variety of historic ceramics on the site. Surprisingly, no whole ceramics was recovered (Figure 6-161). Dating of historic ceramics on our site, outside of a general time period, is problematic. Additionally, the ambiguous dates for some of these pottery types throws this set of artifacts into the same realm as the glass where it can be postulated that much of the assemblage could be intrusion from the nearby City of Savannah, as well as the over 4,000 intrusive prehistoric ceramics that were recovered from the site. We know the time period for the wreck site. The problem is attributing the ceramics to the site because of intrusion issues. Subsequently, the following ceramic analysis, which was written by William Wilson, then becomes a discussion of numbers, types, decorations, and makers' marks.

The types and counts for the historic ceramics artifacts are presented in Table 6-05, and the provenience of all ceramics is presented in Figure 6-162, which shows an almost site-wide distribution, similar to both glass and prehistoric ceramics. This includes plenty of occurrences north of the West Casemate and well into the channel. Both of these loci are associated with intrusive artifacts, particularly by the presence of prehistoric ceramics.

Table 6-05. Historic Ceramic Categories and Counts.

Artifact Category	Sub Category	Count
Ceramic	Creamware	34
Ceramic	Ironstone	4
Ceramic	Pearlware	39
Ceramic	Porcelain	16
Ceramic	Refined Earthenware	523
Ceramic	Slipware	9
Ceramic	Stoneware	264
Ceramic	Tile	1
Ceramic	Tin Enameled	2
Ceramic	Whiteware	330
Ceramic	Undifferentiated	77

Artifact categories named and categorized according to the Texas A&M University Conservation Research Lab protocols.



Figure 6-160. Examples of the types and numbers recovered during the Mechanized Site Recovery Phase.



Figure 6-161. From a whiteware saucer, this is one of the larger fragments recovered during the Mechanized Site Recovery Phase.

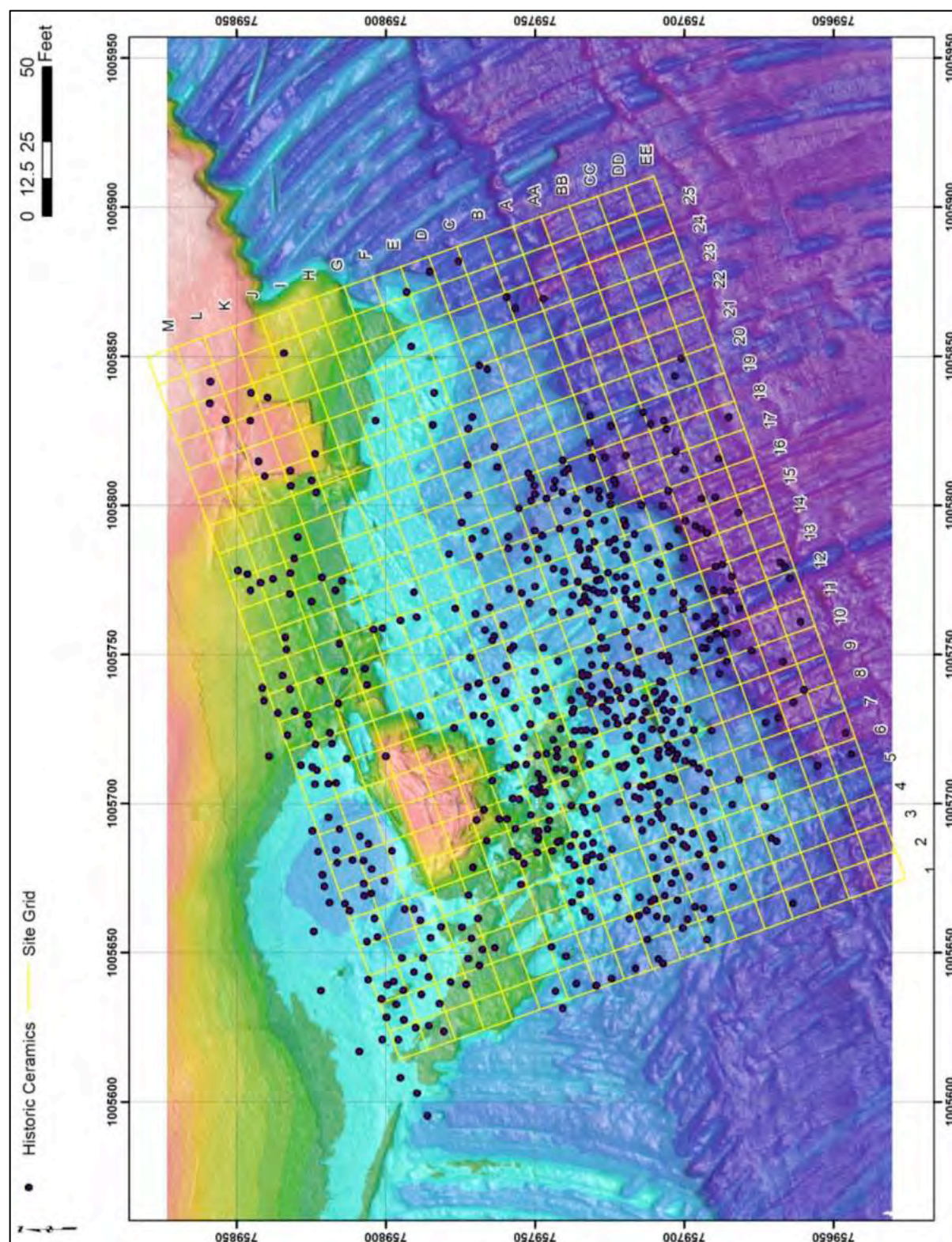


Figure 6-162. Distribution of historic ceramics.

As noted in the table above, the most abundant type noted was categorized as Refined Earthenware. This is a general type used to describe slightly porous ceramics. Whiteware, creamware, and pearlware are all forms of refined earthenware. During analysis, ceramics that could not be positively identified as a specific subtype (e.g., pearlware) were designated as refined earthenware. Therefore, many artifacts classified as refined earthenware likely would be identified as one of the previously mentioned subtypes, if the vessels were recovered intact.

Classification of eighteenth- and nineteenth-century refined ceramics into specific types has been problematic for historic archaeologists (Majewski and O'Brien 1987; Mathews 1990; Miller 1991; Noël Hume 1982; South 1977). Paste composition can be used a general chronological indicator because creamware was an eighteenth-century product from which pearlware evolved in the 1780s, followed by whiteware and ironstone. This evolution in wares resulted in a paste gradient that becomes evident as a problem in the reliable sorting of refined earthenwares into the common typological categories. Miller (1980:2) has remarked that differences between the types often "hinge on personal opinion." The gradient from whiteware to ironstone probably presents the most significant problem in identification.

Pearlware (n=39) and creamware (n=34) are almost equally represented. Pearlware, an English innovation, was introduced to the U.S. around 1780, and by 1810 had become the predominant tableware (Noël Hume 1982). Pearlware is typically dated 1780 to 1830, with a mean date of 1805 (South 1977). Creamware slightly predates pearlware, but was also developed in England and brought to the U.S. in the mid- to late eighteenth century. Both of these types are more closely related to British colonization and would have been common types in the city of Savannah from its founding onward.

Whiteware was an abundant ceramic type in the assemblage (n=330). Whiteware has a buff-colored or whitish paste and a clear or colorless lead glaze and lacks the bluish tint of pearlware. Whiteware began replacing pearlware ca. 1820 and continued production throughout the century (Noël Hume 1980). Undecorated whiteware is relatively common. It is difficult to precisely date plain whiteware due to its long production span. Some of the whiteware collected from the *CSS Georgia* have been decorated, but many of the smaller fragments lack decoration or markings. Some consider plain whiteware to be most common after the Civil War, but whiteware can generally be dated between 1830 and 1950 (Price 1979).

Ironstone was relative sparse in the recovery (n=4). Ironstone ceramics exhibit a hard grayish-white paste and a clear glaze. As noted previously in the discussion on whiteware, problems occur in the reliable sorting of ironstones from whitewares. Wetherbee (1980) suggests a date range of 1840 to 1950 for plain ironstone (mean date 1895) recovered on North American archaeological sites.

Stoneware (n=264) is only slightly less represented than whiteware, and is also a significant portion of the overall ceramic assemblage. Like earthenware above, "stoneware" is a more general term used to describe a wide variety of very compact and hardy pottery. This type of pottery is usually grey and is often seen with a salt-glaze technique. Stoneware was generally made for utilitarian purposes and was manufactured locally throughout the U.S.

The earliest American utilitarian stoneware was generally salt-glazed on the exterior and unglazed in the interior. This was the most commonly used utilitarian stoneware glaze throughout the nineteenth century (Greer 1981:180). Salt-glazed vessels are manufactured using a different process for most other glazes: the vapor method. Common salt (sodium chloride [NaCl]) is thrown or dropped into the hot kiln, where it immediately vaporizes and adheres to the surfaces that are approaching vitrification. Salt-glazed vessels exhibit a characteristic "orange peel" texture and the glaze is most often transparent (Greer 1981:181). Surfaces are often very glossy as well (Figure 6-163).

Natural clay or slip glazes (Figure 6-164) began to be employed by American stoneware potters during the nineteenth century (Greer 1981:194). They were created by dipping vessels in a watery solution created by straining clay, and thus suspending clay particles in the liquid. Greer (1981:197-198) remarks that “most slip glazes are generally not purposefully colored; they are natural clays, containing varying amounts of iron...[and] other color influencing oxides” that typically result in glazes that are shades of brown. Slip clay glazes are typically, smooth, untextured, and opaque (Greer 1981:200).



Figure 6-163. Artifact 1812.03, a salt-glazed stoneware base with unglazed interior recovered from Unit 8-F.



Figure 6-164. Artifact 1863.01, a slip-glazed stoneware recovered from Unit 5-E.

The most well-known slip glaze is Albany (Figure 6-165), a shiny, dark-dark colored glaze that was developed during the early 1800s by potters using clay from Albany, New York. Similar glazes that are derived from other clay sources are referred to as “Albany-like.” After 1850, most vessels that were salt glazed on the exterior were Albany glazed on the interior to prevent seepage (Greer 1981:197). During the late nineteenth to early twentieth centuries the increasing popularity of lighter colored slips, which were associated with cleanliness, diminished the popularity of dark slip glazes.

The remaining ceramic types make up a small portion of the assemblage, including some tile, porcelain, and slipware. Due to porcelain being a more expensive and prestigious type of tableware ceramic, it is not surprising that it constitutes a small part of the assemblage. Like the cream and pearlware above, most porcelain was brought from England to the American colonies.



Figure 6-165. Artifact 1876.01, a stoneware jug handle, neck, and rim showing Albany glaze on interior recovered from Unit 8-D.

Ceramic Forms

With the historic ceramic assemblage, many sherds and fragments have not been identified to a certain type, but some, more readily apparent, forms can be determined (handles, bowls, bases, etc.). Within the assemblage from the *CSS Georgia*, there were multiple usage and forms of ceramics identified as presented in Table 6-06. However, it is possible to infer other ceramic forms (or at least broad usage) based on composition. According to Stewart-Abernathy (1986), the majority of refined earthenware ceramics are classified as tableware, with the exception of stoneware, which is considered storage. Based on this assumption, refined earthenware ceramics

(n=926), and therefore tableware, constitute the majority of historic ceramics on the site. Stoneware (n=264), assumed to be used as storage vessels, make up a much smaller sample.

Table 6-06. Historic Ceramic Forms.

Artifact Category	Description	Count
Ceramic	Sm. Dish	1
Ceramic	Plate	2
Ceramic	Sm. Handle	2
Ceramic	Bottle	1
Ceramic	Lg. Handle	2
Ceramic	Lid	1
Ceramic	Bases	6
Ceramic	Bowl	1
Ceramic	Tile	1
Ceramic	Undifferentiated sherds	1282

Decoration

A major category of the decorated pieces included blue transfer- and hand-painted decorations. This was one of the more common types of decoration seen on pottery brought from Europe to the U.S. and can be seen represented on many historic sites across the country.

Hand-painted designs were applied (as the name implies) by hand painting minerals into the glaze. This contrasts with later transfer prints in appearance, as the hand-painted designs tended to have visually softer edges. This resulted from pooling of glazing, creating a haze around designs. Figure 6-166 illustrates the contrast between transfer-print and hand-painted motifs, as both are included on the ceramic fragment. Hand-painted blue was also popularly used on shell-edged molding of some refined earthenwares, one of which is shown in Figure 6-167. Of the analyzed historic ceramics, only ten were noted specifically to have hand-painted decorations.



Figure 6-166. Hand-painted motif on pearlware (left) recovered from north of the site grid (Artifact 2709.3). Note the contrast in sharpness compared with the transfer print on the left side of the artifact. On the right (Artifact 2558.01) is a small piece of whiteware with a hand-painted floral motif.



Figure 6-167. Hand-painted blue design on shell-edged whiteware.

Transfer-printed wares (n=5; Figure 6-168), exhibit colored designs that are applied to the vessel surface by means of an inked paper onto which the design was transferred from a copper plate engraving (Price 1979:19; Figure 6-169). During the nineteenth century, vast quantities of transfer printed wares were manufactured for the American market at the Staffordshire potteries in England. Transfer-printed designs were the most expensive designs to produce in the nineteenth century (Miller 1991). The first step in the transfer print process is engraving flat copper plates with designs. The engraved plates are then warmed and filled with color, which are metallic oxides mixed with oil (Gross 1996). The designs are then printed on special nonabsorbent tissue paper and dried. The impressions on the tissue paper are cut to fit a given vessel's shape, and the designs are hand rubbed onto bisque ware (unfired ceramic body). Friction causes the color to adhere to the bisque ware in clear outline, and the paper is then removed using water. Because the color is oil based, the water does not affect it. The bisque ware with the transfer designs are then immersed in a fluid glaze and fired in a glaze kiln.

Transfer print colors have been demonstrated to be chronologically significant (Table 6-07). Most early transfer prints were blue obtained from cobalt, because it "was the only color capable of providing the numerous graduations of tint yet [was] able to withstand the high temperature of the kiln" (Gross 1996:6). About 1828, it was discovered that "by mixing finely powered yellow, green, red, and black enamels with tar, it was possible to transfer designs in various shades of these colors without distortion or loss of brilliance" (Gross 1996:6). Therefore, after 1830 transfer prints on whitewares were characterized by various colors including red, brown, green, and purple. The popularity of transfer print designs declined after ca. 1860 (Price 1979:19); however, the technique was revived toward the end of the century, often using the same designs as earlier wares (Henry and Garrow 1982).



Figure 6-168. Transfer-printed sheep motif on pearlware (left) recovered from Unit 18-M (Artifact 2681.06), and a transfer-printed woman with amphora motif on whiteware (right; Artifact 2381.02).



Figure 6-169. Steps in the transfer print process (courtesy of C. Andrew Buchner).

Decorations also took the form of molding techniques. Among the common edge molding forms during the nineteenth century found on the site were shell edging (Figure 6-170) and diamond band (Figure 6-171). The most common motifs of edge decorations are shell-edge designs (Noël Hume 1982:131). Blue edging became the dominant color by 1830. Green and red are

considered earlier. Edge decoration has a date range ending ca. 1860 (Price 1979:17). Although several examples were located on the site, edging treatments were not recorded during conservation, so there is currently no accurate breakdown of types.

Table 6-07. Transfer-printed whiteware chronology.

Transfer Print Color	Maximum Popularity	Production Range	Median
Dark Blue	1820–1830	1820–1860	1845
Light Blue	1827–1828	1826–1831	1829
Red	1829–1839	1829–1850	1840
Brown	1829–1839	1829–1850	1840
Green	1829–1839	1829–1850	1840
Black	—	1830–1850	1840
Purple	1829–1839	1829–1860	1845

Source: Stelle 2006



Figure 6-170. Shell-edged pearlware recovered from Unit 5-F (Artifact 1839.07).

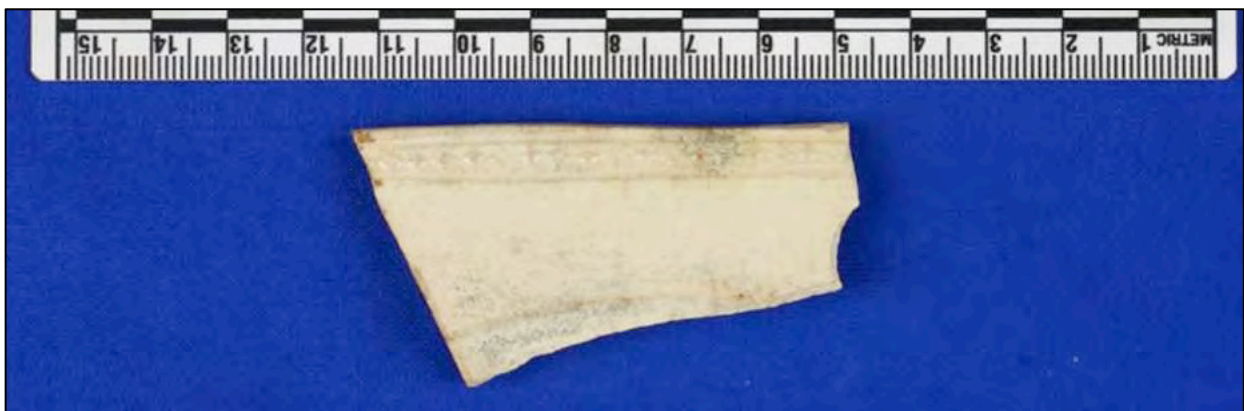


Figure 6-171. Diamond-band edged creamware recovered from Unit 15-BB (Artifact 5073.01)

One of the most unique finds amongst the ceramic assemblage was several fragments of a Rockingham-style stag and boar hunt-motif pitcher (Figure 6-172). The Rockingham-style of pottery was produced widely and was popular in the 1840s and 1850s. It is identified by a distinctive brown-and-yellow-tinted glaze over both yellowware and stoneware pottery. The stag and boar hunt motif was copied by multiple American pottery companies from their English counterparts and modified for the cultural climate (Goldberg 2003). Illustrated by three different yellowware fragments showing different aspects of the scene on the pitcher (Figures 6-173 to 6-175), it is interesting to note that these separate artifacts were not found in the same vicinity, but were recovered from multiple grabs during Mechanized Recovery of Artifacts. Recovery locations included Units 4-J, 5-L, and 23-L (see Figure 6-162). While Units 4-J and 5-L are only 20 feet apart, Unit 23-L is some 180 feet away. It is possible that there are multiple vessels represented here, but the glaze and thickness appear to be consistent in all of the pieces recovered. That does not necessarily place this artifact on the wreck at the time it was scuttled, but it is an interesting note on the distribution of a single disarticulated artifact.



Figure 6-172. Example of a complete Rockingham-style pitcher with hound handle, and stag and boar hunt design (from Goldberg 2003).



Figure 6-173. Artifact 2664.05 from Unit 23-L a stag motif fragment from a Rockingham style hound and stag motif pitcher.



Figure 6-174. Artifact 2855.02 from Unit 4-J a horse and rider fragment from a Rockingham style hound and stag motif pitcher.



Figure 6-175. Artifact 2777.11 from Unit 5-L a hound handle from a Rockingham style hound and stag motif pitcher.

Maker's Marks

While many of the artifacts in this assemblage are fragmentary in nature, this report will attempt to cover some of the more diagnostic ceramic types, specifically examples with maker's marks and brand indicators. Due to the dynamic flow of the Savannah River, as well as the disposal of broken ceramics, most of the ceramic artifacts are fragmentary in nature. However, out of the overall 1,299 ceramic artifacts recovered from the *CSS Georgia*, approximately 200 ceramic pieces showed specific decoration and/or makers' marks. Many of these examples of sherds with maker's marks are small fragments with only one or two letters visible. Lack of any other indicators on these artifacts makes identification problematic. However, there are some examples of well-preserved text that provides a glimpse at some of the uses and manufacturers that were common in this area.

The most common mark found on the ceramic fragments from the *CSS Georgia* was from James Edwards & Son. This father and son partnership was based at the Dale Hall Pottery in England. They operated as a partnership from 1851 to 1861, when James retired. Eventually the business was passed to Knapper and Blackhurst in 1882. Much of their inventory was exported to the U.S. and they specialized in whiteware and ironstone (Birks 2019). This mark (or partial mark) was identified on ten individual items. Figures 6-176 and 6-177 shows examples of the marks from this company that were seen on ceramic fragments from the site.



Figure 6-176. Example of a complete James Edwards and Son maker's mark. Artifact 2797.4.

An additional datable maker's mark is that of Maddock China (Maddock Pottery), which was found on two ($n=2$) ceramic fragments. John Maddock operated out of Newcastle Street Pottery in Staffordshire, England in 1842 and subsequently added his sons to the business in 1855. The company, under various transitions and names, operated well into the mid-twentieth century. Interestingly John Maddock's brother Thomas, who moved to New York in 1847, served in the Union Army, and survived the war to be a businessman after (Robinson et al. 1980). Additionally, John Maddock was initially in business briefly with James Edwards, discussed above, before leaving to start his own company. These examples would have also been contemporary with Edwards and Son and share the same likelihood for being directly related to the wreck of the *CSS Georgia*.



Figure 6-177. Examples of partial James Edwards & Son. maker's markings on recovered artifacts (Artifact 2070.03 [top] and 5037.01 [bottom]).

It is interesting to note that Artifact 2607.1 had the maker's mark "JAMES.M.SHAW & Co." (Figure 6-178). James M. Shaw & Co. produced china and glassware for hotels, clubs, and institutions starting in 1838, and incorporated in 1895 (Blaszczuk 1994). The U.S. Navy began purchasing china from James M. Shaw & Co., out of New York in the 1890s (thepirateslair.com). Hotelware (actually vitrified stoneware) pieces like this were common, mass-produced and widely used tableware during the early twentieth century (Meyers 2016:110). This type of pottery was known for being extremely durable, which made it useful in restaurants and hotels (thus the names "hotelware" and "restaurantware"). Hotelware is still commonly used today. Although no date is printed on the stamp, James M. Shaw & Co. was sold to Nathan Straus in 1938, indicating a manufacture date prior to that date.



Figure 6-178. James M. Shaw & Co. mug recovered from Unit 19-J (Artifact 2607.01).

Summary

As with other artifact groups from the *CSS Georgia* (e.g., brick and glass), it is important to note that many historic ceramic pieces are intrusive to the site. There are multiple historic sites upriver that display similar ceramic types found on the *CSS Georgia*, including the historic sections of the city of Savannah, which could explain the presence and wide variety and type of ceramics represented. The casemates and other large artifacts on the *CSS Georgia* site act as material traps for smaller artifacts that have been transported by tidal flow. One specific example of outside artifact intrusion includes the fragments from James M. Shaw & Co. (bought by the U.S. Navy after 1895). Other examples include later glazing styles and colors that were

not evident until the early twentieth century. That is not to say that all the historic ceramics found on the site are intrusive, but this option must be considered with such large historic sites in the immediate vicinity and the site location in a high-energy tidal river.

PEWTER ARTIFACTS

Excavation of the CSS *Georgia* site yielded a small assemblage of pewter artifacts consisting of: 23 tableware-related artifacts, six buttons (see *Uniform Buttons* section), three friction primers, one syringe, one decorative unidentified artifact (in three pieces), and seven unidentified fragments. Written by Karen Martindale, this section presents the analysis of this assemblage.

Methodology

The majority of the analysis in this chapter is based on visual inspection of the artifacts, as well as x-ray images of artifacts that were accessible to the author (i.e., located at the CRL, and not in treatment at the time of assessment) in order to find any marks that would be difficult to discern with the naked eye. Accessible artifacts were also analyzed using a Bruker Tracer XRF to determine their elemental composition (Table 6-08). Most of the artifacts were analyzed after conservation, so artifacts that were in treatment at the time of assessment, or did not survive conservation, are listed, but do not have XRF data.

Tin, the primary component of pewter, is rarely found in archaeological sites in a pure form, so it is no surprise that multiple combinations of metals were identified. Depending on the time and location, pewter generally contained 85 to 99% tin. The most common additives to create pewter are lead, copper, and antimony. Lead makes the metal more malleable and easier to finish, but the dangers of lead were not unknown even in medieval Europe; in England, the earliest written record limiting the amount of lead allowed in tableware is dated to 1348, and today's pewter, regardless of use, generally contains no lead (Michaelis 1971:2-5; Osburn and Wilbur 1938:7, 17; Plenderleith and Werner 1971:266). Copper and antimony act as hardeners, and give the pewter a lustrous appearance (Kerfoot 1942:10; The Pewter Collectors' Club of America 2006:43; Plenderleith and Werner 1971:266).

In most cases, iron, nickel, silver, and zinc were not purposely alloyed with tin to make pewter, and the presence of these other metals may indicate that the metals used were not refined to their purest form. Zinc is commonly alloyed with tin and lead to make solder; the thin fragments from the site may indeed be solder, but zinc is also present in several other artifacts, such as spoons. According to North and MacLeod (1987:90), pewter artifacts from other sites have contained small amounts of zinc, quantified as less than 0.01 percent; according to Kerfoot (1942:10), the presence of zinc may indicate a more modern alloy. To determine whether these metals were present because the technology was not yet available to fully refine the desired metals, or that these objects were purposely made with less refined metals would require further research. Additionally, the two artifacts that contain silver may have been silver plated, as it was common to cast objects in a cheaper metal such as copper or pewter and plate them with silver or gold.

Tableware

With 23 artifacts, Tableware makes up over one-half of the assemblage, and consists primarily of eating utensils. Four artifacts are represented only by the stem and handle; while these most likely belong to spoons since the soft alloy was rarely used to make forks or knives; however, it cannot be confirmed. Based on decorative features, there are at least six types of spoons in the assemblage.

Table 6-08. Qualitative XRF analysis of the pewter assemblage, indicating elements present (P), present in trace amounts (T), or not present (-).

Artifact No.	Description	Cu	Fe	Pb	Ni	Ag	Sn	Zn	Sb
1366	Cruet Handle	P	T	T	T	-	P	T	-
1881.5	Fragment	NA							
1983.18	Spoon Bowl	T	T	T	T	-	P	T	-
2016.1	Utensil Handle	T	T	P	T	-	P	-	-
2128.5	Button	P	P	P	P	-	P	P	-
2213.6	Fragment (Flat)	P	P	P	P	-	P	P	P
2213.6	Fragment (Square)	P	P	P	P	-	P	P	-
2286.4	Unidentified, decorated	NA							
2251.5	Friction primer	P	-	P	T	-	P	-	-
2352.8	Small ring fragment	NA							
2432.1	Ring	P	P	P	P	-	P	P	-
2492.3	Partial Ring	P	P	P	T	-	P	T	-
2499.11	Friction primer (Stem)	T	T	P	P	-	P	-	-
2499.11	Friction primer (Wire)	P	T	T	-	-	T	-	-
2553.3	Spoon	P	P	P	P	-	P	P	-
2680.8	Spoon Bowl	P	P	P	T	-	P	P	-
2684.6	Syringe (Cap)	T	P	P	T	-	P	T	-
2684.6	Syringe (Plunger)	T	P	P	T	-	P	T	-
2692.4	Spoon	P	P	P	T	-	P	T	-
2694.5	Button	T	T	P	T	-	P	T	-
2695.5	Utensil Handle	P	P	T	T	-	P	P	P

Artifact No.	Description	Cu	Fe	Pb	Ni	Ag	Sn	Zn	Sb
2700.8	Spoon Bowl (Intact)	P	P	P	T	-	P	P	-
2700.8	Spoon Bowl (Corroded)	P	P	P	P	-	P	-	-
2700.8	Utensil Handle	P	P	P	P	-	P	P	-
2701.4	Button	NA							
2733.1	Friction Primer	NA							
2739.2	Button	T	T	P	T	-	P	T	-
2742.13	Spoon	P	P	P	T	P	P	P	-
2753.7	Fragment (Larger)	T	T	T	-	-	T	P	-
2753.7	Fragment (Smaller)	P	P	P	P	-	P	P	-
2760.2	Spoon Bowl	P	P	P	T	-	P	T	-
2767.1	Spoon Bowl	P	P	P	P	-	P	P	T
2768.5	Spoon	T	T	P	T	-	P	-	-
2780.3	Spoon	T	T	P	T	-	T	-	-
2783.6	Spoon Bowl	P	P	P	P	-	P	-	T
2788.3	Pewter fragments (Cylinder)	P	P	T	T	-	P	-	-
2788.3	Pewter fragments (Knob)	P	P	T	T	-	P	-	-
2796.5	Utensil Handle	P	P	P	P	-	P	P	-
2851.4	Spoon Bowl	P	P	T	P	-	P	-	-
2853.3	Spoon Bowl	P	P	T	P	-	P	P	-
2881.1	Spoon Bowl	P	P	T	T	P	P	P	-
3004.3	Button	P	P	P	P	-	P	P	-
3396	Button	P	P	P	P	-	P	P	-

Spoon Type 1 (Figure 6-179) is represented by a single spoon (Artifact 2881.1) with a fiddle-shaped handle with a shell at the terminal and a honeysuckle device between the handle and stem, rounded shoulders, and a shell drop pattern; the tip of the bowl is narrowed. The pattern on the handle, most easily seen in the x-ray image, is known as the “Kings Pattern” (O’Keefe-Coulson 2014). Although the pattern is distinct, it is a popular pattern that has been produced from the early nineteenth century to present day. According to XRF analysis, this is one of two artifacts that contain silver; further analysis would be needed to determine whether the silver is part of the alloy, or if the artifact was silver-plated.

This spoon is the only pewter artifact with a definite maker’s mark, which would allow for the date or date range of manufacture to be determined. Unfortunately, the mark is difficult to discern by visual inspection or with the X-ray image due to wear and spots of corrosion; the mark may say “EASTERN,” “EASTMAN,” or “DRASTMAN.” Two companies that were founded at the beginning of the twentieth century used a variation of “EASTERN” to mark their goods: the Eastern Carolina Silver Company, which used the mark “EASTERN,” and the American Silver Company, which used the mark “EASTERN SILVER CO.” (Woodhead 1991:6, 68). Further research is needed to determine the manufacturer of this spoon.



Figure 6-179. Spoon Type 1, bearing the “Kings Pattern,” and represented by a single spoon, Artifact 2881.1. The image includes a diagram of the parts of a spoon (courtesy of CRL, Texas A&M University).

Similar to the first type, Spoon Type 2 (Figure 6-180) is represented by a fiddle-shaped handle, rounded shoulders, a shell drop pattern, and a narrow bowl tip. Rather than the Kings Pattern, lines extend from the shoulders to the terminal ending, in the case of the only intact example that is not heavily worn, in a simple heart-shaped pattern. This spoon type is represented by three intact or mostly intact spoons and one handle without a bowl. In addition, two spoon bowls, both broken at the drop, may represent either this type or the third type since they do not have handles; they have been grouped here because they are from the same unit as the handle without a bowl.



Figure 6-180. Spoon Type 2, characterized by the shell-drop pattern and simple lines on the stem and handle. This type is represented in Artifacts 2700.8, 2768.5 (*this image*), 2780.3, and 2553.3 (courtesy of CRL, Texas A&M University).

Spoon Type 3 (Figure 6-181) is represented by a shell drop pattern, narrowed bowl tip, and the lack of a shoulder protrusion, making the shoulders and stems of these spoons appear skinny in comparison to the first types. Of the four spoons that make up this type, none is complete, but it is possible that some of the handles without bowls (Spoon Type 4) correspond to these bowls.

Spoon Type 4 (Figure 6-182) is represented by four handles without bowls: all have rounded ends; no shoulders; and almost no decoration. One handle (Artifact 2016.1) does appear to have a slight indent running down the center. The most worn handle (Artifact 2796.5) is the only one

of the handles that includes the drop, which may have a shell pattern, but it is too worn to be certain. Collectors' catalogs generally date the earliest examples of the rounded terminal to the early eighteenth century.



Figure 6-181. Spoon Type 3, characterized by a shell drop pattern and a lack of defined shoulders. This type is represented in Artifacts 1983.18, 2760.2, 2783.6 (*left*), and 2853.3 (*right*; courtesy of CRL, Texas A&M University).



Figure 6-182. Spoon Type 4, characterized by a rounded terminal, is characterized by a lack of defined shoulders, and little to no decoration. This type is represented in Artifacts 2016.1 (*right*), 2695.5, and 2796.5 (*left*; courtesy of CRL, Texas A&M University).

Spoon Type 5 (Figure 6-183) is defined by a long, narrow, but not pointed, bowl and a rounded stem, resembling a seventeenth century “slip top” style, though the bowl is more elongated than most of the examples found (Moore 1999:5-7). The XRF shows a possible maker’s mark or decoration near the drop, but it is too worn to be certain.



Figure 6-183. Spoon Type 5 is characterized by a rounded stem and a narrow, blunt bowl tip. Represented by Artifact 2692.4 (courtesy of CRL, Texas A&M University, College Station, TX).

Spoon Type 6 (Figure 6-184) is represented by a single intact spoon (Artifact 2742.13), and defined by a rounded terminal, a lack of decoration along the handle and stem, and a long, narrow bowl. The metal is also thinner than that of the other spoons. This is the only other pewter artifact that was silver plated or contained silver in the alloy.

Three spoon bowls are too worn to determine if they may belong to any of the above types or new categories. The first is a spoon bowl with part of the drop (Artifact 2767.10); the tip is too worn to determine whether it is pointed or rounded. The second is a bowl with part of the stem but no shoulder (Artifact 2680.8); because the stem is present, if a shell drop pattern were visible, it would be grouped with the third type. The third bowl, Artifact 2581.4, may have an “X” incised on the back of the bowl (Figure 6-185), but wear or mechanical cleaning could have caused this mark.



Figure 6-184. Spoon Type 6, characterized by a rounded terminal and a lack of decoration. This type is represented in Artifact 2742.13 (courtesy of CRL, Texas A&M University).

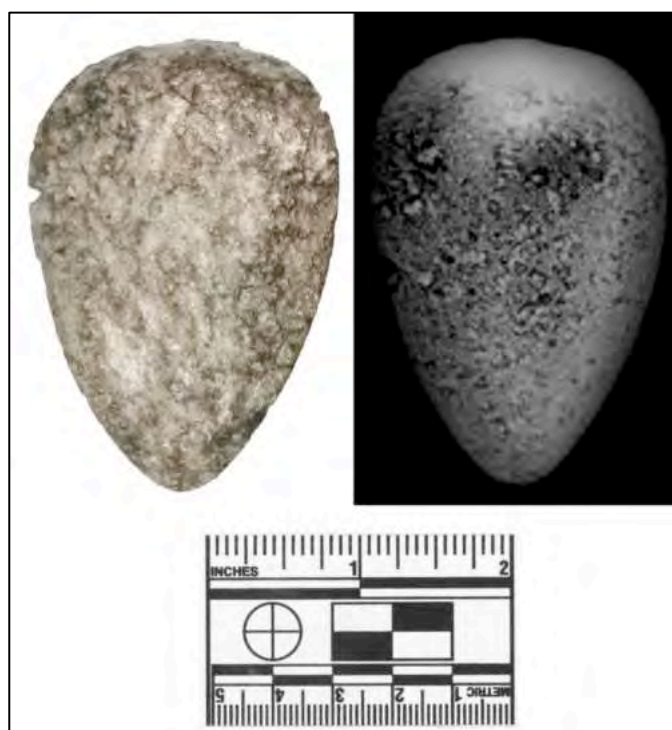


Figure 6-185. Artifact 2581.4, which may have an “X” incised on the convex side of the bowl, near the drop (located at the top of the photo and X-ray; courtesy of CRL, Texas A&M University).

One long, handle-shaped pewter artifact (Figure 6-186) has been identified as the handle for a cruet stand, which would have held condiments such as salt, pepper, oil, and vinegar. At the time of writing, the author has not yet found an exact match for the handle. However, similar sets may indicate other pieces of the set that have been recovered. For example, one intact pewter ring and two ring fragments may be the devices that held glass condiment containers. Originally, it was thought that these small rings may be finger rings for oil lamps; however, the intact ring has four attachment points, and no examples of lamps have been found that have more than two points that connected the ring to the rest of the lamp. If there are several rings in a cruet stand that connect to each other in a circle, as well as to an inner and outer ring for additional support, that could explain the four connection points.



Figure 6-186. Artifact 1366, a cruet stand handle (*left*), and possible rings that would hold condiments, Artifacts 2492.3 (*above*) and 2432.1 (*below*). One additional ring fragment, Artifact 2352.8, did not survive conservation (courtesy of CRL, Texas A&M University).

Additionally, it may be possible to attribute some of the glass fragments from the site of the CSS *Georgia* to a cruet set (Figure 6-187). Artifact 1546 is a thick-walled, strangely shaped bottle with a small base of a diameter that would allow it to fit into one of the rings; glass fragments similar to this bottle were found in several units across the site. Seven glass bottle stoppers, divided into four categories, were recovered, and may belong to cruet or decanter sets. Four of these stoppers, represented by Artifact 2326.7 in Figure 6-187, are of slightly different sizes, but all are made of clear glass with a rounded, rectangular top. Artifacts 2329.1 and 2480.10 both have elongated, faceted tops. Artifact 2477.2 has a pointed top, but the base is large and hollow, and appears that it would be placed over a bottle rather than inserted into it.



Figure 6-187. Glass artifacts that may belong to cruet or decanter sets: 1546 (*left*), 2326.7 (*top center*), 2329.1 (*top right*), 2477.2 (*bottom center*), and 2480.10 (*bottom right*; courtesy of CRL, Texas A&M University).

Friction Primers

A friction primer is a simple device, designed to light a cannon from a distance by inserting the primer into the vent tube and pulling a wire (Manucy 1985:26-27). The tube was filled with gunpowder, while a spur on one end contained antimony sulphide and potassium; a roughened copper wire was inserted in this spur and stuck out the other end, looped and twisted to allow for easy removal. The powder and the friction composition would be separated by lacquer, and when the wire was pulled, the roughened wire would start the ignition process. Although several copper alloy friction primers were recovered from site, three were made of pewter, but with copper alloy wire (Figure 6-188). At the time of writing, the author has not found mention of pewter friction primers, though tinned boxes for friction primers are common. Pewter, just like copper alloys, is malleable and non-sparking; although copper and quill were by far the most common materials used for friction primers, perhaps the difference between the two metals was negligible in some cases.



Figure 6-188. Three pewter friction primers were recovered from the site: 2251.5, 2499.11 (*this image*), and 2733.1 (courtesy of CRL, Texas A&M University).

Medical Equipment

A syringe, represented only by the pewter plunger and barrel cap (Figure 6-189), is one of three medical items identified from the site. The cap has a maximum diameter of 1.021 inches at the flange. The plunger measures 2.926 inches in length and the shaft is 0.249 inches in diameter; the metal part of the seal measures 0.485 inches, which would be the approximate inside diameter of the barrel. Since no parts of the barrel have been found, it is possible that the barrel was made of glass, and the plunger seals were made of cork or another organic material. At the time of writing, the type of syringe these pieces belong to has not been identified.

Although not pewter, it is worth noting the other two medical devices recovered from the site. The first (Artifact 2381.3) is a brass tourniquet press, missing the bottom plate and one wing on the screw. The second is a brass, oval disc with what appears to be some kind of buckle or fitting in the center and small holes along the edge; it is stamped with “SHERMAN’S PATENT DEC 23 56.” This patent number can be traced to U.S. Patent 16292A, a truss pad for hernias made by Sylvester I. Sherman of New York, New York (Sherman 1856). The brass plate would have attached to a strap using a ball and socket joint, and the holes around the edge were used to attach a pad.

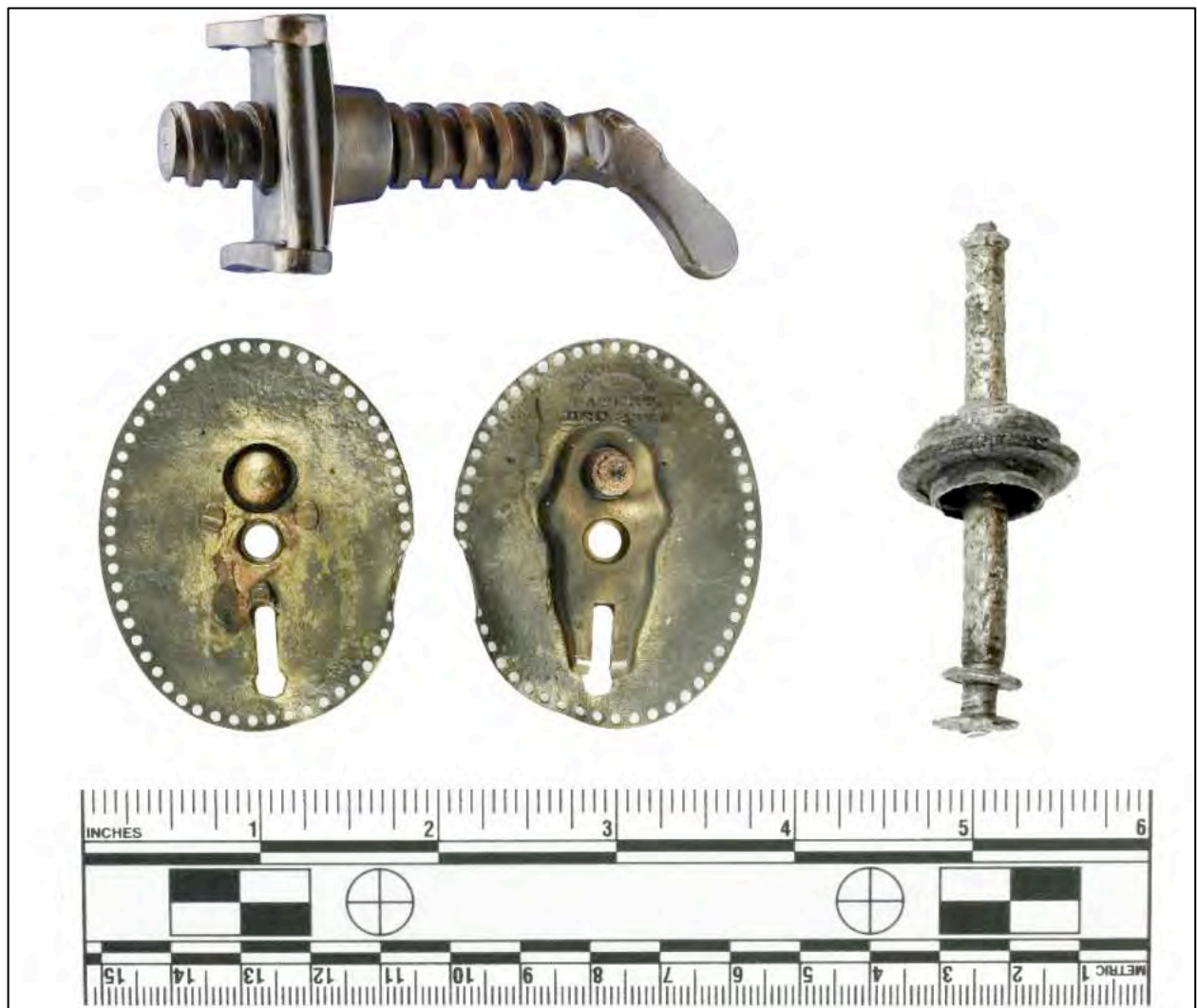


Figure 6-189. Medical equipment recovered from the site: 2215.1 (*bottom left*), 2381.3 (*top left*), and 2684.6 (*right*; courtesy of CRL, Texas A&M University).

Unidentified Artifacts

Seven small pewter fragments—perhaps solder or window coming, but they easily could have broken off much larger artifacts—have not been identified. One of the most decorated pewter artifacts (Figure 6-190) remains a mystery. It is composed of a mostly ovular central rod, and two sets of relatively flat “arms” at different angles; the entirety of the artifact is decorated in lines in different orientations and thicknesses. Field notes suggest it belongs to an oil lamp, but no close matches have been found. Although it’s of a similar size to the cruet set handle (Artifact 1366) it is not nearly as robust—in fact, it broke in two areas during treatment. The delicate nature of the artifact may indicate that it was not made for utilitarian tasks, such as a cruet stand or lamp, or may simply be an effect of corrosion.



Figure 6-190. Artifact 2286.4, an unidentified pewter artifact (courtesy of CRL, Texas A&M University).

MISCELLANEOUS ITEMS

“Miscellaneous Items” is not a true functional group; rather it is a “catchall” category that includes various items that cannot readily be placed in any of the above-mentioned groups. Numerous Miscellaneous Items were recovered that are extremely interesting. Many are personal items and some are one of a kind, such as a telescoping spyglass (Figure 6-191). Items associated with the ship itself include a complete cask of pine resin, a naval store for hull maintenance (Figure 6-192), and a 2-inch thick glass deck-prism (Figure 6-193). The prism is interesting in that it must have been built into the upper deck atop the casemate to allow light in. Other items include game items including a wooden domino (Figure 6-194), and a possible chess piece made out of a Maynard Bullet (Figure 6-195), eight kaolin smoking pipe bowls (Figures 6-196 to 6-199), three views of one of the several sets of leg irons recovered from the site (Figure 6-200), and a bronze “skeleton” key (Figure 6-201).

Similar to the prehistoric ceramics (below), and some percentage of the glass and historic ceramics recovered from the site, the kaolin smoking pipe bowls are potentially intrusive, although some if not all could easily have been personal property of those on board.



Figure 6-191. Remains of a bronze spyglass. It has been crushed and the lenses are no longer present.



Figure 6-192. A complete cask of pine resin. A naval store, it would have been employed for vessel maintenance.



Figure 6-193. Eight-inch wide, 2-inch thick, glass deck-prism.



Figure 6-194. Wooden domino recovered from the site.



Figure 6-195. Maynard Bullet with cut marks leading to speculation it was modified for use as a game piece, possibly chess.



Figure 6-196. One of eight kaolin smoking pipe bowls recovered on the site, this one with floral decoration.



Figure 6-197. Artifact 2312.4, one of eight kaolin smoking pipe bowls recovered on the site.



Figure 6-198. Artifact 2457.1, one of eight kaolin smoking pipe bowls recovered on the site.



Figure 6-199. Artifact 3319.1, one of eight kaolin smoking pipe bowls recovered on the site.

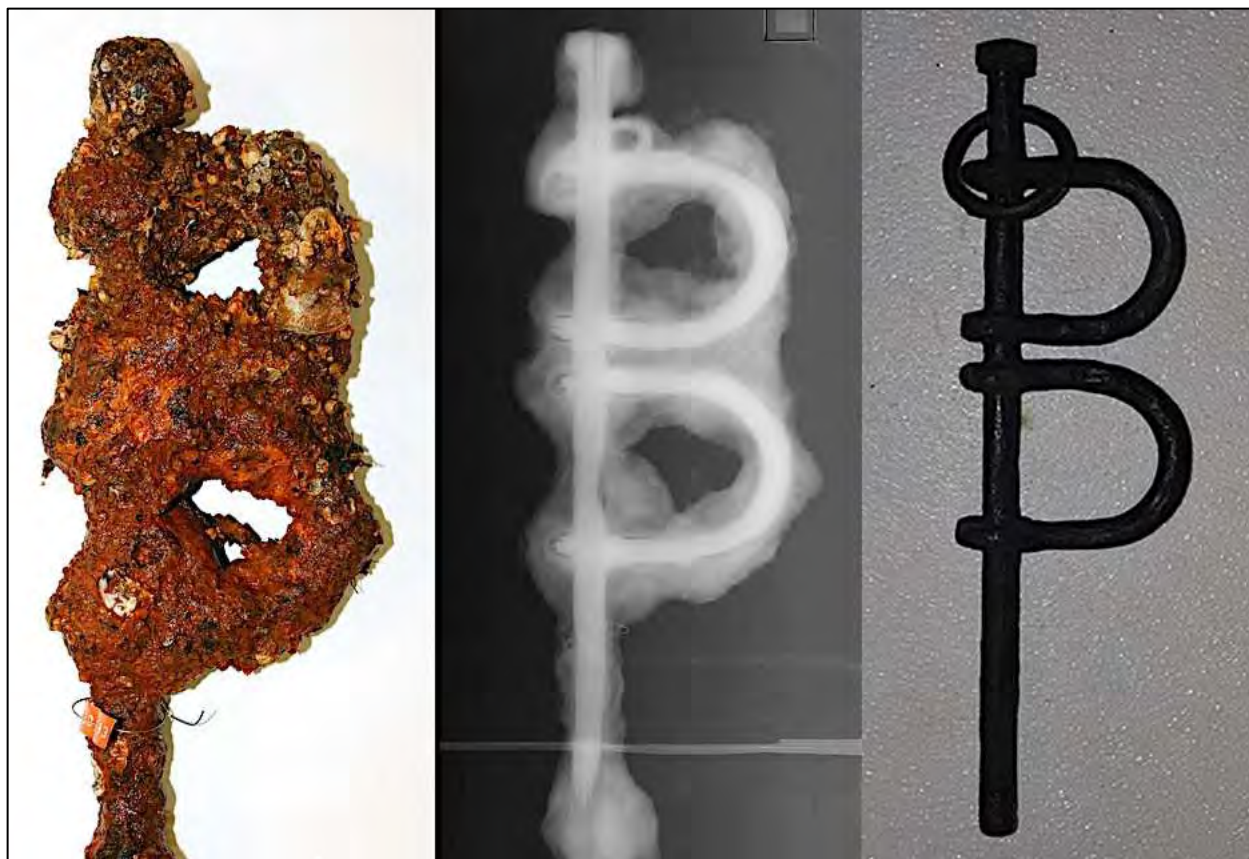


Figure 6-200. Three views of the same set of leg irons: as recovered; x-rayed; and conserved.



Figure 6-201. Bronze “skeleton” key (conserved).

PREHISTORIC CERAMICS AND PROJECTILE POINTS/KNIVES

Although totally unassociated with the wreck, but perhaps the most prolific artifact type found on-site and undoubtedly the most surprising (at least for their numbers), was prehistoric ceramics. Surpassing historic ceramics in number, and represented by mainly small fragments (Figure 6-202) an astounding total of 4,140 prehistoric sherds was recovered. Again, not an exhaustive presentation, but illustrated in Figures 6-202 to 6-210 are examples of pieces recovered, many with various decorations including cord-marked, check-stamped, punctate, incised, and complex designs. A cursory examination of the ceramics, besides underscoring the fact that it is an amazing assemblage, indicated that the majority represents prehistoric types dating from the Woodland through the Mississippian periods and possibly into the Historic period. However, this is overly simplistic and the assemblage has been sent to Georgia Southern University (GSU) for analysis and curation. Discussions with Dr. Mathew Compton of the GSU Anthropology Department indicated that the assemblage appeared to represent every type known for Coastal Georgia and South Carolina, including Late Archaic Fiber Tempered wares (i.e., Stallings), as well as some types that he had never seen (Dr. Mathew Compton personal communication, 2019).

In addition to prehistoric ceramics 17 prehistoric projectile points/knives (PP/Ks) were recovered and represent Early Archaic (i.e., Eva Type I) to possibly Mississippian period types (i.e., Madison). Several examples are presented in Figures 6-211 to 6-216. Similar to the ceramics, the PP/K assemblage has been sent to the GSU where it will undergo proper analysis and curation.

The provenience of the prehistoric materials is presented in Figure 6-217 and shows an almost site-wide distribution, but does seemingly indicate a concentration or swath along the northern side of the site, as if the CSS *Georgia* was acting as a catchment for ceramics coming downstream. The fact that they are present is not overly surprising, their numbers, however, are, and beg the questions of origin and why so many are present. Their presence raises yet another question: if indeed, the CSS *Georgia* is acting as a catchment, are other artifacts (e.g., glass, ceramic, buttons, smoking pipes, etc.) also “washing in”?



Figure 6-202. Recovery (both trays) from S-819 in Unit 3-L showing a glimpse of the sheer number of recovered prehistoric ceramics.



Figure 6-203. Large decorated rim/body sherd.



Figure 6-204. Small check-stamped decorated sherd.



Figure 6-205. Large, cord-marked, body sherd.



Figure 6-206. Small, "Complicated Stamped," sherd.



Figure 6-207. Large, "Complicated Stamped," body sherd.



Figure 6-208. Large, punctate and incised decorated, rim/body sherd.



Figure 6-209. Small, decorated sherd.



Figure 6-210. Small, “Complicated Stamped” sherd.



Figure 6-211. Recovered PP/K, possibly a *Madison* (Late Woodland to Mississippian).



Figure 6-212. Recovered PP/K, possibly a *Citrus* (Early to Middle Woodland).



Figure 6-213. Recovered PP/K, possibly a *Citrus* (Early to Middle Woodland).



Figure 6-214. Recovered PP/K, possibly a *Citrus* (Early to Middle Woodland)).



Figure 6-215. Recovered PP/K, possibly an *Eva Type I* (Early Archaic).



Figure 6-216. Recovered PP/K, possibly a *Morrow Mountain Straight Base* (Middle Archaic) or a *Kiokee Creek* (Late Archaic).

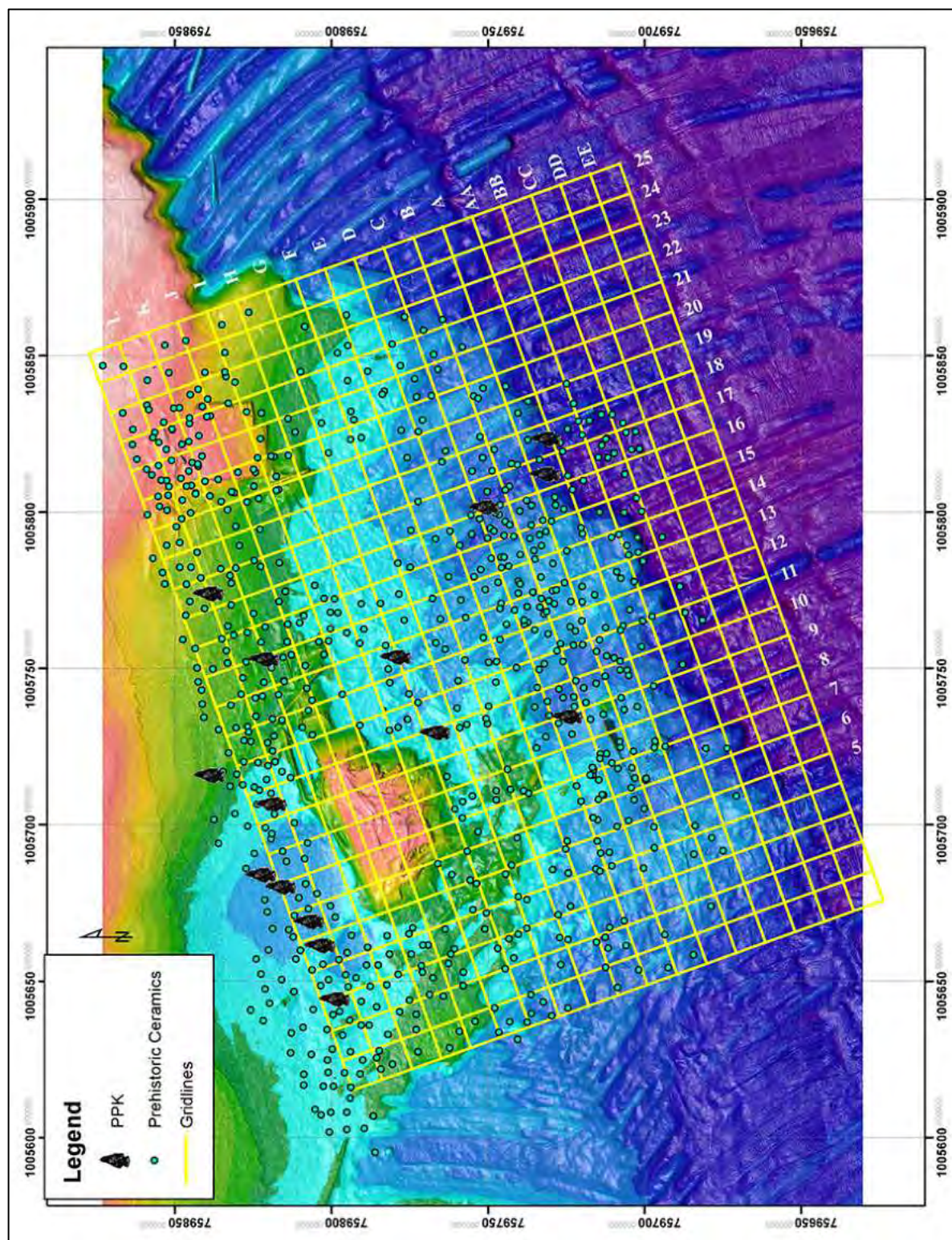


Figure 6-217. Distribution map of prehistoric ceramics and PP/Ks showing an almost site-wide distribution.

TOOLS

A large number of hand tools have been recovered from the CSS *Georgia* and undergone or are currently undergoing conservation. On the CSS *Georgia*, as on any ship, there would have been much engineering, metalworking, and woodworking involved in the maintenance of the vessel and its machinery. This variety of jobs required a diverse number of tools, and the scuttling of the CSS *Georgia* in 1864, resulted in much of the equipment on board being left behind (Swanson and Holcombe 2007:91).

This chapter catalogues 38 tools found during excavation of the CSS *Georgia* (Table 6-09). These artifacts are also analyzed via GIS to examine the significance of their distribution on the wreck site. As described below, maps are presented in the catalogue for each tool type, and a discussion of the overall distribution of artifacts is presented in a dedicated section following “Catalogue.” Written by Chase Oswald and Paul Cochran, and Chase also produced the GIS analysis maps.

Catalogue

This section catalogues the tools studied for this chapter by tool type. These types are, in order, augers, axes, chisels, drills, files, hammers, pliers, scrapers, and wrenches. Wooden tool handles are also studied following the wrenches, and an effort has been made to identify plausible tools they might have fit.

Some explanation of this Catalogue is required to describe its goals and its limitations. In the first place, this Catalogue only describes artifacts that have undergone conservation at the CRL Texas A&M University, or are sufficiently identifiable as tools in pre-conservation. This does not, for example, include the carpenter’s adze recovered in 1979 (Swanson and Holcombe 2007:68). Additionally, this means that there may still be concretions from the CSS *Georgia* containing tools, but these have not yet been identified. Gun wrenches and some other large artifacts might also be considered tools in some sense, but the authors felt that these objects did not fit thematically within the scope of this research. Therefore, these larger artifacts were excluded.

For each tool type, entries for individual tools are presented in order of the artifact’s assigned number. This only differs for artifacts that could not be physically studied by the authors, which are presented after all other tools in each type. Each type of tool is introduced with an overview of how these tools were used in general, and an explanation of more specific tool forms, such as open-ended wrenches versus adjustable wrenches, is also offered. At the end of each section, a site map has been presented in GIS displaying the distribution of the particular artifact type.

Each entry provides all basic measurements of the tool that could prove useful to future analysis. Again, if a more specific identification of a tool can be made within its sub-type, then the particulars of that tool are provided (e.g., adjustable wrench Artifact 1879.19 identified as Joseph Hyde’s “Gripping Screw Wrench”). The authors could not physically measure artifacts that were already at NHHHC at the time of writing, however. For these artifacts, only a brief description could be offered based on available photos. To compensate for this, photos are included for each artifact that is already at NHHHC.

Table 6-09. Tools from the CSS Georgia.

No.	Tool Type	Artifact No.	Sub-type/Identification (if applicable)
1	Augers	1850.10	Spiral auger
2		2160.10	Spiral augers
3	Axes	1899.1	Felling axe—Kentucky/intermediate Anglo-American pattern
4		2231.3	Felling axe—Anglo-American
5		NP 117	Possible tomahawk (?)
6	Chisels	1879.19	Cold chisel
7		2923.10	Cold chisel
8	“Drill”/Star Chisel	1861.17	
9	Files	2193.4	Coarse flat file
10		2808.4	Triangular file
11	Hammers	1899.2	Brass, non-sparking hammer
12		2165.8	Cross-pein sledgehammer
13		2927.11	Forging hammer
14		3058.1	Double-face/Engineer’s hammer
15		3158.5	Cross-pein sledgehammer
16	“Pliers”	1883.5	
17	Scrapers/“Caulking Tools”	1814.7	Thick, curved head
18		1852.5	Thin-plate scraper
19		1852.11	Thin-plate scraper
20		1853.2	Thin-plate scraper head
21		1853.17	Thin-plate scraper
22		1853.18	Thin-plate scrapers
23		1856.4	Thin-plate scraper
24		1892.4	Thin-plate scraper head
25		2165.11	Thin-plate scraper head
26		2996.2	Scraper shank
27	Wrenches	1879.12	S-wrench
28		1879.19	Adjustable wrench—Joseph Hyde’s “gripping screw wrench”
29		1899.16	S-wrench
30		1899.20	Adjustable wrench
31		1900.1	S-wrench
32		1964.2	S-wrench
33		3019.5	One-sided, open-ended wrench
34		3020.1	Possible S-wrench (?)
35	Wooden Tool Handle	1299	Possible awl handle (?)
36		1926.4	Possible awl handle (?)
37		2182.1	Possible awl handle (?)
38	Anvil	1843.02	

Pictures are offered for the most illustrative examples of the different tools within each tool type, which means they are not necessarily the first specimens of each such tool. For example, Artifact 1853.18 provides the most illustrative, well-preserved scraper, though several scrapers are described before this artifact. Additionally, these pictures are labeled with the terminology used in this catalogue to describe each type of tool. Where possible, the authors have used terminology appearing in other literature for standardization. However, these terms are not absolute and may vary from one author to another describing the same tools. John Light noted a similar issue when compiling his dictionary of blacksmithing terminology (Light 2007:84).

One of the aims of this research was to identify maker's marks or other diagnostic stampings on the tools. These are listed in individual artifact entries when observed. However, the authors believe that extensive stress corrosion may have worn away stamp evidence on a significant number of the CSS *Georgia* tools. Comparing the tools studied here with tools from other sites suggested that the stamped portions of tools from elsewhere often corresponded with parts of the CSS *Georgia* tools that were rather corroded. It cannot be proven that stress corrosion has erased such evidence, but this is a plausible mechanism for explaining the relative scarcity of observable maker's marks on the CSS *Georgia* tools (Donny Hamilton personal communication, 2019).

Augers

Three augers were recovered and studied from the CSS *Georgia* (Artifacts 1850.30 and 2160.10—two augers). Historically, the auger was the best tool available to the nineteenth-century tradesman when it came to boring holes in wood (Blackburn 1998:316). Many forms of auger were available, but by the time of the Civil War the most commonly used and most efficient was the spiral auger (Mercer 2000:200). This auger had the advantage of both horizontal blades at the cutting edge, allowing for the hole to be cut as a perfect cylinder from the start, as well as being designed so as to carry the wood shavings from the cut up the spiral and out of the way with each twist. These augers were commonly fitted with a wooden handle set perpendicular at the end of the shank, giving the tool what has been commonly called a “T-shape” (Blackburn 1998:316).

Artifact 1850.30

Artifact 1850.30 is a spiral auger (Figure 6-218). It has a leading screw, with what should probably be considered a medium thread, which is better suited for boring softer woods (Blackburn 1998:324). No spur is apparent on the auger's cutting edge. The end of the shank is squared then slightly tapered, likely for a wood handle.

The overall length of the auger is about 16.73 inches, with the spiral extending for about 6.10 inches. The spiral has a diameter of about 1.21 inches. The auger's leading screw has a length of about 0.43 inches and diameter of about 0.30 inches. From the spiral, the round portion of the shank has a diameter of about 0.51 inches for a length of about 5.92 inches before transitioning to the square section with a width of about 0.54 inch for the last 3.89 inches of the auger's length.



Figure 6-218. Artifact 1850.10. Auger parts as follows: (a) shank, (b) spiral, (c) cutting edge, and (d) leading screw (courtesy of CRL Texas A&M University). Labels follow terminology in Blackburn (1998:316) and Mercer (2000:200).

Artifact 2160.10

This artifact applied to two spiral augers (Figure 6-219). These were unavailable for study at the time of writing. Both augers appear to be heavily corroded, and it is uncertain whether they might originally have had horizontal cutting edges and a leading screw. Using the available photo for reference, the first auger (at top in the figure below) has an overall length of about 18 inches and a spiral width of about 1.75 inches. The second auger (at bottom in the figure below) has a preserved length of about 15.50 inches and preserved spiral width of about 1.69 inches.

Illustrated in Figure 6-220, these two augers were still in their wooden “holder” at the time of recovery. Similar to what would hold them in any woodworking shop then or today, this holder was not available for study.

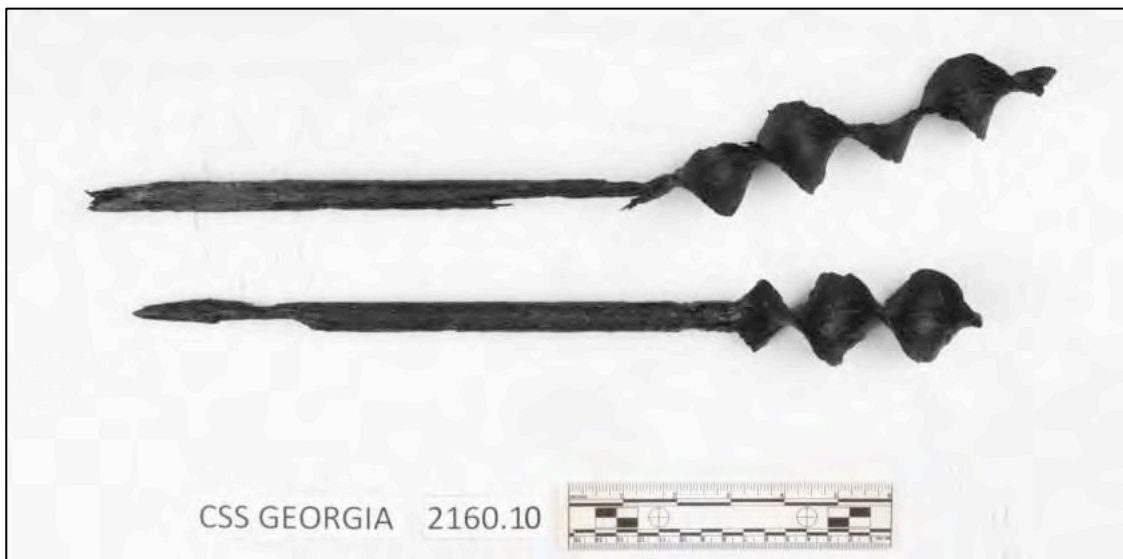


Figure 6-2-219. Artifact 2160.10 (courtesy of CRL Texas A&M University).



Figure 6-220. Artifact 2160.10, two auger bits recovered still in their wooden holder.

Axes

Three axe heads retrieved from the CSS *Georgia* were included in this study (Artifact 1899.1, Artifact 2231.3, and NP 117). A fourth object identified as an axe, the authors could, not personally examine Artifact 1803.10, at the time of this study, and existing photos only showed a heavily concreted artifact. Therefore, Artifact 1803.10 has been excluded from this study. While it is possible that some axe heads were kept as replacements, Artifacts 1899.1 and 2231.3 were found with wooden handles attached. Two of the three axe heads denoted in this report are felling axes specialized with a double-beveled bit and used for felling trees and chopping wood (Blackburn 2000:7-8).

Artifact 1899.1

This axe head (Figures 6-221 and 6-222) is classified as a felling axe with a similar configuration to the Kentucky and intermediate Anglo-American axe patterns (Mercer 2000; Heavrin 1999:113-115). The axe head has a length of 7.11 inches, a width of 4.01 inches and a thickness of 1.06 inches. The bit has a width of 4.21 inches and thickness of 0.07 inches. The poll of the axe has a length of 3.40 inches and a thickness of 0.79 inches. The eye of the axe has length of 2.36 inches and a width of 0.83 inches. The axe head weighs 4.20 pounds. Corrosion appears mostly on the bit most likely from the stress put on the cutting edge by continual use. A portion of the wood from the haft of the axe was recovered, removed, and then conserved separately.

Artifact 2231.3

This axe head (Figures 6-223 and 6-224) is classified as an Anglo-American felling axe with a round eye and no pole (Heavrin 1999:112-115). The axe head has a length of 5.96 inches, a mid-section width of 3.99 inches and thickness of 0.80 inch. The cheek to bit measured 3.95 inches in length and had a width of 3.51 at the base of the cheek with a thickness of 0.62 inches. The max width for the bit had a width of 4.04 inches and a terminal width of 3.72 inches. The eye of the axe had a length of 2.01 inches and a width of 1.70 inches. The axe head weighed 2.55 pounds. This axe head suffers from intense corrosion and other damage. The bit is heavily corroded with a sizeable portion missing while part of the eye is no longer intact. The corrosion is most likely due to stress from use with the cutting edge. The missing portion may also be due to stress corrosion from the bending of the metal around the haft of the axe during its construction. A portion of the wood from the handle of the hammer was recovered, removed, and then conserved separately.

Artifact NP 117

This axe head (Figures 6-225 and 6-226) was rather difficult to classify in that it did not fit the known description of any distinctive class of axes. However, it does have a somewhat similar form to that of a tomahawk containing a hammer poll. Examples of this type of axe include lathing hatchets and shingling hatchets (Peterson 1965:31). The axe head has a length of 5.85 inches. The bit has a width of 1.51 inches. The eye of the axe had a length of 1.10 and a width of 0.60 inches. The poll has a width of 0.93 inches. The head had a maximum thickness of 1.07 inches, the bit had thickness of 0.13 inches, and the poll had a thickness of 0.93 inches. The axe head weighed 1.00 pound. The axe is missing approximately a third of the bit, as well as a section of the eye is also missing. The locations of these missing portions indicate stress corrosion is the most likely culprit.

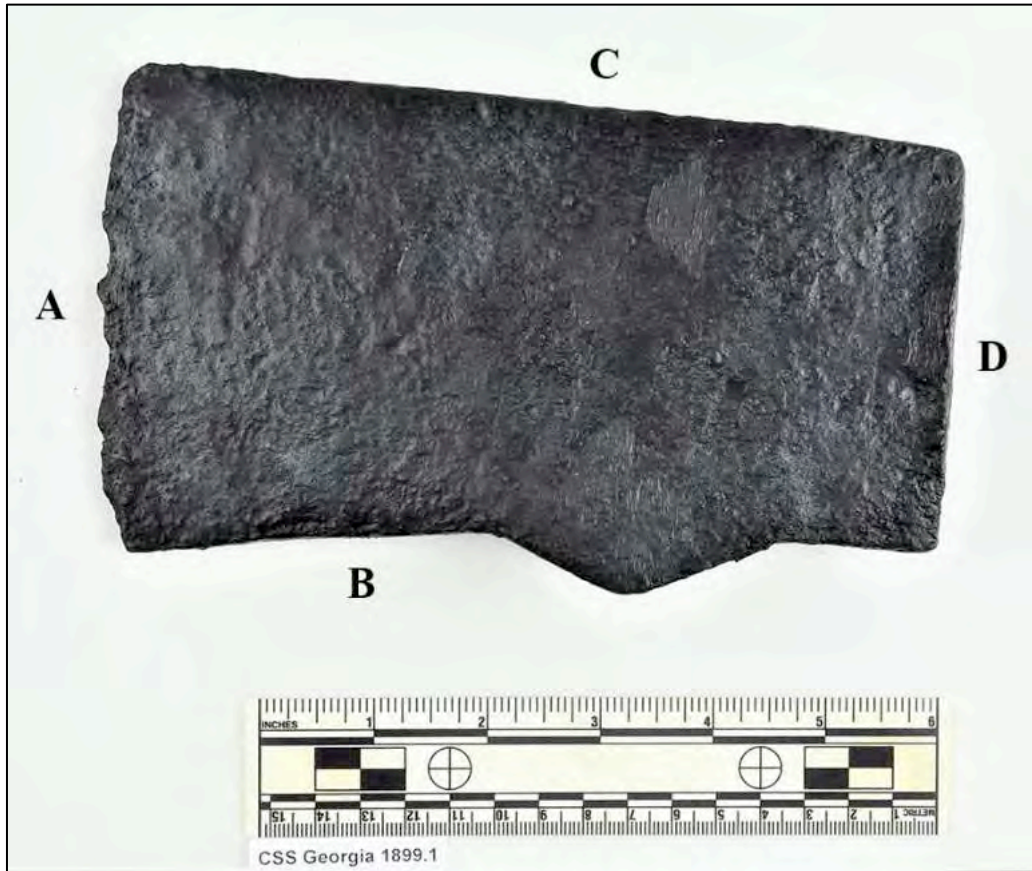


Figure 6-221. Artifact 1899.1 felling axe parts as follows: (a) bit, (b) cheek, (c) eye, and (d) poll (courtesy of CRL Texas A&M University). Labels follow terminology in Blackburn (2000:6).



Figure 6-222. Felling axe recovered from the CSS *Georgia*. Axe parts as follows: (a) bit, (b) cheek, (c) eye, and (d) poll (courtesy of CRL Texas A&M University). Labels follow terminology in Blackburn (2000:6).



Figure 6-223. Artifact 2231.3 felling axe (courtesy of CRL Texas A&M University).



Figure 6-224. Artifact 2231.3 felling axe (courtesy of CRL Texas A&M University).



Figure 6-225. Artifact NP 117 potential tomahawk (courtesy of CRL Texas A&M University).



Figure 6-226. Artifact NP 117 potential tomahawk (courtesy of CRL Texas A&M University).

Chisels

Two hand chisels were recovered and studied in the CSS *Georgia* assemblage (Artifacts 1879.19 and 2923.10). Whereas woodworking chisels tend to be thin and relatively light, the chisels from the CSS *Georgia* were clearly stout “cold chisels” used in metalworking (Hodgkinson 1979:245; Light 2007:105). A cold chisel is used any time that unheated metal must be cut into, with various shapes of cold chisel used for different cutting jobs (Light 2007:105). In the case of the CSS *Georgia* chisels, both artifacts appear to be so-called “flat chisels,” which were used to chip flat metal or to cut through objects like fasteners (Light 2007:105).

Artifact 1879.19

Artifact 1879.19 is a cold chisel found in association with adjustable wrench Artifact 1879.19 (Figure 6-227). The chisel almost has the appearance of being single-beveled, but is probably just a double-beveled chisel, like Artifact 2923.10, that has bent at the bit post-deposition. Overall, the chisel is about 6.50 inches long. The bit is about 3.00 inches long and 0.63 inches wide at the cutting edge of the bit. The stock is badly worn, but it can be seen to be octagonal in cross-section. The diameter of this stock is about 0.70 inch where most well preserved, and the length is about 3.50 inches.

Artifact 2923.10

Artifact 2923.10 is a cold chisel (Figure 6-228). Overall, the chisel is about 7.81 inches long. The bit of the chisel is about 3.06 inches long, with a width at the cutting edge of about 0.87 inches. The stock is octagonal in cross-section, with a diameter of about 0.75 inch and a length of approximately 4.75 inches.

“Drill”/Star Chisel

This study included one artifact from the CSS *Georgia* labeled as a “drill bit” (Artifact 1861.17). However, it would perhaps be more accurate to call this artifact a “star chisel” (sometimes called a “star drill”), owing to the “x-shape” of the tool’s cutting surface. Star chisels were often employed for drilling holes into dense material such as stone or brick (Ham 2008:32; Hines 1995:11). Repeatedly hammering and turning a star chisel could bore a circular hole into such surfaces (Hines 1995:11). There were other “drill bits” listed in the artifact database for the CSS *Georgia* project, but these are all still in pre-conservation and could not be meaningfully studied for this report. Therefore, it is possible there are more conventional drill bits amongst these, but that is beyond the scope of this research.

Artifact 1861.17

Artifact 1861.17 is a star chisel/drill about 7.75 inches long (Figure 6-229). Each side of the four-sided “x-shaped” cutting edge measures about 0.75 inch across; that is, at the widest point of the diameter there is a distance of 0.75 inch from one edge to either of the other two nearest edges.

Files

Two metal files were recovered from the CSS *Georgia* (Artifacts 2193.4 and 2808.4); however, only one of the files is currently fully conserved. Files are typically used for smoothing and shaping materials such as wood and metal, and are generally made of steel covered in rows of parallel teeth or furrows (Blackburn 2000:55).

Artifact 2193.4

This file (Figure 6-230) is designated as a single-cut coarse straight flat file (Blackburn 2000:56). The file appears to have not undergone any significant damage; however, the file does not have a tang. Instead of a tang the teeth cover the entire surface of the file and there appears to be a groove cut out of the belly of the file where one might grasp it. The length of the file is 7.28 inches. The width at the heel is 1.14 inches, the width at the point is 0.87 inch at the point, and

the width at the groove is 0.81 inch. The thickness at the heel is 0.28 inch and the thickness at the heel is 0.24 inch. The file weighs 0.55 pounds. The file is most heavily corroded around the edges, most likely from the stress of being worked with in those areas.



Figure 6-227. Artifact 1879.19 is a cold chisel (courtesy of CRL Texas A&M University).



Figure 6-228. Artifact 2923.10 cold chisel parts as follows: (a) bit, (b) stock, and (c) head (courtesy of CRL Texas A&M University). “Bit” follows Light (2007:105), whereas “Stock” and “Head” follow Scientific American (1884:32).

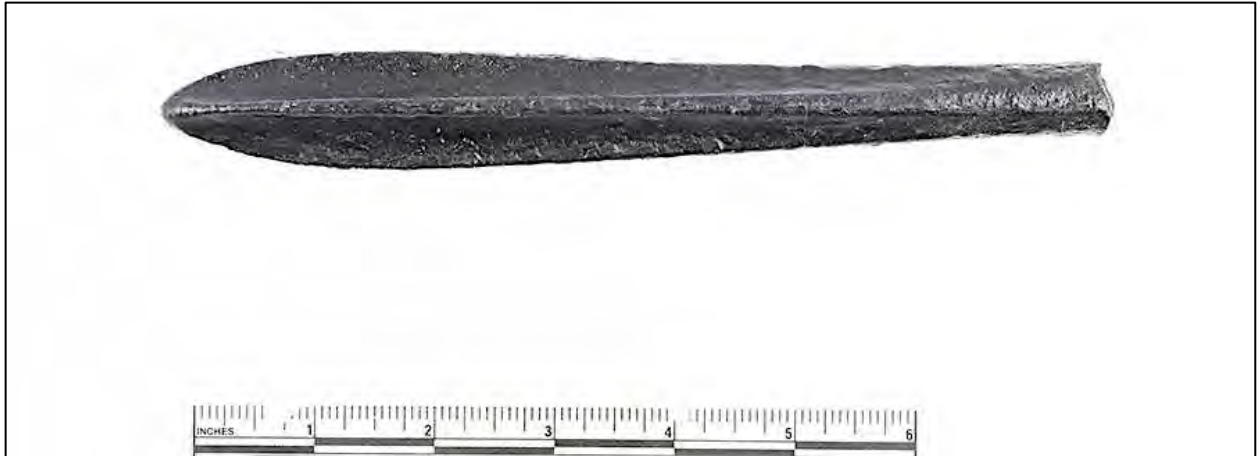


Figure 6-229. Artifact 1861.17, star chisel with cutting edge at right (Following Hines 1995; courtesy of CRL Texas A&M University).



Figure 6-230. Single-Cut Coarse Straight Flat File (courtesy of CRL Texas A&M University).

Artifact 2808.4

This file (Figure 6-231) is designated as a single-cut second-cut tapered triangular file (Blackburn 2000:56-57). The file has length of 4.01 inches and a width of 0.39 inches. The length of the belly is 3.18 inches and the length of the tang is 0.83 inch. The heel has a width of 0.33 inch. The file weighs 0.05 pounds. Corrosion could not be accurately determined at the time of recording because the artifact was still partially concreted.



Figure 6-231. Single-cut second-cut tapered triangular file parts as follow: (a) point, (b) side, (c) edge, (d) belly, (e) heel, and (f) tang. Labels follow terminology in Blackburn (2000:55; courtesy of CRL Texas A&M University). Note that metric units are on top of scale bar.

Hammers

Five hammers were identified within the CSS *Georgia* material (Artifacts 1899.2, 2165.8, 2927.11, 3058.1, and 3158.5). Artifact 1899.2 is made of brass, while all four other hammers are forged from iron. The hammers within this catalogue pertain to both metalworking and woodworking (Blackburn 2000:67-72; Light 2007). Wood remains were not clearly observed in these hammers except for Artifact 3058.1 (described below).

Artifact 1899.2

This hammerhead (Figure 6-232) is the only hammerhead in the collection made of brass, not iron. Similar hammerheads are typically used in metal work, as they do not disfigure the work (Blackburn 2000:69). This particular hammerhead, however, is believed to have been a non-sparking hammer used in relation to opening the gunpowder barrels on the CSS *Georgia* (Jim Jobling personal communication, 2019). The hammerhead has a length of 5.61 inches with a mid-section width of 2.48 inches and mid-section thickness of 2.24 inches. The necks of the hammerhead have a width of approximately 2.00 inches and a thickness of approximately 2.12 inches. The faces of the hammerhead have an average diameter of approximately 2.20 inches. The eye of the hammerhead has a length of 1.99 inches and a width of 0.92 inches. The hammerhead weighs 6.05 pounds.

Artifact 2165.8

This hammerhead (Figure 6-233) is designated as a cross-pein sledgehammer (Blackburn 2000:72). The hammerhead has a max length of 7.5 inches, a max width of 2.52 inches, a max thickness of 2.36 inches, and a weight of 9.75 pounds. The eye of the hammerhead has a length of 1.63 inches and a width of 1.10 inches. The chamfers on the pein portion of the hammerhead have a length of 0.99 inches and a width of 1.50 inches (Bealer 1976:159). The chamfers on the face portion of the hammerhead have a length of 2.29 inches and a width of 0.68 inch. The width of the pein was 1.91 inches. The base of the pein is 2.16 inches thick, the mid-section of the pein is 1.17 inches thick, and the curve at the tip of the pein was 0.27 inch. The face of the hammerhead has a vertical diameter of 2.05 inches, and horizontal diameter of 2.55 inches. A typical handle for this type of hammer would have measured between 16 inches and 3 feet, increasing with the weight of the hammerhead (Blackburn 2000:72).



Figure 6-232. Artifact 1899.2 is an anti-sparking brass hammer (courtesy of CRL Texas A&M University).



Figure 6-233. Cross-pein sledgehammer hammerhead parts as follows: (a) face, (b) eye, (c) pein, and (d) chamfer (courtesy of CRL Texas A&M University). Labels follow terminology in Blackburn (2000:67).

Artifact 2927.11

This hammerhead (Figure 6-234) is designated as a forging hammer, most likely used in blacksmithing (Light 2007:121). The hammerhead has a length of 5.44 inches and a mid-width of 2.08 inches. The average width of both necks is less than 1.73 inches. The eye of the hammer has a length of 1.38 inches and a width of 0.94 inch. The faces of the hammer have an average diameter of approximately 2.01 inches. The hammerhead has a weight of 4.00 pounds. The faces of the hammer are slightly flared out in a mushrooming formation; this is due to the stress put on the faces of the hammer from use. It also appears as though the initials “C.W.” were stamped into the hammerhead near the eye. The handle of the hammer would have measured somewhere between 1 and 1.5 feet (Light 2007:121). It should be noted also that in reference to classifying the hammer, the actual term applied by the blacksmith whom created it could have varied and differed from person to person. This variability in terminology stems from differentiating personal preferences between blacksmiths and early catalogues, as well as a tendency of blacksmiths to denote the same name to different types of hammers (Light 2007:121).



Figure 6-234. Artifact 2927.11, a forging hammer (courtesy of CRL Texas A&M University).

Artifact 3058.1

This hammerhead (Figure 6-235) is designated as a “double-face” or “engineer’s” hammer and was most likely used in metalwork such as blacksmithing (Bealer 1976; Blackburn 2000:69). The hammerhead has a length of 5.13 inches and a width of 1.82 inches. The eye of the hammer has a length of 1.03 inches and a width of 0.77 inch. The necks of the hammer have a width of approximately 1.79 inches. The faces of the hammer have an average diameter of approximately 1.69 inches. The hammerhead has a weight of 3.30 pounds. Notably, it appears as though there has been a “4” stamped into the hammerhead near the eye most likely indicating its weight. Additionally, it appears though a pair of initials is also stamped in the hammerhead on the opposite side of the eye as the 4. The stamped initials may possibly read “LE,” however, they are not clearly distinguishable as stress corrosion has heavily damaged this area of the hammer. A portion of the wood from the handle of the hammer was recovered, removed, and then conserved separately. The handle would have averaged around 16 inches in length (Blackburn 2000:69).



Figure 6-235. Artifact 3058.1 is a “double-faced” or “engineer’s” hammer. Note that the scale bar is positioned with metric at top in this photo (courtesy of CRL Texas A&M University). Note the cast “4” at left.

Artifact 3158.5

This hammerhead (Figure 6-236) is classified as a cross-pein sledgehammer (Blackburn 2000:72). The hammerhead has a length of approximately 6.75 inches, a max width at the mid-section of 2.60 inches and a thickness of 2.64 inches. The eye of the hammerhead has length of 1.56 inches and a width of 1.22 inches. The pein of the hammerhead has a width of 2.38 inches and a thickness of 0.90 inch. The face of the hammer has a diameter of approximately 3 inches. The chamfers on the sides of the hammerhead are highly corroded but have an average width of approximately 0.94 inch. The hammerhead has a weight of 8.60 pounds. The handle for this hammer would have ranged between 16 inches and 3 feet (Blackburn 2000:72). Overall the hammerhead is in a very poor condition suffering from high levels of surface corrosion, especially compared to the other hammer specimens recovered from the CSS *Georgia*. The high levels of corrosion possibly indicate that this particular tool saw an immense amount of use and stress compared to the other hammerheads. Most of the corrosion pertains to the work areas of hammerhead such as the face and pein, with the face suffering from an exceptionally exaggerated flared mushrooming affect that is a direct result of high levels of repeated use with that surface.

“Pliers”

A single artifact, Artifact 1883.5, has been identified as a pair of plier handles (Figure 6-237). This tool is included here for thoroughness, but because it was already at NHHC when this research began, the authors have not had the opportunity to personally examine this artifact. Therefore, a detailed, meaningful analysis is beyond the scope of this research.



Figure 6-236. Artifact 3158.5, a cross-pein sledgehammer (courtesy of CRL Texas A&M University). Labels follow terminology in Blackburn (2000:6).



Figure 6-237. Artifact 1883.5, "plier handles" (courtesy of CRL Texas A&M University).

Scrapers/“Caulking Tools”

Ten artifacts identified as scrapers were studied for this report (Artifacts 1814.7, 1852.5, 1852.11, 1853.2, 1853.17, 1853.18, 1856.4, 1892.4, 2165.11, and 2996.2). An eleventh scraper (Artifact 1852.12) is known, but as of this writing has not undergone conservation and could not be studied. With eleven tools in this group, the scrapers form the largest category of tools identified from the CSS *Georgia* at this time.

For this catalogue, these tools are called “scrapers,” though they are presently labeled as “caulking tools” in the artifact catalogue. However, defining the exact use of these tools on the CSS *Georgia* has proven problematic. In the course of research, literary references to and depictions of these triangular tools proved scarce, so perhaps a more extensive literature review would allow for a well-defined description of these scrapers. Horsley depicts several handheld ship scrapers similar in shape to the CSS *Georgia* scrapers (Horsley 1978:153; Figure 6-55). Unfortunately, little information is provided on these tools other than that they were used for “used for cleaning down hulls, paintwork and the varnishing known as brightwork” (Horsley 1978:151). Another publication shows a scraper of this same shape used in the period of the American Revolution, in this example socketed onto a long wooden pole (Wilbur 1984:12). Wilbur reaffirms that these tools were used to scrape the hulls, noting specifically that these scrapers were employed after a ship had been caulked and its hull smoothed with a plane.

However, in the case of the CSS *Georgia*, associating these tools with hull scraping is problematic. Since the CSS *Georgia* was an ironclad, there was presumably no need for hull scraping on the ship’s exterior (Stephen James personal communication, 2019). Therefore, alternative uses have been proposed, such as that these tools were used to scrape out a boiler’s ash pits and or clean fire tubes (Gordon Watts personal communication, 2019). It is also worth noting that these triangular tools somewhat resemble modern “shave-hooks” used by some woodworkers (Hardwick & Sons). Evidently, there are a number of uses for scraping tools with a triangular shape like those on the CSS *Georgia*, and it is quite possible that these artifacts were in fact multi-purpose scrapers (Jim Jobling personal communication, 2019). Their numbers may suggest a specific purpose however.

There are five significant parts to the scraper’s anatomy (see *Artifact 1853.18* section). First, there was a shank, often with a widened socket at one end. These sockets may have had keyholes through which a metal pin would have fastened a wooden shaft (Justin Parkoff personal communication, 2019). The other end of the shank was placed through a hole in a triangular plate or head, and the protruding end of the shank appears to have been hammered into a rivet in most cases. Some triangular plates have been found kept as spares. It has been suggested that a damaged scraper head could be cut off on the shank, and that a new head could be riveted onto the remaining shank (Jim Jobling personal communication, 2019). In the scrapers studied, the most significant distinction between artifacts seems to be the size and shape of the triangular head. As a final note, for the sake of simplicity, a measurement of “total length” is used in this catalogue rather than providing measurements for each scraper’s shank and socket separately.

Artifact 1814.7

Scraper plate Artifact 1814.7 was found in isolation (Figure 6-238). Due to the well-preserved state of this scraper plate over its surface and at the central hole, it appears to have been a replacement head. This head is immediately distinct from the other scrapers. First, it is extra thick, at a thickness of 0.20 inch. This head is also marked by a steeper bevel at the edges compared to the other scraper plates. The central hole is also ovoid in shape, measuring 0.63 inch long by 0.34 inch wide. Unlike the other plates, essentially flat, this scraper head is curves downward on the unbeveled bottom face, with the arcs radiating from the central hole toward the three corners. The three sides of the plate measure 4.75, 4.74, and 4.72 inches.



Figure 6-238. Scraper head Artifact 1814.7 (courtesy of CRL Texas A&M University).

Artifact 1852.5

Scraper Artifact 1852.5 was originally found together with scrapers Artifact 1852.11 and 1852.12. Artifact 1852.5 is an example of the more common thin-plate scrapers, with a head thickness of 0.08 inch. The head is damaged, with only one edge preserved enough to determine its length, approximately 4.34 inches. There is a round rivet on the head about 0.63 inch in diameter. The overall length of the shank including the socket is about 9.75 inches. The socket has a depth of about 3.25 inches. The shank has a diameter between 0.59 and 0.66 inch from the head down to the top of the socket. As preserved, the socket has a maximum internal diameter of 1.10 inches. There were two possible keyholes, one measuring about 0.12-x-0.04 inch and about 2.76 inches up the side of the socket, while the other is set at a bit more than a right angle to the first keyhole. This second hole measures about 0.16-x-0.35 inch and about 2.91 inches up the side of the socket.

Artifact 1852.11

Scraper Artifact 1852.11 is an example of the more common thin-plate scrapers, with a head thickness of about 0.08 inch. The only edge of this scraper's head with substantial preservation has a length of 4.50 inches. There is still a round rivet preserved with a diameter between 0.71 and 0.91 inch, and a thickness of about 0.24 inches. The overall length of the scraper, including the socket, is 9.13 inches, with a socket depth of about 1.56 inches. The shank has a diameter of about 0.63 inch, widening to about 1.22 inches at the end of the opening of the socket. This socket has a maximum internal diameter of about 0.96 inch. There was not any clearly preserved pinning hole, though there is a crack along part of the socket.

Artifact 1853.2

Scraper head Artifact 1853.2 is an example of the more common thin-plate scrapers, with a head thickness of 0.08 inch (Figure 6-239). This head was found in isolation, and has a well-preserved, square shank hole measuring 0.43-x-0.43 inch. Due to the nature of the find and the state of its preservation, it's possible that this was a spare scraper head. None of the sides are entirely intact, but they have minimum measurements of 4.25, 4.75, and 4.50 inches.



Figure 6-239. Artifact 1853.2, a scraper head (courtesy of CRL Texas A&M University).

Artifact 1853.17

Scraper Artifact 1853.17 is an example of the more common thin-plate scraper, with a plate thickness of about 0.08 inch. The edges of the scraper head are not fully preserved except for one with a length of about 4.84 inches; the other sides have minimum lengths of 4.44 and 4.31 inches. There is a slight trace of a rivet preserved, possibly square in shape with dimensions of about 0.43-x-0.43 inch and a thickness of about 0.08 inch. The shank has not survived in its entirety, terminating before the beginning of the socket with an overall preserved length of about 5.75 inches. This shank has a diameter between 0.63 and 0.73 inch.

Artifact 1853.18

Two scrapers were found concreted together in Artifact 1853.18, both of the more common thin-plate variety (Figure 6-240). The first scraper (the upper of the two in the image below) has a plate thickness 0.08 inch, with one intact edge about 5.00 inches long and the other two edges, only slightly damaged, measuring 4.75 and 4.56 inches. No rivet is preserved on this scraper, with the edges of the square shank hole (measuring 0.43-x-0.43 inch) plainly visible from the upper side of the head. Due to the exposed joint between the shank and plate at the shank hole, this scraper could prove idea in a dedicated study of tool construction. Including the socket, the scraper has a length overall of about 8.75 inches, with a socket depth of about 2.315 inches. The shank's diameter is about 0.63 inch, widening to about 1.34 inches at the end of the socket. The interior of the socket has a maximum diameter of at least about 0.83 inch. This scraper has a well-defined keyhole measuring about 0.43-x-0.24 inch and at about 1.18 inches up the side of the socket. A crack with the same width runs up the socket on the directly opposite side from this pinning hole, so it is possible that there was once a second hole for a pin to run all the way through the socket. Unfortunately, the length of the crack makes a confident determination impossible.

The second scraper has a more damaged head, but with the same thickness as the first (0.08 inch). The most well preserved edge of this scraper measured about 4.25 inches, but it was evident that there was still a relatively large proportion of the edge's length missing. Neither of the other two edges had enough length preserved to be diagnostic, with only 2.50 inches remaining on the longest of these edges. A round rivet is well preserved, with a diameter of about 0.67 inch and a thickness of about 0.16 inch. Including the socket this scraper has a length of about 8.88 inches, with a socket depth of about 3.00 inches. The shank is about 0.61 inch in diameter, widening to 1.22 inches at the end of the socket. This socket has a maximum internal diameter of about 1.02 inches. The socket is essentially intact apart from a small hole on the bottom edge. This is probably damage, rather than a pinning hole.

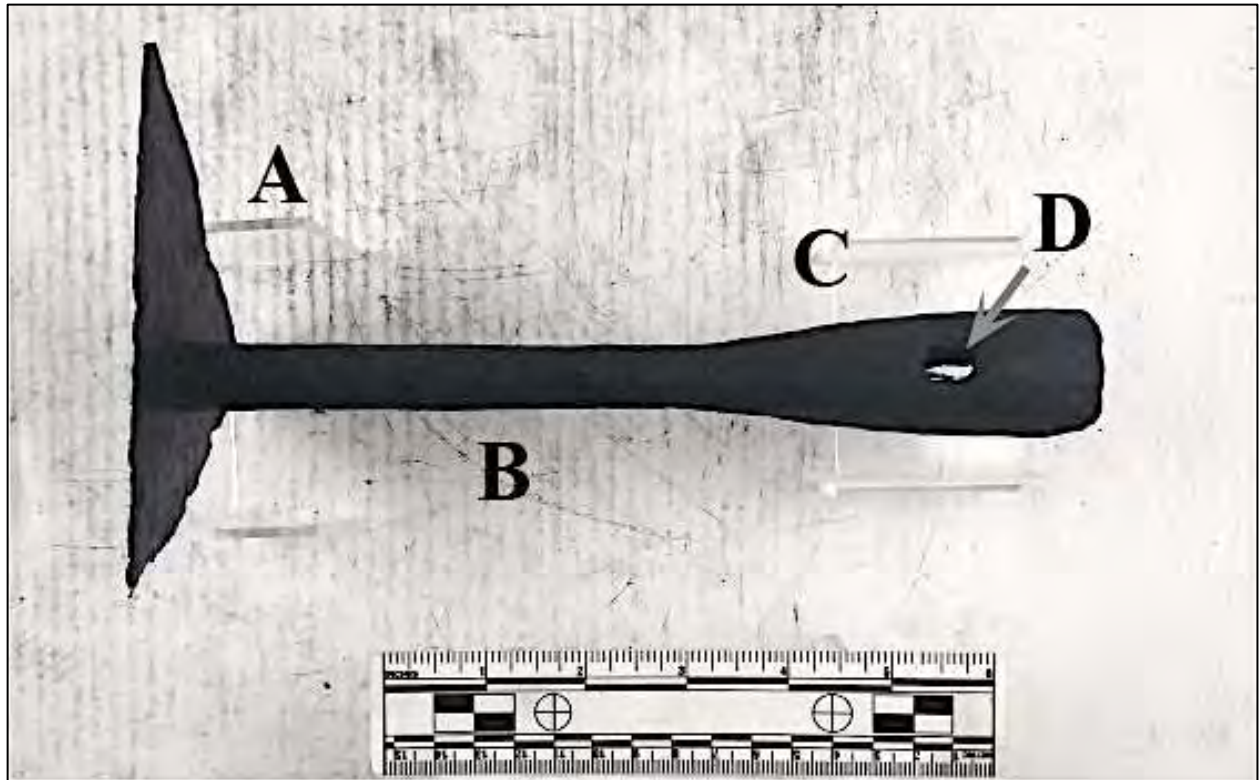


Figure 6-240. Artifact 1853.18, scraper parts are as follows: (a) scraper head/plate, (b) shank, (c) socket, and (d) pinning hole/keyhole. A rivet cannot be seen on this scraper due to the angle of the plate, but can be observed on the end of the lower scraper in the image at left. Labels are mostly drawn from common language applied to other tools, lacking a more precise discussion in scholarly sources. “Pinning hole/keyhole” follows personal communication with Justin Parkoff, Houston Maritime Museum (courtesy of CRL Texas A&M University).

Artifact 1856.4

Scraper Artifact 1856.4 is an example of the more common thin-plate variety, with a plate thickness of about 0.08 inch. The edges of the scraper head have intact lengths of 4.53, 4.15, and 4.42 inches. There is a round rivet present with a diameter of 0.72 inch. The scraper's shank is about 8.50 inch long overall, including a socket about 2.20 inches deep. The shank has a diameter of about 0.70 inch, while the maximum diameter of the socket is about 1.35 inches. No keyhole was observed for this scraper, though perhaps it was present along the long crack running up one side of the socket.

Artifact 1892.4

Scraper head Artifact 1892.4 seems to be an example of the common thin-plate scrapers, although it is slightly thicker at a thickness of about 0.10 inch. This head was found in isolation, but because the shank hole was not particularly well preserved, it is possible that this head had been attached to a shank and simply broke off. As preserved, the hole has a diameter between 0.59 and 0.83 inch. The edges of the head have lengths of about 5.00, 4.88, and 5.25 inches.

Artifact 2165.11

Scraper head Artifact 2165.11 is an example of the more common thin-plate scrapers, with a thickness of about 0.08 inch. The head was found in isolation, with a well-preserved rectangular shank hole measuring about 0.35-x-0.49 inch. Because of the condition of the artifact and the nature of the find, it is possible that this plate was kept as a spare scraper head. The edges of the scraper head are mostly intact, with lengths of about 4.88, 4.63, and 5.00 inches.

Artifact 2996.2

Scraper shank Artifact 2996.2 did not have a head attached to it when found. The overall length of this shank is about 9.63 inches, including a socket about 2.50 inches deep. It appeared that the end of the shank was not particularly worn or damaged; possibly, this scraper shank had not yet been fitted with a scraper head. Up to the beginning of the socket, the shank has a diameter of about 0.61 inch. The socket is well preserved up to the opening, widening out to a maximum internal diameter of about 0.96 inch. There is a possible keyhole about 0.50 inch above the end of the socket, with a diameter of about 0.16 inch.

Wrenches

Eight wrenches have been identified from the CSS *Georgia*, only five of which could be studied by the authors (Artifacts 1879.12, 1879.19, 1899.20 1900.1, 3019.5, and 3020.1). The remaining two are currently housed at NHHC (Artifacts 1899.16 and 1964.2). This section will give wrench jaw sizes in fraction form rather than decimal, so that they may be compared more easily with standard American wrenches.

The CSS *Georgia* wrenches represent a wide variety of types. Open-ended wrenches, both simple straight examples and “S-wrenches” (so-called for their shape) were present, as well as adjustable wrenches, including screw types (sometimes called “monkey wrenches;” *Scientific American* 1867:280, 1869:116). All such wrenches are used for the same essential purpose, to twist nuts and bolts in order to loosen or tighten them, and these would have been essential tools to engineers on the CSS *Georgia* (Swanson and Holcombe 2007:68). Each type of wrench has its value. For example, an open-ended wrench (with fixed jaws) is generally considered faster and easier to use than other wrenches, and works well where there is insufficient access for other wrenches (Ikert 1922:731; Vila 2010s). Five S-wrenches form the majority of the wrenches from the CSS *Georgia*, with two open-ended wrenches of different sizes on either end of the wrench. These offered the obvious convenience of allowing work on two nut sizes with one tool, but the shape also offered advantages. For example, S-wrenches used on trains allowed for access to nuts that were otherwise difficult to reach, and probably served a similar purpose for the various machinery and engine components of the CSS *Georgia* (National Museum of American History). Adjustable wrenches obviously were useful in fitting a range of bolt sizes, though they are more likely than a fixed wrench to slip from their grip.

Artifact 1879.12

Wrench Artifact 1879.12 is an S-wrench (Figure 6-241). One end of this wrench is a 1¾-inch set of jaws, while the other is a 2¹/₁₆-inch set of jaws. These jaws are within heads that both about 0.87 inch thick, with a diameter of about 4.00 inches for the 1¾-inch head, and a diameter of about 4.25 inches for the 2¹/₁₆-inch head. The wrench handle is about 0.55 inch thick. This

wrench has an overall length from edge to edge of about 26.13 inches. Edge-to-edge length is used for S-wrenches in this report rather than along the body for the sake of simplicity.



Figure 6-241. Artifact 1879.12, an s-wrench, parts as follows: (a) jaws, (b) head, and (c) handle. Labels follow Richardson (1890:37, 40; courtesy of CRL Texas A&M University).

Artifact 1879.19

Artifact 1879.19 is an adjustable wrench (specifically a “screw wrench”) found in association with chisel Artifact 1879.19 (Figure 6-242). Specifically, this appears to be an example Joseph Hyde’s “Gripping Screw Wrench” (Figure 6-243). In 1855, Joseph Hyde filed two screw wrench patents for components that were incorporated into this screw wrench (Don Haury personal communication, 2019). In Letter Patents No. 12510, Hyde claimed his patent of the “auxiliary jaw or gripper,” which the wrench-handler could engage by setting the small tab on the lower jaw (Hyde 1855a:2). This gripping jaw allowed Hyde’s wrench to serve as a pipe wrench in addition to its use in twisting nuts. Hyde’s second patent, Letter Patents No. 13617, claimed a mechanism consisting of an eccentric shaft and “thumb piece” (Hyde 1855b:1). The eccentric shaft ran through the screw in the wrench’s lower jaw, and by rotating the thumb piece, the eccentric shaft engaged and disengaged the screw from the teeth-like rack of the bar. This allowed for the width of the jaws to be adjusted either by sliding the lower jaw on the bar, or by raising and lowering the screw on the rack to the desired size. Whereas the original patent for the eccentric shaft/thumb piece pairing positioned the thumb piece outside of the lower jaw, it moved inside to a place directly below the screw by 1857, with the combination of the patents in the gripping screw wrench. As indicated by the advertisement in Figure 6-25, Gray Brothers, a New York manufacturer, was the only producer of this wrench, at least in 1857 (Lovell’s Canada Directory 1857). These wrenches are mentioned again, however, in the United States Navy Department’s annual report of 1862, where the Hyde’s gripping screw wrench is included in an order for 42 screw wrenches (U.S. Navy Department 1862:658). A full examination of how a wrench produced in New York ended up on a Confederate shipwreck is beyond the scope of this research, but the historical and technological evidence makes it clear that Hyde’s gripping screw wrench was a useful, multipurpose wrench with a long working life. Such qualities make it quite plausible that a Confederate engineer already had such a wrench prior to the Civil War, though a number of other explanations for its presence on the CSS *Georgia* might be offered. Interestingly, surviving examples of the Hyde’s gripping screw wrench are rare, with one wrench

expert commenting that Artifact 1879.19 is the only such wrench that has been found as far as they were aware (Don Haury personal communication, 2019).



Figure 6-242. Artifact 1879.19, adjustable wrench, parts as follows: (a) upper/fixed jaw, (b) lower/movable jaw assembly, (c) “projection” to engage auxiliary jaw, (d) screw, (e) thumb piece, (f) bar, (g) rod, (h) ferrule, and (i) auxiliary jaw/gripper (obscured in this photo). Labels follow Hyde (1885a; 1885b), while “ferrule” and “rod” are applied from typical definitions of these terms (courtesy of CRL Texas A&M University).

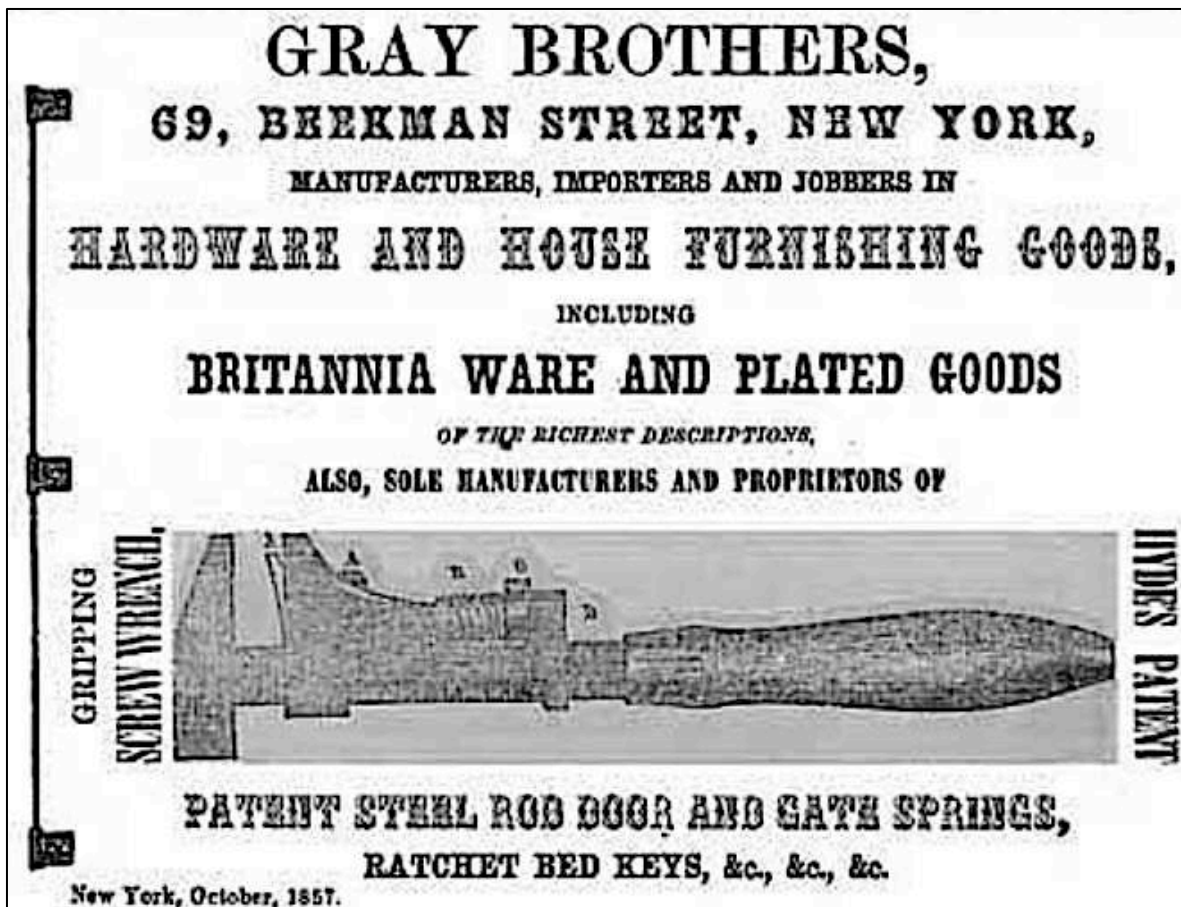


Figure 6-243. Hyde's Gripping Screw Wrench (as presented in Lovell's Canada Directory 1857).

Although this wrench has been identified with considerable precision, measurements will be given for thoroughness. The fixed upper jaw is approximately 0.83 inch thick by 0.75 inch wide by 2.75 inches long. The lower jaw is about 3.63 inches long and 0.88 inch wide, with an auxiliary jaw that is about 0.20 inch wide. Measuring the width of the jaw opening as found during conservation, it appears that this wrench may have been last set to a width between $1\frac{1}{2}$ and $1\frac{7}{8}$ inches. An exact determination is difficult due to some deterioration of the upper jaw and a slight misalignment of the lower jaw. The screw appears to have been engaged with the rack, judging from a quick x-ray (Figure 6-244).

The bar of this wrench is about 5.88 inches long with dimensions of about 0.51-x-0.71 inch. A small portion of rack is visible on the bar below the lower jaw assembly. At the end of the bar, a rod is set slightly off-center. This originally would have been covered by a wooden handle, as evident from the Gray Brothers advertisement and what appears to be a small amount of wood still attached to the rod. The ferrule that once capped this wood handle now hangs loose on the rod. Two pinholes are present in the ferrule that would have been used to help fix it to the wood handle. These both measure about 0.04 inch in diameter, with one set about 0.16 inch up the side of the ferrule, and the other set at about 0.39 inch. There is about a 90-degree angle between these holes. The rod tapers from a diameter between 0.55 and 0.63 inch at the top to 0.24 inch at the bottom.

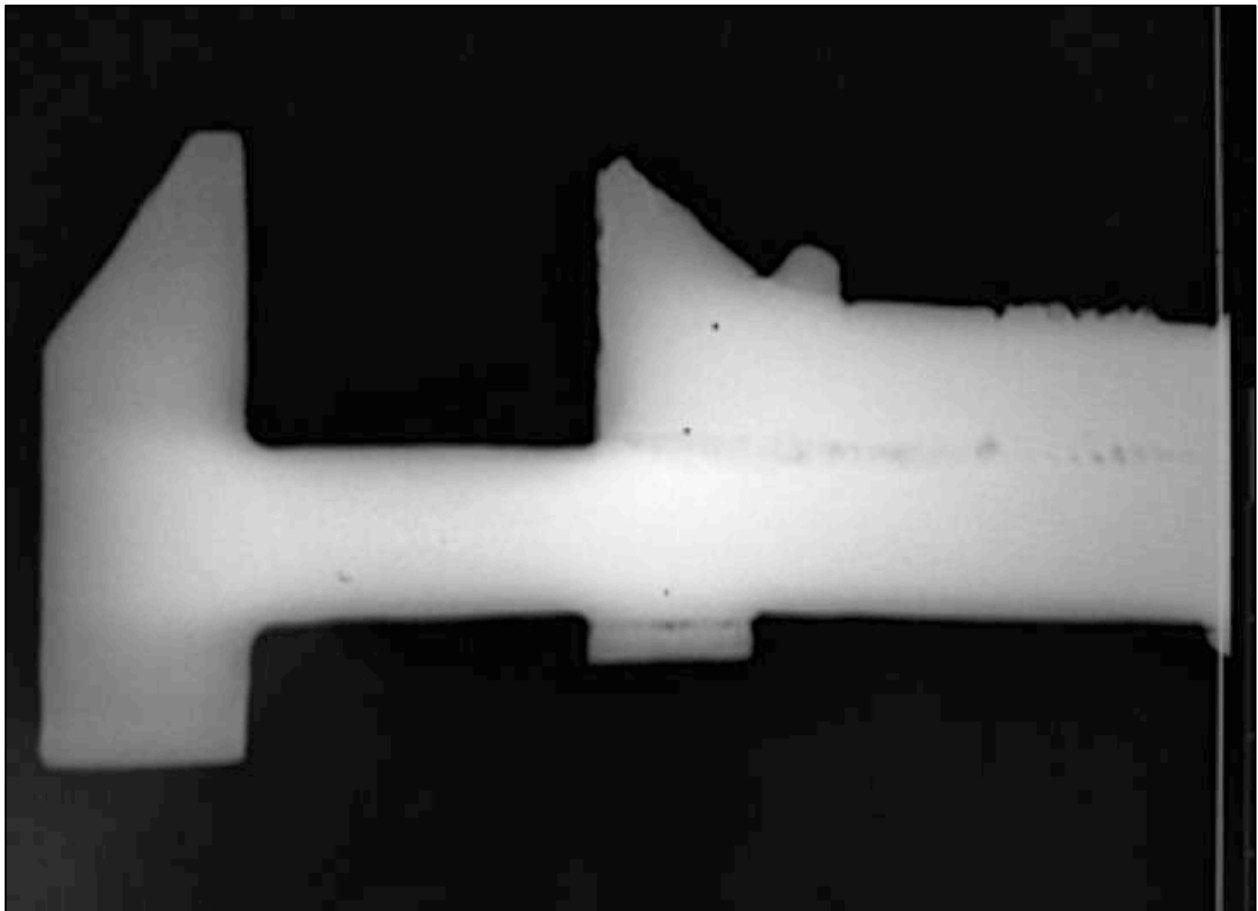


Figure 6-244. X-ray of Artifact 1879.19. Note apparent contact of screw and bar at right.

Artifact 1899.20

Artifact 1899.20 is an adjustable wrench (Figure 6-245). The upper jaw is fixed, while the lower jaw is adjustable. The wrench bar and a “gib” wedge run through an opening in the center of the adjustable jaw. There do not appear to be any rack teeth on the bar, so the lower jaw was perhaps set in place entirely by tightly setting the wedge. This wrench is still undergoing conservation as of this writing, so it is possible that some detail is still obscured, although concretion appears to be nearly absent from this artifact at this point.

Both jaws have a width of about 1.75 inches, and are similar in thickness as well, having a thickness of about 1.75 inches between the bar and the grooves on the outside faces of the jaws and a thickness of about 1.88 inches in front of the groove. The only significant difference between the jaws is that the lower jaw is longer: the upper jaw has a length of about 5.88 inches, while the lower jaw is about 7.00 inches long. At the time of recording, the wrench has become fixed with its jaws open to a width of about $2\frac{3}{8}$ inches. The bar is rectangular, with a thickness of about 0.47 inches. This bar is preserved for a length of about 12.75 inches. The wedge measures about 5.88 inches long and about 0.47 inches wide.



Figure 6-245. Artifact 1899.20, an adjustable wrench, parts as follow: (a) upper jaw/fixed jaw, (b) lower jaw/moving jaw, (c) bar, and (d) gib wedge. Because some parts of this adjustable wrench are functionally comparable to screw wrench Artifact 1879.19, labels (a), (b), and (c) follow Artifact 1879.19, while (d) is taken from Richardson (1890:42; courtesy of CRL Texas A&M University).

Artifact 1900.1

Artifact 1900.1 is an S-wrench. One end of this wrench has an approximately $1\frac{1}{2}$ -inch jaw width, while the other has a jaw width of about $1\frac{3}{8}$ inches. Both heads are about 0.94 inches thick, and the $1\frac{1}{2}$ -inch jaw has a head diameter of about 3.19 inches while the $1\frac{3}{8}$ -inch jaw has a head diameter of about 3.00 inches. The thickness of the handle is about 0.51 inch. This wrench has an edge-to-edge length of about 20.03 inches.

Artifact 3019.5

Artifact 3019.5 is a small, one-sided, open-ended wrench (Figure 6-246). The jaws of this wrench were probably $1\frac{1}{16}$ inches wide. The head has a diameter of about 2.25 inches, and a thickness of about 0.51 inch. The handle of this wrench is about 0.43-inch thick, and widens from about 0.79 inch at the head to 1.10 inches at the base of the handle. Overall, this wrench has a length of about 8.00 inches.



Figure 6-246. Artifact 3019.5, a wrench, parts as follows: (a) jaws, (b) head, and (c) handle. Because the parts are functionally the same as that of an S-wrench, labels follow Artifact 1879.12 (courtesy of CRL Texas A&M University).

Artifact 3020.1

Artifact 3020.1 is probably a broken S-wrench. The curvature of the handle leading away from the head is very similar to that of other S-wrenches from the CSS *Georgia*. It also has a very similar handle and head thickness (particularly to Artifact 1900.1), with the handle measuring about 0.55 inch thick and the head measuring 0.91 inch thick. The jaws are slightly deformed, but appear to have been either $2\frac{1}{2}$ or $2\frac{9}{16}$ inches wide.

Artifact 1899.16

Artifact 1899.16 is an S-wrench (Figure 6-247). It is already at NHHHC and could not be studied by the authors. Measuring jaw size from the photo alone poses too much imprecision.

Artifact 1964.2

Artifact 1964.2 is an S-wrench (Figure 6-248). It is already at NHHHC and could not be studied by the authors. Measuring jaw size from the photo alone poses too much imprecision.

Wooden Tool Handles

There were many non-diagnostic portions of wood recovered from the CSS *Georgia* and the uses for many of these pieces are still unknown at the time of this report; however: in this catalogue the authors have included three wooden artifacts that are most likely potential tool handles. The tool handles in this catalogue are denoted as looking similar to a round-style handle that might be attached to an awl, or a woodcarving tool such as a chisel or gouge (Blackburn 2000:4-5, 36). In

addition to the tool handles discussed below, two more supposed wooden tool handles were recovered from the CSS *Georgia* but are not included within this report.



Figure 6-247. Artifact 1899.16, an S-wrench. Please note that the metric side of the scale bar is right-side up in this image (courtesy of CRL Texas A&M University).



Figure 6-248. Artifact 1964.2, an S-wrench. Please note that the metric side of the scale bar is right-side up in this image (courtesy of CRL Texas A&M University).

Artifact 1299

This artifact (Figure 6-249) appears to be a wooden tool handle possibly resembling a handle belonging to a handheld awl, chisel, or gouge (Blackburn 2000:4-5, 36). The handle has a length of 4.26 inches with a max width of 1.61 inches at the base, and a minimum width of 1.10 inches at the tool portion. The handle weighs 0.16 pound.

Artifact 1926.4

This artifact (Figure 6-250) appears to be a wooden tool handle possibly resembling a handle belonging to a handheld awl, chisel, or gouge (Blackburn 2000:4-5, 36). The handle has a length of 5.82 inches with a max width of 1.53 inches at the base, and a minimum width of 0.92 inch at the tool portion. The handle weighs 0.25 pound.



Figure 6-249. Artifact 1299, a tool handle (courtesy of CRL Texas A&M University).



Figure 6-250. Artifact 1926.4 , a tool handle (courtesy of CRL Texas A&M University).

Artifact 2182.1

This artifact (Figure 6-251) appears to be a wooden tool handle possibly resembling a handle belonging to a handheld awl, chisel, or gouge (Blackburn 2000:4-5, 36). The handle has a length of 4.73 inches with a max width of 1.63 inches at the base, and a minimum width of 1.13 inches at the tool portion. The handle had a maximum thickness of 1.19 inches at the base and minimum thickness of 0.82 inch near the tool portion. The handle weighs 0.11 pound.



Figure 6-251. Artifact 2182.1, a tool handle (courtesy of CRL Texas A&M University).

Anvil

Perhaps one of the most surprising tools recovered was an anvil (Figure 6-252). Still in conservation and not available for study, Artifact 1843.02 was recovered from Unit 6-E and only photographed at the time of Mechanized Recovery of Artifacts but not measured. A much-needed tool for blacksmithing, and one that would not be unexpected on an ironclad, other blacksmithing tools are present like the forging hammer (see Artifact 2927.11). It is expected that the *CSS Georgia* would have had a small blacksmith furnace on board, but evidence to this effect was not observed.

GIS Analysis

The *CSS Georgia* tools are relatively clustered on the southern side of the West Casemate, and seemingly form groups of each tool type (Figure 6-253). This clustering of artifacts most likely indicates that the tools were generally stored in the one area of ship and that similar tools were stocked together according to classification. It should be pointed out that much of the recovered boiler material was located in this area as well. However, this placement is not true for all of the tools in the assemblage, as some of the files, axes, and hammers are outliers and are neither located in this central cluster nor are they located near other tools of their type. This occasional scattering and isolation of a few of the tools most likely indicates they were displaced during scuttling, not stored with the other tools on the ship, and/or moved during salvage.



Figure 6-252. Artifact 1843.02, the anvil recovered in Unit 6-E.

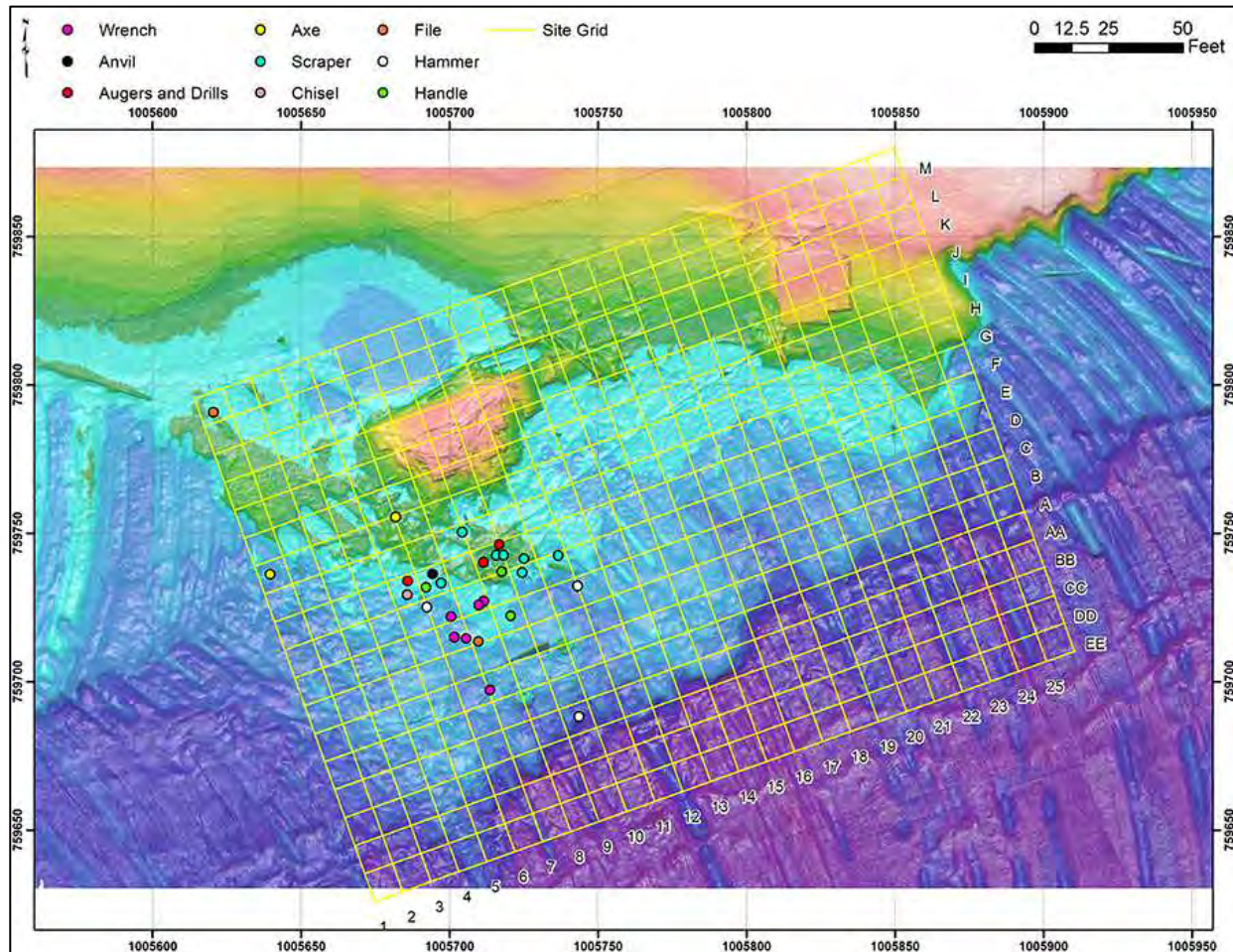


Figure 6-253. Provenience of all recovered tools. Clustering just south of the West Casemate may indicate that the tools were generally stored in the one area of ship.

Summary

The tool assemblage from the CSS *Georgia* represents a wide variety of instruments. Examples have been studied of tools used both for woodwork and for work with metals and machinery parts. GIS analysis of the tools has suggested clustering of some tool types while others are more widespread; an interesting step further in the future might examine evidence for the CSS *Georgia*'s layout to compare with these distributions. Some tools in this study are unusual, and further study of tools found both on the CSS *Georgia* and on other shipwrecks of the Civil War can only bring clarity to how seamen lived and worked while on these vessels.

BRICK

Brickmaking and the Civil War

Brickmaking in the U.S. was a well-established tradition by the onset of the Civil War, with most of the most well-known refractories and forges existing in the northeastern U.S., specifically in the Hudson River valley. With the expansion of industrial equipment, companies would continue to crop up in the Ohio River Valley and upper Midwest, and continue wherever river banks and clay deposits could support large-scale manufacturing. The Northeast manufacturing

companies and their specific makers' marks and stamps are certainly represented in historical research in much larger proportions to any other areas of the country.

Brickmaking shares many of the same manufacturing steps as most fired ceramics (tiles, tableware, decorative, etc.). Various types of clays are dug or mined from river channels and banks where they are then prepared for molding. The presence of different minerals in the clay based on the region of origin can greatly impact the color and consistency of the clay, making certain regions preferable over others for optimum durability. Additives or tempering agents, are sometimes added, as well as some clays being mixed to increase stability during firing depending on the intended use for the final product (Gurcke 1987:3-13). During the nineteenth century, brickmaking, like many other industries, was marked by the transition into more mechanized manufacturing techniques. This is seen specifically in brickmaking in the molding process where the problem of mass molding bricks from soft clay took several attempts to solve. The early molding machines mentioned by Arthur Tompkins that were in processing in the late 1840s and 1850s seemed to have issues with the requirement of having the clay pressed in a much softer state, which caused the final product to often fail in keeping its rigid square shape when set out to dry. The problem was corrected when Richard VanValen patented his machine in 1852, which persisted in use into the early 1920s (deNoyelles 1982:7-10). The bricks were then dried and fired in kilns.

The threat and eventual onset of the Civil War impacted many industries that were suddenly attempting to keep up with more than just local demand for infrastructure materials. Bricks were a very versatile material that was used in more than just building. It was a common and efficient ballast for some merchant and naval vessels as well as a key insulating agent in boilers (which is the main use in context here of the *CSS Georgia*). Many brick manufacturers expanded or joined forces with iron and other metal foundries to take advantage of the need for these materials. The impact of the Civil War on these industries would be felt well through the Reconstruction and into the twentieth century.

CSS Georgia Brick Recovery

Literally hundreds of bricks and brick fragments were recovered from the site. However, not all of the bricks recovered during the mechanized recovery phase were sent to conservation, and the majority, which did not include diagnostic markings or clear molded and sided dimensions, was reburied alongside other non-diagnostic iron and wood. In fact, only 178 bricks and brick fragments were sent to the CRL at Texas A&M University, all with either diagnostic makers' marks or representing a unique brick type.

Figures 6-254 and 6-255 show bricks recovered in a single grab and show the sheer number recovered, as well as the variety. However, recovery of this nature was specific to Units 6-E, 7-E, and 8-E, a provenience that contained a preponderance of boiler components, indicating that the majority of brick appeared to be associated with the boiler (Figures 6-256 and 6-257). While other brick may have been associated with the vessel's stove or blacksmithing area, this is unsubstantiated in the archaeological record, and it is assumed these would have not had the sheer numbers as those associated with the boiler.



Figure 6-254. Recovered from Unit 7-E, miscellaneous brick fragments from the CSS *Georgia* depicting multiple brands and styles. These were reburied.



Figure 6-255. Recovered from recovered a single grab, the recovery includes numerous firebricks and brick fragments, as well as boiler fire grates and plating from Unit 7-E just south of the West Casemate.

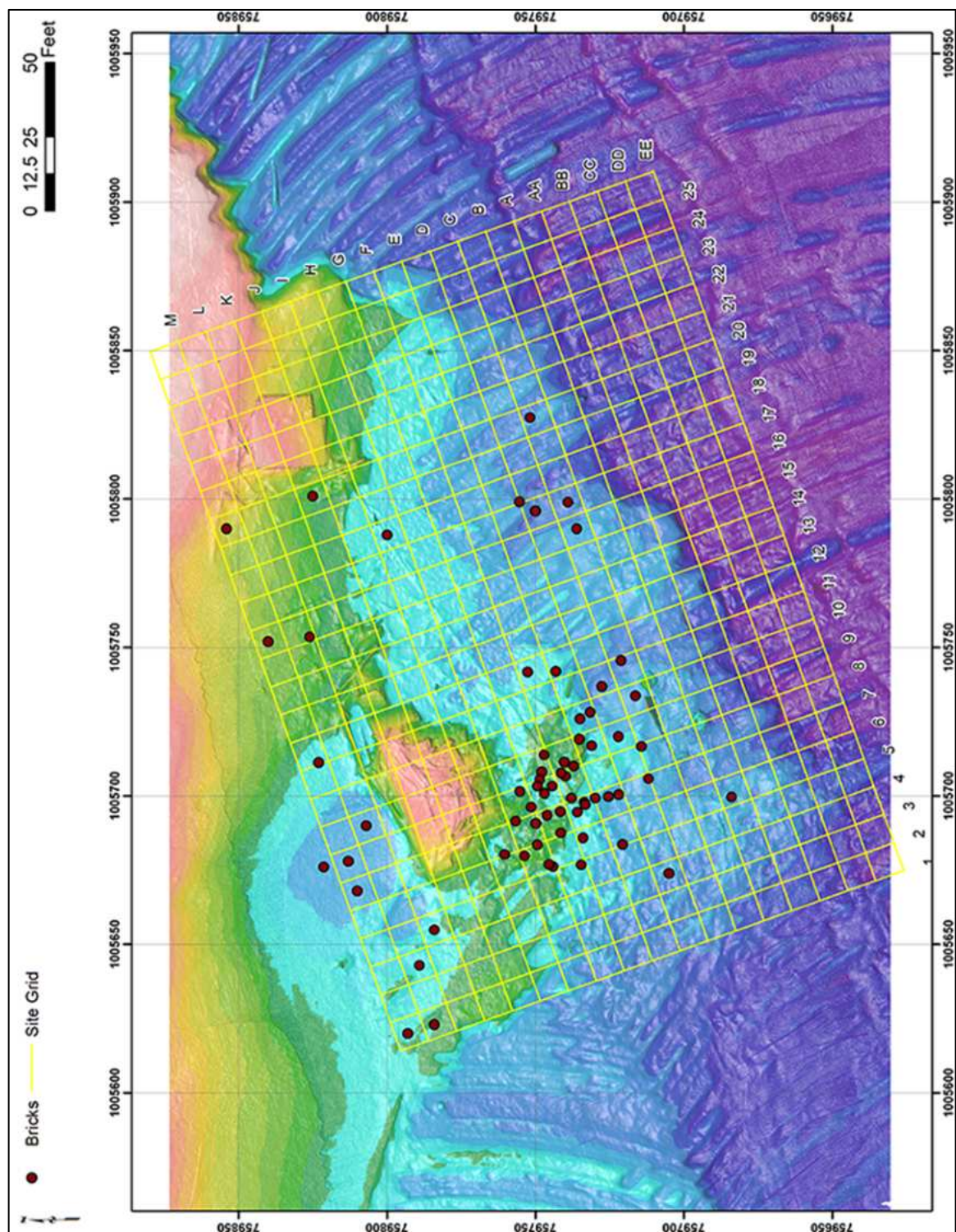


Figure 6-256. Provenience of brick.



Figure 6-257. Firebrick still attached to the inside of the boiler face just below one of the doors. Notice the white and cracked nature of the brick, indicating extreme heat. Artifact 1844.02 is from Unit 6-E just south of the West Casemate.

Firebrick

Firebrick is distinct from other types of brick due to the fact that it is made from specific clays that sometimes take more intensive processing than basic types. Firebrick can be exposed to much higher temperatures and are designed to be used in kilns, ovens, and other situations where an insulator is needed to contain excessive heat (withstanding temperatures ranging from 1,100° to well over 3000° Fahrenheit). Due to this, firebrick is more expensive to make and therefore more expensive to buy (Gurcke 1987:99). In the context of the *CSS Georgia*, firebrick would have been present in the construction of the boiler as the crucial lining and insulation component though they can be used as building brick if needed. Illustrated in Figure 6-258 and discussed below, several types or makes of firebrick were recorded on the site.



Figure 6-258. Miscellaneous recovered firebricks and brick fragments from the *CSS Georgia* depicting multiple brands and styles. Artifact 1844.6 from Unit 6-E, the presence of both Brooklyn Fire-Brick Works firebrick and Southern Porcelain Manufacturing Company firebrick from the same provenience as numerous boiler fragments indicates that both were associated with the boiler.

Brooklyn Fire-Brick Works

The Brooklyn Fire-Brick Works is the most common maker's mark seen on the recovered and conserved section of bricks from the *CSS Georgia* and shows at least two different marks from this company that can be discerned (Figure 6-259). The refractory was established in 1854, in Brooklyn, New York and advertised high-grade brick and industrial material (Brooklyn Fire-Brick Works 1900:1-4). The Brooklyn Clay Retort and Fire-brick Works storehouse can still be found at its original location because it was restored and is now home to the Carvart Glass Company. Their association with boiler components suggests they were utilized in the boiler.



Figure 6-259. Examples of the two styles of Brooklyn Fire-Brick Works brick recovered from the *CSS Georgia*, “Brooklyn Fire-Brick Works, Extra” (top), and “Brooklyn Fire-Brick Works, No. 1” (bottom).

The Southern Porcelain Manufacturing Company

The Southern Porcelain Co. was a small company out of Kaolin, South Carolina, just south of the city of Bath, near Augusta on the Savannah River. It was founded in 1856 by William H. Farrar who came from Vermont with a few of his brick masons from the U.S. Pottery Company. They utilized the very light-colored clay that was native to the Edgefield pottery district for a multitude of products, including firebricks, which could and most likely were easily shipped down river to the City Savannah. During the Civil War, the company was recognized as the Southern Porcelain Manufacturing Company, which is represented by unique makers' marks seen during that time period (Figure 6-260). The company did not last long, as it was destroyed by fire in 1864 (Stradling 1996:1-3). The Southern Porcelain Manufacturing Company bricks that have been recovered from the *CSS Georgia* have some of the best-preserved sections of makers' marks and are easily identified by their much lighter color and distinct material. Their association with Brooklyn Fire-Brick Works and boiler components suggest they were utilized in the boiler (see above).



Figure 6-260. Two examples depicting the Southern Porcelain Manufacturing Company firebrick. Top: from a private collection (Stradling 1996:3). Bottom: Southern Porcelain Manufacturing Company Firebrick example recovered from the *CSS Georgia*, Artifact 1850.5 from Unit 8-E.

Partial/Unidentified Makers

Three noticeable makers' marks have yet to be identified. These bricks are fragments of firebricks and, although partial stamps remain, not all brands have been documented. These bricks can at least be narrowed to a region as they bear identifiable lettering for the cities of manufacture, with all of them from northern states.

The brick in Figure 6-261 can be seen to retain approximately half of the maker's mark with the lettering encompassed by an oval border. The word "FIRE" and subsequent letter "B" in the center identifies it as a firebrick (as well as its lighter, generally yellowish appearance that many firebricks have). The top lettering is less distinct and could be any of the three "LAN," "LAH," or "LAM." The "NEW" of most likely New York or New Jersey on the third line is also fairly distinct. This brick could possibly belong to the Lahey Company of Fishkill, New York that operated before and during the Civil War (deNoyelles 1982:245). The spacing and estimate of the remaining stamp based on the curvature of the oval would suggest that the name "LAHEY" would fit in the space, but as no representation of the Lahey bricks have been found, there is no way to type it definitively.



Figure 6-261. Firebrick with an unidentified oval border maker's mark from the CSS *Georgia*. Artifact NP 25.

The brick in Figure 6-262 also shows roughly half to three-quarters of a maker's mark. The letters "LLER." can clearly be seen on the top line, and the letters "AND" are shown directly underneath the top letters. An inverted "3" can also be seen next to the "D." Unfortunately, although there are some references in historical sources to a Weller Manufacturing Co. and multiple Keller and Miller companies spanning from New York to Ohio, no solid reference to a firebrick company fitting the description has surfaced as of yet.



Figure 6-262. Unidentified “LLER.ND3” firebrick maker’s mark recovered from the CSS *Georgia*. Artifact 3073.1.

The final unidentified mark of the brick currently having been recovered is a small fragment (Figure 6-263). Although this brick is much less intact than the previous examples, the letters “PHILAD” can be seen on the bottom line suggesting the City of Philadelphia as the origin of manufacture. The top letters are smaller and harder to determine and could possibly be “MET,” “KET,” “HET,” or “NET.” The right edge and relative position of the text on the upper line suggests the termination of the brick that could make the “PHILAD” lettering an abbreviation for the city. In Philadelphia, Pennsylvania, there was a fairly prominent firebrick company by the name of Newkumet and Melick that operated next to the residence of John Newkumet who served as a Union Colonel in the Civil War (Hunt 2007:128). The “MET” on the top line of the mark could refer to this company, but again, there is no reference to the style of the mark from this company, and there were many firebrick refractories operating out of Philadelphia.

Miscellaneous Brick

The difficulty in determining the makers’ marks on the small number of bricks that are not represented with the Brooklyn Fire-Brick Works or Southern Co. maker’s mark is not a new issue. Due to the incomplete nature of the remaining marks, it is extremely difficult to match them to the limited resources that depict specific makers’ marks. The comparative ease of opening a brick yard and beginning production during the nineteenth century in the Hudson River Valley led to an overwhelming number of refractories that popped up without the guarantee of longevity (Scarlett et al. 2006:35). Subsequently, this type of production environment doesn’t allow for as much survival of documented makers’ marks within the historical and archaeological record.



Figure 6-263. Unidentified “PHILAD” firebrick brand recovered from the CSS *Georgia*.

Some of the firebrick and other fragments show evidence of mortar and glazing. These examples are few within the larger sample and there is no distinguishable pattern as to which brand/style/type of brick bears mortar or glazing. Whether glazed bricks were fired that way to create an impervious layer to discourage absorption of water or whether the bricks became glazed due to exposure of extreme heat is not immediately clear. Due to the fact that the other firebricks of the same brand show no glazing or heat damage, it would seem that certain bricks were glazed purposely. The same can be said for the examples of mortar that can be seen on some bricks but not on others of the same type.

While the majority of the marked bricks and brick fragments are firebricks, there are many more fragments and whole bricks that are not marked and are made of a variety of different clays. Some of these can be determined to be separate from firebrick due to their coloring as well as the more porous nature of the material. The firebricks, it seems, maintained more of the sharp pressed edges, as well as their markings than their basic brick counterparts. Many of the generic bricks are red, which is consistent with a more common building material (Figures 6-264 and 6-265). There are some nicks and scraps, which could be seen as cut marks, but the fact that they have been through abandonment, wrecking, and possibly multiple salvage operations, it is difficult to say for sure whether these scrapes and chips are from their manufacture.



Figure 6-264. Example of complete red brick recovered from the CSS *Georgia*, Artifact 1279.



Figure 6-265. Example of red brick fragment recovered from the CSS *Georgia* showing interior matrix, Artifact 721.

Summary

It has been a well-established concept repeated throughout research into Confederate infrastructure and resources that materials for vessels of war (both terrestrial and maritime) were sometimes repurposed from unrelated mechanisms. A prime example of this is the railroad iron cladding of the *CSS Georgia* itself. It can be postulated then, that other sections of the vessel would bear the same evidence of repurposing. Some studies into the construction of the *CSS Georgia* (specifically research into the origins of the engines) have speculated that the engines came from captured Union vessels or pre-war vessels. Some of the speculated boiler/engine origins include vessels that were built within easy range of many of the northern firebrick companies (Swanson and Holcombe 2003:67). The presence of the Brooklyn, Philadelphia, and miscellaneous New York firebricks supports these theories, as it would be difficult to dismantle a boiler simply to reuse the brick. However, the presence of Southern-manufactured firebrick alongside the fact that brick is a durable material that can be reused, there is no way to determine definitively whether these bricks were repurposed.

While there is more than enough evidence to show that the boiler components and other sections of the *CSS Georgia* did utilize brick as a key construction element, there is also the possibility that some of the brick noted and recovered from this site could have been transported in from other areas of the river. The tides and currents in the Savannah River are, and have been, a very strong transport system. During Mechanized Recovery of Artifacts, a very large number of artifacts recovered from the site were prehistoric pottery sherds and chipped stone that have not yet been studied and dated. There are a number of large prehistoric sites upriver, as well as ones closer to the site from which these artifacts could have eroded out of the bank and become caught up on the substantial iron and wreckage of the *CSS Georgia*. Any number of the smaller bricks and brick fragments that were recovered on this site could have also been transported in the same manner.

As noted previously in this section, bricks had a plethora of functions from colonization through much of the early twentieth century. During the Civil War and the Confederate defense of Savannah, this was no exception. Bricks are noted to have been used to fortify obstructions in the river, as well as weigh down and scuttle other ships and machinery (Swanson and Holcombe 2003:34). The Confederate obstructions in the Savannah River (including the eventual abandonment of the *CSS Georgia* itself) is well documented and is shown in multiple maps, Union soldier accounts, and Confederate communications. Our understanding of the location and design of at least the crib-type obstruction comes mainly to us from two Union coastal survey maps that were produced soon after the war during just prior to removal efforts. The 1871 Ludlow map shows them just below Fort Jackson and just above the *CSS Georgia* (Figure 6-266). While the 1871 Ludlow map gives us excellent diagrams of the cribs, a letter from Boutelle written while on the USS *Bibb* to his commanding officer to accompany his 1865 map (an earlier version than Ludlow's that unfortunately has not been located) gives us an excellent description of the obstructions, their types and placement. Of the obstructions Boutelle in 1865 states:

They are filled with paving stones from the streets of Savannah, live oak branches, and bricks. The latter composed the greater part of the ballast. An irregular line of cribs was begun near Fort Lee, and nine cribs will be seen sunk there.

Two others were sunk above them for mooring the floating battery "*Georgia*" before referred to (From Judy Woods Personal Collection).

It is possible that, like the prehistoric ceramics, the brick utilized in these cribs could have found their way onto the site.

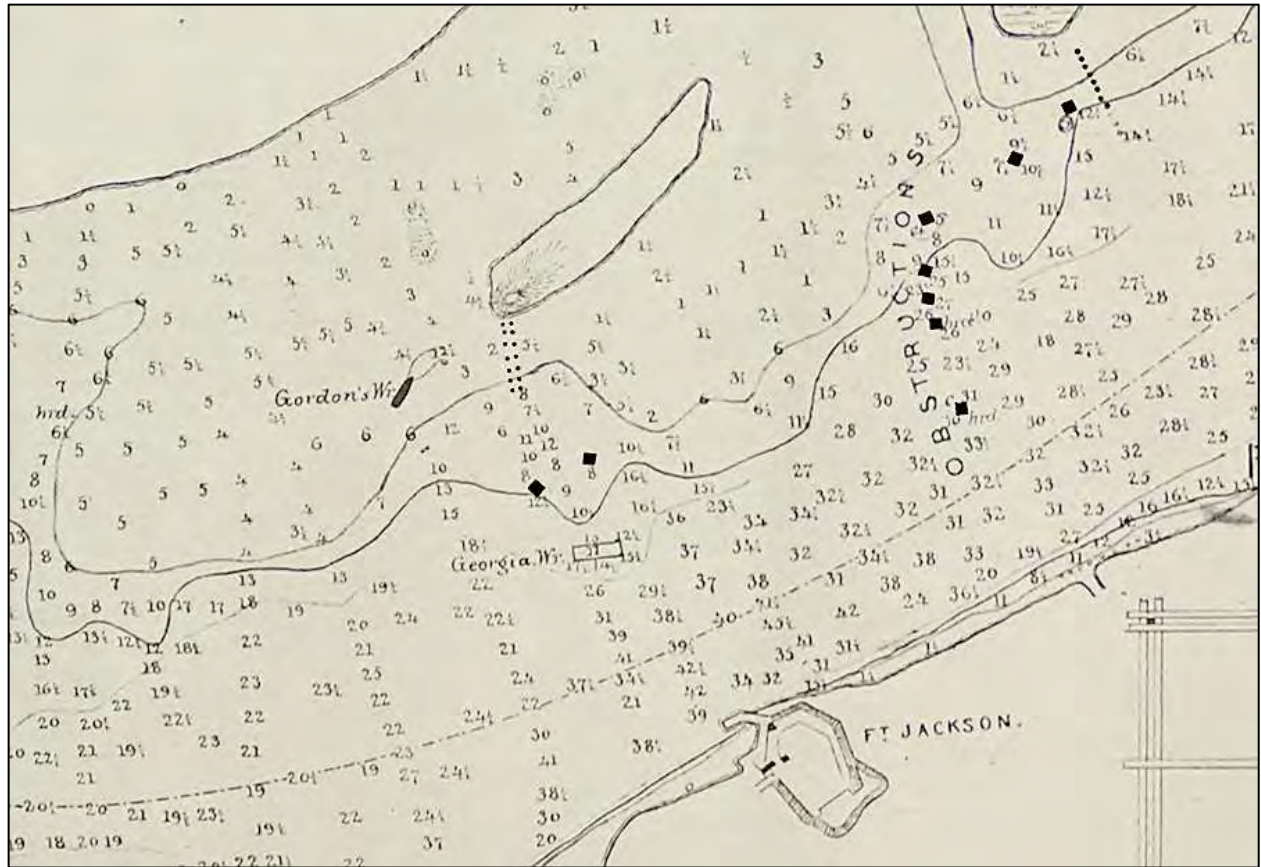


Figure 6-266. 1871 Gillmore and Ludlow map showing the location of the CSS *Georgia* opposite Fort Jackson and in relation to two nearby brick-filled obstructions (black squares), as well as others downstream (Swanson and Holcombe 2003:93).

CANNON

Five cannon were recovered from the CSS *Georgia* site during the 2015 field season, two IX-Inch Dahlgren cannon, two 6.4-inch single-banded Brooke rifles, and a small cast iron 6-pounder. Designated in the field and on project maps as Cannon Nos. 1 to 5, four of the cannon were brought up by MDSU-2 divers during the Large Artifact Recovery phase discussed above. The fifth cannon, Cannon No. 5, a single unknown and buried IX-Inch Dahlgren was unexpectedly found during Mechanized Recovery of Artifacts (Figure 6-267; Table 6-10). Written by James Jobling, this section describes the five guns in detail.

The earliest inventory of the cannons on board the CSS *Georgia* was compiled on 23 April 1863. The battery was composed of four starboard guns, four port guns, one gun on the spar deck forward and one aft, and one mounted on the bow (Swanson and Holcombe 2007:79). Table 6-10 illustrates the number and classes of the cannons and their location on the vessel.

Table 6-10. 1863 Inventory of Guns on CSS *Georgia*.

Item	Description
No. 1 Starboard	8-inch shell
No. 2 Starboard	32-pounder rifle
No. 3 Starboard	8-inch shell
No. 4 Starboard	8-inch shell
No. 1 Port	9-inch shell, Dahlgren pattern
No. 2 Port	32-pounder rifle
No. 3 Port	32-pounder rifle
No. 4 Port	9-inch shell, Dahlgren pattern
Spar Deck Forward	24-pounder (made by A.N. Miller of Savannah, Georgia)
Spar Deck Aft	6-pounder (presented by Ladies of Rome, Georgia)
Mounted on Bow	32-pounder rifle

Source: Swanson & Holcombe 2007:79-80



Figure 6-267. Cannon No. 5, a IX-Inch Dahlgren cannon (Artifact 1823.11) deposited on deck after being grappled from Unit 6-F, just to the northwest of Cannon 2. Mr. Paul Hankins, head of Donjon for the project, is directing the crane to lift it from the deck.

The 32-pounder rifles had a caliber of 6.4 inches (16.25 centimeters) and had a single band to withstand the strain on the gun from the powerful pressure from the burning of the propellant powder charge. Two of the 32-pounders were of 66 hundredweight (7,392 pounds or just under 3,353 kg) and the other two were of 58 hundredweight (6,496 pounds or 2,946.5 kg). All three 8-inch guns fired explosive shells. Two were of 55 hundredweight (6,160 pounds or 2,794.1 kg) and the third was of 56 hundredweight (6,272 pounds or 2,894.9 kg; Swanson and Holcombe 2007:82-83). The 9-inch shell guns were smoothbores of the Dahlgren pattern and were of 9300 pounds (4,227 kg). Numerous changes in the CSS Georgia's ordnance took place, after this initial inventory. A series of loans reduced the complement of guns to nine. By the end of October 1863, only five heavy guns that would have employed gun furniture were left on board *Georgia*. Some of the 32-pounders and all the 8-inch shell guns were given to the Army before the end of the year and *Georgia*'s battery then consisted solely of 32-pounder rifles and Dahlgren smoothbores by the start of 1864 (Swanson and Holcombe 2007:80). The 32-pounder rifles described in the original inventory are in fact 6.4" single banded Brooke rifles.

In 1986, diving exploration work was undertaken by the US Army Corps of Engineers–Savannah District, and the Coastal Heritage Society, in an effort to learn more about the vessel. Illustrated in Figure 6-268, two cannon, a 6.4" Brooke rifle and a cast iron 24-pound flank howitzer, were recovered along with a large number of ordnance (Babits 1989).

Babits goes on to describe the larger gun as a Model 1846 32-pounder, single banded, and rifled to 6.4 inch in the Brooke fashion. The gun is considerably shorter (~ 20") than usual, as it was not originally cast as a Brooke rifle. This cannon was the No. 2 Port Gun on the CSS *Georgia*, as the markings closely match the April 1863 Inventory (Babits 1989, Swanson and Holcombe 2007). The second cannon is attributed to A.N. Miller, a local foundry owner, who cast a number of cannon for the Confederacy (Babits 1989:6, Daniel and Gunter 1977:88). When looking at this particular cannon in the summer of 2015, the late John Robertson, of the Coastal Heritage Society, passed comment to the author that the howitzer was a poor casting. On closer examination, one could see that the trunnions were of a different size and slightly out of alignment, and the bore was not perfectly centered.



Figure 6-268. 6.4-inch Brooke rifle and a cast iron 24-pound flank howitzer recovered in 1986 and on display at Fort Jackson.

The Dahlgren Cannon

John A. Dahlgren

The Dahlgren cannon were the brainchild of John Adolphus Bernard Dahlgren, the man history knows as the “Father of American Naval Ordnance” (Boyd 2010). He was born in Philadelphia, PA, on 13th November 1809, and died in Washington, D.C., on 12th July 1870 (Melton and Pawl 2019). His father, Bernard Ulric Dahlgren, was the Swedish consul in Philadelphia until his death in 1824. Dahlgren showed considerable intellectual ability in his school work, and his early enthusiasm led him to enter the US Navy when he turned 16. He received his midshipman’s warrant on 1st February 1826, making his first cruise in the *Macedonian*, of the Brazil squadron, in 1827-29. He was then attached to the sloop *Ontario*, of the Mediterranean squadron, in 1830-2, and passed his midshipman examination in the latter year. In 1834, owing to his mathematical proficiency, he was detailed for duty on the U.S. Coast Survey (1834-37), where he distinguished his early career.

He was commissioned as a lieutenant in the Navy, in 1837. In the same year, his exceptionally fine eyesight failed him, due to long hours of incessant labor in poor lighting conditions. Threatened with the entire loss of his vision, he was advised to take a leave of absence from the Navy, as absolute rest was needed. In 1842 he resumed duty, and in 1843 went to the Mediterranean in the frigate *Cumberland*, returning late in 1845 to the U.S.. The cruise had been shortened, as there was the prospect of a war with Mexico.

In January 1847, Lieutenant Dahlgren was assigned to ordnance duty at the Washington Navy Yard. Over the next 16 years, he led a very busy life and improved the U.S. Navy’s ordnance beyond belief. He invented and developed bronze boat guns, heavy smoothbore shell guns, and rifled ordnance. He also wrote copiously, on boat howitzers, percussion locks and primers, shells, boat armament in the Navy, and on shells and shell guns. He established the U.S. Navy Ordnance Department, and under his sole direction built extensive additions including a foundry to manufacture and test new equipment, gun carriage shops and an experimental gun battery (Melton and Pawl 2019). It was for these achievements that Dahlgren later became known as the “Father of American Naval Ordnance” (Figure 6-269).

He was made Commander in 1855, and was given command of the Washington Navy Yard on April 22, 1861, when Franklin Buchanan resigned to join the Confederate service. He was promoted to Captain by Congressional act in July 1862, when he was appointed Chief of the Ordnance Bureau. He was promoted again in February 1863, to Rear-Admiral. In July 1863, he took command of the South Atlantic blockading squadron, where for the next two years he led the naval forces besieging Charleston in the Union navy’s most frustrating campaign (Figure 6-270, Naval Historical Center 2001). He later worked with General Sherman on his march south, and was at the captured of Savannah on 23 December 1864 (Melton and Pawl 2019).



Figure 6-269. Rear Admiral John A. Dahlgren, the “Father of American Naval Ordnance” (courtesy of Wikipedia.com)



Figure 6-270. Rear Admiral Dahlgren on the USS *Pawnee* circa 1864, leaning on one of his guns (courtesy of Wikipedia.com)

There was a formative event in Dahlgren's life that happened on his 40th birthday, in 1849 (Boyd 2010). He was on the gun range along the Anacostia River, when a 32-pounder cannon exploded nearby. A sailor was killed and he was nearly struck by a 2,000-pound piece of flying metal. The gun had fired only 116 rounds, and was supposed to last for at least 500 rounds. Dahlgren realized that there were numerous flaws in the manufacturing system, as well as in the Navy's proofing system. Endeavoring to improve on this, the Navy adopted his first ordnance work in 1850, this was for the 12- and 24-pounder bronze guns specially designed for small boat use. He then developed the heavy cast iron smoothbore cannon characterized by their unusual soda bottle shape, which fired nine and eleven inch shells. They were originally derived from cannon invented by the French Admiral Henri Joseph Paixhans. The U.S. Navy had equipped several ships with 8-inch Paixhans guns of 63 and 55 hundredweight. in 1845. and later a 10-inch shell gun of 86 hundredweight. In 1854, the six Merrimack-class steam frigates were equipped with the new IX-inch Dahlgren shell guns in battery. By 1856, the Dahlgren gun had become the standard armament of the U.S. Navy (Melton & Pawl 2019). These guns, popularly called "Dahlgrens," contributed decisively to the firepower that gave naval supremacy to the Union in the Civil War (Green 2019). They were produced at nearly all of the major foundries, including Alger Co., Bellona, Fort Pitt, Seyfert, McManus & Co, Tredegar, and West Point Foundry.

Dahlgren Cannon Design

The Dahlgren cannon design was based on scientific research in ballistics and metallurgy, and manufactured and tested under the most comprehensive program of quality control in the Navy to that time (Boyd 2010). These guns are of iron, cast solid, and cooled from the exterior. They are distinguished by great thickness at the breech, rapidly diminishing from the trunnions to the muzzle, and were the first practical application of results obtained by experimental determination of pressures at different points along the bore.

Dahlgren's Patent No. 32,983, dated 6th August 1861, specified all of the proportions for his cast iron shell guns, which have a caliber of 12 times the bore diameter. He claimed that "a cast-iron gun constructed substantially according to the rule...whereby the quantities of metal disposed in the different parts of the gun are proportionate, or nearly so, to the relative degrees of strain exerted by the force of the exploded charge at those parts respectively." He recognized that "the form of the breech may be hemispherical, hemispheroidal or ellipsoidal as greater or less strength is required." Although preferring a curvilinear reinforce, his was a cylinder to give "the means of taking a direct level aim for point blank firing, in case of injury to the sights" he retained "a swell about the muzzle, chiefly to protect it from liability of fracture by being struck against, or by, hard bodies...also...giving a hold for lashing..." (Olmstead et al. 1999:83).

Dahlgren, with creative insight reversed the emphasis when casting large cannon. Rather than striving for flawless iron when casting cannon, he chose to shape the raw gun block castings, so as to maximize the homogeneity and quality of iron throughout. His observation was that a weapon machined from superior metal, could contain nothing but superior metal. His second patent No 32,984, also dated 6th August 1861, he observes "to produce cast iron of the greatest strength, it is necessary that the molten metal, after being poured into the mold, should cool with evenness and regularity throughout the entire length of the gun, to effect which it is indispensable that the diameters of the casting should vary as little as possible, and that the external surface should be uniform and free from prominences of any kind, or at least from such as have material volume; if not, the mass cools and solidifies first where its diameters are least, and afterward, where they are greatest, and the parts which cool last shrink from the parts which cool first, thereby straining the metal and diminishing its strength" (Olmstead et al. 1999:83).

Rough cast iron block castings were to be lathe finished to dimensions laid out by Dahlgren himself. There was excess metal in the castings, and numerous letters attest to various foundry owners complaining to the extra costs involved in removing the excess iron. Charles Knap, the

owner of the Fort Pitt Foundry, testified before a Senate committee, that “9- and 11-inch Dahlgren guns cost about ten percent more than the 8- and 10-inch Rodman guns with the ‘royalty’ included” (Olmstead et al. 1999:84).

Illustrated in Figure 6-271, nominal bore lengths for the IX-inch, including the round-bottom Gomer chamber 9 inches long, were 107.325 inches. The drawings show a trunnion of 7.2 inches in diameter and 7.2 inches in length. These were to fit a two-truck Marsilly wooden carriage, parts of which were recovered from the site. There were two vents and lock lugs on the dorsal surface (shown in detail below). The lateral vent on the right was initially drilled through, while the left vent was only partially drilled so as to indicate the correct angle. The left lock lugs were left solid, or the slot filled with zinc. The right vent, when eroded to 0.400 inch, was closed by molten tin, zinc or lead and the left vent drilled through. A post-Civil War letter states that the IX-inch shell-guns “have always been cast solid and bored out.” A crew of 17, including a powder boy/monkey, served the IX-inch shell gun when in pivot or used singly (Olmstead et al. 1999:84).

By 1864, 1,201 IX-Inch Dahlgren cannon had been produced, 66 of which survive today (Jim Bender personal communication, 2019). The best proof of their reliability, and a tribute to Dahlgren’s monumental design and gun foundry achievement, comes from a statement made by Commodore Montgomery Sicard, U.S. Navy, Chief of the Bureau of Ordnance, “that of the 960 IX-inch Dahlgren shell guns issued to the Naval service (and all of which were in active use) not one ever burst prematurely or killed one of its own crew” (Dahlgren 2006:6).



Figure 6-271. Dahlgren cannon on a Marsilly carriage on the *USS Hunchback* (U.S. National Archives Photo No. 111-B-2016, Brady Collection).

Dahlgren IX-Inch Cannon, Dimensions

The two Dahlgren cannon recovered from the *CSS Georgia*, have the same basic dimensions as those laid out in Figure 6-272. The cannon are approximately 132 inches (11 feet) long, with a bore of 9 inches, giving them a caliber of 11.9. The hatched areas designate the rough casting, as specified by Dahlgren, although not always heeded by foundries.

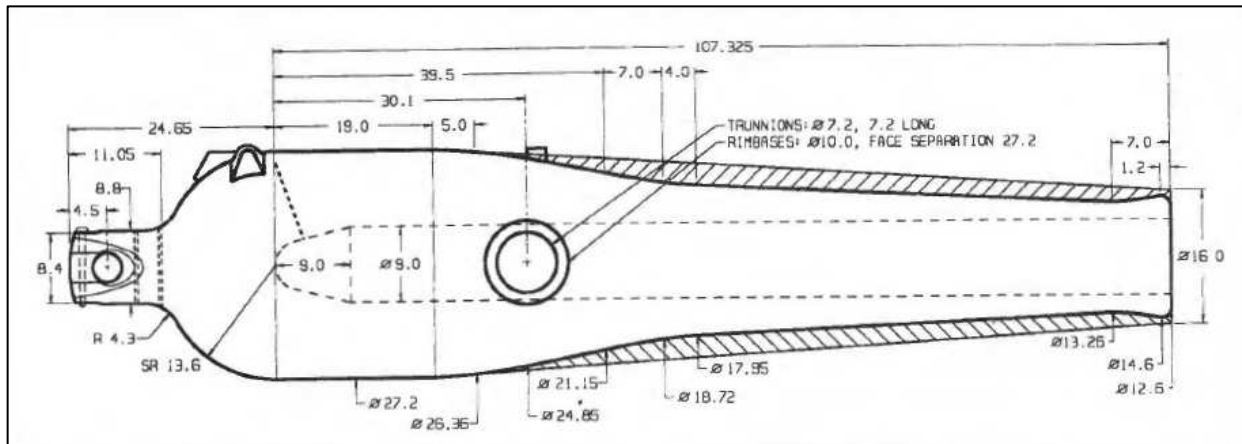


Figure 6-272. IX-Inch Dahlgren shell gun dimensions (Olmstead et al. 1999:88).

The Brooke Cannon

John M. Brooke

John Mercer Brooke was born in Fort Brooke (modern day Tampa), Florida, on December 18, 1826. His father was an army officer, General George Mercer Brooke, who died in San Antonio, Texas, and his mother was Lucy Thomas Brooke. He graduated from one of the earliest classes in the U.S. Naval Academy in 1847, and became a lieutenant in the U.S. Navy in 1855.

His early years in the Navy were spent at the U.S. Naval Observatory, working under Commander Matthew Maury. He charted the stars to aid in celestial navigation, and assisted in taking soundings of the sea floor to determine its shape and composition. There were problems in taking deep soundings, in that the ocean currents would deflect the sounding device so as to give false readings. Lt. Brooke perfected a “deep sea sounding device” that was used for many years by navies around the world for recording the water depth. He added a core sampler to his device, so as to be able to collect sediment samples from the sea floor. This gave the U.S. Navy the knowledge that the bottom sediments in the deep Atlantic Ocean were soft calcareous shell material. The outcome from all this work was the laying of the first transatlantic telegraph cable in 1858 (John M. Brooke 2019).

Lt. Brooke was now acknowledged as an expert in maritime surveys. He completed several cruises in the Pacific and eventually wrecked in a typhoon off the coast of Yokohama, Japan, in 1859. He had a role in counseling and instruction of the officers in the fledgling modern Japanese Navy, and returned to the U.S. as a technical adviser aboard the Japanese steamer *Kanrin Maru* in February 1860 (John M. Brooke 2019).

As the secession crisis deepened, t. Brooke resigned his commission in the U.S. Navy in April 1861, and “went south.” Upon joining the Virginia State Navy, Lt. Brooke served as naval aide to General Robert E. Lee. By June 1861, the Secretary of the Navy, Stephen Russell Mallory,

transferred him to the naval ordnance office. He was immediately assigned to the drawings and calculations for the salvage of the USS *Merrimack*, and its conversion into the CSS *Virginia* (Olmstead et al. 1999:125).

He was promoted to Commander in September 1862, and in March 1863 became the Chief of the Confederate Navy's Bureau of Ordnance and Hydrography. He served in that post until the end of the Civil War, which was two years later. He was instrumental in the organization and establishment of the Confederate States Naval Academy (Figure 6-273). After the war, he became a professor of physics and astronomy at the Virginia Military Institute, at Lexington, Virginia. He retired in Lexington in 1899. He died there in 1906, and is buried in the Stonewall Jackson Memorial Cemetery alongside his wife Catherine Carter "Kate" Corbin (John M. Brooke 2019).

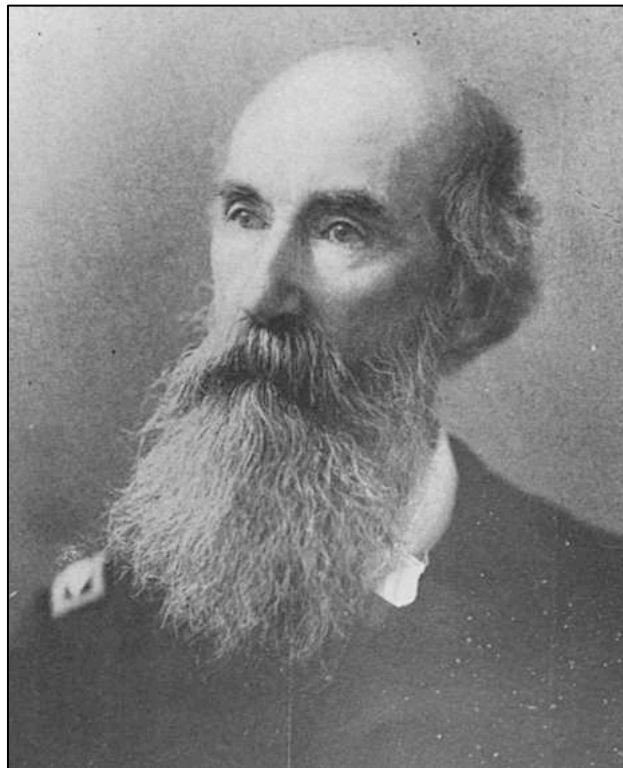


Figure 6-273. John Mercer Brooke (as presented in Olmstead et al. 1999).

Brooke Cannon Design

Lt. Brooke was instrumental in the development of a new rifled gun for the Confederate Navy, which became known as the Brooke rifle. At the Ordnance Depot, he oversaw all Confederate weapon experiments, including submarine boats and ordnance, and was one of the contributors to the development of the torpedo—now called an “underwater mine.”

The distinctive shape of his guns (Figure 6-274) indicates an acknowledgement, along with many other gun founders such as Joseph Reid Anderson, Theophilus Alexander Blakely, and John A. Dahlgren, that a hemisphere is the strongest cap for a cylindrical pressure vessel. He also understood, along with Daniel Treadwell, Blakely, and Robert Parker Parrott, the gain in strength from adding wrought iron banding around a cast iron tube.



Figure 6-274. Concreted Brooke rifle from the *CSS Georgia* (Cannon No. 3, Artifact 1611) immediately after recovery, showing the distinctive shape and characteristics of the Brooke rifle.

With minor exceptions, existing heavy rifled cannon of his design may be identified by five conspicuous features (Olmstead et al. 1999:125):

1. A fully hemispheric breech contour
2. One to three layers of butt-welded reinforcing bands, each finished to about 6 inches wide and 2 inches thick; subsequent layers, when used, were “shrunk upon the first, breaking [covering] the joints”
3. A plain tapered chase, extending from the fore end of the reinforcing bands to the muzzle
4. Practical Confederate “dispensing with the turning of the exterior surface of the Gun”—in as much that the exteriors remain rough; those from the Selma foundry usually reveal the joints of the seven-section vertical foundry flasks
5. Seven-groove rifling of righthand twist and “triangular” grooves, henceforth identified as “Brooke rifling” (Figure 6-275)

It could be concluded by some that the Brooke cannon are simply a cross between a Dahlgren smoothbore and a Parrott rifle (Swain 2013). Lt. Brooke certainly used the basic features of Dahlgren’s design, and benefited from the examination of the Parrot rifle. The result was not just a reverse engineered design, but a refinement incorporating some of the latest technological advances along with his personal experience. Many of the early Brooke rifles were simply bored-out 32 pounders and/or Dahlgren cannon, which were then banded. His design was finalized and adopted in October 1861. The Brooke rifle was the closest thing to a pure “Confederate” gun in the Civil War.

The chase on the Brooke rifle lacked the classic “tulip” muzzle swell, and used a “truncated cone” design, with no exterior ornamentation. Between the trunnions and the breech, there was a cylindrical section where the wrought iron bands were added for strength. The single-banded rifles generally had five 2-inch thick wrought bands, applied over a 30-inch section of the barrel. The bands were applied whilst red hot, and when cooled they shrank on to the cast iron barrel. The breech called for a hemispherical contour, as laid out in his requirements (see above). There was only one vent drilled through the centerline, and the sight masses were in a similar arrangement to the Dahlgren. The breech chamber is the classic “Gomer” shape, used in many Federal cannon. The Brooke rifles had generous “lands” between cuts for the rifling that were of equal distance. The cuts are not “hook and slant” or “sawtooth” as sometimes described, as the

lands form the circle of the rifle's caliber. The cascabel design followed the principles of the Dahlgren, in that there was the same horizontal hole for the breeching tackle, and space for a vertical elevation screw (Swain 2013).

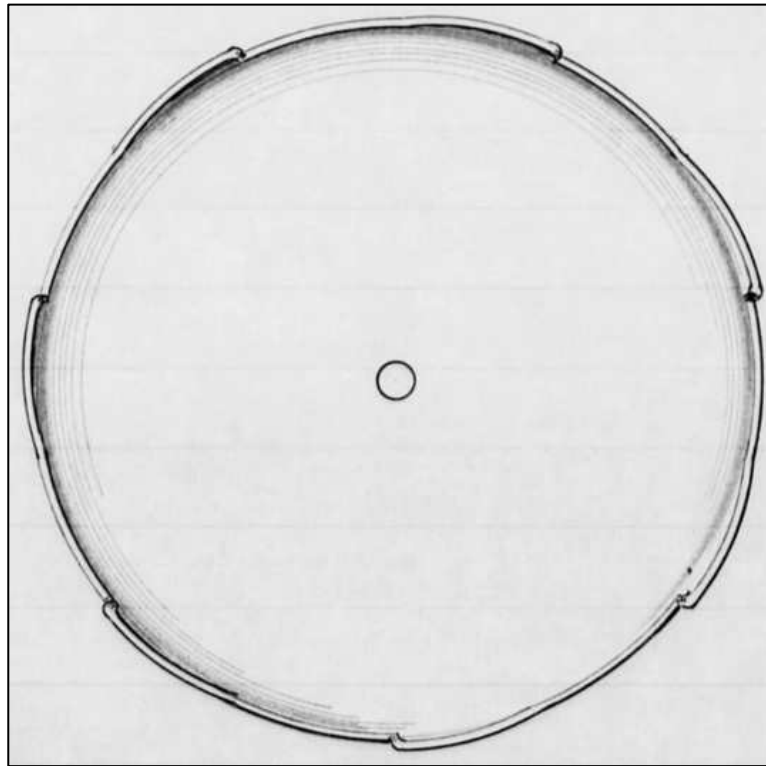


Figure 6-275. Brooke rifling pattern (as presented in Swain 2013).

6.4-inch Brooke Rifle Dimensions

The two Brooke rifles from the *CSS Georgia*, have the same basic dimensions as those laid out in the figure below. The rifles were approximately 142 inches long, with a bore of 6.4-inches, giving them a caliber of 18.5 (Figure 6-276). Discussed below, one of the recovered rifles (Cannon No. 4, Artifact 1613) had part of its muzzle blown off in a gunnery accident.

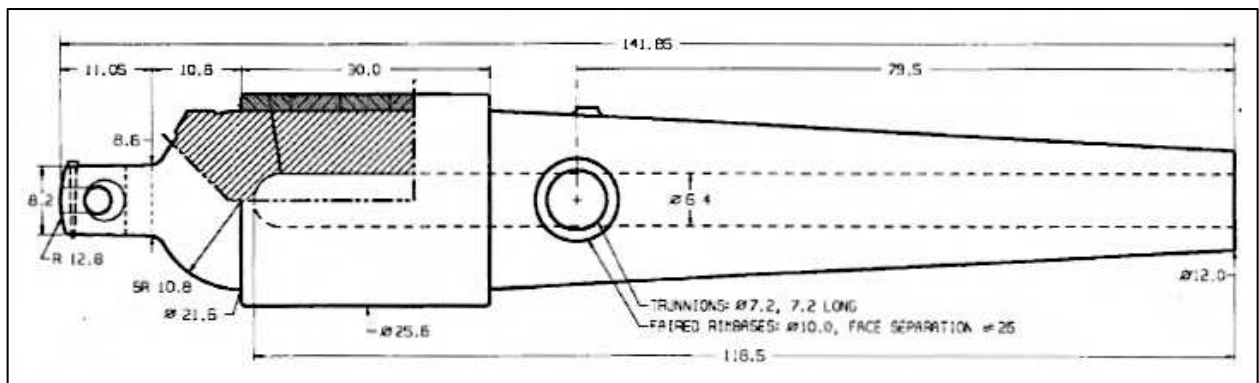


Figure 6-276. 6.4-inch single-banded Brooke rifle dimensions (as presented in Olmstead et al. 1999:127).

The Tredegar Iron Works

As will be shown below, all four of our recovered large guns were produced at the Tredegar Iron Works (Tredegar) in Richmond, Virginia. The biggest ironworks in the South before 1860, it played a significant role in the decision to relocate the capital of the Confederacy from Montgomery, Alabama, in May of 1861, and became the industrial heart of the Confederacy.

In 1836, a group of Richmond businessmen and industrialists led by Francis B. Deane, Jr., set out to capitalize on the growing railroad boom in the U.S. The group hired Rhys Davies, then a young engineer, and brought a number of his fellow ironworkers from Tredegar, Wales, to construct the new facility with furnaces and rolling mills. The foundry was named in honor of the town of Tredegar, where an iron works of the same name had been constructed in the early nineteenth century. The new works opened in 1837 to hardship for the company, as a result of an accompanying downturn to the economy. Davies died in Richmond in September 1838, from stab wounds sustained in a fight with a workman and was buried on Belle Isle, on the James River (Tredegar Iron Works 2019).

In 1841, the owners turned management over to a 28-year old civil engineer, by the name of Joseph Reid Anderson, who proved to be an able manager. J.R. Anderson was born at “Walnut Hill” near Fincastle in Virginia, in 1813. He was the grandson of Scotch-Irish immigrants, and the son of Colonel William Anderson, a self-taught engineer, and Anne (née Thomas) Anderson. Anderson was appointed to the U.S. Military Academy at West Point, New York, and graduated fourth in his class of 1836 (Figure 6-277). In recognition of his engineering abilities, Anderson was assigned as an assistant engineer in the Engineer Bureau in Washington, D.C. before being officially transferred to the USACE on July 1, 1837, as a Brevet Second Lieutenant. His primary duty with the USACE was in the construction of Fort Pulaski, to guard the Port of Savannah, Georgia (Joseph R. Anderson 2019).

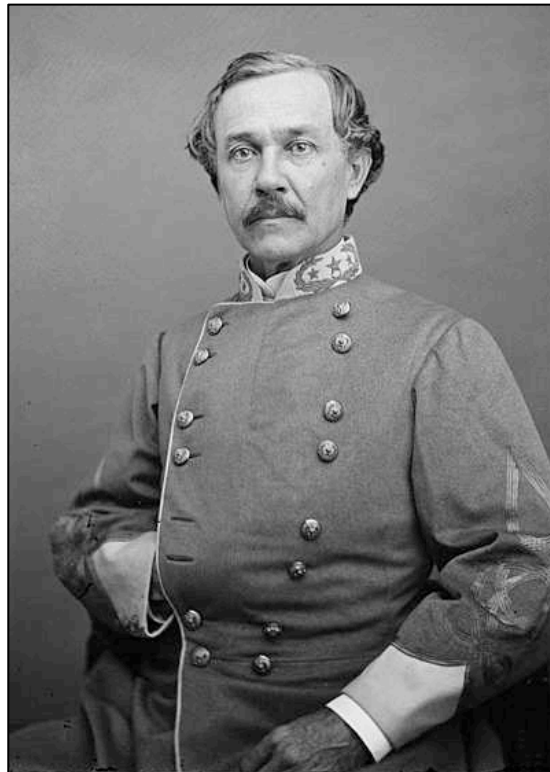


Figure 6-277. Joseph R. Anderson, owner of the Tredegar Iron Works.

He married Sara Eliza Archer, daughter of Dr. Robert Archer, the post surgeon at Fort Monroe, Virginia. Later, under the Virginia Board of Public Works, Anderson became Assistant State Engineer and served as Chief Engineer of the Valley Turnpike Company from 1838 to 1841.

After initial difficulties in producing guns for the government in 1843, the foundry soon improved with the use of better iron and casting techniques. Anderson acquired ownership of the foundry in 1848, after leasing the works for five years. He was soon doing work for the U.S. government. Between 1844 and 1860, Tredegar delivered 881 pieces of ordnance to the Federal Government, none of which failed to pass inspection (Daniel and Gunter 1977).

These were good years, and the company also produced about 70 steam locomotives between 1850 and 1860, along with miles of rail for local railroads. Tredegar assembled steam engines and manufactured the propulsion plants for the USS *Roanoke* (1855) and USS *Colorado* (1856).

Prior to the Civil War, industry expanded at the Tredegar site under Anderson's direction to include a new flour-mill and cast iron stove works. By 1860, Crenshaw & Co. had established the Crenshaw Woolen Mill on the adjoining land. The woolen mill became "the principal source of supply for the Confederate Army's requirements for uniform material" during the first half of the Civil War. A fire on May 16, 1863, on the Tredegar/Crenshaw site damaged the mill and the foundry. He also introduced slave labor to cut production costs, and by the beginning of the Civil War in 1861, half of the 900 workers were slaves, including many in skilled positions. The Tredegar foundry became a leading iron producer in the country (Figure 6-278).

By 1860, Tredegar lost its Federal Government contracts to produce cannon, as it would not use the new Rodman manufacturing methods. Guns were traditionally cast solid, and then the bore was drilled out of the solid metal. With this old method, the gun cooled from the outside inward, as cast iron shrinks as it cools. As each succeeding layer cools, it contracts, pulling away from the still molten metal in the center, creating voids and tension cracks. Drilling out the bore removed the voids, but the tensions in the metal were still in the metal toward the outside. Rodman devised a method of hollow casting, where the gun cooled from the inside out, so that as cooling occurred, it created compression rather than tension. This resulted in a much stronger gun (Rodman Gun 2019).

With the advent of the war, it became the largest of its kind in the South by supplying high-quality munitions to the Confederacy. The wartime production included the iron plating for the first Confederate ironclad warship, the CSS *Virginia*, and they were also credited with making approximately 1,100 artillery pieces. This was about half of the South's total domestic production of artillery during the war years (1861 to 1865).

Anderson was a strong supporter of Southern secession and became a Brigadier General in the Confederate Army after the war broke out. In 1862, he was wounded with a concussion at Glendale, during the Seven Days Battles in the Peninsula Campaign and then served in the Ordnance Department for the remainder of the Civil War (Joseph R. Anderson 2019).

As the war continued, with more and more men being conscripted into the Confederate armies, Tredegar experienced a lack of skilled laborers. Scarce supplies of metal also hurt the company's manufacturing abilities during the war years, and as the conflict progressed it was noticed that Tredegar's products were beginning to lose quality, as well as diminish in quantity. Even in the summer of 1861, soon after the beginning of the Civil War, the initial quantity of metal was so scarce that the iron works failed to produce a single piece of artillery for an entire month. This was a constant problem—one the company never overcame. It did not have the capacity nor the raw materials to compete with the Union.



Figure 6-278. Tredegar Iron Works and associated facilities, as it appeared shortly after the fall of Richmond in 1865. The 1861 Gun Foundry, to the left and front of large chimney stack. Crenshaw Woolen Mills (Pattern Building), the white-roofed building between the two chimney stacks. Old Foundry, the smaller building between the two chimney stacks. Offices, the white-roofed building to the right of the central chimney stack. Haxal Canal, the waterway to the left of the 1861 Gun Foundry. Richmond Armory Rolling Mills, the large white-roofed buildings to right. Richmond Armory, the brick building "shell" to the extreme right (courtesy of Wikipedia.com).

During the evacuation of Richmond by the Confederates on the night of April 2/3, 1865, the retreating troops were under orders to burn many of the ordnance dumps and industrial warehouses, which would have been valuable to the Union. Anderson reportedly paid over 50 armed guards to protect the facility from arsonists. As a result, Tredegar is one of few Civil War-era buildings that survived the burning of Richmond.

The Noble Brothers Foundry

In 1837, James Noble, an English mining engineer and mineralogist, moved to America and settled in Reading, Pennsylvania. He established a foundry and machine shop, but the facility was later destroyed by fire. Shortly thereafter, he returned to England with his wife to see the World's Fair. At the Fair, he was attracted to the Southern brand of iron ore, which was on display. Returning home, he toured the South and decided to relocate in Rome, Georgia (Daniel and Gunter 1977). In the summer of 1855, in partnership with his six sons—John, draftsman and machinist; James, boilermaker; Samuel, secretary and treasurer; and William, George, and Stephen, ironworkers—he organized and built the Noble Brothers & Company (Aycock 1972). They ordered a lathe from Pennsylvania around the same time. This massive lathe, with a length of 16 feet and a 10-foot swing, was brought by boat to Mobile, Alabama. From there it was transported by a river boat up the Coosa River, to the first waterfall and subsequently hauled by horse and cart to the foundry in Rome (Noble Brothers Foundry 2019).

Prior to the war, the firm manufactured steam engines and boilers, and constructed a 25-ton locomotive, the *Alfred Shorter* (Aycock 1972), the first such engine built south of Richmond. The foundry later expanded to include iron castings of any size, mining machinery, and constructing railroad iron, bar iron, grates, and pipes. The establishment was also the repair shop for the Rome Railroad and the Coosa River Steamboat Company.

At the first signs of hostilities, James Noble went to Montgomery, Alabama, to confer with President Jefferson Davis concerning a Confederate contract. A contract was signed in June 1861, and the appropriate drawings for 3-inch rifles and cannon were furnished. The original contract called for 27 field pieces, although by the end of the summer the number had been raised to 56, mostly 3-inch rifles. In 1861, a Noble 3-inch rifle sold for \$175, and an additional \$815 for the carriage and caisson.

By January 1862, the firm was heavily engaged in the production of cannon and battery equipment. A local newspaper at that time reported, "MANUFACTURE OF CANNON IN GEORGIA":

"At this foundry they are now completing on an average, one cannon a day, and in the manufacture of gun carriages, caissons, etc. are fitting up a battery of six guns once every three weeks" [Daniel and Gunter 1977].

Although strategically located near the rich Alabama coal and iron ore fields, and the large Ducktown copper mines near Chattanooga, the Noble foundry was in need of raw materials at an early date, the difficulty often due to a lack of proper transportation. "We can get neither cars nor coal," stated the Nobles in April 1862, "and will soon be obliged to stop." In an effort to increase the supply of raw materials, scrap metal drives were conducted and churches donated their bells for the war effort. The shop yard was a "wonderful sight," reported a member of the Noble family, "with loads of stills and their worms from fifty to hundred gallons, bells from churches, brass and iron fenders, candlesticks and other heirlooms" given cheerfully by the farmers. The shortage of labor also created difficulties. By November 1861, the firm was advertising for an additional 20 blacksmiths and five machinists. Numerous communications were sent to the Secretary of War requesting additional mechanics, but with little effect. In February 1862, Governor Joseph Brown of Georgia exempted 20 men at the plant of military

age, to protect them from the Militia Officer. Confederate President Davis exempted the brothers from battlefield fighting. He proclaimed "... the 6 Noble brothers are exempt from the fighting, as we have plenty of men to fight but few that can make cannon" (Noble Brothers Foundry 2019). In August 1862, a single molder was ordered to report to the foundry to assist in the manufacture of projectiles.

Further complications were experienced when in August 1862, a fire swept through the gun carriage department. The facility was located in a three-story building, also occupied by the Dickson & Nelson Rifle Factory. The fire started in the drying room and spread so rapidly, that workmen were forced to jump from the second-story windows. The building and contents were a total loss.

Despite these numerous difficulties, the Noble Brothers experienced considerable success in the casting of bronze and iron field guns. Between April 1861 and October 1862, some 58 field pieces were delivered to the Confederacy. Of these, at least 15 were cast iron 6 pounders. They weighed an average of 890 pounds and were approximately 72 inches in length (Hazlett et al. 2004). Their trunnions were marked in the usual manner, date on the one side and some version of "Noble Brothers and Co/Rome GA" on the other.

An unusual incident occurred in October 1862, which caused a sharp exchange between the Nobles and the Confederate Government. In that month, two Ordnance Department representatives, Maynadier Mason and Captain I.J. Smith, inspected the foundry and complained about the faulty casting of several cannon. At that, one of the Noble Brothers began insulting Capt. Smith by saying that "all ordnance officers were fools and jackasses." Mason objected and was knocked down and beaten. The incident, apparently not the first, was promptly reported to Col. Josiah Gorgas, the Chief of Ordnance, who moved swiftly. On November 12, 1862 a stern letter was dictated to the Noble Brothers. "In view of your abusive and insulting language against the officers of the [Ordnance] Department and your suits to Capt. L. J. Smith, C.S.A., while on discharge of his duties as an inspector of ordnance at your foundry, you are hereby informed that no more of your bills will be paid at this office." That ended all ordnance contracts with the Confederacy (Daniel and Gunter 1977).

The Noble Brothers' plant was destroyed when Sherman's troops entered Rome on May 18, 1864. The large smoke stacks of the foundry were blown up and the shops burned. The Union troops attempted to dismantle the lathe using sledgehammers, with little success. The hammer marks are still visible today and the fire caused minimum damage to the lathe. The massive machine stayed in production until the mid-1960s (Noble Brothers Foundry 2019).

Recovered Cannon

Five cannon were recovered from the *CSS Georgia* site during the 2015 field season: two IX-Inch Dahlgren cannon; two 6.4-inch single-banded Brooke rifles; and a small cast iron 6-pounder. These were designated in the field and on project maps as Cannon Nos. 1 to 5 (Figure 6-279). Cannon No. 1 is the 6-pounder (Artifact 1610) recovered from Unit 24-J, Cannon No. 2 is a IX-Inch Dahlgren (Artifact 1612) recovered from Unit 10-D, Cannon No. 3 is a Brooke rifle with the only intact sight on any cannon (Artifact 1611) recovered from Unit 8-D, Cannon No. 4 is a Brooke rifle with a broken muzzle (Artifact 1613) recovered from Unit 18-BB, and Cannon No. 5 is a IX-Inch Dahlgren (Artifact 1823.11) recovered from Unit 6-F.

6-Pounder Cannon—Cannon No. 1

There was only one of these cannon on the vessel, which was originally located on the spar deck aft. The original inventory does not record any markings. The cannon was presented to the *CSS Georgia*, by the "Ladies of Rome" the location of its foundry. Cannon No. 1 (Artifact 1610) was recovered from Unit 24-J, adjacent to the downstream side of the East Casemate and measured

during recovery at 6 feet 5 inches in length (Figure 6-280). Figure 6-281 shows the left trunnion is marked August 1862. Observe that the “6” in 1862 is reversed left to right. The only way to accomplish this error is to use a foundry pattern stamp, which is reversed for use on molds. Figure 6-282 shows the right trunnion is marked with “Noble Brothers Co” on top with “Rome GA” underneath.

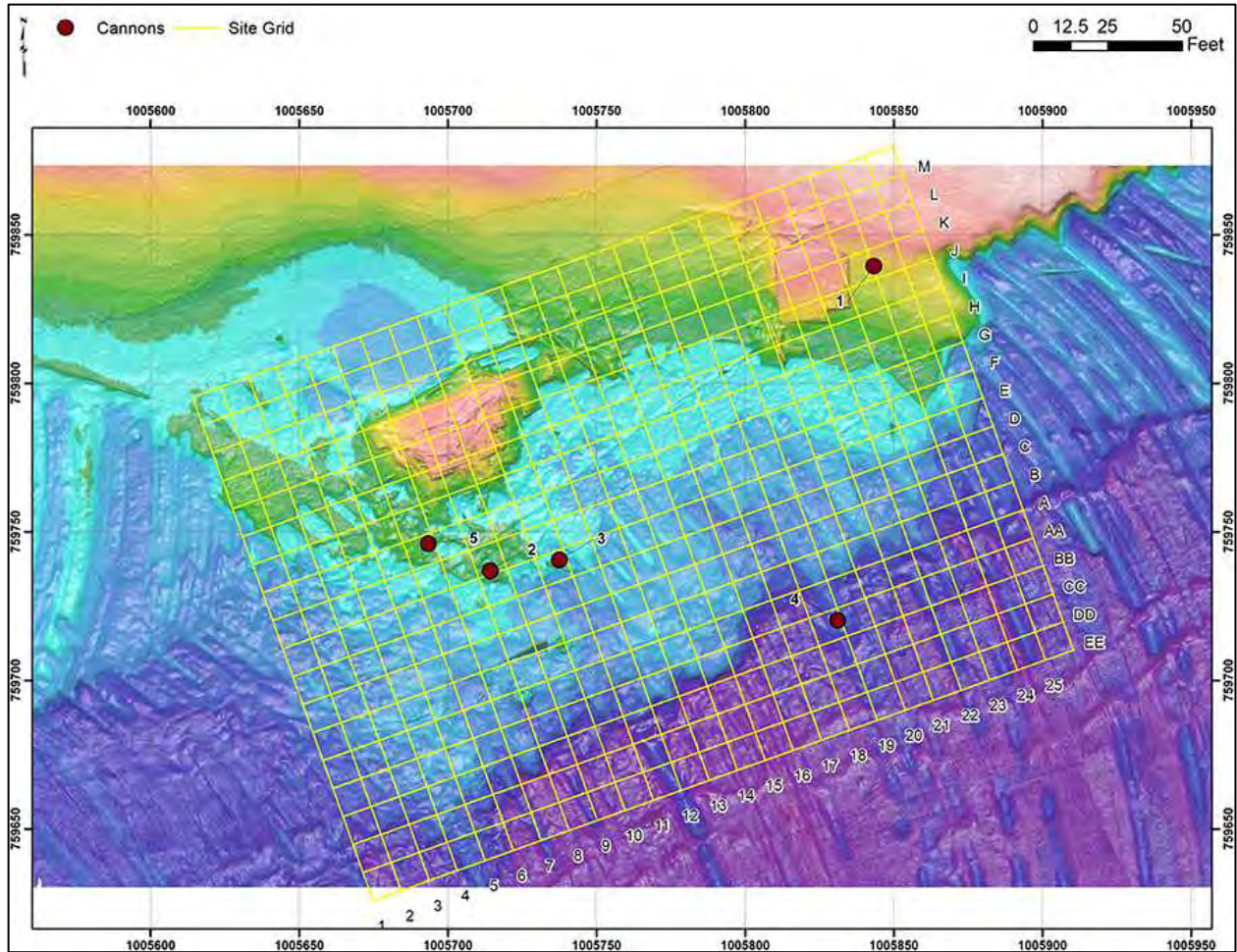


Figure 6-279. Location of the five recovered cannon.

Relative to markings on the recovered cannon, the Ordnance Instructions 1866 for the U.S. Navy gave clear instructions as to how and where cannon were to be marked. The Confederacy followed using the same instructions, as laid out in this and earlier manuals. Guns for the naval service, received by authority of the Bureau of Ordnance, are to be marked in the following manner:

- “On the base ring or line...the weight of the gun in pounds
- On the right trunnion, the caliber and year of manufacture
- On the left trunnion...the initials of the inspecting officer
- On the...cascabel, the foundry number
- The foundry number is also to be marked on the right rimbase” [Ordnance Instructions 1866].

Lt. O.T. Johnston recorded the cannon on the *CSS Georgia*, on the April 23, 1863 (Swanson and Holcombe 2007:82). Using this information and the markings found on the cannon, the cannon placement locations were determined on the vessel. A process of elimination had to be used, as the remaining markings are not always visible on the surface of the iron, and one of the cannon has yet to go through its conservation process. The recovered cannon and their most likely position on the *CSS Georgia*, based on their type and markings, are presented below along with illustrations and discussion. Discussed out of numerical order for continuity of presentation, both Brooke rifles are discussed together, as are the Dahlgren.



Figure 6-280. Recovered 6-pounder cannon, Cannon No. 1, Artifact 1610, the *CSS Georgia*'s aft spar deck gun; scale in feet.



Figure 6-281. Left trunnion of recovered 6-pounder cannon marked August 1862. Observe the “6” in 1862 is reversed left to right. The only way to accomplish this error is to use a foundry pattern stamp, which is reversed for use on molds.



Figure 6-282. Right trunnion of recovered 6-pounder cannon marked with “Noble Brothers Co” on top with “Rome GA” underneath.

IX-Inch Dahlgren—Cannon No. 2

Two Dahlgren cannon were recovered from the site, Cannon Nos. 2 and 5, and two are recorded as being on the CSS *Georgia* in 1863. Illustrated in Figure 6-283, Cannon No. 2 (Artifact 1612) was recovered from Unit 10-D. This cannon was identified based on records as the No. 1 Port Gun on the vessel, a IX-Inch Dahlgren recorded as having the following markings when first placed on the CSS *Georgia*:

- Weight— 9,300 pounds
- Right trunnion— JRA TF (Joseph R. Anderson, Tredegar Foundry)
- Left trunnion— 1862
- Face of muzzle— 1389

Taken out of electrolysis for recordation, the gun had an overall length of 11 feet. Figure 6-284 shows the gun’s weight as 9,300 pounds, stamped parallel to base ring on the breech, which matches the recorded weight, while the muzzle is stamped with “1389,” which also matches the original record for the vessel’s No. 1 Port Gun (Figure 6-285). Illustrated in Figures 6-286 and 6-287 are the trunnions. The left trunnion, heavily corroded, is marked with what appears to be a possible 1 and 8, and then a possible 6. The right trunnion is marked on the top line with “JRA” for Joseph R. Anderson, and underneath “TF” for the Tredegar Foundry, all of which match the original record.

Figure 6-288 is a photograph of the cascabel showing it is a composite or has an insert completing the circle for rope, while Figure 6-289 is shows the tangent sight mount (or lug), as well as two percussion lock mounts (or lugs). As discussed above, the lateral vent on the right was initially drilled through, while the left vent was only partially drilled so as to indicate the correct angle. The left lock lugs were left solid, or the slot filled with zinc. The right vent, when eroded to 0.40 inch, was closed by molten tin, zinc, or lead and the left vent drilled through.



Figure 6-283. IX-Inch Dahlgren, Cannon No. 2, Artifact 1612, removed from electrolysis for recordation.



Figure 6-284. IX-Inch Dahlgren, Cannon No. 2, Artifact 1612, showing a weight of 9,300 pounds stamped in line with the breech. Right percussion lock lug at top left.



Figure 6-285. IX-Inch Dahlgren, Cannon No. 2, Artifact 1612, the breech stamped with “1389,” which is the foundry number.

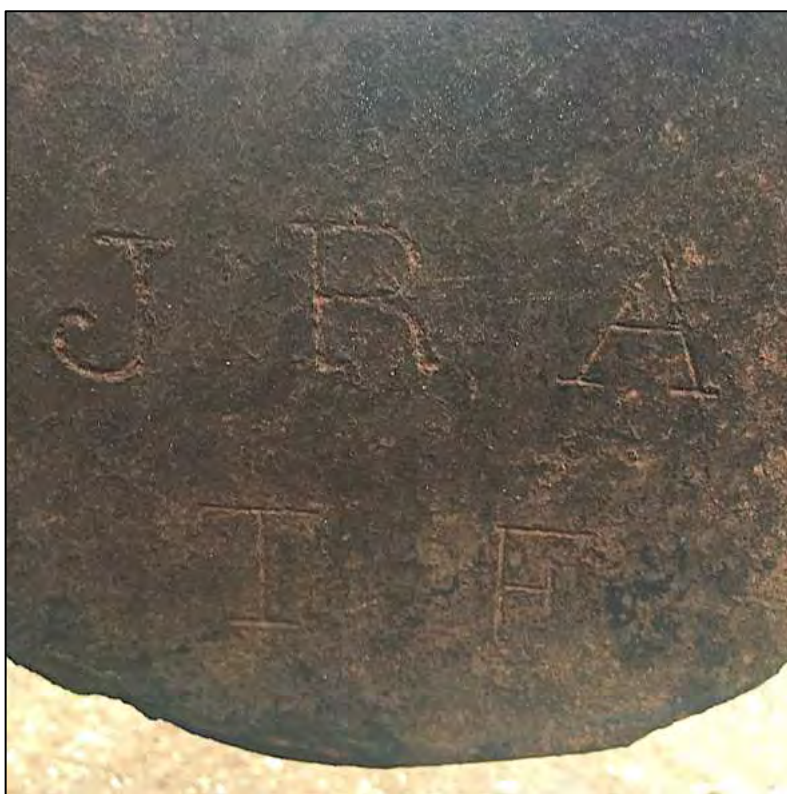


Figure 6-286. Right trunnion of IX-Inch Dahlgren, Cannon No. 2, Artifact 1612, marked with “JRA” and underneath “TF.”



Figure 6-287. Left trunnion of IX-Inch Dahlgren, Cannon No. 2, Artifact 1612, marked with what appears to be a 1 and 8, and then a 6.



Figure 6-288. View of cascabel showing it is a composite or has an insert completing the circular opening for rope.



Figure 6-289. Tangent sight mount (or lug; center), as well as two percussion lock mounts (or lugs; left and right). Cuts or impressions on right lock lug indicate that it was employed at the time of scuttling; note touch hole.

At the time of writing, the cannon bore has been cleaned nearly down to the breech. Before the vessel was scuttled, a 9-inch shell was placed backwards down the bore, so as to prevent it from being fired safely. The wooden sabot pictured in Figure 6-290 has been removed successfully, but the shell is being stubborn and resisting all removal efforts. The sabot is presented in the DMM section below.

IX-Inch Dahlgren—Cannon No. 5

Cannon No. 5 (Artifact 1823.11; Figure 6-291) was identified based on records as the No. 4 Port Gun on the vessel, a IX-Inch Dahlgren was recorded with the following markings when first placed on the CSS *Georgia*:

- Weight— 9,310 pounds
- Right trunnion— JRA TF (Joseph R. Anderson, Tredegar Foundry)
- Left trunnion— 1862
- Face of muzzle— 1385

Unexpectedly found in Unit 6-F during Mechanized Recovery of Artifacts, the cannon at the time of writing has yet to be cleaned, conserved, recorded, and analyzed.



Figure 6-290. Looking down the bore of the IX-Inch Dahlgren, Cannon No. 5, Artifact 1823.11, at the sabot of the inverted shell.



Figure 6-291. IX-Inch Dahlgren, Cannon No. 5, Artifact 1823.11 was recovered from Unit 6-F.

6.4-inch Single Banded Brooke Rifle—Cannon No. 3

Four rifled cannon were recorded as being on the vessel. Of the two recovered, one is complete (Artifact 1611), currently in electrolysis, and has the markings “JRA” and “1862” on the trunnions. The second Brooke (Artifact 1613) is also in electrolysis, and has part of the muzzle blown off. The markings, on the cannon, at time of writing, are obscured. The third Brooke rifle is the No. 2 Port Gun marked “B.F.” for the Bellona Foundry, is currently located at Fort Jackson. The last rifled cannon recorded on the inventory, was a lightweight non-banded 32-pounder/6.4-inch cannon, not adequate for the heaviest projectiles. It was not present on the site.

On January 28, 1864, during a practice session with the 7-inch stern gun (*nota bene*: possible typographical error, “7-inch” and “stern”) the muzzle burst upon detonation. The charge had been a 12-pound load, using a Charlotte shell [shell produced at the ordnance facility in Charlotte] and a McEvoy fuze. It was replaced with a IX-Inch Dahlgren from the starboard side (Swanson and Holcombe 2007:80-1). This cannon was most likely the lightweight rifle.

On September 27, 1864, a second muzzle explosion took place on the CSS *Georgia*. During the quarterly target practice, the No. 1 32-pounder, single-banded rifle burst upon firing, blowing 18 inches off the muzzle. The damaged 32-pounder was replaced by a IX-Inch Dahlgren already on board, and it was decided to save the damaged gun for testing 6.4-inch shells in Savannah. By early October, Navy officials had determined that the damaged gun had been made at Tredegar in Richmond, and that the gun broke as a result of a defective shell, of which there seemed to be a considerable number on hand in Savannah. Most of the bad shells appeared to have been made in Charlotte, leading officials to recommend that future ordnance be obtained from Navy facilities in Selma. The damaged gun was not discarded, but prepared for re-use: “It is desirable that the muzzle of the gun should be cut to [a] smooth face” (Swanson and Holcombe 2007:80-1). This work was evidently not undertaken, as one cannon was recovered missing part of its muzzle.

Cannon No. 3, Artifact 1611, was identified as the CSS *Georgia*’s No. 3 Port Gun was a single banded 6.4-inch Brooke rifle with the following markings recorded when first placed on the CSS *Georgia*:

- Weight— 6,689 pounds
- Right trunnion— JRA (Joseph R. Anderson)
- Left trunnion— 1862
- Face of muzzle— 1367

Recovered from Unit 8-D, Figures 6-292 and 6-293 show the concreted gun prior to electrolysis and then taken out of electrolysis for recordation. A bronze dispart gun sight, the only sight found attached to any of the guns, is visible on the cleaned gun. Guns sights are discussed below.

Measured at the time of recovery, the gun had an overall length of 10 feet 8 inches. Illustrated in Figures 6-294 and 295 are the trunnions. The left trunnion is marked with “1862,” the year it was produced. Interestingly, it has a threaded hole present in the center face of the stamp, drilled after it was stamped; its purpose is unknown. The right trunnion is marked on the top line with “JRA” for Joseph R. Anderson, and underneath “TF” for the Tredegar Foundry, all of which match the original record.



Figure 6-292. 6.4-inch Brooke rifle, Cannon No. 3, Artifact 1611 recovered from Unit 8-D, pre conservation.



Figure 6-293. 6.4-inch Brooke rifle, Cannon No. 3, Artifact 1611 during electrolysis. The dispart sight, the only one found attached to any of the guns, is visible on the cleaned gun above the trunnions.



Figure 6-294. Left trunnion of 6.4-inch Brooke rifle, Cannon No. 3, Artifact 1611 marked with “1862,” the year it was produced. Note the threaded hole present in the center face of the stamp, placed after stamping; its purpose is unknown.



Figure 6-295. Right trunnion of 6.4-inch Brooke rifle, Cannon No. 3, Artifact 1611 stamped with the “JRA” foundry mark for John R. Anderson, owner of the Tredegar Iron Works in Richmond, Virginia, where it was produced.

6.4-inch Single Banded Brooke Rifle—Cannon No. 4

With a total remaining length of just under 10 feet, Cannon No. 4 (Artifact 1613; Figure 6-296), identified as the CSS *Georgia*'s Bow Gun, was a single-banded 6.4-inch Brooke rifle with the following markings recorded when first placed on the CSS *Georgia*:

- Weight— 6,696 pounds
- Right trunnion— JPA (Joseph R. Anderson)
- Left trunnion— 1862
- Face of muzzle— 1356



Figure 6-296. 6.4-inch Brooke rifle, Cannon No. 4, Artifact 1613 taken out of electrolysis for analysis. As a result of one of two muzzle explosions aboard the CSS *Georgia* thought to be the result of defective shells, the remaining length is just under 10 feet.

Because of severe corrosion (Figure 6-297), no markings remain on the gun. While the corrosion has erased any trace of markings, it does allow us to see the wrought iron breech banding in relationship to the cast iron of the cannon tube (Figure 6-298). Damaged by corrosion as well, the cannon is also missing part of its muzzle as is evidenced in Figure 6-296. As discussed above, there were two muzzle explosions on board the CSS *Georgia* thought to be

a result of defective shells, with one of the two damaged guns likely our Cannon No. 4. Placed back into electrolysis, there is a 6.4-inch solid iron bolt (non-explosive armor piecing round) concreted some 40 inches down the barrel that requires removal.



Figure 6-297. Right trunnion of 6.4-inch Brooke rifle, Cannon No. 4, Artifact 1613 showing extreme corrosion precluding observation of foundry markings.



Figure 6-298. Breech of 6.4-inch Brooke rifle, Cannon No. 4, Artifact 1613 showing layered wrought iron breech banding in relationship to the cast iron of the cannon tube. Note the similarity to the insert completing the circular opening for rope of Cannon No. 2 (Artifact 1612) in Figure 6-288.

GUN FURNITURE

The archaeological investigation of the CSS *Georgia* resulted in the recovery of thousands of artifacts, among them four large cannon and a single small 6-pounder to add to the two recovered in the 1980s, for a total of seven guns recovered from the site. Included in the recovered artifact assemblage were a series of small, cupreous instruments: small and roughly triangular pieces (Figure 6-299); long, graduated scales that originally slid through a type of “box” (Figure 6-300); and items resembling small hammers, some with beak and others with a hollowed shaft and/or a perforation through its head (Figure 6-301). After initial analysis, these artifacts were determined to be a dispart sight, a tangent sight, and a percussion lock, respectively. “Gun Furniture” as they are known, were crucial to the successful operation of naval guns (Tucker 1989:33-41).

The brass naval gun sights and percussion locks recovered from the CSS *Georgia* provide a unique opportunity to gain a deeper understanding of nineteenth-century naval gun furniture, especially gun furniture used during the Civil War, a period of dramatic technological development. The artifacts display several stamps and other marks on their surface, and exhibit slight variations in general appearance. For example, two of the graduated scales are of the same shape and size, but have different numbers on the scale divisions, while the head of one percussion “hammer” is perforated and the head of another is not.

Modern literature on this type of nineteenth-century gun furniture is relatively scarce. Additionally, foundries melted down and repurposed most brass and cupreous materials after the Civil War, making physical examples recovered from archaeological sites even less common. The collection of gun sights and percussion locks recovered from the CSS *Georgia* represents one of the largest extant assemblages of these types of artifacts to date. They survived thanks primarily to their relative inaccessibility underwater, reinforcing the importance of the field of underwater archaeology. At least nine gun sights (dispart and tangent) and five percussion locks were recovered. Written by Miguel Gutierrez, Jr., this section presents the analysis of this assemblage.



Figure 6-299. Dispart sight recovered from CSS *Georgia*.



Figure 6-300. Tangent sight recovered from the CSS *Georgia*.



Figure 6-301. Percussion lock/hammer recovered from the CSS *Georgia*.

The Civil War was a time of dramatic technological development in ordnance as well. In 1848, the Navy Bureau of Ordnance and Hydrography ordered all navy guns to carry both a dispart sight and a tangent sight (Tucker 1989:40). This means the Civil War was the first major American conflict that placed serious emphasis on the concept of long distance accuracy at sea. The brass gun sights and percussion locks from the CSS *Georgia* contribute to our understanding of how naval forces from both sides applied this concept in their efforts to outperform each other.

Improving the Accuracy of Naval Guns

The Gunner's Quadrant

The earliest mode of improving the accuracy of naval guns by using an aiming device concerned the angle of elevation of the gun set by using the Gunner's Quadrant (Figure 6-302) invented in 1545 by Niccolò Fontana Tartaglia, an Italian mathematician of the Republic of Venice (Manucy 1949:75; Owen 1873:172).

However, Luis Collado (1592:38), a Spanish mathematician and historian from Andalucía, cited a book written by Daniel Sanbech before Tartaglia was born, in which "Iohan (Johann) of Monte Regio" used an instrument very similar to Tartaglia's quadrant called a "triangulis" to measure ranges of shot based on different degrees of elevation. The shape of the Gunner's Quadrant was like that of a carpenter's square with a graduated quarter circle connecting the two arms. A plumb bob dangled from the angle of the square and displayed the gun's angle of elevation when the long arm of the instrument entered the bore of the gun (Manucy 1949:75). The gunner could achieve the desired range simply by raising the gun until the line of the plumb bob was over the proper mark on the instrument (Figure 6-303; Collado 1592:38). Collado used the quadrant for several experiments with a 20-pounder culverin, but a poor understanding of the effects of air resistance on the trajectory of a projectile resulted in inconsistencies between theory and experimental results (Manucy 1949:76).

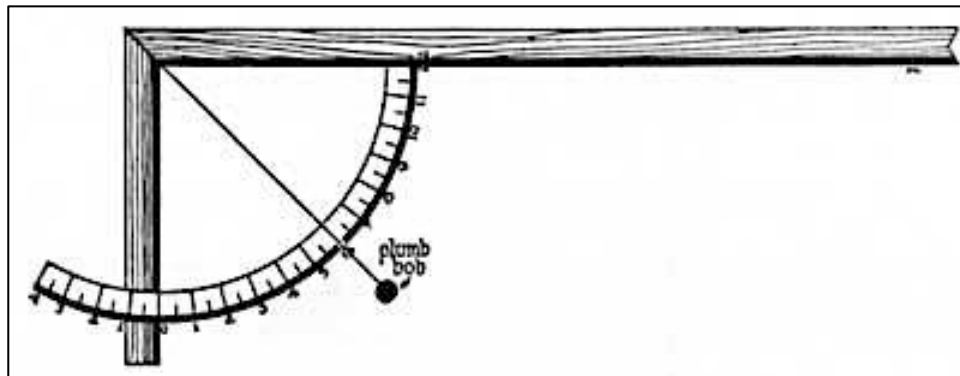


Figure 6-302. Gunner's Quadrant (Manucy 1949:75).

Adjusting for Difference in Thickness

Bronze and iron muzzle-loading guns are thicker at the breech than they are at the muzzle; thus, what a gunner sees when he aims a gun by following the surface of the barrel is underneath the actual area of impact. This is because the outer surface of a muzzle-loading gun tapers from the breech to the muzzle while the bore stays horizontal. For example, Beauchant (1828:10) calculated that aiming for the gun ports of a ship 100 fathoms (182.9 meters) distant by using the outer surface of the gun would cause the shot to go 18 to 20 feet (5.5 to 6.1 meters) above the intended target. Thus, any reasonable attempt at hitting what one looked at required that the bore of any given gun be parallel to the gunner's line of sight. To deal with this issue, the Spanish gunner inserted a pick into the vent at the breech down to the bottom of the bore and marked the depth. He then took that same pick to the muzzle and stood it up in the bore to mark the height of

the muzzle. The difference (called “*el vivo*” by the Spanish) between the two marks, with an adjustment for the base ring (which was higher than the vent), was calculated and fixed using a small wedge of proper size (Manucy 1949:76-77). Archaeologists working at the 1715 Spanish Douglass Beach Wreck in Florida recovered a brass “gunner’s bar” (Figure 6-304) now being conserved by the Florida Bureau of Archaeological Research (Jessica R. Stika electronic communication, 2017). The surface of this artifact is graduated and seems appropriate for the aforementioned process.

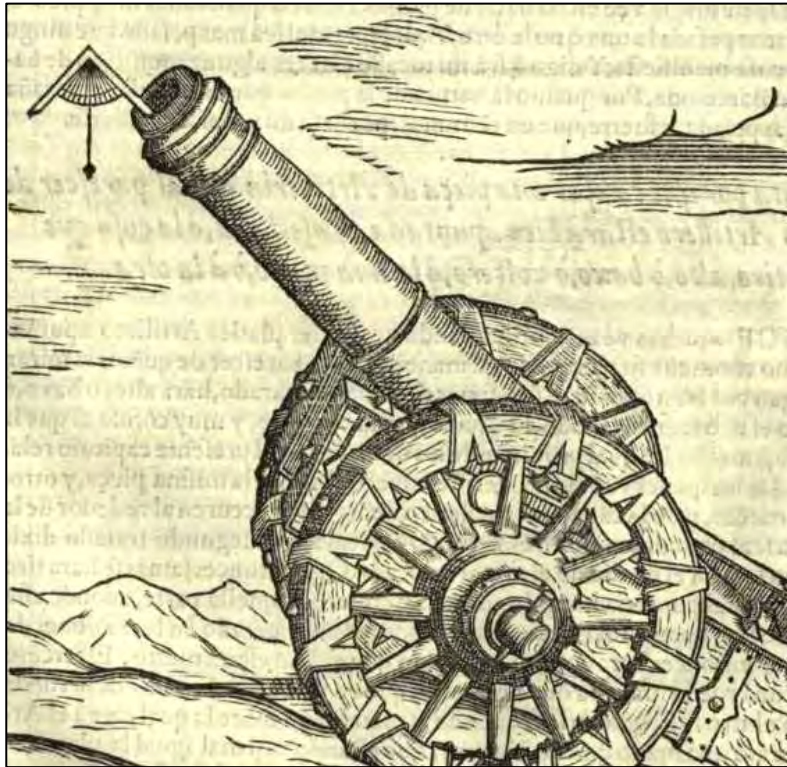


Figure 6-303. Example showing placement of Gunner’s Quadrant (Collado 1592:38).



Figure 6-304. Spanish “gunner’s bar” from Douglass Beach Wreck Site (courtesy of Florida Division of Historical Resources).

Gunner's Level

As late as the mid-nineteenth century, common practice for training a gun on a target required the location of the centerline at the top of the gun, marking it with chalk or filed notches, and using those as a sighting line. To locate this centerline, gunners used a Gunner's Level (Figure 6-305). This instrument was similar to a Gunner's Quadrant. It had a quarter circle connecting the two arms and a plumb bob dangling from the angle of the square; however, a third arm connected the ends of the arms of the Gunner's Level and formed a triangle. This third arm was the base of the triangle and the plumb bob dangled at its midpoint. The gunner placed the instrument first on the base ring, then on the muzzle. When it was level above both points, the plumb bob was theoretically on the centerline, which was subsequently marked (Manucy 1949:77).

Eventually, Müller thought both the Gunner's Quadrant and Gunner's Level should be rejected for a variety of reasons. Concerning the latter, Müller recognized the fact that no gun "is ever turned so true, that the outside corresponds exactly with the inside" due to the nature of the tools and heaviness of the work of casting ordnance (Müller 1780:148-149). Thus, it was reasonable to assume that an instrument applied on the outside of the gun would yield an inaccurate centerline due to differences with the inside of the gun. Concerning the former, if a gunner relied too much on the Gunner's Quadrant to determine proper degree of elevation, his "gunner's eye," (i.e., the ability to quickly judge distance to a target by eye) would slowly deteriorate and an important skill to have in the midst of the confusion of battle would be lost. The Gunner's Quadrant had its merits, but these were easier to appreciate in time of peace when there was no enemy battery with which to contend (Müller 1780:150).

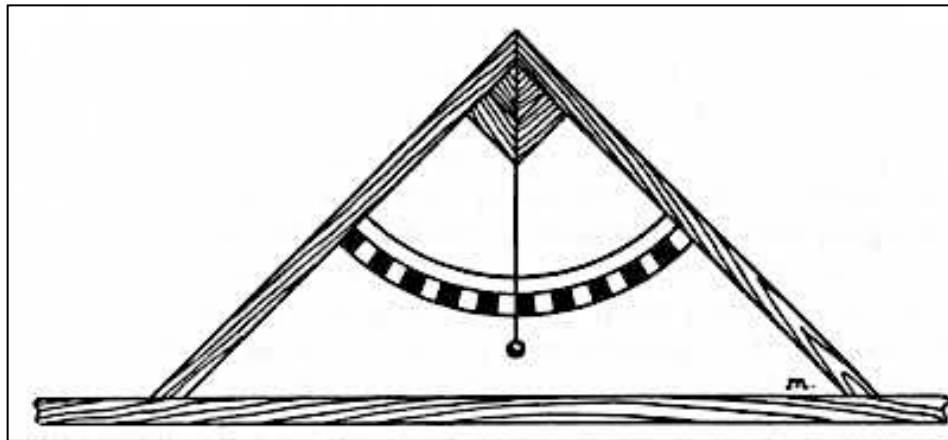


Figure 6-305. Seventeenth-century Gunner's Level (Manucy 1949:77).

Point-Blank Range

Prior to the nineteenth century, permanently mounted gun sights on naval ordnance were practically nonexistent (Tucker 1989:37). Dispart sights similar to those mounted on the muzzles of modern rifles were used sparingly during the seventeenth century, but because typical naval engagements were yardarm-to-yardarm, broadside vs. broadside encounters, there was no pressing need to improve the accuracy of guns (Manucy 1949:76; Tucker 1989). In fact, Admiral Horatio Nelson rejected an 1801 proposal for a set of gun sights saying, "The best and only mode I have found of hitting the enemy afloat is to get so close that whether the gun is pointed upwards or downwards, forward or aft...it must strike its opponent" (Tucker 1989:37).

The definition of point-blank range varied over time and with each country. Müller defined point-blank range as that distance between where the shot was fired and where it first touched the ground when the gun was level (Müller 1780:152). During the eighteenth century, the U.S. Navy defined point-blank range as the distance to a point at which a shot, fired from a level gun loaded with a full service charge, crossed the horizontal plane on which the trucks of the gun carriage stood. The French defined point-blank range as the distance between where the shot was fired and where it crossed the horizontal plane on which stood the gun's line of metal. Point-blank range varied according to the powder charge, gun, caliber, and weight of projectile (Tucker 1989:37).

Calculating Distance

Improvements in guns and powder compelled artillerists to invest in accuracy, as longer ranges and improved accuracy made the possibility of keeping an enemy ship within range while simultaneously staying out of theirs a viability. Müller formulated a chart of distances at sea (Figure 6-306) based on the height of ships above water. He assigned ships heights from 1 to 50 yards (0.9 to 45.7 meters) "deduced from the roundness of the sea's surface," calculated the mean diameter of the Earth in English yards, which "gives 7.1447018 [sic] for its logarithm; to which adding continually the logarithm of the height, gives the logarithm of the of the distances in yards" (Müller 1780). The assumption was that a seaman would always know the height of his position above water within his own ship. To that height, he adds the approximate height of the part of the ship that is underwater. The sum is then matched with the corresponding distance in the chart, shown in yards and miles (Müller 1780:xl).

Yds.	Yards	Miles.	Yds.	Yards	Miles.
1	3735	2.12	26	19048	10.82
2	5278	3.00	27	19410	11.03
3	6470	3.67	28	19767	11.23
4	7470	4.24	29	20107	11.42
5	8353	4.74	30	20460	11.62
6	9150	5.20	31	20800	11.82
7	9863	5.60	32	21133	12.00
8	10566	6.00	33	21459	12.20
9	11206	6.36	34	21780	12.38
10	11800	6.70	35	22100	12.55
11	12390	7.04	36	22413	12.73
12	12940	7.35	37	22720	12.91
13	13468	7.65	38	22895	12.97
14	13977	7.94	39	23329	13.20
15	14468	8.22	40	23631	13.40
16	14942	8.49	41	23919	13.59
17	15402	8.75	42	24209	13.75
18	15850	9.00	43	24500	13.92
19	16283	9.25	44	24780	14.08
20	16706	9.49	45	25059	14.24
21	17118	9.72	46	25336	14.40
22	17521	9.95	47	25610	14.55
23	17915	10.18	48	25880	14.70
24	18300	10.40	49	26148	14.85
25	18678	10.61	50	26414	15.00

Figure 6-306. Müller's chart (courtesy of Müller 1780:xxxix).

Robert Simmons, in his *Sea Gunner's Vade-Mecum* (1812:39-40, 43-45), used the height of the enemy vessel at sea to calculate the approximate distance to it by operating under the assumption that mast heights were generally the same for ships of each class, regardless of their nation of origin (Tucker 1989:41). Simmons observed that by using Hadley's quadrant to take angular heights, the angle corresponding to the height of another ship as seen from the quadrant's

telescope will read 45 degrees, if the distance between the observer and the ship is equal to the ship's perpendicular height. A table for gauging the distances between ships of the line at sea, furnished by Admiral William Waldegrave for *Steel's Treatise on Naval Tactics*, was used in tandem with Hadley's quadrant. When a ship of the line was spotted at sea, Hadley's quadrant was adjusted to ascertain the angle made from the observer's eye to the "maintop-gallant-mast hounds or rigging" of the other ship. Once the angle was established, the gunner consulted the table. On the table, the rate of the ship (which an experienced gunner or captain would know) is found on the topmost row. It is followed down its corresponding column to the degree closest to that shown on the quadrant, and, on a parallel left-hand column, the distance between the enemy ship's mainmast and the observer would be shown in fathoms or miles (Figure 6-307).

A TABLE for finding the distance of Ships in the line.									
Guns.	100	90	80	74 L.	74 S.	64	60	50	
Distance in Fathoms.	3 decks		2 decks						
	Angle.	Angle.	Angle.	Angle.	Angle.	Angle.	Angle.	Angle.	Angle.
50	31 50 1/2	30 43'	29 57'	35 43'	31 13'	30 16'	27 50'	26 45 1/2	25 34 1/2
100	16 21 1/2	15 43'	15 23 1/2	16 49'	16 7 1/2	15 34 1/2	14 4 1/2	13 28 1/2	12 5 1/2
150	11 34'	10 37'	10 18 1/2	11 25'	10 48 1/2	10 26'	9 30'	9 5 1/2	8 39'
200	8 18 1/2	7 50'	7 44 1/2	8 29 1/2	8 7 1/2	7 50'	7 8'	6 49 1/2	6 20'
250	6 39'	6 23 1/2	6 12'	6 50'	6 30'	6 16 1/2	5 42'	5 27'	5 11 1/2
300	5 32 1/2	5 18 1/2	5 9 1/2	5 39 1/2	5 24 1/2	5 13 1/2	4 44 1/2	4 38 1/2	4 19 1/2
400	4' 9'	3 59 1/2	3 52 1/2	4 13'	4 3 1/2	3 55'	3 34'	3 24'	3 14'
500	3 19 1/2	3 11 1/2	3 5 1/2	3 24'	3 13'	3 8'	2 51'	2 44'	2 36'
600	2 46'	2 39'	2 31 1/2	2 50'	2 42 1/2	2 36 1/2	2 22 1/2	2 17'	2 10'
700	2 22 1/2	2 17'	2 12 1/2	2 25 1/2	2 19'	2 14'	2 9'	1 57'	1 51'
800	2 5'	1 59'	1 56'	2 8'	2 2'	1 58 1/2	1 46 1/2	1 42 1/2	1 37 1/2
900	1 51'	1 46 1/2	1 43 1/2	1 53 1/2	1 48'	1 44 1/2	1 35'	1 31'	1 27'
1 mile	1 38'	1 34'	1 31 1/2	1 40 1/2	1 36'	1 32 1/2	1 24'	1 20 1/2	1 17'
2 miles	0 49'	0 47 1/2	0 45 1/2	0 50 1/2	0 48'	0 46 1/2	0 42'	0 40'	0 38'
3 miles	0 33'	0 31 1/2	0 30 1/2	0 33 1/2	0 32'	0 31'	0 28'	0 27'	0 25 1/2
4 miles	0 24 1/2	0 23 1/2	0 23'	0 25 1/2	0 24'	0 23 1/2	0 21'	0 20 1/2	0 19 1/2

Figure 6-307. Chart showing angles of elevation and corresponding distances to ships (courtesy of Simmons 1812:44).

The Function of the Naval Gun Sights

A naval gun had to be raised to an appropriate degree of elevation to achieve the necessary range to strike a distant object at sea. The degree of elevation was a measure of the angle formed by the lower surface of the gun and the horizontal plane on which the trucks of the carriage stood. The angle of projection or departure was formed by the bore of the gun and the horizontal plane. Therefore, it was slightly greater to the angle of elevation because the bore was inside the outer surface of the gun. Jeffers (1850:22) cautioned against confusing both angles when preparing tables of ranges. The projectile departed from the axis of the gun but the quoin, used to adjust elevation, was marked in degrees of elevation *of the lower outer surface of the piece* with which it made contact. In fact, the degrees marked on the quoins were the same as those marked on the tangent scale if the latter was marked in degrees (U.S. Navy 1852:118). The mean difference between both angles ranged between a minimum of 10 feet and an extreme of 34 feet (Jeffers 1850:22).

Extensive experimentation determined effective ranges of shot and shell under varying conditions. The degree of elevation, powder charge, weight of the gun and projectile, height of the carriage above the water, and distances in yards were marked on tables of ranges for guns of each caliber (U.S. Navy 1852:133). These ranges were marked on the tangent sight scale and the difference in diameter of the bore and outer surface of each gun was calculated and used to make a dispart sight of proper height. Before both sights could be used effectively in tandem, the exact placement of the dispart sight on the surface of the gun had to be determined.

Two adjustments were needed to place the dispart sight exactly in the correct spot: it had to be in a vertical plane perpendicular to the axis of the trunnions and its apex had to create a line of sight parallel to the axis of the bore (Ward 1861:112). The vertical plane had to cut the muzzle and base ring into equal parts. Once this plane was established, the points on the surface of the gun where the plane cut through had to be marked with permanent notches (Figure 6-308). The gun was placed on skids *e* and *f* on the plane *gh*. A rectangular, wooden frame *abcd* was placed over the gun with one leg resting on each arm of the trunnions. A spirit level was placed on top of the wooden frame (*bc*) and the skids were adjusted until *bc* was level. If *bc* was level, then *ik*, the axis of the trunnions, was also level (Ward 1861:113). Figure 6-309 represents a section of the same gun, with level trunnions, at the base ring. Points *abc* represent the outer surface of the gun and *def* represents a square with an attached plumb bob.

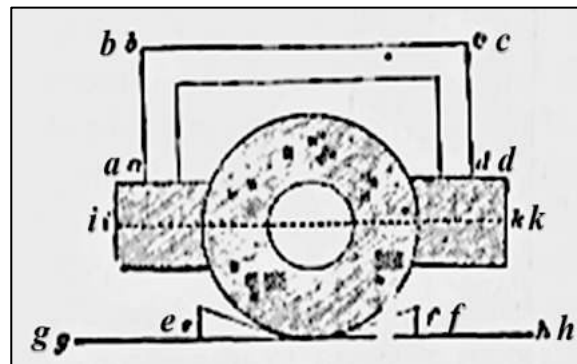


Figure 6-308. Eighteenth-century diagram showing how to level the trunnions (base image: Ward 1861:113; diagram letters repeated for clarity).

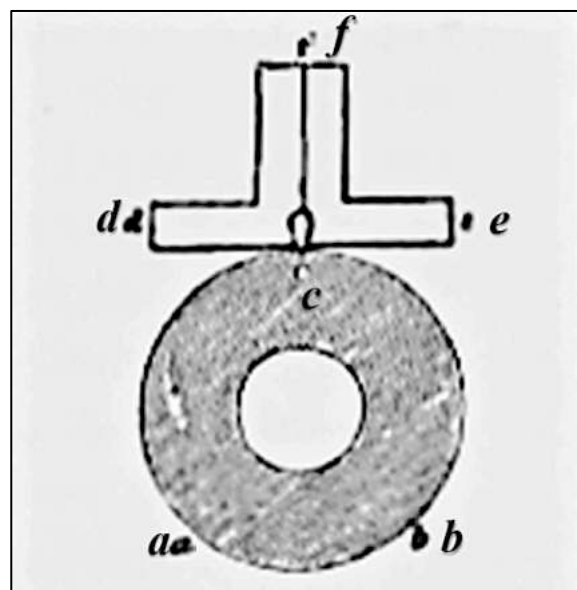


Figure 6-309. Locating the vertical plane (base image: Ward 1861:113; diagram letters repeated for clarity).

By adjusting the square so that the plumb bob touches the base ring at c , a vertical plane at right angles with the base ring is created. The notch marking the location of this plane is made at the meeting of the plumb bob and the point c at the base ring. The same square is then placed on the muzzle and the placement of the notch is determined in the same manner. These two notches are joined by a line representing the vertical plane along which the dispart sight is placed (Ward 1861:113-115).

Once the placement of the dispart sight was determined it was fitted to the gun and ready to be used in tandem with the tangent sight. The basic geometric principle behind this system of training naval artillery was that of equal angles when a straight line cut through two parallel lines (Figure 6-310). Diagonal line AB represents the axis of the bore of a gun. When this line cuts through planes CD and EF , it creates angles a and b at the corresponding points of intersection. Point C represents the top of the tangent sight. The point of intersection of line AB and plane CD represents the apex of the dispart sight. Plane CD represents the line of sight created with the tangent and dispart sights. Angle b represents the degree of elevation of the gun. Angle a represents the artificial angle of sight formed by the line of sight with the surface of the gun (Jeffers 1850:23). A variety of angles are formed when a diagonal line intersects two parallel lines. The universal rule concerning these angles is: adjacent outer angles always combine to form 180 degrees and opposite inner angles are always equal. Therefore, because angle b and angle a are both opposite inner angles, the angle of elevation of a gun must be equal to the artificial angle of sight created by the gun sights (Simmons 1812:25).

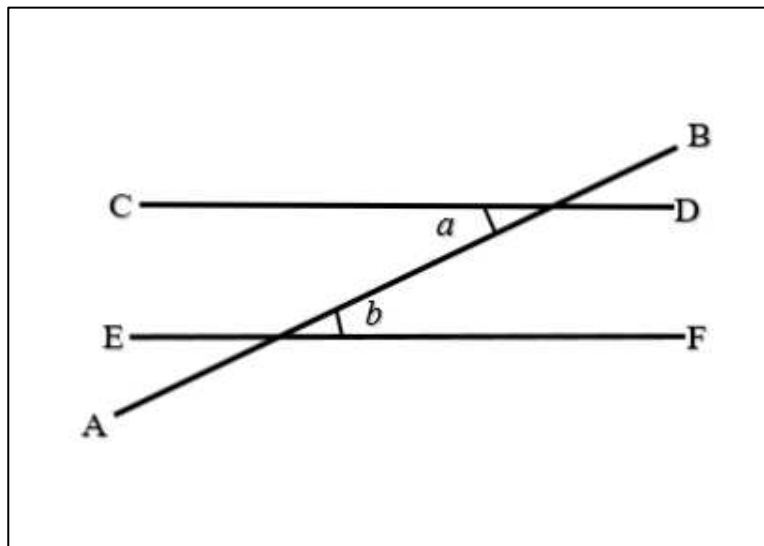


Figure 6-310. Diagram showing angular relationships when firing a gun (courtesy of M. Gutierrez, Jr.).

When the “Captain of Division” of a battery of naval guns (U.S. Navy 1860:82) calculated the approximate distance to an enemy ship, he instructed the gunners to raise their tangent scales to that same distance marked as a graduation on their surface. After this was done, the quoin, marked in degrees of elevation, was adjusted so that the gun was raised to the proper degree recorded on the table of ranges. Once the quoin was raised and the tangent sight was adjusted, a line of sight had to connect the notch at the head of the tangent sight with the apex of the dispart sight and the enemy ship at the waterline (U.S. Navy 1860:46). This process was easy to execute in calm weather. During adverse weather and heavy swells, the gun had to be raised to the proper elevation and the correct angle of sight had to be created by the sights first. Once this was done, the gunner had to wait for the opportune moment to fire—preferably when the ship was at the top of a wave (U.S. Navy 1860:82, 86).

The Advantages of Naval Gun Sights

The system of using a tangent and dispart sight adopted during the mid-nineteenth century did not guarantee a hit. Yet, by creating tables of ranges and using the artificial line of sight and proper degree of elevation to strike a distant target, while supplementing the process with instantaneous discharge by using primers composed of fulminate of mercury and efficient percussion locks, the chances of success were infinitely greater than they would be if the gunner depended entirely upon his own judgment without the aid of any instruments (Ward 1861:117).

One of the greatest advantages of the tangent sight was the ease with which a battery was placed under the control of a commander. His presumed superior judgment in estimating the distance to another ship at sea, coupled with his unobstructed vision from an elevated position on the quarterdeck, allowed him to communicate the proper adjustment to the tangent sights and elevation of the gun to those on the gun deck. The men working the guns below had obstructed views of the target due to smoke and the general confusion during the heat of battle but were more likely to strike the enemy, or at least come very close to doing so, because the commander did the work of many pairs of eyes. Gunners were solely responsible for setting the gun and tangent scales properly. Once the guns of the battery were fired, the commander observed the results and communicated any necessary adjustments to those working the gun decks (Ward 1861:119).

Before naval batteries were under the control of one skillful leader and before the advent of good sighting and ignition implements, inaccuracy in naval gunnery was exhibited in conflicts at sea all over the world. When the frigates USS *United States* and HMS *Macedonian* met in battle during the War of 1812, they fired 50 broadsides (approximately 2,500 shot). Yet, both vessels recorded only 100 hits combined: 95 on the *Macedonian* and five on the *United States* (Ward 1861:120; Simpson 1862:485-487; Tucker 1989:41). This inefficiency in accuracy happened despite the close range at which the ships were engaged. Another example of subpar gunnery happened during the Greek War of Independence at the Battle of Navarino of October 20, 1827. The battle was fought at anchor at exceedingly close range and yet the 74-gun ship *Albion* did not sink a single ship despite firing 52 tons of shot in the form of 98 broadsides (approximately 4,000 shot; Ward 1861:120).

Even though “gallant men” preferred to engage an enemy at close range, the results were not always satisfactory. Yardarm-to-yardarm engagements did not prevent the unnecessary expense of large quantities of ammunition and, before the advent of steam; opposing winds could prevent a vessel from closing in with an enemy in the first place. Therefore, the constant application of scientific principles to the art of war was of utmost importance, as it compensated for any deficiencies in resources, marine or otherwise, of any nation (Ward 1861:122-124). Tangent sights reduced the amount of guesswork a gunner had to resort to when gauging distance and training his gun. An artillerist trained in the use of tangent sights was aware of the proper force required to move a projectile with sufficient initial velocity to reach a target. This information was translated to the tangent sights in the form of effective ranges marked on the scale. The gunner was assisted by every aid at his disposal and the only factors with a negative influence on accuracy were those that the gunner had no control over (i.e., deviations caused by the movement of a ship and by balloting, atmospheric resistance, and the force of gravity). Less was left to chance and the practical gunner, with vague and general ideas upon the subject of the principles of gunnery, and without these advanced tools and techniques, was only successful by accident (Jeffers 1850:144-145).

The Advent of Nineteenth-Century Naval Gun Sights

Orders given in 1848 instructed the fitting of all U.S. Naval guns with a pair of gun sights: a dispart sight on top of the gun in the area known as the second reinforce and a tangent sight, a graduated scale that moved in a vertical plane, at the breech of the gun. Commander J.A.

Dahlgren graduated the tangent sight scales for guns of every class shortly after this order (Dahlgren 1856:39). Colonel Jure of France first proposed the idea of using both a dispart sight and a tangent sight together.

As previously mentioned, the basic concept behind the use of a dispart sight was not new and had been considered since possibly the sixteenth century. During the nineteenth century, the difference between the diameter of the breech and the diameter of the muzzle was calculated and divided by two. The resulting quotient represented the proper height of the sight placed at the muzzle. This created a line of sight “perfectly parallel” to the bore of the piece as long as the gun was “truly bored” (Beauchant 1828:10; Simmons 1812:142). Dispart sights became permanent fixtures on the muzzles of naval guns by mid-century, as indicated by the casting of sight masses on the outer surface of guns. These masses were the attachment locations of sights, as well as percussion hammers on the surface of the gun (Figure 6-311; Tucker 1989:40).

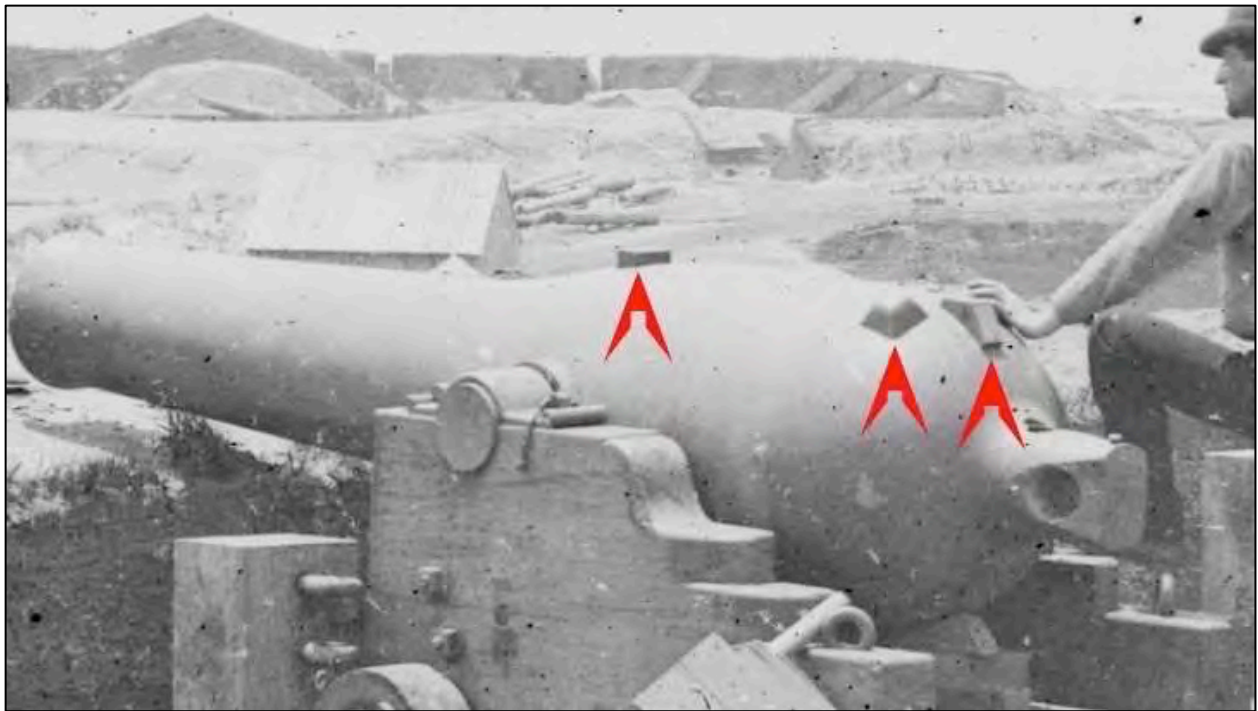


Figure 6-311. IX-Inch smoothbore Dahlgren on Marsilly carriage showing location of castings for the attachment of tangent sight (right), percussion lock (center), and dispart sight (left; excerpt from U.S. National Archives Photo No. LC-DIG-cwpb-00177).

Under Col. Jure’s system, the tangent sight scale had six principal divisions and each represented one cable length (approximately 608 feet or 185.3 meters; Tucker 1989:39). The English followed suit but graduated their tangent scales in degrees rather than range, which required consultation of a range table. This was deemed impractical in the heat and confusion of battle by W.N. Jeffers, a passed midshipman of the U.S. Navy, thus declaring the English tangent sights “undesirable” (Jeffers 1850:146-148). Tangent sights were used when the enemy vessel was beyond point-blank range. When the range increased, the gun had to be elevated, effectively blocking the enemy ship from the gunner’s line of sight (Jeffers 1850:143). Lowering the gun would reveal the position of the enemy ship but the range of the projectile would obviously decrease. The tangent sight, sliding through a metal box fixed in place at the breech of the gun, solved this problem. Once it was raised, the gunner would look through the notch at the top of the scale, rather than along the gun’s line of metal, effectively obtaining a direct view of the enemy ship despite the increased elevation of the gun itself (Jeffers 1850:137). This point of

view was known as an artificial line of sight. This line of sight was a straight, imaginary line that ran from the tangent sight notch, through the tip of the dispart sight, and ended at the intended target. Once all three points were “connected” by this line, the gunner would pull the lanyard and the gun discharged instantly thanks to the new percussion locks and mercuric fulminate primers adopted during this period (Jeffers 1850:139). Figures 6-312 and 6-313 are Civil War-era photographs of both a IX-Inch smoothbore Dahlgren and a 6.4-inch rifled Brooke showing the location and configurations of the tangent sight, the dispart sight, as well as the percussion hammer for firing.

Tangent and dispart sights were unique to each gun because each gun had a different dispart, caliber, projectile, and appropriate powder charge, which resulted in ranges attainable at different degrees of elevation. The information on the different possible ranges determined the graduated reading on the tangent scale. Dispart sights proved very useful during close-quarter, quick-firing battles. Tangent scales were crucial during long-distance engagements and were indispensable on the breech of the gun with the advent of more powerful artillery capable of greater ranges of fire. In fact, British Lieutenant Theophilus Samuel Beauchant (1828:15) once said, “A ship is about as complete without a rudder as a gun without a tangent scale.”



Figure 6-312. Brooke Rifle on the CSS *Teaser* showing the location of the tangent sight above the cascabel, and dispart sight forward in the center of the gun. Note the percussion lanyard placed around the tangent sight and that runs under the percussion lock cover for firing (as presented in Miller and Lanier 1911:77).

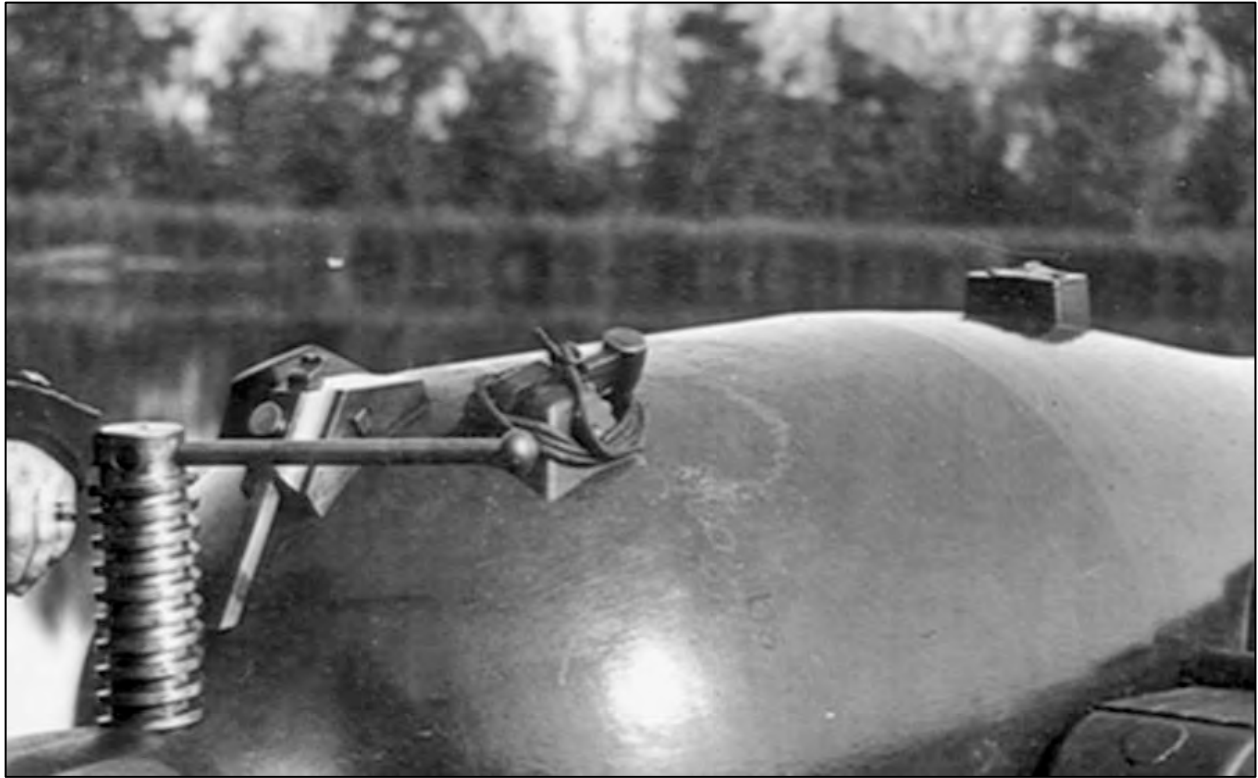


Figure 6-313. Dahlgren cannon on the *USS Hunchback* showing tangent sight just forward of the elevation screw, the percussion lock with its coiled lanyard, and the mount for the dispart at right, the sight not in place (U.S. National Archives Photo No. 111-B-2016, Brady Collection).

Gun Sights Recovered from CSS Georgia

Figures 6-314 to 6-328 represent the tangent and dispart gun sights, as well as sight covers recovered from *CSS Georgia*. Figure 6-329 presents the provenience for the tangent and dispart sights, as well as the percussion locks relative to the cannon locations.



Figure 6-314. Artifact 2160.9 - L.: 11.3 in. (28.7 cm), W.: 0.6 in. (1.5 cm), W. of head: 0.9 in. (2.3 cm), L. of head: 0.7 in. (1.8 cm). Typical graduated tangent scale. Graduations are from right to left: 340, 700, 900, 1100, 1300, 1500, and 1700.



Figure 6-315. Artifact 1892.3 – Top and Side View – Width of “box” 2.4 in. (6.1 cm), Diameter of screw hole: 0.2 in. (0.5 cm), Width of tangent scale: 0.6 in. (1.5 cm), Length of tangent scale: 10.5 in. (26.7 cm). Typical tangent sight. Stamps on scale read: NO 58, 8 IN. OF 55 CWT. Lowest graduation on scale is 260. Largest graduation on scale in 1860. Screw to secure tangent scale still present.



Figure 6-316. Artifact 1892.3 - Maker's mark on the side of the tangent “box” reads: DANIEL EDWARDS, MAKER, NEW ORLEANS.



Figure 6-317. Artifact 1972.1 - Max. width: 2.7 in. (6.9 cm), Max. length: 11 in. (27.9 cm). Distinct shape of a Tangent cover. Narrow section is slightly bent. Stamp on top of artifact reads: NO 79.



Figure 6-318. Artifact 1856.10 - W. of "box": 2.3 in. (5.8 cm), Diameter of screw hole: 0.3 in. (0.8 cm), W. of tangent scale: 0.6 in. (1.5 cm), L. of tangent scale: 10.5 in. (26.7 cm). Typical tangent sight. Tangent scale slightly bent. Largest graduation is 1860. Stamps on head read: 8 IN. SHELL, 7 LBS. LEVEL. Stamps on "box" read: NO: 112 8 IN. 56 CWT.



Figure 6-319. Artifact 1874.5 - W. of “box”: 2.4 in. (6.1 cm), W. of tangent scale: 0.6 in. (1.5 cm), L. of tangent scale: 10.9 in. (27.7 cm). Has a slightly different appearance from the other tangent sights. The head of the scale is perforated with a small hole. Graduations are in degrees. Stamp on scale reads: NO. 3 OF 66- and then it cuts off. Stamp on “box” reads: NO 3 OF 6600.



Figure 6-320 Artifact 978 - L.: 5.75 in. (14.6 cm), W.: 2.5 in. (6.4 cm), Diameter of screw hole: 0.3 in. (0.8 cm), W. of scale opening: 0.7 in. (1.8 cm). Tangent sight “box” has two fastener holes at the sides towards the front, presumably for attachment to naval gun.



Figure 6-321. Artifact 2997.4 – Side View. Length 5.8 in. (14.8 cm), Width 2.5 in. (6.4 cm), Diameter of screw hole: 0.3 in. (0.8 cm), Width of scale opening: 0.5 in. (1.3 cm). Shape resembles that of the previous sight “boxes” from previous tangent sights except for CSSG 978. Barely any damage, no marks, no stamps.



Figure 6-322. Artifact 1850.17 – Tangent cover - Length 12.3 in. (31.2), Width of narrow opening on side: 0.3 in. (0.8 cm). Extremely distorted. Stamp on outer edge reads: 27 CWT.



Figure 6-323. Artifact 2994.8 - Height: 2.0 in. (5.1 cm), W. of base: 1.3 in. (3.3 cm), L. of base: 4.0 in. (11 cm). Typical dispart sight. Stamp on the base reads: NO. 289 32 of 32 meaning 32 sights were made in that "batch."



Figure 6-324. Artifact 1855.6 - Height: 2.0 in. (5.1 cm), W. of base: 1.8 in. (4.6 cm), L. of base: 3.9 in. (9.9 cm). Typical dispart sight. Stamp on base reads: 112.



Figure 6-325. Artifact 1856.14 (1 of 2) - Height: 2.4 in. (6.1 cm), W. of base: 1.4 in. (3.6 cm), L. of base: 3.9 in. (9.9 cm). Typical dispart sight. Tallest in the collection. Stamp on base reads: 714.



Figure 6-326. Artifact 1856.14 (2 of 2) - Height: 2.0 in. (5.1 cm), W. of base: 1.7 in. (4.3 cm), L. of base: 3.9 in. (9.9 cm). Typical dispart sight. Stamp on base reads: 111.



Figure 6-327. Top view of Artifact 1856.14. At left is dispart sight marked with 714 (see Figure 6-325 above), and at right sight marked with 111 (see Figure 6-326 above)



Figure 6-328. Artifact 1881.28 - Max. height: 3.9 in. (9.9 cm), Max. length: 6.3 in. (16.0 cm). Dispart sight cover. Shape is distorted. Stamp on base reads: US WNY 112. Stamp at the top reads: 112.

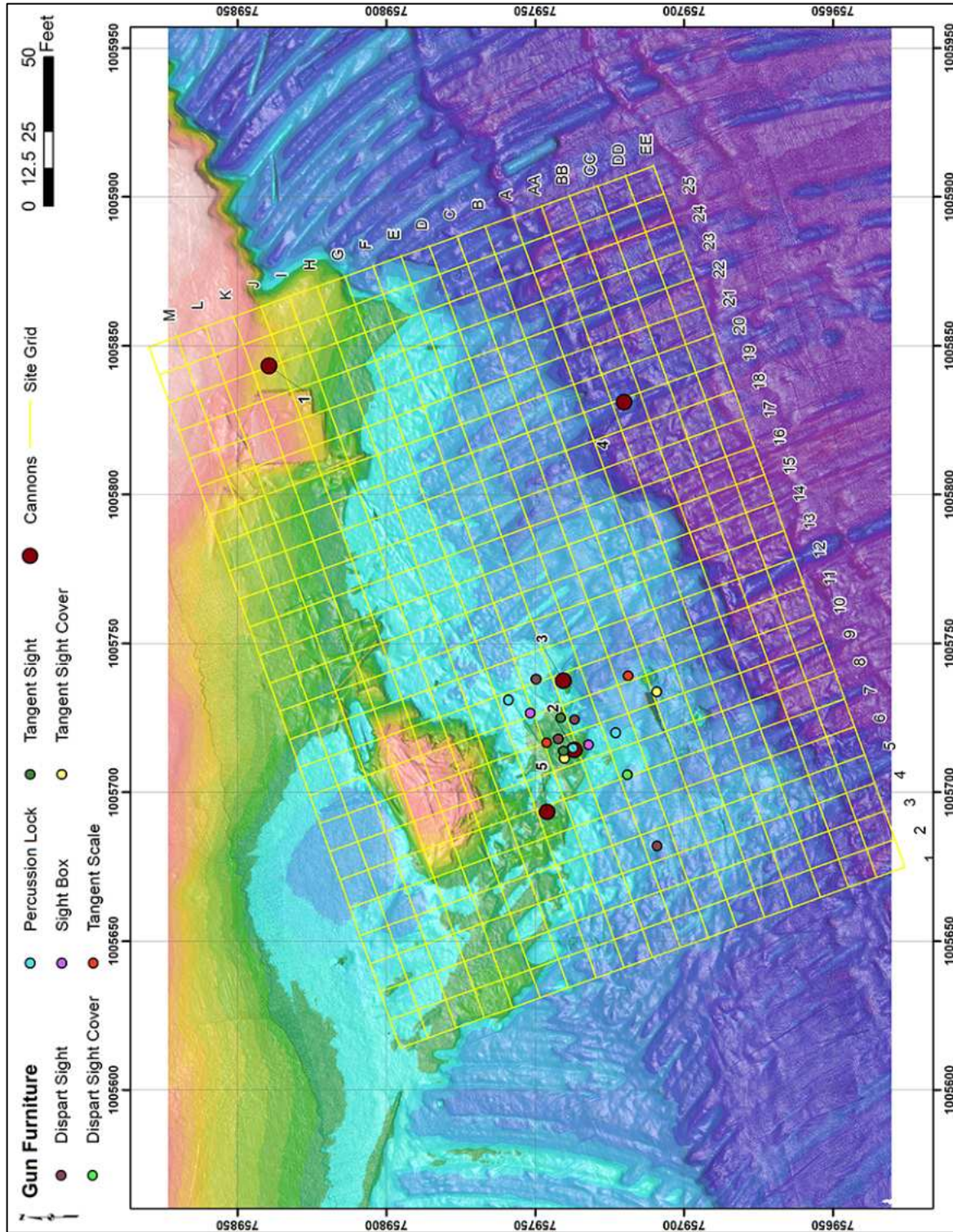


Figure 6-329. Distribution map for the tangent and dispart sights, as well as the percussion locks relative to the cannon locations. As one can see, they are tightly clustered around the 2 Dahlgren (Guns 2 and 5) and Gun 3.

Matching Gun Sights and Guns

Here, gun sights and gun locks will be matched with corresponding guns based on specific stamps and other markings on their surfaces, documentary evidence, and what is known about the nature of the different components of the CSS *Georgia*'s battery over time. While some sights and locks were successfully matched with their corresponding guns, others require additional evidence to confidently establish their place on the CSS *Georgia*'s battery beyond mere conjecture.

The earliest inventory of the guns on board the CSS *Georgia* was compiled on April 23, 1863. Its battery was composed of four starboard guns, four port guns, one gun on the spar deck forward and one aft, and one mounted on the bow (Swanson and Holcombe 2007:79). Table 6-11 illustrates the number and classes of guns and their location on the CSS *Georgia*.

Table 6-11. 1863 Inventory of Guns on the CSS *Georgia*.

Item	Description
No. 1 Starboard	8-inch shell
No. 2 Starboard	32-pounder rifle
No. 3 Starboard	8-inch shell
No. 4 Starboard	8-inch shell
No. 1 Port	9-inch shell, Dahlgren pattern
No. 2 Port	32-pounder rifle
No. 3 Port	32-pounder rifle
No. 4 Port	9-inch shell, Dahlgren pattern
Spar Deck Forward	24-pounder (made by A.N. Miller of Savannah, Georgia)
Spar Deck Aft	6-pounder (presented by Ladies of Rome, Georgia)
Mounted on Bow	32-pounder rifle

Source: Swanson and Holcombe 2007:79-80

The 32-pounder rifles had a caliber of 6 inches (15.2 centimeters) and had a single band to withstand the strain on the gun from the powerful pressure from the explosion of the powder charge. Two of the 32-pounders were of 66 hundredweight (7,392 pounds or just under 3,353 kilograms) and the other two were of 58 hundredweight (6,496 pounds or 2,946.5 kilograms). All three 8-inch guns fired explosive shells. Two were of 55 hundredweight (6,160 pounds or 2,794.1 kilograms) and the third was of 56 hundredweight (6,272 pounds or 2,894.9 kilograms; Swanson and Holcombe 2007:82-83). The 9-inch shell guns were smoothbores of the Dahlgren pattern and were of 93 hundredweight (10,416 pounds or 4,724.6 kilograms). Changes in the CSS *Georgia*'s ordnance took place after this initial inventory. A series of loans reduced the complement of guns to nine. By the end of October 1863, only five guns that would have employed gun furniture were left on board the CSS *Georgia*. Some of the 32-pounders and all the 8-inch shell guns were given to the Army before the end of the year and the CSS *Georgia*'s battery consisted solely of 32-pounder rifles and Dahlgren smoothbores by the start of 1864 (Swanson and Holcombe 2007:80).

The gun sights recovered from excavations of the CSS *Georgia* include as many as four dispart (front) sights and eight tangent (breech) sights. The collection of dispart sights consists of four sights, Artifact 2994.8 (see Figure 6-322), Artifact 1855.6 (see Figure 6-323), and two artifacts with the number 1856.14 (see Figures 6-324 and 6-325) and one dispart sight cover Artifact 1881.28 (see Figure 6-327). However, the marking on the cover reads: US WNY 112 (see Figure 6-327). This number is the same as the number on the base of one of the dispart sights: Artifact 1855.6 (see Figure 6-323). Therefore, even though there are five pieces associated with

dispart sights, only four sights have been found because one sight and cover go together. It was standard practice to place covers over dispart and tangent sights when they were not in use (Tucker 1989:40). The collection of tangent sights consists of two covers, Artifact 1972.1 (see Figure 6-316) and 1850.17 (see Figure 6-321), two sight “boxes,” Artifact 978 (see Figure 6-319), and Artifact 2997.4 (see Figure 6-320), one graduated tangent scale (Artifact 2160.9), and three nearly complete tangent sights consisting of both box and scale sliding through it (Artifacts 1856.10, 1892.3, and 1874.5). No marking on any standalone sight covers or boxes match the numbers on the standalone scale or on the nearly complete tangent sights.

An idea of the composition of the CSS *Georgia*’s battery is given by other markings on these artifacts. Three of the nearly complete tangent sights are marked with the type of gun on which they were mounted. The front of sight box Artifact 1874.5 (see Figure 6-318) reads: NO 3 of 6600. This can represent the manufacturing number or, more likely, the type of gun on which the sight was mounted. Two of the 32-pounders on board the CSS *Georgia* in 1863 were of 66 hundredweight (7,392 pounds or 3,353 kilograms) and this tangent sight might have belonged to one of them. The front of the sight box of sight Artifact 1856.10 (see Figure 6-317) reads: 8 IN. 56 CWT. The head of the graduated scale reads: 8 IN. SHELL...7 LBS. The bottom of the graduated scale of sight Artifact 1892.3 (see Figure 6-315) reads: 8 IN OF 55 CWT.

When these markings are combined with the documentary evidence, they strongly support the interesting assertion that even though the 8-inch shell guns on board the CSS *Georgia* were given to the Army in 1863, the sights corresponding to these guns were kept. When dispart and tangent sights were placed on a gun, *they could only be used for that specific gun and did not admit to being transferred to other guns without readjustment* (U.S. Navy 1852:63). Tangent sights were graduated with degrees of elevation and/or distance to the enemy ship in yards. The distance marked on the face of the tangent scale had to match the actual range of the gun for the system to work (Ward 1861:118). For example, if a gun was to be loaded with a powder charge of 7 pounds but the powder was deficient when compared to another powder charge of the same weight loaded to another gun of the same type, it was imperative for the gunner to go out of his way to increase the charge of the first gun. This allowed the ranges to equalize and the tangent sights to indicate the proper elevations for each charge and distance (U.S. Navy 1852:2-3). Therefore, the gunners on the CSS *Georgia* might have been planning to calibrate new guns to the tangent sights they already had.

Out of the entire collection of gun sights, three artifacts have number 112 engraved on their surface: the dispart sight cover Artifact 1881.28 (see Figure 6-327), dispart sight Artifact 1855.6 (see Figure 6-323), and tangent sight Artifact 1856.10, which has a stamp that reads: 8 IN. SHELL, 7 LBS. LEVEL (see Figure 6-317). It is very likely they belong to the same system of sights mounted on the 8-inch shell gun because the U.S. Navy Bureau of Ordnance and Hydrography had made it mandatory for guns to be equipped with a dispart sight at the second reinforce of the gun and a tangent sight at the breech since 1848. Although Confederate naval ordnance differed from Union naval ordnance in some ways, their systems were still based on standard U.S. Navy systems because many naval officers, including John Mercer Brooke, a distinguished artillerist and U.S. Navy veteran of twenty years’ service, defected to the Confederacy when the Civil War began and took their experience, knowledge, and skills with them (Tucker 2002:6; Brooke 2002:viii-ix, 13-14). Further, because it was preferable to conduct naval engagements at long distances during the first half of the nineteenth century (Ward 1861:122; Holley 1865:203-204) and the new system of tangent and dispart sights was deemed revolutionary and indispensable by anyone who placed any value on long-range accuracy (Beauchant 1828:15-17; Jeffers 1850:143), this system was used and developed by northern gunners as well as their southern rivals.

Dispart sight Artifact 1855.6 (see Figure 6-323) had a base-to-apex height of 2 in. (5.1 cm), which further supports the assertion that it was meant to work in tandem with tangent sight

Artifact 1856.10 (see Figure 6-317). Dispart sights compensated for the difference in the diameter of the bore and the gun. The height of the dispart sight had to equal this difference to make the line of sight parallel with the axis of the bore. Additionally, due to the taper of the gun from the breech to the muzzle, its height depended on its position on the surface of the metal: it increased the closer it was to the muzzle and vice versa. Nineteenth-century dispart sights were located on the second reinforce on a plane perpendicular to the axis of the trunnions (Ward 1861:112). Further, the markings on tangent sight Artifact 1856.10 (see Figure 6-317) closely match the specifications of one of the 8-inch shell guns that formed part of the CSS *Georgia*'s battery. This gun fired an 8-inch shell, was No. 1 on the starboard side (faced upriver), was of 56 hundredweight, and was commonly loaded with a 7-pound (3.2 kilograms) powder charge (Dahlgren 1856:33, 61; U.S. Navy 1866:xiii; Swanson and Holcombe 2007:82). According to the inventory of 1863, the year 1846 was inscribed on the face of the right trunnion and the cascabel had initials: F.P.F. 111. Therefore, this 8-inch shell gun, the specifications of which are noted on the 1863 inventory and on the tangent sight CSSG 1856.10, was likely one of the 186 8-inch chambered shell guns of 55 hundredweight produced by Alger, Fort Pitt, and West Point foundries from 1846 to 1852 (F.P.F. likely the initials for Fort Pitt Foundry), allowing for a very slight variation in weight (Olmstead et al. 1997:42; Swanson and Holcombe 2007:82). Otherwise, it follows the characteristics of guns of this class close enough to justify using their dimensions and measurements for comparison (Figure 6-330).

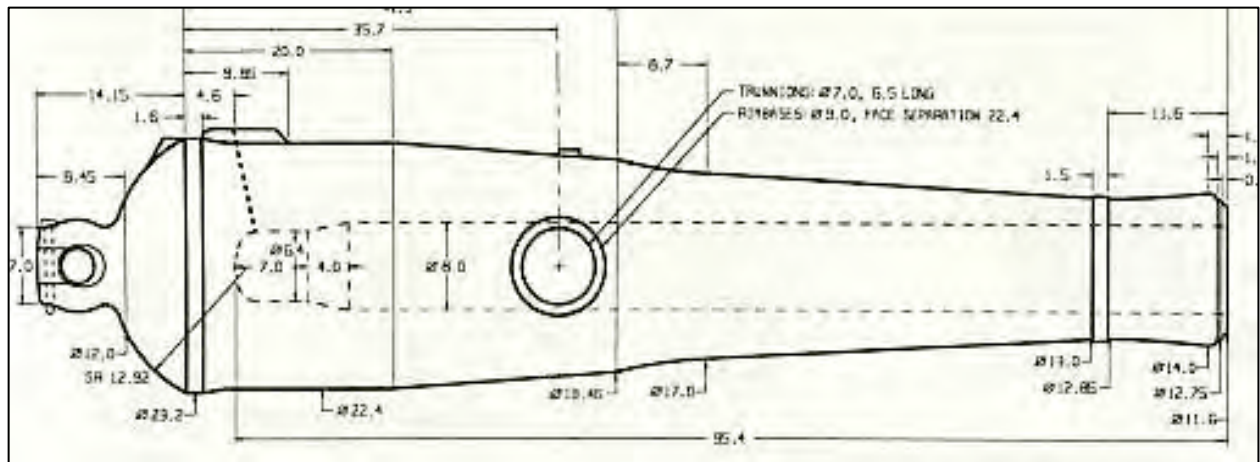


Figure 6-330. Eight-inch chambered shell gun (Olmstead et al. 1997:41).

Chambered shell guns of the 1846 8-inch class were typically 100 inches (254 cm) in length from the base ring to the face of the muzzle (Olmstead et al. 1997:41). As previously mentioned, the height of the dispart sight was equal to the difference between the diameter of the gun and the bore. To find this height, the diameter of the muzzle at the location of the dispart sight was subtracted from the diameter of the breech and divided by two. The diameter of the gun at the breech of the 1846 8-inch class was 23.2 inches (58.9 centimeters) and 19.6 inches (49.8 centimeters) at the second reinforce, where the dispart sight was located (allowing for a slight increase in diameter at the muzzle since figure 31 provides a diameter slightly forward of the dispart sight mass on the surface of the gun). The difference of these diameters is 3.6 inches (9.1 centimeters). When this is divided by two, the answer is 1.8 inches (4.6 centimeters). Dispart sight Artifact 1855.6 had a height of 2 inches (5.1 centimeters) when it was measured—close enough to reasonably suggest that this dispart sight belonged to this type of gun on the CSS *Georgia*.

The form of graduation on the tangent scale may also indicate the guns to which they belonged. The highest graduation located at the bottom of the tangent scale of sights Artifact 1892.3 (see

Figure 6-315) and Artifact 1856.10 (see Figure 6-317) reads: 1860. The highest for tangent scale CSSG 2160.9 reads: 1700. Methods of graduating tangent scales varied through time and with different countries. The French, who were the first to adopt the system of using a tangent sight and a dispart sight together (Jeffers 1850:138, 146), marked the tangent scale in cables' lengths. However, they marked the same ranges on tangent scales regardless of the type of gun they were mounted on. There was no variation according to the true caliber and uniqueness of each gun. Therefore, the system was relatively ineffective and drew many objections. The English graduated their tangent sights in degrees. This required a readily available table of ranges to see the distances that corresponded to each degree of elevation marked on the tangent scale. Jeffers thought this system was very inconvenient, as the consultation of a book or range board during the heat of battle was hardly practical (Jeffers 1850:146). Graduating the tangent scales by ranges in yards corresponding to degrees of elevation for different calibers and weights of guns was more common during the 1860s (Ward 1861:118). The tangent sights recovered from the CSS *Georgia* were graduated in yards to represent the effective range of the gun they were mounted on. Only one tangent scale out of the four recovered is graduated in degrees (Artifact 1874.5).

The tangent sights with 1860 marked as the highest range on their scales belonged to the 8-inch shell guns of 55 hundredweight and 56 hundredweight on board the CSS *Georgia*. The highest marked range on a tangent scale was judged to be the greatest effective range at which a certain gun could be used and still maintain penetrative power, even if the gun was capable of longer ranges (Jeffers 1850:145; Ward 1861:38-39). The 8-inch shell guns of the type on board *Georgia* ranged approximately 1,866 yards at 6-degree of elevation (Dahlgren 1856:33; U.S. Navy 1852:133, 1860:lxix, 1866:xiii). The highest range marked on tangent scale Artifact 2160.9 (see Figure 6-313) is 1700. When tables of effective ranges at different degrees of elevation for the guns on board the CSS *Georgia* are examined, only the 9-inch shell guns of the Dahlgren pattern have a range of exactly 1,700 yards as the maximum effective range marked on the tangent sights (U.S. Navy 1860:lxx, 1866:xiv). This tangent scale is the only component of tangent sight Artifact 2160.9 and its maximum graduation of 1700 is the only clue we have that it belonged to a IX-Inch Dahlgren gun on board the CSS *Georgia*.

Method of Graduating Tangent Scales

In geometry, any section of the circumference of a circle is known as an arch. When a line touches an arch of a circle without cutting through it, it is called a tangent line or *tangential*. The tangential is perpendicular to the radius of the circle and its length is limited by a line drawn from the center of the circle through its other end. This line is known as the *secant* (Simmons 1812:22). Tangent sights or tangent scales derived their names from this geometric principle. They touched the circular, curved surface of the chamber of the gun and were perpendicular to the radius of the imaginary circle formed by this arch.

If the length of a gun represented the radius of a great circle, the face of the muzzle would be at the center, a section of the circumference (arch) would be represented by the rounded outer surface of the breech chamber, and the tangent sight scale would work as the tangential of the circle. If this radius was raised to 1 degree and a triangle was made by using the original, horizontal position of the radius as the base and the new position as the second side, the third side of this triangle would be formed by a straight line connecting the first two at the breech of the gun. This line would be part of the tangential and its length would be equivalent to the length of one division on the tangent sight scale (Beauchant 1828:13).

The 8-inch shell guns of 55 hundredweight on board the CSS *Georgia* had an overall length of 100 inches (Olmstead et al. 1997:41-42). First, this length was converted to 8.3 feet (2.5 meters). Once the length in feet was obtained, it was multiplied by 0.22, as this is the tangent of 1 degree to 1 foot. The product was 1.826, or the length, in inches, between each division on the tangent

sight scale (Beauchant 1828:13; Ward 1861:117-118). However, the lengths between the divisions of the tangent scales of sights Artifact 1856.10 (see Figure 6-317) and Artifact 1892.3 (see Figure 6-314) are much smaller. This is because the radius of the circle one must work with is not the length of the gun, but the length of the distance between the dispart sight and the tangent sight (Beauchant 1828:13-14). When the tangent sight was raised, the line of sight began at the bottom of the notch at the head, passed through the apex of the dispart sight at the second reinforce, and ended with the target to be hit (Beauchant 1828:16; Jeffers 1850:136-137; U.S. Navy 1860:82; Ward 1861:116-117). Therefore, rather than the total length of the gun, the distance between the dispart sight and the tangent sight of the 8-inch shell guns must be used as the radius of the imaginary circle. This length was listed as 35.7 inches (90.7 centimeters), or approximately 3 feet (0.9 meters; Olmstead et al. 1997:41). When this length was multiplied by 0.22, the product was 0.66. The lengths between each division on the scales of tangent sights Artifact 1856.10 and Artifact 1892.3 must be 0.66 inches (1.7 centimeters) for them to function correctly. Indeed, when the lengths between the divisions on the tangent scales of these sights were measured, they proved to be about 0.66 inch.

Maker's Mark—The Daniel Edwards Foundry

An interesting feature of tangent sight Artifact 1892.3 (see Figure 6-315) is a maker's mark engraved on the side of the sight box through which the tangent scale passes. The maker's mark reads: DANIEL EDWARDS MAKER NEW ORLEANS. This is interesting because the city of New Orleans was not a major manufacturing center prior to the Civil War and did not begin to experience any degree of prosperity in this industrial venture until after the war (Walker 1900:511). Instead, the economy of New Orleans revolved around commerce and trade, which kept most of the population employed. In 1835, the port of New Orleans achieved about \$54 million in commerce and by 1840, some 400 steamboats plied the Mississippi River (Walker 1900:512).

However, the manufacturing enterprises that did exist in antebellum New Orleans devoted themselves almost exclusively to repair work or turned out goods that could not be easily found anywhere else. Of these, the foundry business was the leading industry of the city during the mid-nineteenth century and had been the oldest and most successful for a very long time (Walker 1900:523). These early foundries were originally designed for the repair of such machinery that was broken, could not be used, or was too heavy to be shipped back to its original place of manufacture (Walker 1900:513). One of these early foundries was known as the Daniel Edwards Foundry—the only one of that name in New Orleans (Warsaw Collection of Business Americana Foundries ca. 1827-1926: Manufacturers and Distributors, ca. 1827-1924: box 1, folder 29).

The eponymous Daniel Edwards Foundry was established in 1846 by Daniel Edwards, an Englishman brought up in the foundry business of Liverpool, England (Morrison 1885:95; Walker 1900:525; Huber et al. 2004:143). Mr. Edwards was the sole proprietor for a few years until he was joined by his son, James D. Edwards, and the firm changed its name to Daniel & James D. Edwards Foundry. It became the James D. Edwards Foundry upon the death of the founder in 1859 (Morrison 1885:95; Walker 1900:525). In 1884, James D. Edwards made a partnership with Mr. Leon F. Hauptman, who had been associated with the business as superintendent of works for 20 years, and the name of the business was changed yet again to Edwards & Hauptman (Morrison 1885:95). Hauptman retired in 1893 and the business was turned over to Daniel Edwards, grandson of the founder, giving the business its original name once more (Walker 1900:526).

By 1860, the foundry boasted of the work produced by its facilities and claimed it was “superior to any other house in the South or West.” Its services included work in “chimneys, juice boxes, fire beds, ash pans, heaters, filterers, sheet-iron pipe, and copper, tin, and pewter worms for distillers.” It also provided “every description of brass work of my [the founder's] own

manufacture” (*The Louisiana Courier* 1858:16). Under the Edwards and Haubtman partnership of 1884, the business was regarded as expert in the construction and repair of steamboat and sugar-making machinery, the former providing plenty of work due to the tendency of ships’ boilers to fall out of order (Morrison 1885:95; Walker 1900:514). Andrew Morrison (1885:96) claimed the Daniel & Haubtman Foundry occupied the largest premises of anybody doing similar work in the South and hired an average of 60 workmen and as many as 200 during the busy season. Any metalwork of copper, sheet-iron, or brass stamped with the firm’s name (such as the gun sights recovered from the CSS *Georgia*) was preferable to any other (Morrison 1885:96). By the end of the nineteenth century, the foundry employed from 200 to 250 workers and was engaged in business with Mexico, Cuba, and Central America. They turned out an average yearly output of \$750,000 and specialized in the production of sugar machinery (Walker 1900:526; Huber et al. 2004:143).

The dispart sight, tangent sight, and cover marked with the number 112 (Artifact 1855.6, Artifact 1856.10, and Artifact 1881.28, respectively) may all have been manufactured at this very foundry because the tangent sight Artifact 1856.10 is identical in almost every feature to tangent sight Artifact 1892.3, which has the maker’s mark, and all three pieces of gun furniture likely came in a set due to having the same mark (and due to other factors previously explained). There was only one foundry in New Orleans named for Daniel Edwards during the majority of the nineteenth century. It is reasonable to assume that a maker’s mark with this city listed as its business location on a brass artifact, a metal in which the business specialized, indicates the source of at least these four components of the gun furniture of the CSS *Georgia*’s battery. Further, because the 8-inch shell guns were likely produced by the Fort Pitt and West Point Foundries in Pittsburgh, Pennsylvania and West Point, New York according to marks on their cascabels, their gun sights might have been replacement pieces produced after these guns were acquired by the Confederacy.

Instantaneous Discharge: The Percussion Locks

The opportune moment to fire a naval gun on a rolling and pitching ship was notoriously ephemeral. Even if everything were in place, the entire process would be ruined if a gunner were not able to discharge the gun precisely when all three major points were connected by his line of sight. The constant movement of the sea and the target, the deviations of the projectile caused by the wind, the weight of the projectile, and the balloting of the shot against the inside of the bore, compelled many to consider naval gunnery an art rather than a skill. The difficulty of mastering this art was ameliorated when the ability to provide instant communication of fire to the powder charge was achieved (Jeffers 1850:138-139).

Gun-firing mechanisms underwent many changes and modifications prior to the nineteenth century. Initially, guns were fired using a slow match wound around a 2.5-foot (0.7-meter) wooden staff known as a linstock. Port fire or quick match was introduced before the end of the seventeenth century. This was a short length of flammable material that freed the crew from the task of laying a powder train to the vent. By the beginning of the nineteenth century, the quill tube was the primary mode of priming used. Flintlocks on naval guns provided a very fast rate of fire and were adopted by the Royal Navy in 1790, after they proved their worth in 1782, during the Battle of the Saints against the French. The French Navy adopted them in 1800 (Dahlgren 1853:9-13; Jeffers 1850:139; Tucker 1989:29-33).

The effectiveness of fulminate of mercury as a primer for gunpowder was first demonstrated with rifles and muskets on land before it was used as a primer for naval guns. This material rendered loose powder obsolete because it did not require fire for ignition. All it needed was friction. It ignited when struck with a sharp blow and since it did not require fire, it was reliable in all weather conditions. Fulminate of mercury was initially in the form of a wafer laid over the touchhole and later transitioned into a sheet metal cup or percussion cap placed over the iron

nipple fitted to a percussion lock, such as those recovered from the CSS *Georgia*, which amount to a total of five: Artifact 2997.3; Artifact 1335; CSSG Artifact 1; Artifact 2994.6; and Artifact 2156.3 (see figures below). Percussion caps became the regulation primer for the U.S. Navy for some time (Simpson 1862:292). The initial conundrum concerned the damage sustained by the lock from the blast that emanated from the vent as the propellant ignited in the gun's breech. Percussion locks underwent two major changes to overcome this problem. The first was a hammer with an open slot in the shank that allowed it to be quickly withdrawn from the touchhole after setting off the primer, such as Artifact 2997.3 (see figure below). The second was simply a hammer with a perforated head through which the hot gases from the vent passed without harming the lock, such as Artifact 1335 and Artifact 2994.6 (see figures below; Dahlgren 1853:51-53; Tucker 1989:33-34).

In an effort to overcome this problem, Enoch Hidden, who was listed in the New York City directory as a "gunsmith" in 1813, patented the first design. His occupation was changed to "Cannon Lock Maker" by 1842. He continued to work under this title until 1851 when he advertised "Brass & Bell Foundry" (Gaede 1998:111). Hidden was most concerned with creating a percussion lock that would be moved out of the way of the vent after igniting the primer. He obtained his first patent for a gunlock on 14 January 1831 and it was described as having a spring-driven hammer that rose vertically from the vent by a counter spring to avoid the blast. Three years later, on 20 August 1834, he received his second patent and his first substantial order by the Ordnance Department (Gaede 1998:113-114).

Hidden's greatest achievement did not come until 29 April 1842 when he patented the design for a sliding lock. This lock had an elongated slot in its shank through which traveled an axial bolt. One quick pull of the lanyard caused the head to strike the vent and instantly slide out of the way of the explosion by the movement of the axial bolt along the shank as the lanyard was still being pulled (Figure 6-331; Simpson 1862:295). This lock was adopted by the British and modified by Colonel William Dundas in 2 October 1846. Enoch Hidden sold all the rights of his patent to the U.S. Navy on 3 April 1848 for \$1,200 (Gaede 1998:117).

Hidden had also attempted to use a gunlock with a perforated head since 1831. However, this lock also had a counter-spring attached close to the hammerhead to instantly rebound away from the vent and the perforation was added merely as an auxiliary means to escape the erosion caused by the blast (Dahlgren 1853:29-30). Dahlgren proposed making a lock that remained over the vent after ignition of the primer and avoided the blast by the perforation alone. The first trials with this lock were held on U.S. frigate *Cumberland* and the lock was fitted on an 8-inch shell gun of the main deck battery. However, "so imperfect were the mechanical means at disposal" that these experiments produced no results. A second attempt was made in 1847 and the results were so satisfactory that the lock was subsequently used on pieces of the new experimental battery. This included all classes of naval ordnance and the then experimental 9-inch and 11-inch shell guns. Dahlgren's lock also became the established percussion lock for the boat-howitzers of the U.S. Navy (Dahlgren 1853:32).

Percussion Locks Recovered from CSS Georgia

Figures 6-332 to 6-337 represent the five percussion locks recovered from CSS *Georgia*.

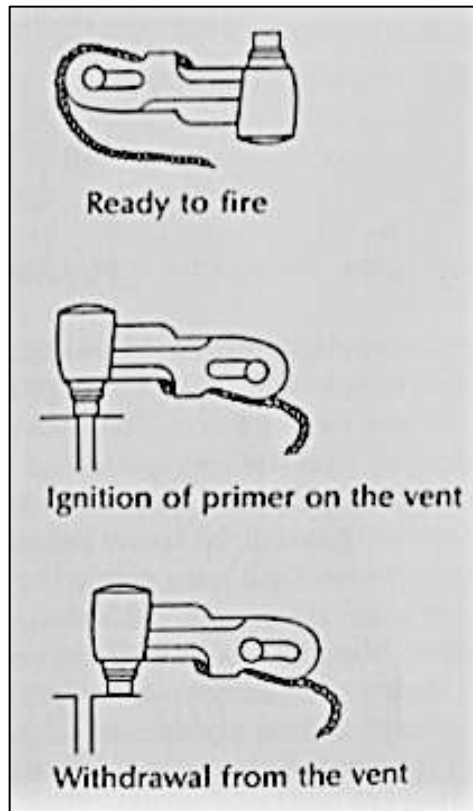


Figure 6-331. Motion of Hidden's patent sliding lock (Tucker 1989:36).



Figure 6-332. Artifact 2997.3 - L. of shaft: 3.2 in. (8.1 cm), L. of shaft opening: 1.4 in. (3.6 cm), Diameter of "hammerhead": 1.3 in. (3.3 cm), L. of iron "nipple": 0.5 in. (1.3 cm), Diameter of iron "nipple": 0.6 in. (1.5 cm). Sliding lock. Axial bolt traveled the length of the opening in the shaft. The "hammerhead" seems to be damaged by explosion from the vent.



Figure 6-333. Artifact 1335 - Lock measurements: L. of shaft: 3.4 in. (8.6 cm), L. of shaft opening: 1.4 in. (3.6 cm), Diameter of “hammerhead”: 1.3 in. (3.3 cm), Diameter of “hammerhead” perforation: 0.4 in. (1.0 cm). Sliding lock with perforated “hammerhead.” Base measurements: L.: 5.1 in. (13.0 cm), W.: 2.9 in. (7.4 cm). Typical percussion lock base. Contains three fastener holes for attachment to gun.



Figure 6-334. Artifact 2012.1 - Lock measurements: L. of shaft: 3.5 in. (8.9 cm), Diameter of “hammerhead”: 1.3 in. (3.3 cm), Diameter of “hammerhead” perforation: 0.4 in. (1.0 cm), L. of iron “nipple”: 0.8 in. (2.0 cm), Diameter of iron “nipple”: 0.7 in. (1.8 cm). A stamp on the top surface of the shaft is not legible due to damage. Perforated “hammerhead.” Base measurements: L.: 5.2 in. (13.2 cm), W.: 3.0 in. (7.6 cm). Base stamp reads: 714.



Figure 6-335. Artifact 2994.6 - Top and side views. Lock measurements: L. of shaft: 3.4 in. (8.6 cm), Diameter of “hammerhead”: 1.4 in. (3.6 cm), Diameter of “hammerhead” perforation: 0.4 in. (1.0 cm). Opening in shaft is not visible due to being stuck to the base or not present altogether. The “hammerhead” is perforated. Base measurements: L.: 3.8 in. (9.7 cm), W.: 0.9 in. (2.3 cm), Thickness: 0.6 in. (1.5 cm). Stamps on base read: NO. 112 55. Mark on the inside face reads: XIII (top panel).



Figure 6-336. Artifact 2156.3 - Lock measurements: L. of shaft: 3.5 in. (8.9 cm), Diameter of “hammerhead”: 1.3 in. (3.3 cm). Lock with no perforation on “hammerhead.” Stamps on the shaft read: J A D US (top panel). Base measurements: L.: 4.0 in. (10.2 cm), W.: 0.9 in. (2.3 cm), Thickness: 0.6 in. (1.5 cm). Base has stamp that reads: 111.

Summary

The CSS *Georgia* was one of the largest ironclad rams built by the Confederacy during the American Civil War. Construction began in 1862 and the ironclad served as a floating battery until 1864, when it was intentionally sunk by the Confederates in response to U.S. Army General William Tecumseh Sherman's approach to Savannah by land. Although it did not get an opportunity to test its mettle in battle, the CSS *Georgia* does provide historians and nautical archaeologists with a wealth of clues and information on American naval history. Excavations and investigations at Savannah have provided the CRL Texas A&M University with a vast collection of artifacts for conservation and analysis.

This collection of artifacts includes brass instruments known as gun sights and percussion locks. These were used in tandem to provide a greater degree of accuracy and instant discharge of the gun during naval engagements. Instruments of this type are relatively rare in archaeological settings because brass instruments like these were typically melted down and repurposed after the Civil War. The group of brass naval gun sights and percussion locks recovered from the CSS *Georgia* represents one of the largest, if not the largest, ever recovered from a Civil War site. Their study facilitates a better understanding of the principles of gunnery during the mid- to late nineteenth century.

The design of the tangent and dispart sights recovered from the CSS *Georgia* were based on different geometric principles unique to each gun. These principles were reflected in the dimensions of the sights, such as the height and positioning of the dispart sight and the length between each division on the tangent scale. Examination of these dimensions and of the markings present on the gun sights helps determine the guns they were mounted on, as each sight was specifically made for each gun.

Future Research

The CSS *Georgia* had as many as 11 guns on board when the first inventory was created in 1863. Even though changes in ordnance took place over the next several months, two sets of gun sights and perhaps one percussion lock recovered in the 2015 investigation belong to two of the three 8-inch shell guns, and the only time this class of gun was on board the CSS *Georgia* was during the time the original inventory was completed. The discovery of more gun sights can help us learn more about the components of the CSS *Georgia*'s battery, which was designed to defend the city of Savannah against the overwhelmingly superior force of the Union Navy. Table 6-12 below illustrates the final results of the attempt to match the specific sights and locks recovered from the site of the CSS *Georgia* with corresponding guns. Not all sights and locks found are represented in this table. More information and evidence is needed before we can reliably match all sights with their guns. For further reading see Gutierrez 2017.

Table 6-12. Matching Gun Sights and Percussion Locks with Guns.

Guns on <i>Georgia</i>	Gun Sights and Locks
8 in. shell (56 hundredweight)	Dispart sight: Artifact 1855.6 Dispart sight cover: Artifact 1881.28 Tangent sight: Artifact 1856.10 Percussion lock: Artifact 2994.6*
32-pounder rifle (66 hundredweight)	Tangent sight: Artifact 1874.5
8 in. shell (55 hundredweight)	Tangent sight Artifact 1892.3
9 in. shell, Dahlgren pattern	Tangent sight scale: Artifact 2160.9

*The only clue that this percussion lock belongs with this set of sights on this gun is the stamp "112" on its surface; therefore, likely making this part of the set.

GUN CARRIAGE COMPONENTS

Prior to being scuttled, the CSS *Georgia* was recorded as having two IX-Inch Dahlgren smoothbores, two unbanded 32-pounder rifled cannons, and one banded 32-pounder rifle (Lawson 1971:6). During the 2015 and 2017 field seasons, two Brooke rifles (banded), two IX-Inch Dahlgren smoothbores, and one 6-pounder were recovered. Components from Marsilly and pivot gun carriages, associated with the five cannons, were also recovered. Written by William J. Wilson, this section will describe the gun carriage hardware and components identified from the CSS *Georgia* recovery.

The mountings for artillery on board the CSS *Georgia* were complex and heavy pieces of machinery, requiring several individuals to operate them. In addition to the sheer weight of the guns, firing inflicted great stress on the carriages. They needed to be sturdy, restrict movement when firing, as well as mobile while running guns in, out, or training (targeting). And, although they had to be stable, they could not be completely fixed during firing, as this would have damaged the guns (Simpson 1862:118). Naval gun carriages varied somewhat from their shore-based counterparts. The two types of gun carriages recovered were pivot carriages and Marsilly carriages, although there may have also been a traditional four-truck carriage for the 6-pounder. On board the CSS *Georgia*, the Brooke rifles were mounted to pivot carriages, while the Marsilly carriages were used for the Dahlgrens. The distribution of gun carriage components tended to follow the same distribution as the majority of artifacts found on the site (Figure 6-337). The main concentration was located south of the West Casemate, and stretched east towards Cannon No. 4.

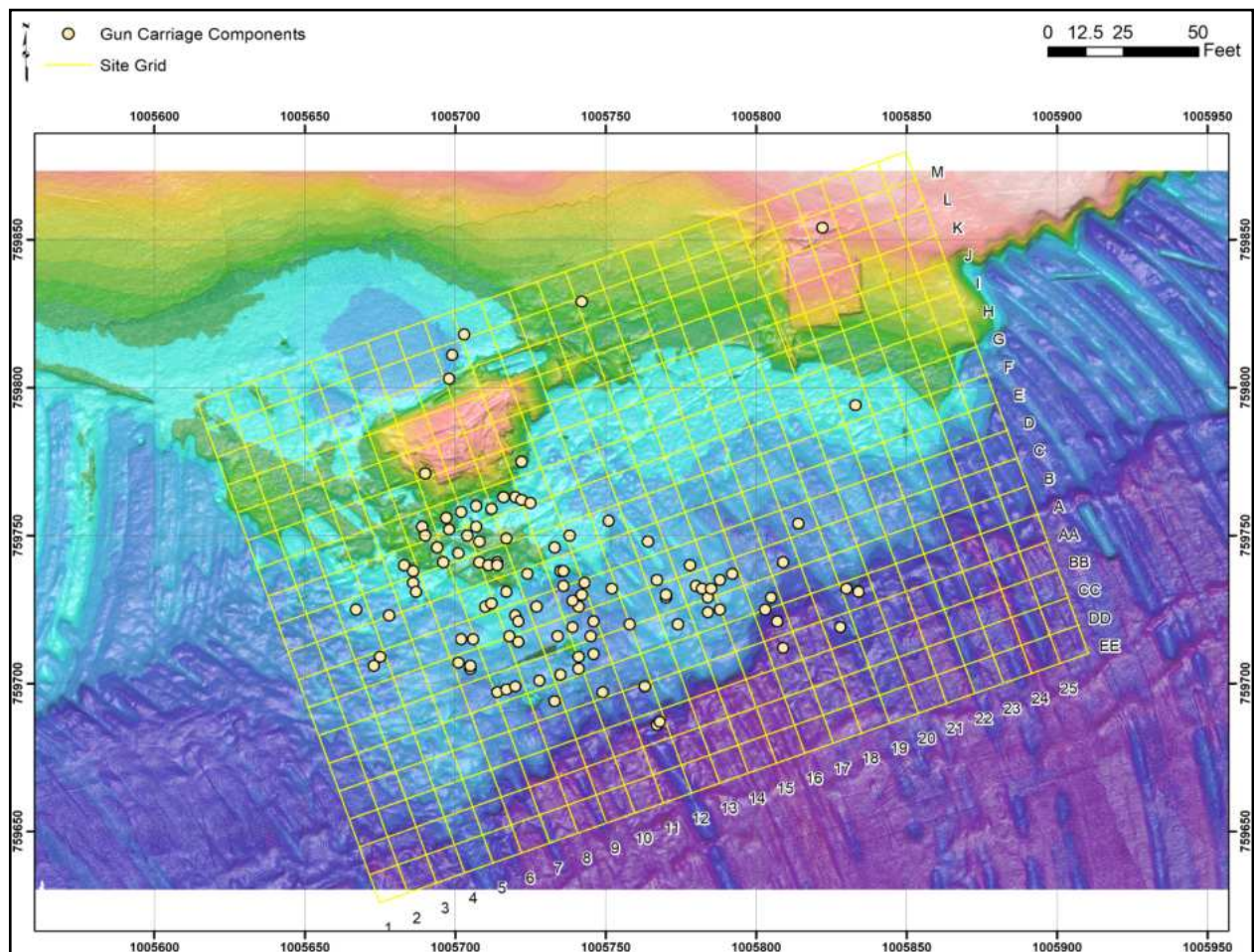


Figure 6-337. Distribution map for gun carriage components.

Pivot Carriages

Pivot carriages were highly complicated devices, with many moving parts, allowing guns to be rotated, pitched, and even relocated from one side of the vessel to the other. The top carriage (gun carriage portion) had four trucks, which through the use of a large wrench could be locked onto or off of an eccentric. The eccentric allowed the carriage trucks to roll, while taking the trucks off of the eccentric increased the friction and dampened recoil (Veit 2011:187). The top carriage itself was mounted onto the slide (pivot) carriage, which also had four trucks mounted at an eccentric angle. The front trucks provided movement from one broadside to the other, while the rear trucks were used for training. An example photograph of a Brooke rifle and pivot carriage on the *CSS Teaser* (Figure 6-338) presents several of the artifacts recovered from the site. A model Dahlgren cannon and pivot carriage (Figure 6-339), and period Navy diagrams (Figures 6-340 and 6-341) illustrates some of these components more clearly.



Figure 6-338. Brooke Rifle and pivot carriage on the *CSS Teaser* (Miller and Lanier 1911:77).

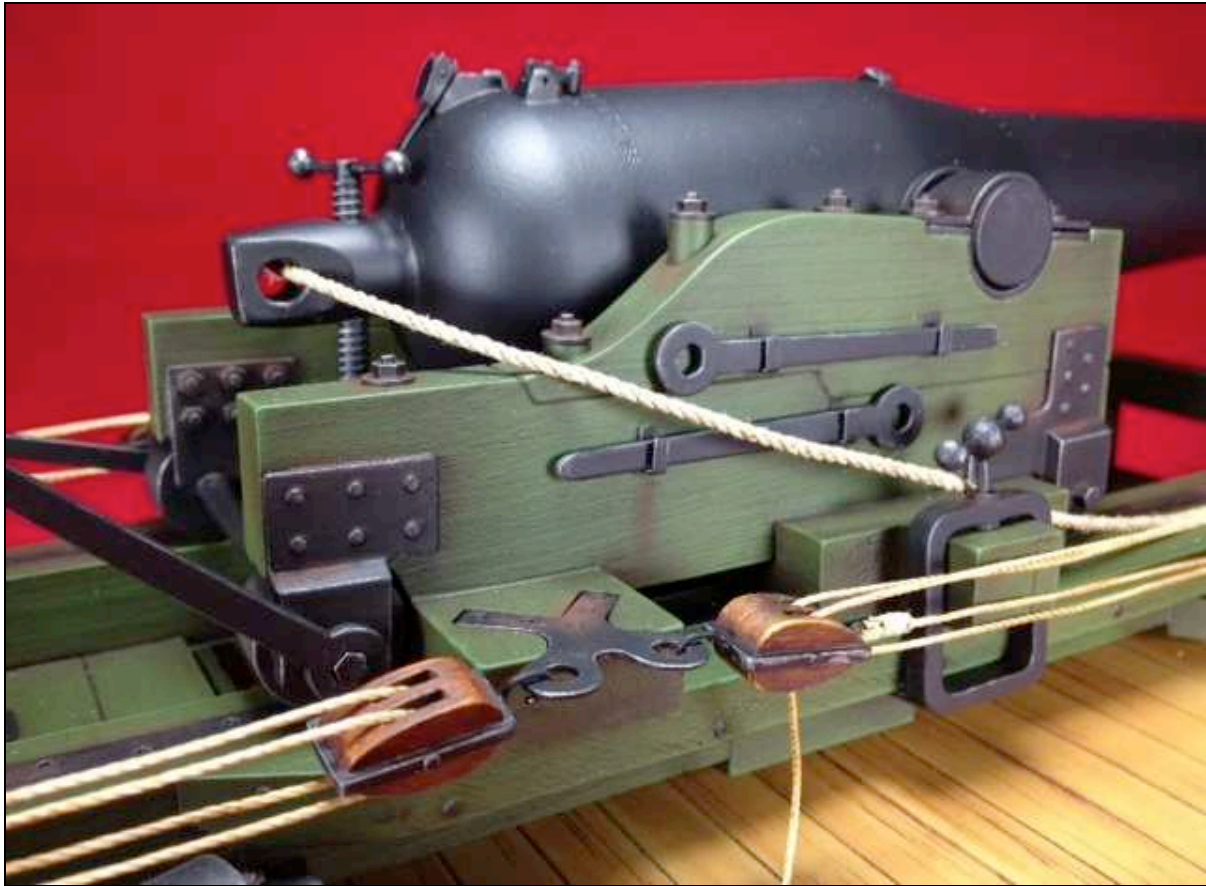


Figure 6-339. This image shows the eyes for tackle, several wrenches, a compressor, elevation screw, trucks and journals, cap square and trunnion plate, additional tackle, and carriage fasteners (Crowley 2013).

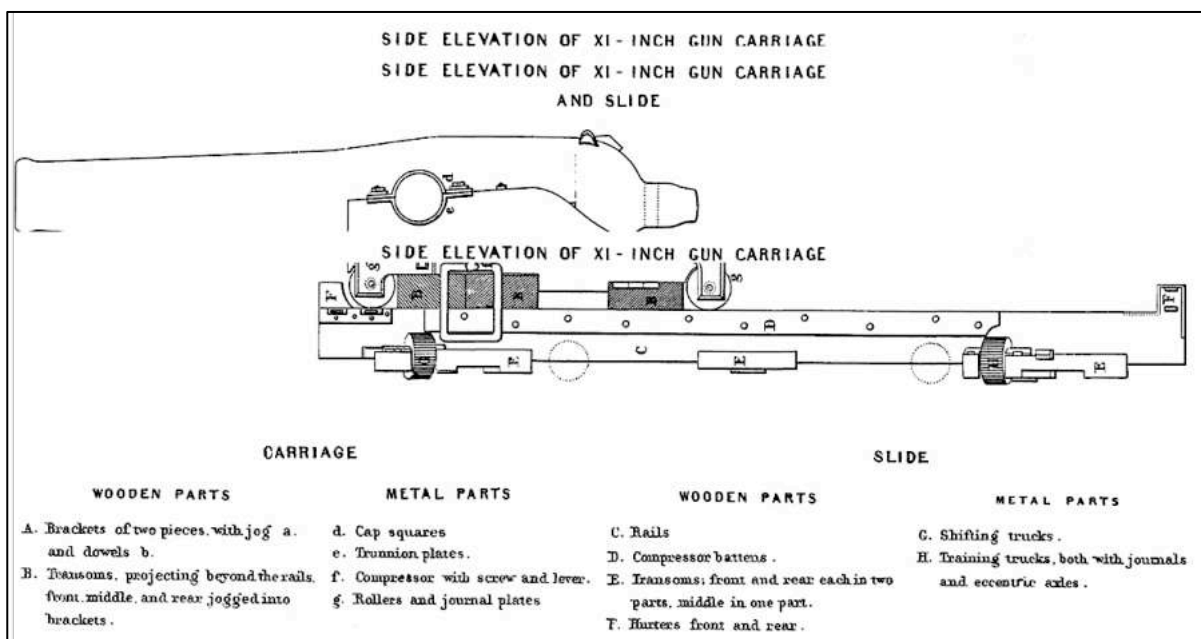


Figure 6-340. Pivot carriage diagram (U.S. Navy Department 1860:60).

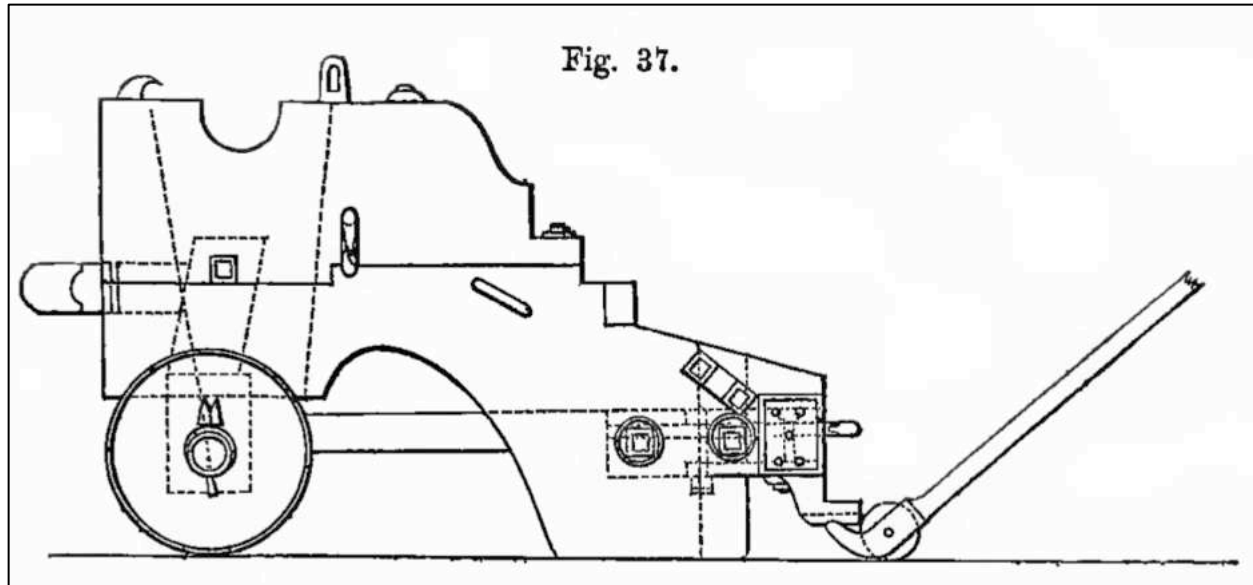


Figure 6-341. Plan and sectional view of pivot carriage (U.S. Navy Department 1860:60). Note top carriage trucks and journals (left, “S”), elevating screw (left “K”), and eyes for tackle (right, “2”).

Trucks

Two types of trucks, or wheels, were associated with the pivot carriage. As previously explained, four trucks were mounted to the top carriage, while four more trucks were connected to the lower pivot carriage. The distribution of trucks recovered from the site is illustrated in Figure 6-342, which shows that the trucks followed a relatively random scatter across the site. Like the gun carriage components in general, this followed the same pattern as the many of the other recovered artifacts. In terms of differentiating between the top carriage trucks and the lower pivot carriage trucks, the best identifier is the journal fixing them to the frame. Of course, this was only possible when the truck and journal (and probably axle) were articulated during recovery. In this assemblage, it seemed that the top carriage trucks were a different size and shape from the lower pivot carriage trucks. Figure 6-343 shows an example articulated truck, axle, and journal belonging to a top carriage. Note the journal, and how its shape mimicked the size of the one next to the large wrench in Figure 6-343. All trucks and associated journals are presented in Table 6-13.

Table 6-13. Carriage Trucks, Journals, and Associated Pieces.

Artifact No.	Description	Unit	Dimensions (in.) Diameter x Thickness
1254	Top carriage wheel	13B	8x5.5
1584	Top carriage wheel	18BB	8x5.5
1633	Unknown pivot carriage wheel	6B	unknown
1809	Marsilly carriage trucks and axle	10G	8x6 (2)
1866.06	Wooden truck	4E	14.5x3
1874.02	Pivot wheel and small brass journals	8E	unknown (likely 15x2.5)
1964.01	Pivot wheel and iron journal	7A	15x2.5
1973.02	Pivot wheel	9B	15x2.5
1977.16	Top carriage wheel	7A	8x5.5
2017.17	Pivot wheel and iron journal	10B	unknown (likely 15x2.5)

Artifact No.	Description	Unit	Dimensions (in.) Diameter x Thickness
2036.06	Top carriage wheel and iron journal	10B	unknown (12x8 according to photo)
2085.03	Pivot carriage iron journal	14B	
2197.01	Pivot wheel	9A	unknown (likely 15x2.5)
2246	Pivot wheel, fasteners, iron journal	8AA	14.5x2.25
2356.07	Pivot wheel and small brass journal	14B	15x2.5
2402.01	Pivot wheel and small brass journals	16A	16x2.5
2433.03	Pivot wheel and small brass journal	16A	12x2.25
2497.04	Top carriage wheel and iron journal	9A	8x5.5
2689.03	Gun carriage Part (incl. brass bearing for rear wheel)	14M	unknown
2743.01	Pivot wheel and small brass journals	10M	14x2.5
2913.01	Top carriage wheel	6F	6x5.5
2934.01	Pivot wheel and small brass journals	7F	14x2.25
3025.01	Wheel with concave edge and square washer	8C	11.25x2.25
3146.01	Pivot wheel and small brass journals	10AA	15x2.5
3146.11	Top carriage wheel and iron journal	10AA	unknown (8x5.5 estimated by photo)
3999	Pivot wheel, fasteners, iron journal	Fort Jackson	15x2.5
4000	Pivot wheel, fasteners, iron journal	Fort Jackson	15x2.5
5032	Top carriage wheel and iron journal	9K	8x5.5
5052.3	Top carriage wheel and iron journal	9K	unknown (likely 8x5.5)
5293.01	Pivot wheel and small brass journal	No provenience	unknown (likely 16x2.5)
5293.02	Pivot wheel and small brass journal	No provenience	unknown (likely 16x2.5)

The pivot carriage trucks had a small fixed axle (Figures 6-344 and 6-345), as opposed to top carriage trucks (see Figure 6-345), which had an aperture through which the axle ran. Top carriage trucks rotated around their axles, with two trucks per axle rotating in unison. Pivot carriage trucks rotated as one piece along with their axle. The pivot carriage trucks recovered from *CSS Georgia* tended to be about 15 inches in diameter and 2.5 inches thick. The upper gun carriage trucks were much thicker but smaller in diameter (about 8 inches in diameter and 5.5 inches thick). As shown in Table 6-13, nine top carriage trucks and 16 pivot carriage (lower) trucks were located. This is curious, as according to the schematics, there should be only four trucks for each lower pivot carriage. Either some trucks were spares, or they may have been used on additional carriages.

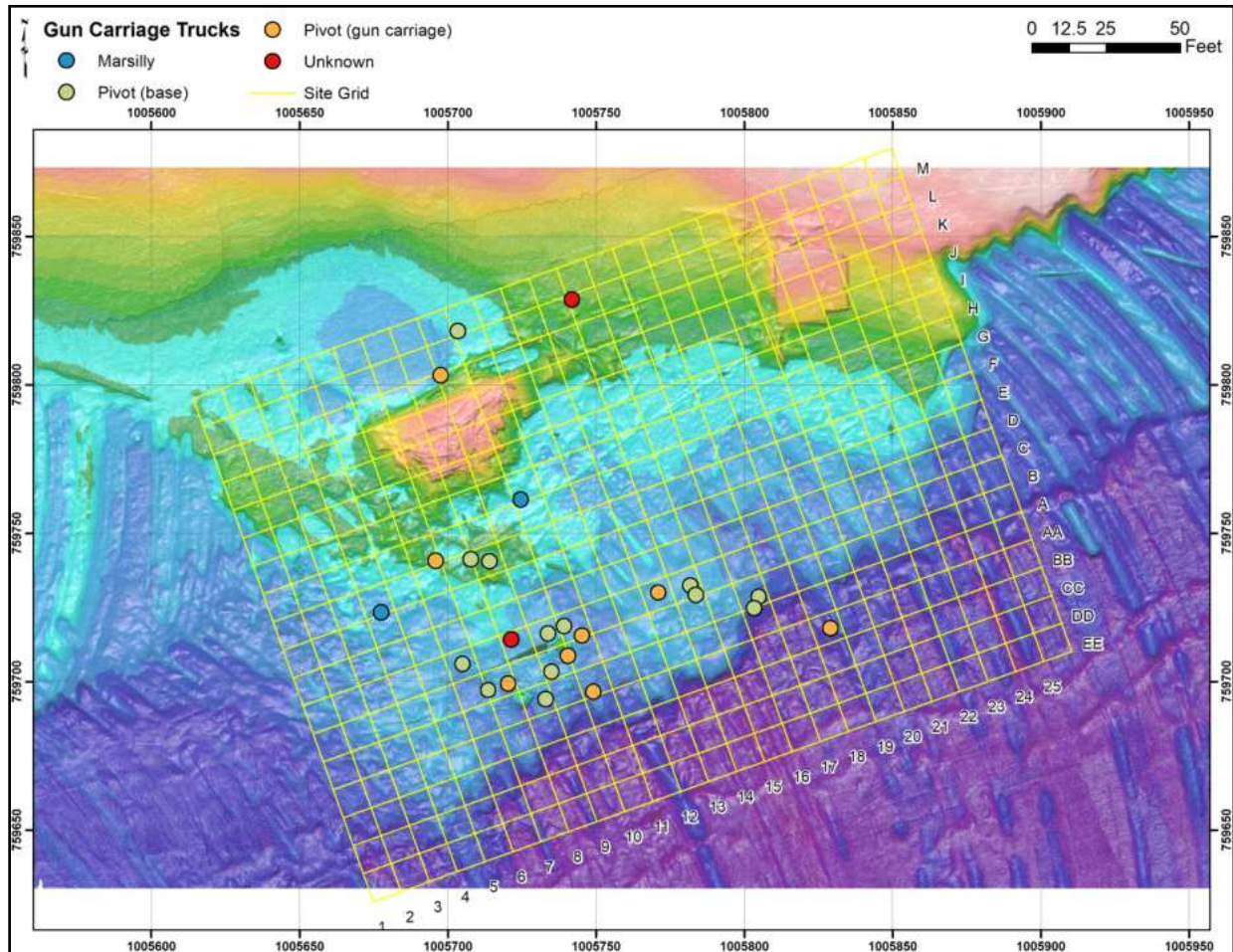


Figure 6-342. Distribution of gun carriage trucks according to type. Note that distribution was relatively random, following the same general distribution of most of the artifacts on the site.



Figure 6-343. Gun carriage axle, truck (wheel), and journal plate recovered from Unit 9-K (Artifact 5032). Note, as evidenced by this type of journal plate, this wheel and axle belonged to the top carriage, and not the lower pivot carriage.



Figure 6-344. Pivot carriage truck, Artifact 2934.01, immediately after mechanized recovery from Unit 7-F (Artifact 2934.01). Compare this Figure 6-345 below.



Figure 6-345. Pivot carriage truck and small copper-alloy journals recovered from Unit 7-F (Artifact 2934.01, left) compared to a top carriage truck recovered from Unit 7-A (Artifact 1977.16, right).

In addition to the numerous trucks, there are two types of journals associated with pivot carriage trucks. There are the small bronze trucks (Figure 6-345), and the much larger iron journals (Figure 6-346) with associated fasteners. It is possible that the iron journals were an adaptation. Although cupreous alloys would likely have been the preferred material (due to the corrosive properties of iron), iron was likely to construct this type of journal as copper became scarce during the war (Still 1969:56). The axle of the truck sat directly on top of a pin running through the journal, and the assembly likely needed plenty of grease to spin freely.



Figure 6-346. Pivot carriage truck (bottom left) with iron journal (top) and fasteners (bottom right) recovered from Unit 14-B (Artifact 2246).

Wooden trucks would not have survived as easily in the site environment as the iron trucks that were recovered. Site formation processes, particularly damage from wood boring mollusks like *Teredo navalis* and *Bankia gouldi*, act fast on submerged wood. Organic materials are also subjected to degradation from microbiology. These extractive forces could explain the lack of wooden trucks on-site, of which less than one half of one truck was recovered. This was further demonstrated by the lack of other wooden components from gun carriages during recovery. The other possibility is that trucks were cannibalized from other carriages, which utilized iron trucks. The recovered (possible) wooden truck was estimated to have a 15-inch diameter, and a thickness of 2.5 inches. This puts it in the size range of the lower pivot carriage trucks, and not the upper gun carriage or Marsilly carriage truck size. It should be noted, however, that this artifact has been identified as *lignum vitae*, and may well have been used as a sheave (see *Tackle* section).

Compressors

Compressors were used as a brake on pivot carriages. The bottom lip of the compressor fit against a wooden projection (the compressor batten) on the pivot carriage. The upper part of the compressor was attached to the middle transom of the top carriage. When screwed down (Figure 6-347), it compressed the compressor batten and middle transom, increasing friction (Simpson 1862:138). Six compressors were recovered during the two field seasons. Of these, four were made of cupreous alloys (Figure 6-348), and the other two were made of iron. The compressors were similarly sized, roughly 16 inches wide, and may well reflect the compressor pairs from three pivot carriages, one with iron compressors and the other two with cupreous-alloy compressors. Like the pivot carriage journals, iron may have been used in this case due to lack of access to copper during the war. As only two pivot carriages are known to have been in use (one for each Brooke rifle), it is possible that the third pair were there as an emergency replacement.



Figure 6-347. Carriage compressor immediately after mechanized recovery from G-15. Note the still intact compressor screw and tightening rod.

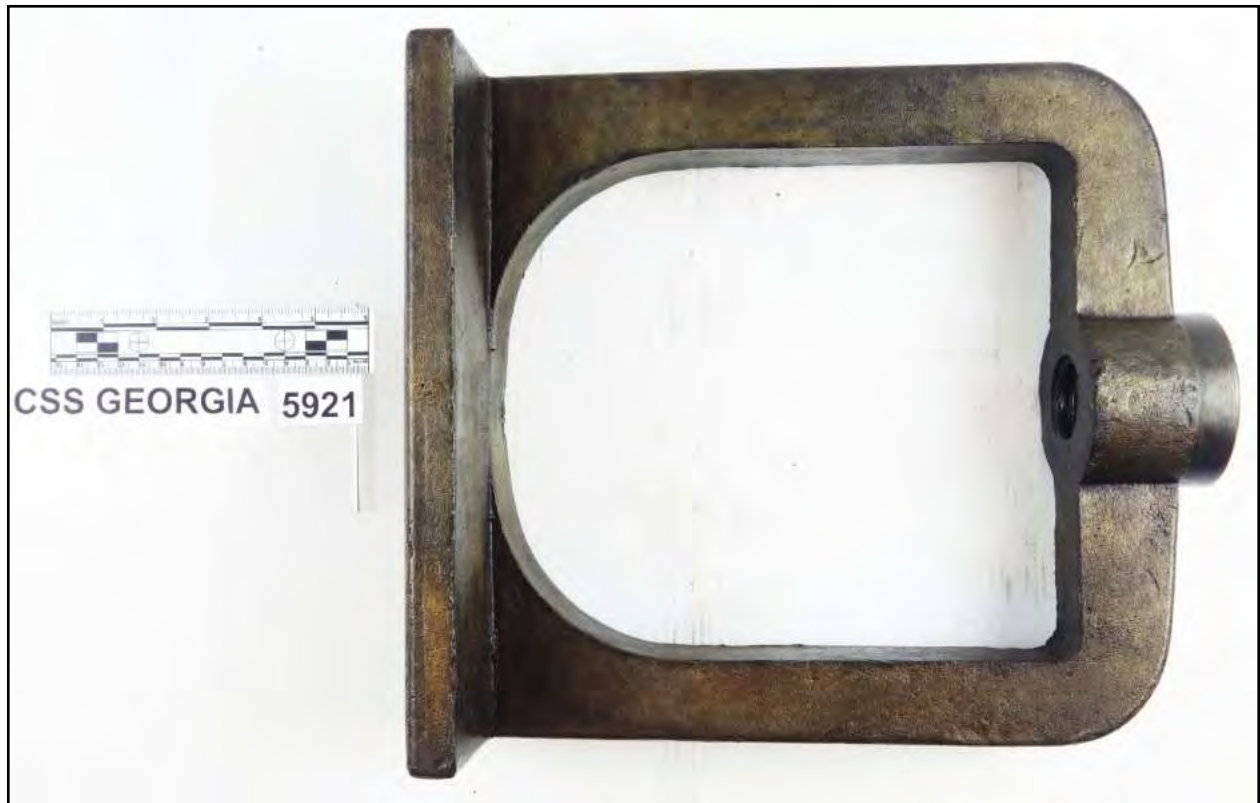


Figure 6-348. Cupreous compressor recovered from Unit 10-A (Artifact 5921). It no longer retains its compressor screw and tightening rod.

Tackle

Tackle was used to run guns in and out, as well as to train them. Tackle provided a mechanical advantage to crewmembers moving the guns, which were far too heavy to move without assistance. Line threaded through the blocks and attached to fixed points on the carriage (such as the eyes for tackle) amplified the force applied by tacklemen. As tackle were used for all gun carriages, this discussion will include all tackle recovered, and not just that which was associated with pivot carriages.

Eyes for tackle, specifically, helped adjust the angle of the gun for training and targeting. This unique and easily identifiable artifact is shaped like an asymmetrical “X,” with two eyes extending roughly 90 degrees apart, and mounting plates extending from each eye (Figure 6-349). The mounting plates were bolted to the rear transom (see Figures 6-338 and 6-339 for an example of eyes for tackle mounted to a pivot carriage). The recovered eyes for tackle varied in composition, with two made of cupreous alloy and two made of iron. Just like the compressors, iron may have been used as copper became less accessible. These fixed eyes were fairly robust, averaging 1.5 inches in thickness, with an overall length and width of about 15 inches.

Other than the eyes for tackle, there were 94 database entries for tackle-related artifacts (including sheaves, hooks, pulleys, and blocks). An example of a conserved block is shown in Figure 6-350 and another type immediately after recovery is shown in Figure 6-351. As the *CSS Georgia* was not a sailing vessel, many of these were likely employed as gun-related tackle. Of the database entries, 60 consisted of or included hooks. All of the hooks were composed of iron. 24 entries included sheaves. Sheaves were iron or wood, although most (20) were wooden (see

Figure 6-352 for an example of a wooden sheave). These numbers do not include Artifact 1866.06, recorded as a possible wooden truck, which may be a sheave.



Figure 6-349. Eyes for tackle recovered from Unit 12-E (Artifact 323).



Figure 6-350. Block and stiff swivel hook recovered from Unit 6-C (Artifact 1899.21).



Figure 6-351. Shown immediately after recovery, another type of tackle, most likely associated with a gun carriage.



Figures 6-352. Wooden sheave recovered from Unit 6-G (Artifact 2138.04).

Cap Squares/Trunnion Caps

Nine cap squares were recovered during the project (Table 6-14). Although five of them were composed of copper alloy (Figures 6-353 to 6-355), four were fashioned from cast iron (Figures 6-356). These cap squares sat atop trunnions and were bolted to the carriage. Marsilly and pivot carriages both employed cap squares (U.S. Navy Department 1866:46,60). Two of the cap squares (Figures 6-357 and 6-358; Artifact 2648.01) are not as wide as the others, measuring only 3 inches wide compared to the average of 5 inches wide. The size of the trunnions fitting these cap squares would have been different as well. The diameter of the interior of the smaller cap squares was only 4.25 inches, while the other cap squares had an interior diameter of 6 inches. Based on their proximity to the recovered 6-pounder, these cap squares are probably associated with it. With regards to the iron cap squares, there is not a known explanation for constructing cap squares from cast iron, but much like the compressors, it likely stems from the availability of iron compared with copper.

Iron works of the carriage were regularly cleaned, particularly when exposed to salt water. Keeping iron components rust free was an important part of routine maintenance (U.S. Navy Department 1860:8). Cap squares needed frequent removal for cleaning. During this time the gun would be lifted as well, allowing the trunnions to be completely cleaned. Additionally, the carriages could be inverted in order to tighten bolts and lacquer the threads (U.S. Navy Department 1860:9), ensuring all metal components were properly maintained.

Table 6-14. Cap Squares recovered from the *CSS Georgia*.

Art. No.	Description	Quantity	Unit	Material	Dimensions - (in.) Length x Width x Thickness
0370	Cap Square	1	10D	Copper alloy	18x7x1
0644	Cap Square	1	10D	Iron	13x5x1
1385	Cap Square	1	8E	Iron	20.5x6x1
1489	Cap Square	1	13A	Copper alloy	13x9x1
1804.03	Marsilly Carriage with Cap Square	1	9F	Iron	Unknown (undergoing treatment)
1806.07	Cap Square	1	8G	Copper alloy	13x7x1
1821.02	Cap Square	1	7G	Iron	15x5x1
2648.01	Cap Squares	2	22L	Copper alloy	15x3x1



Figures 6-353. Brass cap square recovered from Unit 10-D (Artifact 370). Side view.



Figures 6-354. Brass cap square recovered from Unit 10-D (Artifact 370). Top view.



Figures 6-355. Brass cap square recovered from Unit 10-D (Artifact 370). Bottom view.



Figures 6-356. Iron cap square recovered from Unit 7-G (Artifact 1812.02).



Figures 6-357. Small copper-alloy cap squares recovered from Unit 22-L (Artifact 2648.1). Top view. Note the rectangular fastener holes and smaller width compared to Artifact 370 or 1812.02.



Figures 6-358. Small copper-alloy cap squares recovered from Unit 22-L (Artifact 2648.1). Side view. Note the rectangular fastener holes and smaller width compared to Artifact 370 or 1812.02.

In addition to cap squares, pivot carriages were described as using trunnion plates, which sat beneath the trunnion (U.S. Navy Department 1860:Diagram M). Unfortunately, based on the diagrams at least, these appear to have been constructed exactly the same way as the cap squares. Furthermore, they were not always used. Marsilly carriages only used cap squares, and the recovered carriage cheek (described below) demonstrated this. To simplify things, all artifacts of this type recovered were referred to as cap squares.

Pivot-Carriage Track

Approximately 24 sections of pivot-carriage track were recovered from the site. Due to the linear shape, it is possible that pieces in poor condition were identified as rail, so the actual amount recovered is difficult to know. Track pieces were roughly 5 inches wide, 1.5 inches thick, and 25 inches long. The tracks were fixed to the deck with fasteners (through pre-made holes, as seen in Figure 6-359), allowing the pivot carriage trucks to traverse constructed paths on the vessel. As previously stated, these paths enabled gun training as well as repositioning to and from port and starboard. The tracks also reduced damage to the deck that would have resulted from the trucks rolling directly over planking timbers.



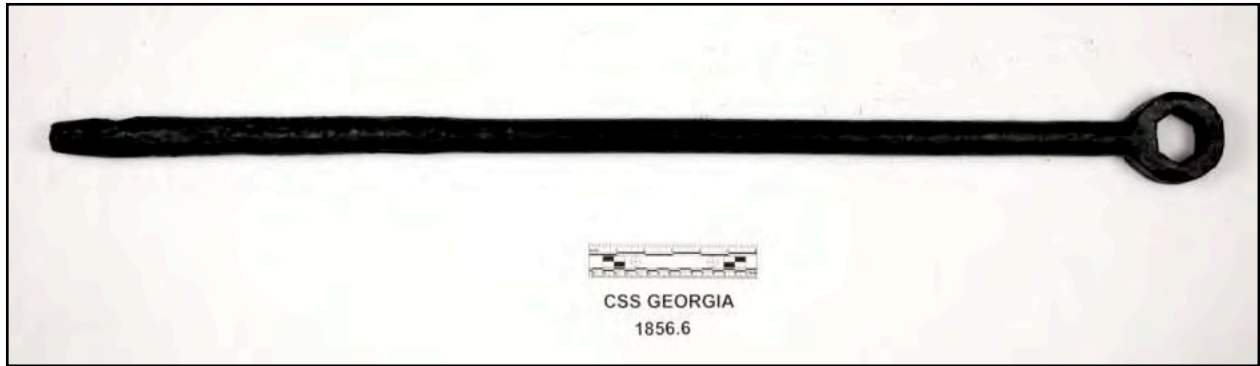
Figures 6-359. Section of pivot-carriage track recovered from Unit 10-E (Artifact 804). Note the notches at either end for fitting pieces together, as well as holes for fastening track pieces to the deck.

Wrenches

The artifact database listed 30 entries for wrenches, and of these, four were specifically listed as gun carriage wrenches. All gun carriage wrenches were recovered from Grab G-58 in Unit 9-E (Figures 6-360 and 6-361). They measured roughly 43 inches long. Many wrenches from other areas of the site had degraded, so their original lengths were unknown. It should be noted that some of these wrenches may actually be concreted rods with hard eyes (used for tackle), but until conservation is complete this cannot be determined.



Figures 6-360. Field photograph of gun carriage wrenches recovered from Grab G-58, Unit 9-E.



Figures 6-361. Conserved gun carriage wrench recovered from Unit 9-E (Artifact 1856.6).

Gun carriage wrenches were utilized primarily as a way to adjust nuts and bolts on the carriages. However, as shown in Figures 6-338 and 6-339 above, wrenches were also used to engage or disengage the truck axle from the eccentric. In this way, the wrench functioned as a lever, either immobilizing the carriage during firing, or mobilizing it for movement and training. All of the recovered wrenches were composed of iron.

Gun Carriage Fasteners

Some fasteners were identified as associated with gun carriages due to their size, or if they were found articulated or associated with other gun carriage components. Large bolts ran vertically (and sometimes horizontally) through the carriage, reinforcing the structure. Many smaller fasteners attached cap squares, journals, tackle, etc. to the carriage frame. The database listed nine fasteners specifically as gun carriage fasteners, five of which were found in the Marsilly carriage cheek (four of which are shown in Figures 6-361). There were likely many more, but positively identifying them as associated with gun carriages, or as fasteners at all, can be difficult following years of deterioration underwater. The artifact database listed 801 entries including the word “fastener,” with a total quantity of 1,018 individual artifacts associated with those entries.



Figures 6-362. Field photograph of gun carriage fasteners recovered from Unit 9-F, associated with the Marsilly carriage cheek (Artifact 1804.2).

Elevation Screws

Both pivot and Marsilly carriages used elevation screws for adjusting the elevation angle of the gun. Elevation screws replaced the old bed and quoin setups, which were basically wooden wedges upon which the cascabel or breech sat (Figure 6-362). This, while potentially slower than bed and quoin, was quite accurate, and one complete turn of the screw equated to one degree of elevation (Simpson 1862:143). Three elevation screws were recovered from the site, which would account for all but one of the carriages. The elevation screws measured about 10 inches tall with 8-inch wide flanges and 3-inch wide screws. It should be noted that none of them seem to have been long enough to screw through the cascabel, which is the type described in the 1860 Navy Ordnance Manual (U.S. Navy Department 1860:52). This is odd, as IX-Inch Dahlgrens were designed to receive elevation screws through their cascabel. However, these seem to be the variety as seen in Figures 6-338 above, which rest under the breech of the gun. Rather than pull the cascabel up via rotating threads, the screw itself rose when turned, thus pushing the rear of the gun up. This style of elevation screw was referred to as a “Hart’s elevating screw” (Simpson 1862:141).

Although elevation screws were in use at this time (and on this vessel), it is possible that some of the carriages did not use them. This might help explain the existence of only three screws. Lacking enough elevation screws, the crew may have resorted to the old bed and quoin elevation system. Figure 6-364, showing a IX-Inch Dahlgren on a Marsilly carriage, presents an example of how this system might have looked on the *CSS Georgia*.

Pivot Pins and Sockets

Artifacts related to the pivot (Figure 6-365), about which the entire carriage rotated, were also recovered. One pivot assembly (Figures 6-366 and 6-367), two pivot plates, and one broken end of a pivot pin were identified. Figure 6-368 shows what the assembly looked like after recovery, and before it was separated for conservation.



Figure 6-363. Elevation screw recovered from Unit 8-D (Artifact 1580).

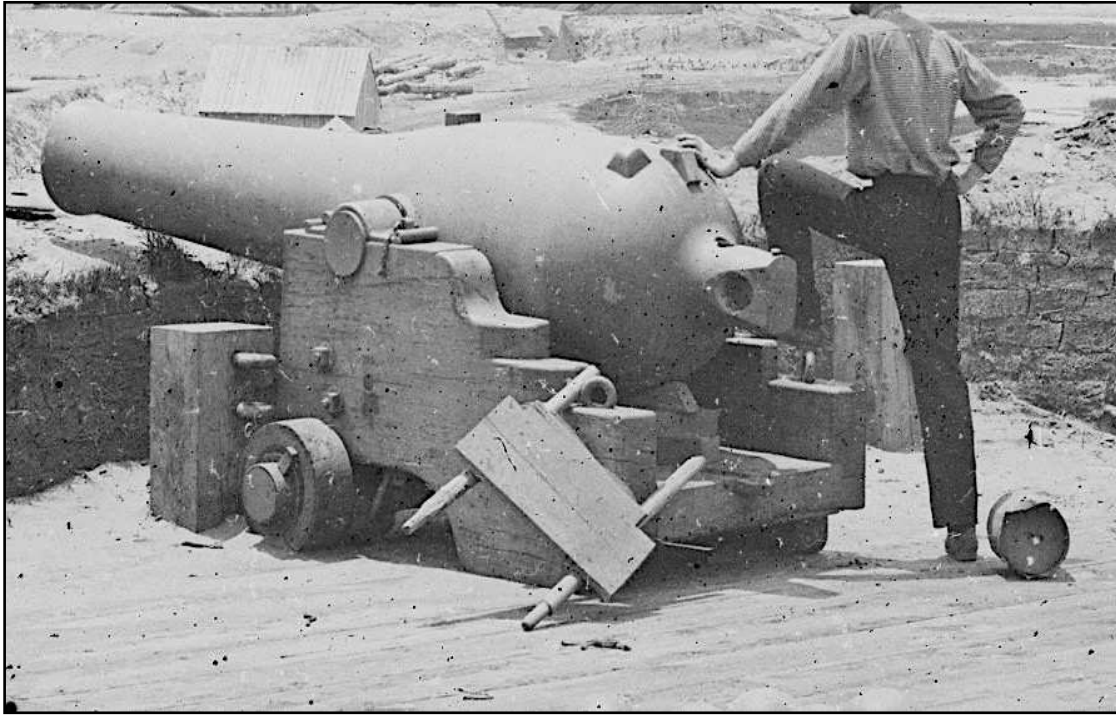


Figure 6-364. IX-Inch smoothbore Dahlgren on Marsilly carriage without elevation screw (U.S. National Archives Photo No. LC-DIG-cwpb-00177). Photo shows bed and quoin elevation setup, taken in Gloucester, Virginia, 1862.

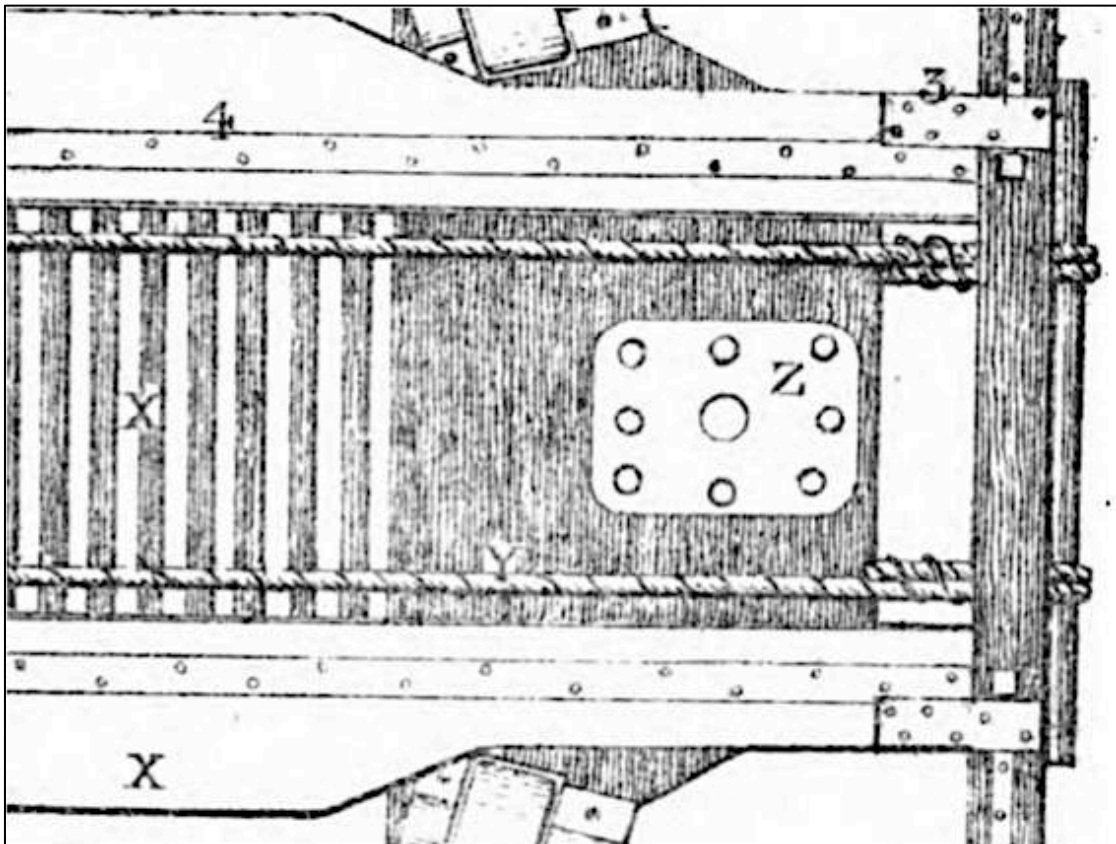


Figure 6-365. Pivot plate diagram (U.S. Navy Department 1860:Diagram K).



Figure 6-366. Pivot plate (Artifact 1623).



Figure 6-367. Pivot pin and fasteners.



Figure 6-368. Pivot assembly articulated after recovery (Artifact 1623).

Marsilly Carriages

The Marsilly gun carriages, used to carry the IX-Inch Dahlgrens on the *CSS Georgia*, included several components represented in the artifact assemblage. The two-truck style marked a shift from the classic four-truck naval carriages, and the design originally came from France before being accepted in the U.S. (Veit 2011:186). The hallmark of the design is the dumb truck on the rear (actually a lack of trucks), which increased friction against the deck, thus further inhibiting movement. A photograph of a Dahlgren mounted to a Marsilly gun carriage, including tackle and accessories, is shown in Figure 6-369 while a period diagram is shown in Figure 6-370. The Marsilly carriage was said to have become the best carriage design in the French navy for large broadside guns (Simpson 1862:130). Following exercises on the *USS Merrimack*, Captain Robert B. Hitchcock reported:

“The guns were in, and the time taken from the order to ‘load and fire,’ to the second fire. The gun was loaded, run out, fired, sponged, loaded, transported to the opposite port and fired. The guns with Marsilly carriages were readily moved by shipping the handspikes in the training loops, raising the after transom off the deck, and moving the piece wheel-barrow fashion.” [Simpson 1862:131]

The recovered Marsilly carriage section (Figure 6-371), which included part of a transom and articulated wheels and axle, is similar to the carriage shown in Figure 6-325. Both use iron

instead for trucks, as opposed to wooden trucks as shown in the Merrimack's Marsilly carriage schematic (Figure 6-372). The trucks measured 8 inches in diameter and 8 inches thick. These trucks are roughly the same size as the top carriage trucks (from a pivot carriage), which may indicate that some of the trucks classified as top carriage trucks could actually have come from a Marsilly carriage. The width of the axle between the trucks (inside to inside) was 29 inches. Once the Marsilly carriage section has been conserved, other diagnostic features may be identified. Assuming only two Marsilly carriages were on board (to support the two Dahlgren IX-Inch guns), then only two trucks and an axle are missing.

Another Marsilly gun section, known as the "cheek" (one side of the carriage and a cap square) was recovered from Unit 9-F (Figure 6-373). This section was also undergoing conservation treatment at the time of analysis. Unfortunately, this means that little additional information was available about it, and only a few field photographs like the one below were available. However, the cap square and associated fasteners were intact (as visible in the photograph), so the piece will yield additional information once conserved.

One possible candidate for an additional Marsilly carriage truck is Artifact 1584, recovered from Unit 18-BB. The axle recovered with this truck features tapered boxing (the boxing restricts lateral movement by the truck along the axle), as opposed to the cylindrical boxing found with the pivot gun carriage axle shown in Figure 6-374. There is no room for a pivot gun carriage journal to attach on the outer side of the axle; therefore, Artifact 1584 more likely came from a Marsilly carriage.



Figure 6-369. Dahlgren cannon in a Marsilly carriage on the *USS Hunchback* (U.S. National Archives Photo No. 111-B-2016, Brady Collection).

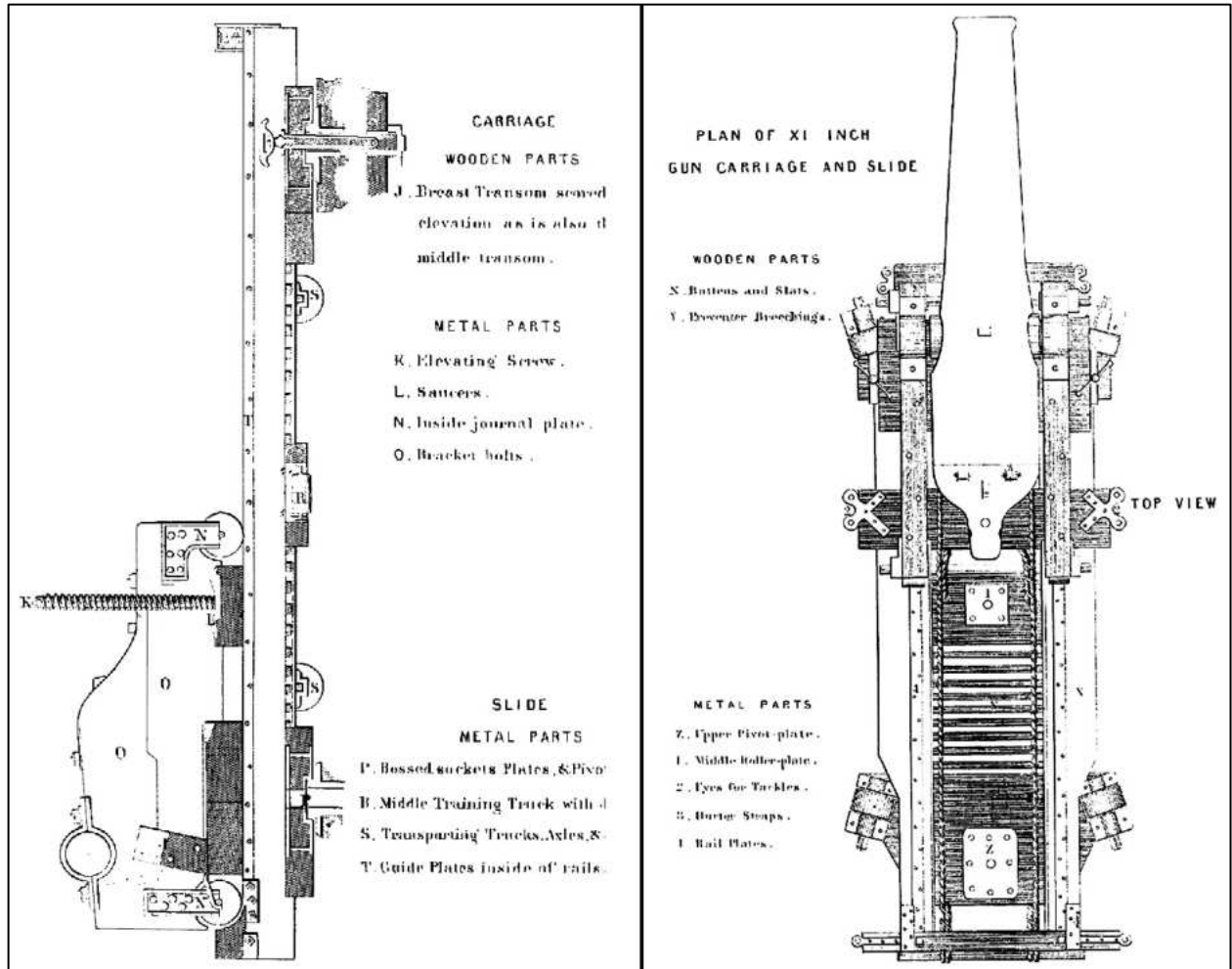


Figure 6-370. Marsilly carriage schematic (U.S. Navy Department 1860:46). Note elevation screw (H), handspike (K), cap squares, trucks, and vertical fasteners.

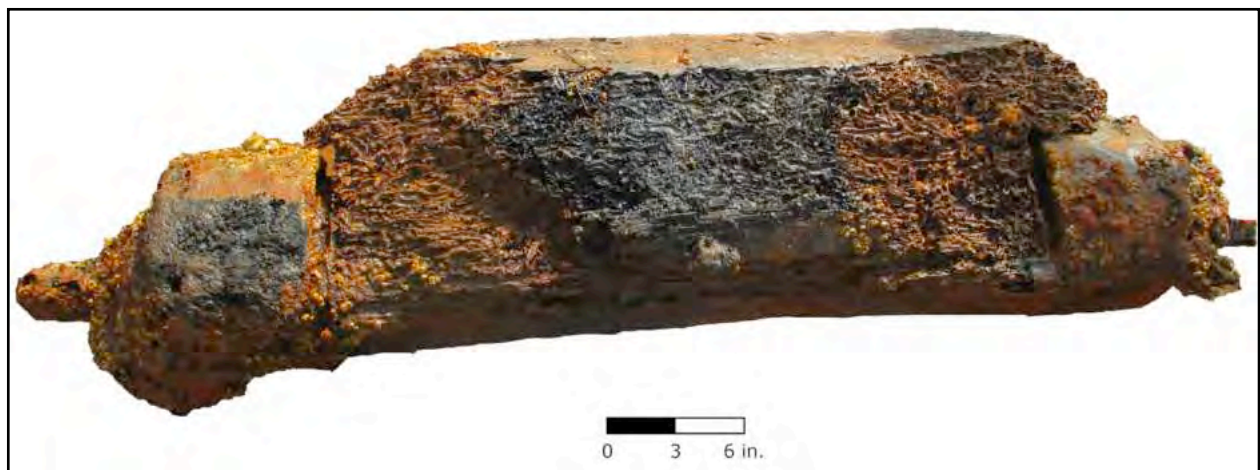


Figure 6-371. Marsilly gun carriage section with wheels and axle recovered from Unit 10-G (Artifact 1809). Image is taken from a field photograph as it was still undergoing conservation treatments during analysis.

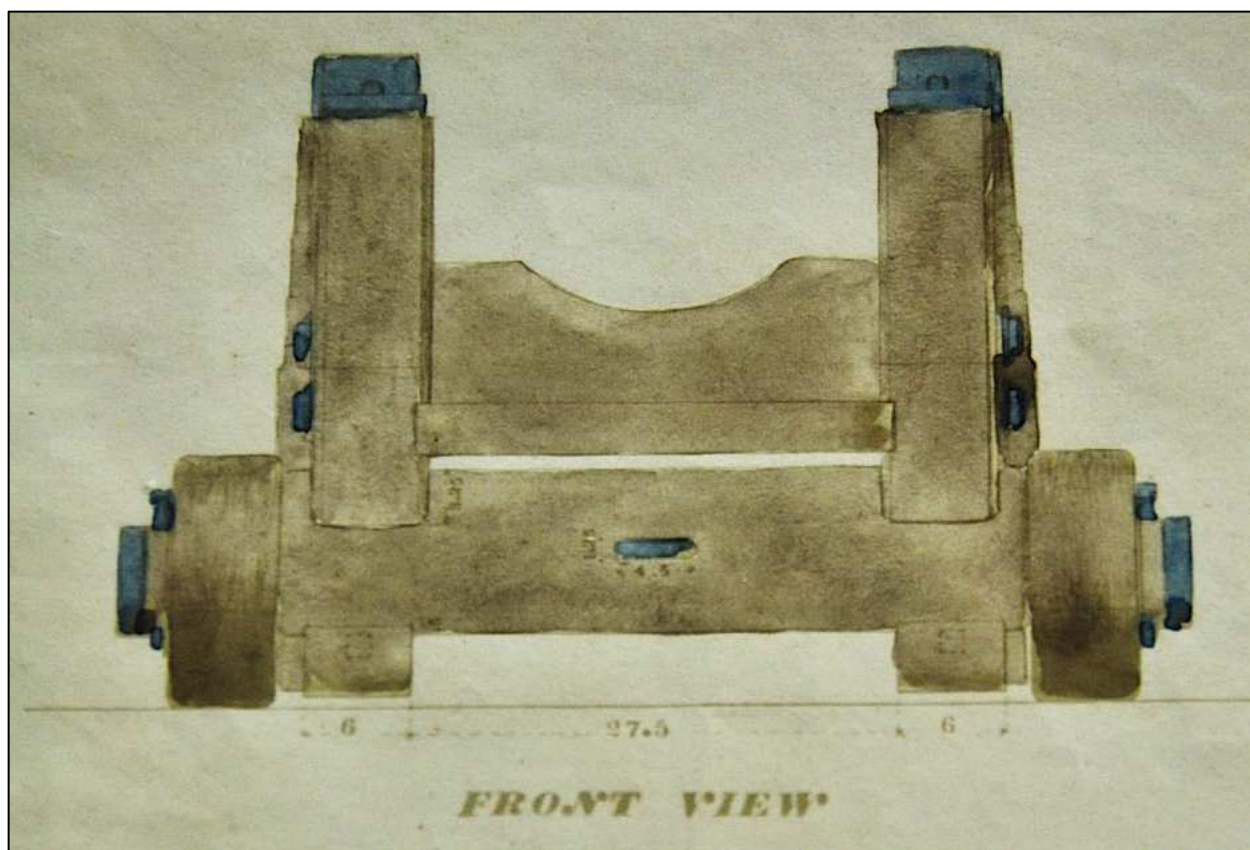


Figure 6-372. Front view of Marsilly carriage design (image courtesy of Naval History and Heritage Command).



Figure 6-373. Marsilly gun carriage cheek (including cap square) recovered from Unit 9-F (Artifact 1804.03). The remainder of the photo has been desaturated to highlight the gun carriage piece.

Roller Handspike

Marsilly-carriage roller handspikes were used to train the guns in the direction of their targets. The handspike was hooked to the rear of the carriage, and used as a lever to raise the back so that the entire carriage could be rotated. Unlike carriages with rear trucks, Marsilly carriages relied on the roller handspikes for running in and out as well as training (U.S. Navy Department 1860:51-52). One handspike was recovered from the site, and although the wooden dowel had deteriorated over time, the metal components were intact and articulated (Figure 6-375). See Figure 6-376 for a diagram illustrating proper use of the roller handspike.

Six-pounder Carriage

Very little evidence is available for the 6-pounder carriage. Based on the size of the gun and the recovered cap squares (see Figures 6-357 and 6-358) it is assumed that the 6-pounder was mounted to a traditional four-truck carriage (Figure 6-377). The trucks, likely made of wood, were not extant. No other materials known to be associated with this carriage have been identified.



Figure 6-374. Possible Marsilly carriage truck recovered from Unit 18-BB (Artifact 1584). Note the boxing on the right side of the truck. The tapered appearance differs from the cylindrical boxing found on the pivot gun carriage axle seen in Figure 6-343.



Figure 6-375. Marsilly carriage handspike recovered from Unit 13-B (Artifact 1192).

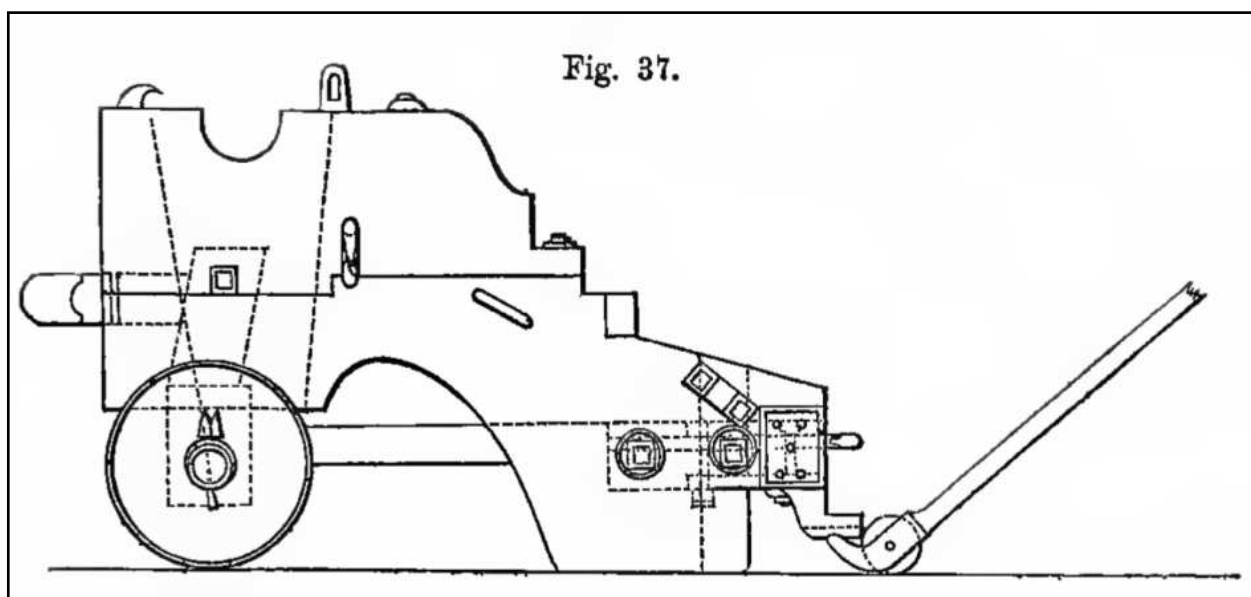


Figure 6-376. Marsilly carriage diagram with roller handspike ready to lift and move (Simpson 1862:131).

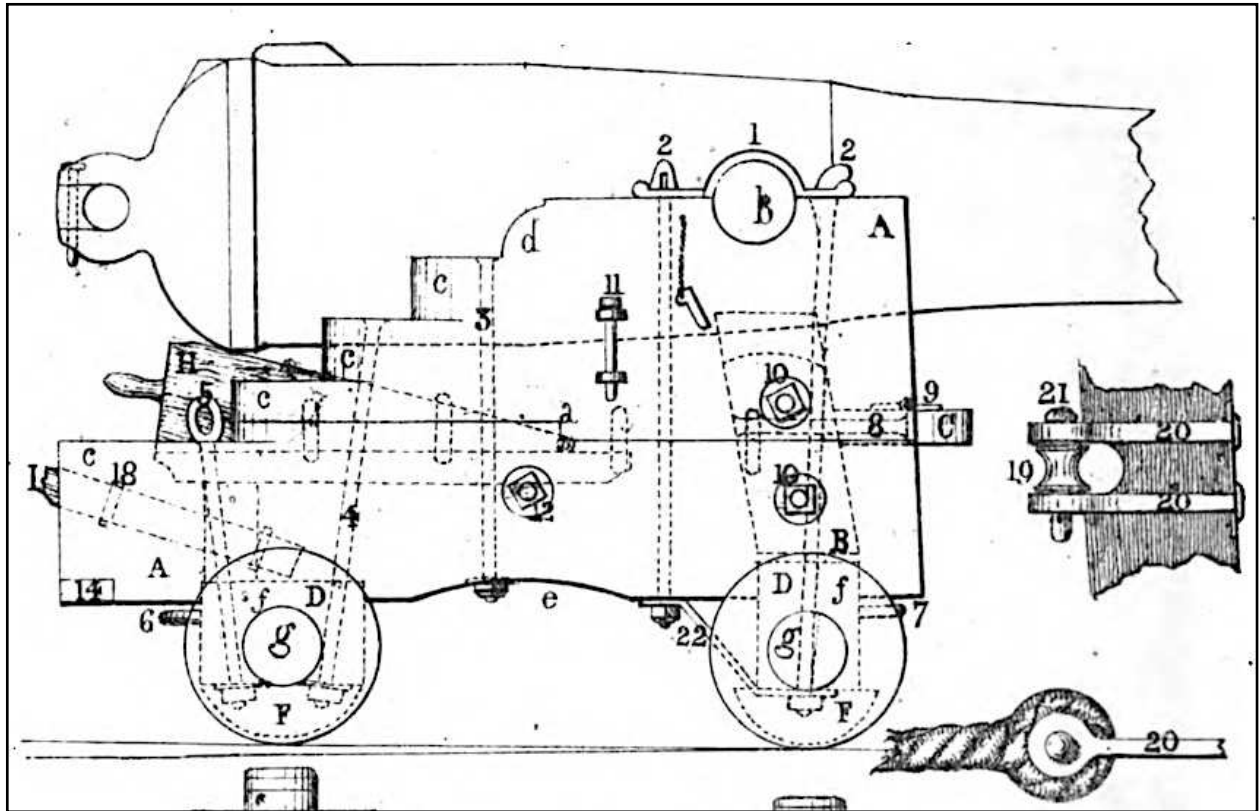


Figure 6-377. Diagram for traditional four-truck naval gun carriage (U.S. Navy Department 1860:Diagram H). Note cap square (1), cap square bolts and associated key and chain (2).

DISCARDED MILITARY MUNITIONS

Significant numbers of DMMs were recovered during the 2015 archaeological recovery operations at the CSS *Georgia* site, with 141 brought up by MDSU-2 divers and an almost equal amount recovered during the Mechanized Site Recovery Phase. Surprisingly, only six would be recovered during the 2017 operations. In total, 246 large caliber shells and bolts were brought up, as well as complete and partial stands of grape shot, evidence of canister rounds and smaller 6-pounder solid shot, including a remarkably well preserved box filled with 6-pounder shot. Totals for the larger munitions include 127 conical shells for the 6.4-inch Brooke rifle, 69 spherical shells for the IX-Inch Dahlgren smoothbore, and 49 bolts for the Brooke rifle. Figures 6-378 and 6-379 illustrate two examples of 2015 mechanized recoveries of DMM. Both grabs had heavy artifact and sediment recovery. Grab G-208 brought up five Brooke shells and one Dahlgren spherical shell, while G-201 revealed both a Brooke and Dahlgren shell. It needs to be stated that all newly deposited grabs were initially inspected for DMM before deck crews were allowed access to the side of the barge where the recoveries had been deposited. Any DMM present were placed in buckets (Figure 6-380) for wet storage and carried to the far corner of the dive barge where EOD personnel placed them behind a large water-filled steel roll-off container to await transportation.

Figure 6-381 illustrates the provenience for all recovered Brooke and Dahlgren shells, as well as bolts. Notice that bolts cluster immediately west of the Cannon No. 4 location in Unit A-20. The provenience for each DMM type recovered is illustrated in Figures 6-382 to 6-384. Figure 6-383 again shows the bolts, and illustrates they are almost exclusively located near the Cannon No. 4 location. Figures 6-383 and 6-384 show the Brooke and Dahlgren DMM locations that are

relatively similar in that they show a main cluster area, a smaller cluster to the west, and both with several outliers. Figure 6-385 shows all DMM combined in relation to the cannon locations, again showing locational similarities with the Brooke and Dahlgren types.



Figure 6-378. Material recovered with grab G-208 showing at least three of the five Brooke shells (lower left and next to bucket right) and one spherical Dahlgren shell (far left), along with rail, chain and other assorted artifacts.



Figure 6-379. Material recovered with Grab G-201 showing numerous artifacts including rail, timber and brick. A Dahlgren shell can be clearly seen in the middle right of the photograph.



Figure 6-380. Brooke shell recovered with Grab G-482, photographed prior to placement in bucket. The shell and small amount of sediment were all that were recovered with Grab G-482. Note the shell's shiny brass Archer fuze.

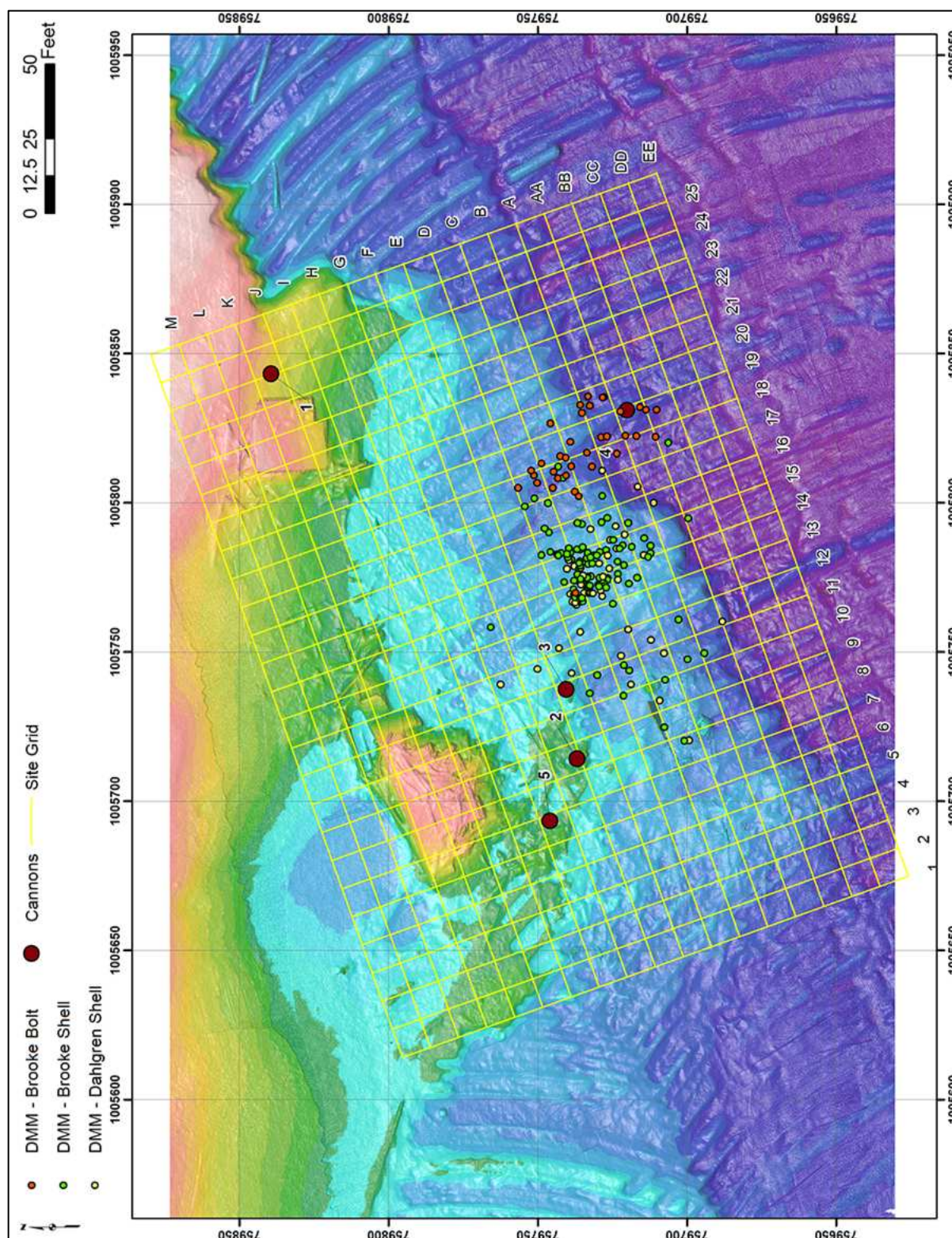


Figure 6-381. In total, These included 155 Brooke shells, 84 Dahlgren balls, and 53 non-explosive solid bolts.

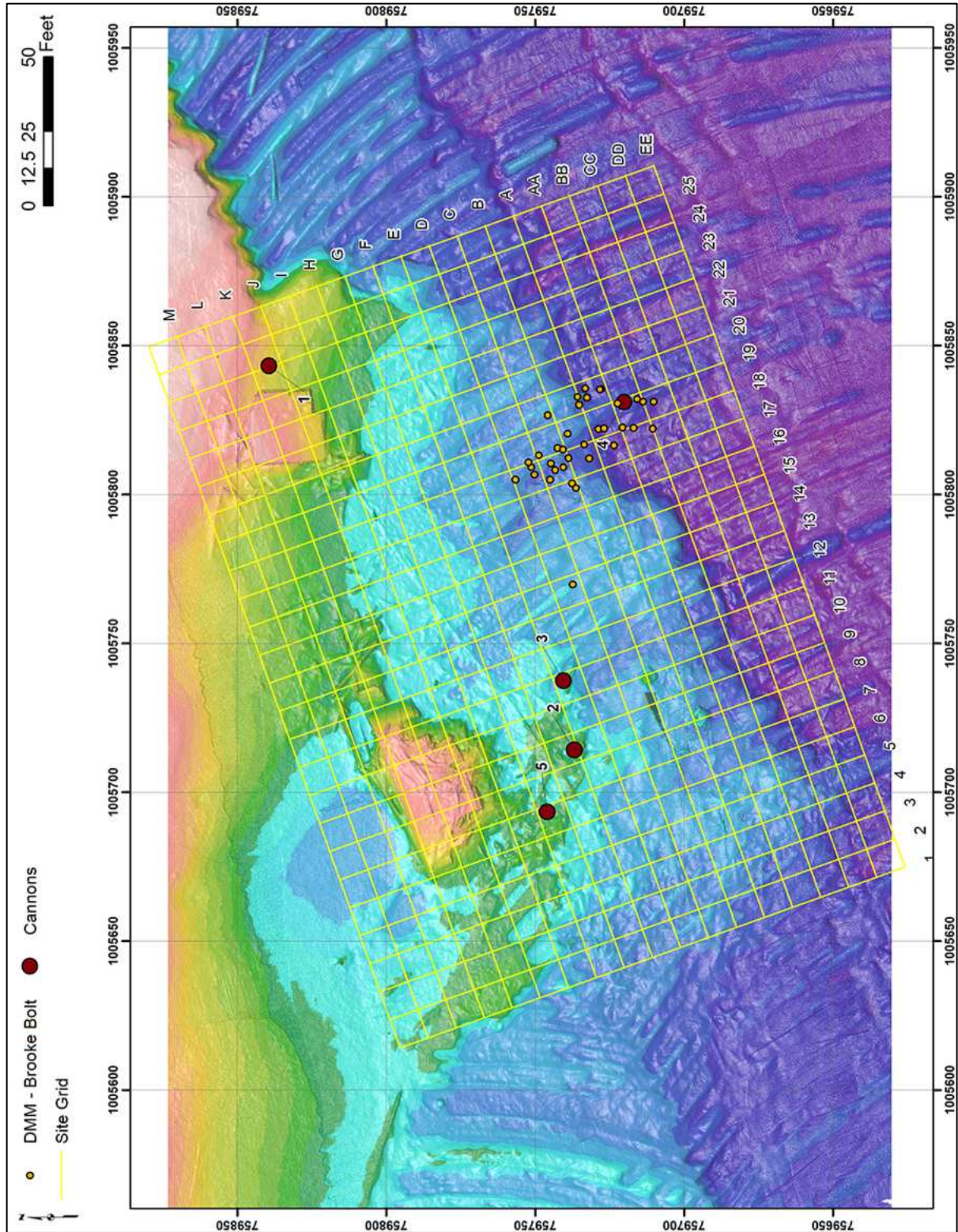


Figure 6-382. Distribution Map of 53 bolts showing that they are almost exclusively located near Cannon 4.

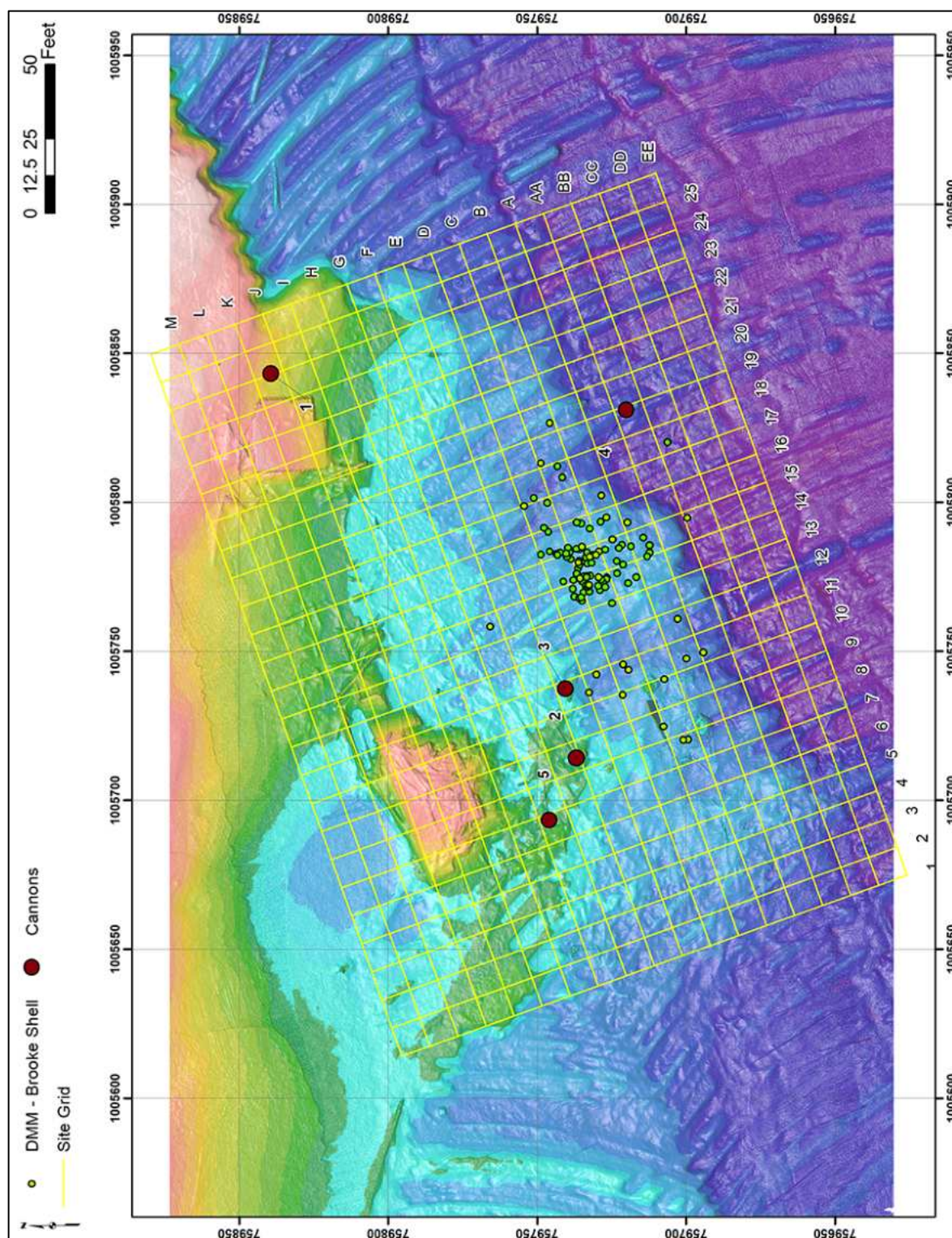


Figure 6-383. Distribution Map of 155 Brooke shells shows a main cluster area and a smaller cluster to the west, both with several outliers.

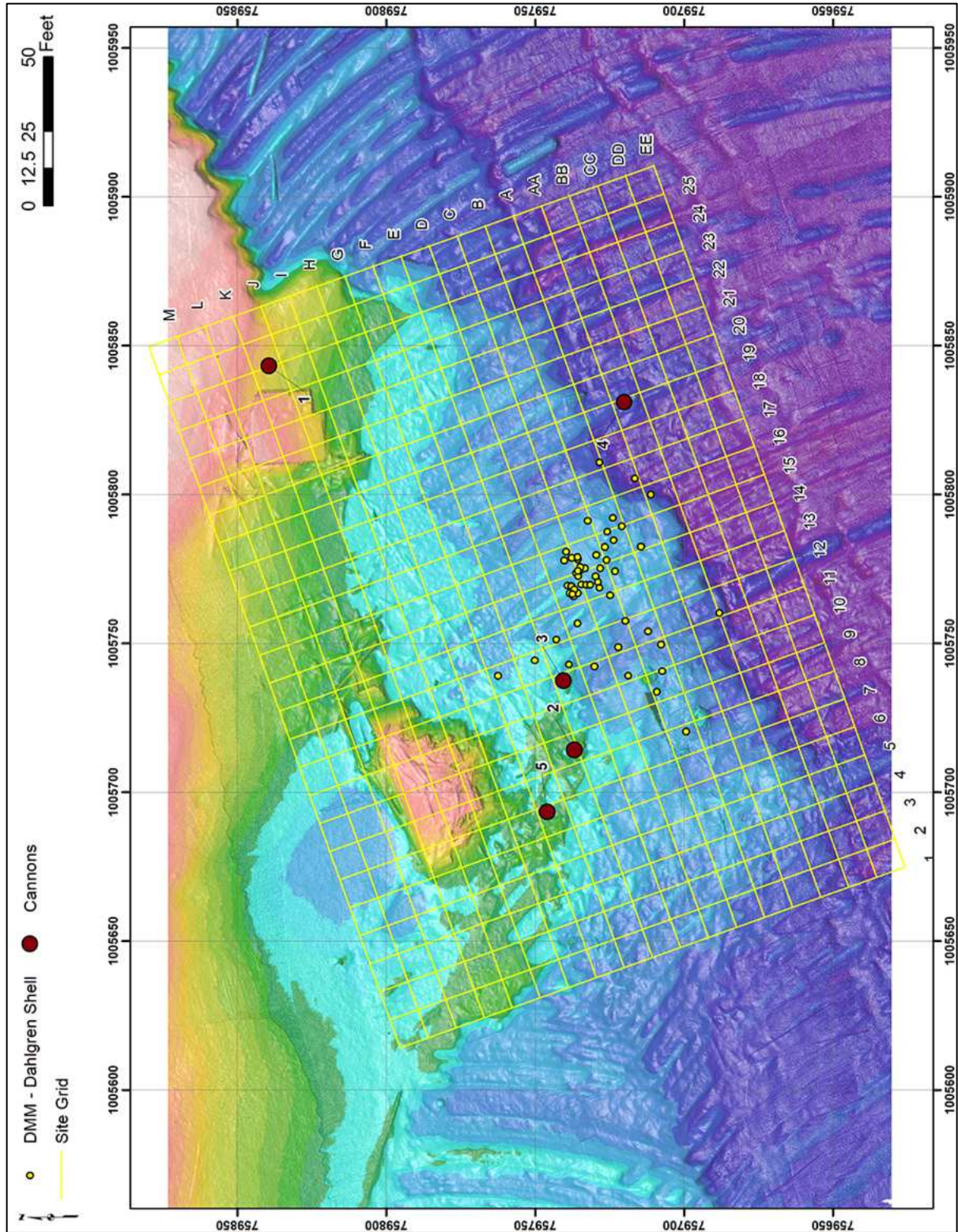


Figure 6-384. Distribution Map of the 84 Dahlgren shells.

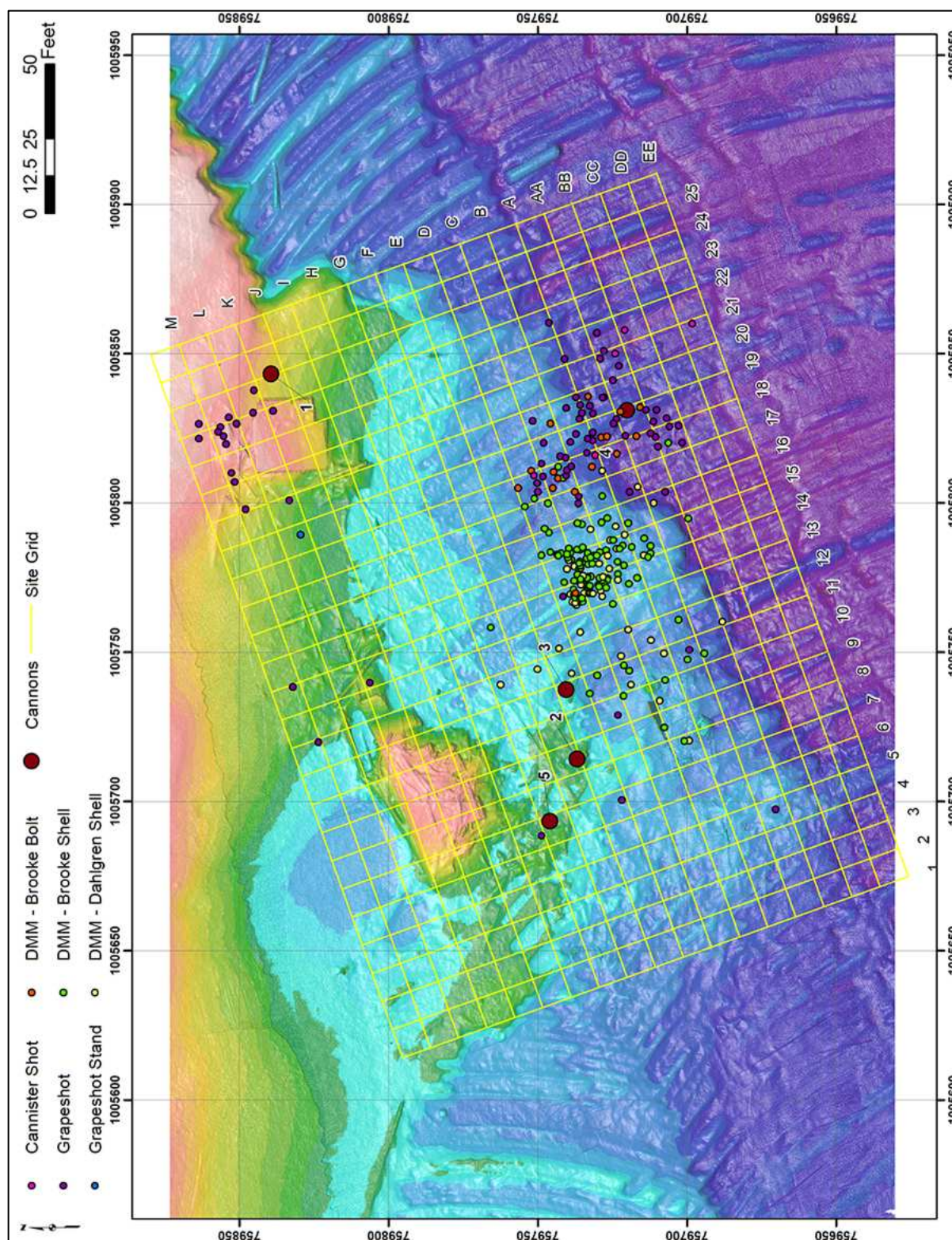


Figure 6-385. Distribution Map of all DMM types including 6-pound, grape and canister in relation to the cannon.

Brooke 6.4-inch Shells

The Brooke shells recovered during this project were designed by Commander John Mercer Brooke, CSN (1826 to 1906). Born in Florida, Brooke was a graduate of the United States Naval Academy (1847) and career naval officer. Resigning his commission in the U.S. Navy at the start of the Civil War, his work with ordnance led to his becoming the Chief of the Confederate Navy's Bureau of Ordnance and Hydrography from 1863 until the end of the war. In addition to his well-known work on the design of large caliber artillery, Brooke conducted numerous experiments on artillery projectiles. Those experiments resulted in the production of various new munitions designs. Among these were three successful types of projectiles designed by Brooke that were concurrently used until the cessation of hostilities. These three types were: the milled base bolt and shell, the ratchet ring sabot bolt and shell, and, the ratchet disc sabot bolt and shell (Bell 2003:153). It is the ratchet disc sabot shells for the 6.4-inch Brooke rifle that were found in abundance during the CSS *Georgia* archaeological recovery project.

The ratchet disc sabot projectiles are considered Brooke's best known (Bell 2003:154). With testing on the design beginning in October of 1862, the shells were quickly put into production and had been placed in service by December of that year (Bell 2003:154). Brooke designed the ratchet disc sabot shells in three sizes: 6.4-inch, 7-inch and 8-inch; other examples of the Brooke 'pattern' in smaller calibers from 3-inch to 4.62-inch have been noted. The larger caliber shells designed by Brooke, and particularly the ratchet disc sabot, were expensive to produce, requiring both skilled labor to provide a perfect fit between the sabot and the base of the shell, and, 3 to 8 pounds of scarce and costly copper. It may be important to note that despite a scarcity of copper in the South (particularly after the Confederacy lost its primary source of copper when the mines in southeastern Tennessee fell to the Union in late 1863) the production of Brooke ratchet disc sabot projectiles continued at various foundries until the war ended (Bell 2003:154). The significance of Brooke's efforts in the design of rifled cannon and projectiles may be summed up in a statement attributed to Union Admiral David Dixon Porter that "...Brooke had done more damage to the North than any other man in the South" (Brooke 1980:290).

Current artifact inventories list 240 heavy artillery projectiles (Brooke shells, bolts and Dahlgren balls) recovered during the 2015 fieldwork with an additional six recovered in 2017. Among those the 6.4-inch Brooke shells were the most numerous, with a total recovery of 127 projectiles, followed by 69 IX-Inch Dahlgren spherical shells ("balls"), and 49 for 6.4-inch bolts. All the 6.4-inch Brooke shells recovered had Archer time delay fuzes in place. The present inventory of separate (not removed from shells) fuzes and fuze parts lists a total of 34 items mostly identified simply as "fuze," until conservation is complete and the entire assemblage can be examined the exact total of loose Archer fuzes (versus Dahlgren water-cap) will remain uncertain. That said, of the fuzes inventoried as brass only and not specifically as "Dahlgren," there were twenty and it may be expected that the final total will be close to that number. Various types of sabots were recovered separate from shells and are inventoried at a total of 33; of these, 16 are listed as iron and 17 as brass (copper/copper alloy). With one of the detached copper sabots identified as a Tennessee (Mullane) sabot, the total of separated/detached 6.4-inch ratchet disc sabots is 16; curiously, far fewer than the 127 Brooke shells.

The 6.4-inch Brooke ratchet disc sabot shells recovered from the Savannah River during this project have a close resemblance to two shells, complete with fuze and sabot, illustrated separately on pages 173 and 174 of Jack Bell's book 'Civil War Heavy Explosive Ordnance' (Bell 2003:173, 174). Respectively, these are identified by Bell as: "CS 6.4-inch Brooke Carolina Shell" (page 173), and, "CS 6.4-inch Brooke Long Shell" (page 174). While the CSS *Georgia*'s Brooke shells may have come from a munitions factory different than Bell's 'Carolina' and 'Long', there are strong similarities in size and shape for both of Bell's examples. It should be noted that the head of the sabot fastener (bolt) on the 'Carolina Shell' more closely matches a CSS *Georgia* example and, further, that recovery of Carolina shells from the

Charleston, South Carolina area is geographically closer to Savannah than 'Long Shell' recoveries in Virginia and North Carolina. Additionally, the 'Long Shell' is said to appear to be of late war design, perhaps also indicating a different or later manufacture than the CSS *Georgia* Brooke shells. Of additional interest here is that, despite the expressed desire by Commander Brooke to have the production of ordnance under Navy management, period Confederate payment vouchers show there were a number of private foundries manufacturing Brooke shells (Bell 2003:155).

A complete 6.4-inch Brooke ratchet disc sabot shell consists of a main body, sabot, sabot bolt, and fuze. The main body of the shell, as may be seen in Figure 6-386, is a heavy hollow cast iron bullet-nosed cylinder with an integral copper base. In overall size a representative example of the main body of a Brooke shell (Inventory 2364.13) was measured at 12.06 inch long (tall) and 6.3 inches maximum diameter. The nose of the shell has a flat surface 1.3 inches in diameter surrounding a hole to the interior (threaded for fuze) measured at 0.77 inch. From the flat surface surrounding the fuze hole the 'bullet' nose of the shell gently curves down to where it meets the cylindrical portion of the body. At 7.25 inches above the base, at the top of the cylindrical portion of the main body and separating the cylindrical portion from the bullet-nosed (conical) end, is a cast-in band (bourrelet) 6.3 inches in diameter that extends down to 6 inches above the base (1.25 inches wide). Below the bourrelet and down to the copper base the cylinder measures 6.2 inches in diameter (0.1 inch less than the bourrelet). The attached/integral copper base entirely covers the end of the shell. This copper base is 6.3 inches in diameter (serving as a second bourrelet) and rises 1.25 inches above the bottom of the shell. The bottom surface of the integral copper piece has at its center a threaded hole measured at 0.66-inch diameter surrounded by a 1.53-inch diameter flat surface. The threaded hole was for the bolt that held the separate copper ratchet sabot. The remaining surface of the blunt/base end of the projectile is not a smooth surface, but consists of seven individual slightly inclined surfaces separated by straight lines radiating from the flat surface surrounding the central bolt hole and extending to the perimeter (outside edge) of the 6.3-inch diameter base. These seven lines maintain equidistant spacing between each other from near the center out to where they meet the perimeter, forming seven separate and nearly identical wedge shaped areas. These areas are inclined planes relative to the central axis of the projectile and, when the projectile is viewed from the side, form an elongated saw-tooth profile around the perimeter of the base. When an upright (fuze hole at top) shell is viewed from the side, the edge of one of these seven planes inclines upward from left to right, rising a short vertical distance before reaching the next of the seven segments. That vertical distance was measured at 0.0625 inch on the shell examined (Artifact 2364.13). This somewhat complex 'ratchet' shape for the base of the shell was intended to mate perfectly with the matching 'ratchet' surface of the sabot.



Figure 6-386. Brooke 6.4-inch ratchet disc sabot shell, Artifact 2364.13, during electrolysis. Note the ratcheted end, left, and the bourrelet band center.

Several recovered sabots and sabot bolt removed from a Brooke shell are presented in Figures 6-3876 to 6-389. The sabot may be simply described as a shallow copper saucer, bowl or basin with a hole in the center (see Figure 6-389). These Brooke ratchet disc sabots were, however, part of a state of the art munition that was difficult to cast and to mate with the base of the projectile body (Bell 2003:155). The overall diameter of the piece was measured at 6.3 inches and height at 1.44 inches. At the center is a 0.875-inch diameter hole to accommodate the bolt that would secure the sabot to the base of the Brooke shell. In cross section profile the top of the 'saucer' begins with a 0.19-inch wide flat rim. The profile then angles down steeply to the interior before a gradual rise increases the thickness to 0.75 inch at the bolt hole. The relatively flat exterior of the 'saucer' has seven angled planes that are an inverse match to the seven angled planes at the base of the shell and are intended to mate with that base in a close fit, the surfaces of all the many facets in direct contact. This would include both the seven angled surfaces and the seven short vertical walls at the lines defining the adjoining edges of those angled surfaces. The threaded bolt that then secured the fitted sabot to the base of the shell was made of iron and 2.37 inches long with a square head 1.19 inches on a side and 0.55 inch thick. The square-headed bolt has a conical end ahead of the threads. The threaded portion extends half the overall length of the bolt, leaving a smooth shaft for the 0.62-inch between threads and base of the bolt head (Figure 6-390).

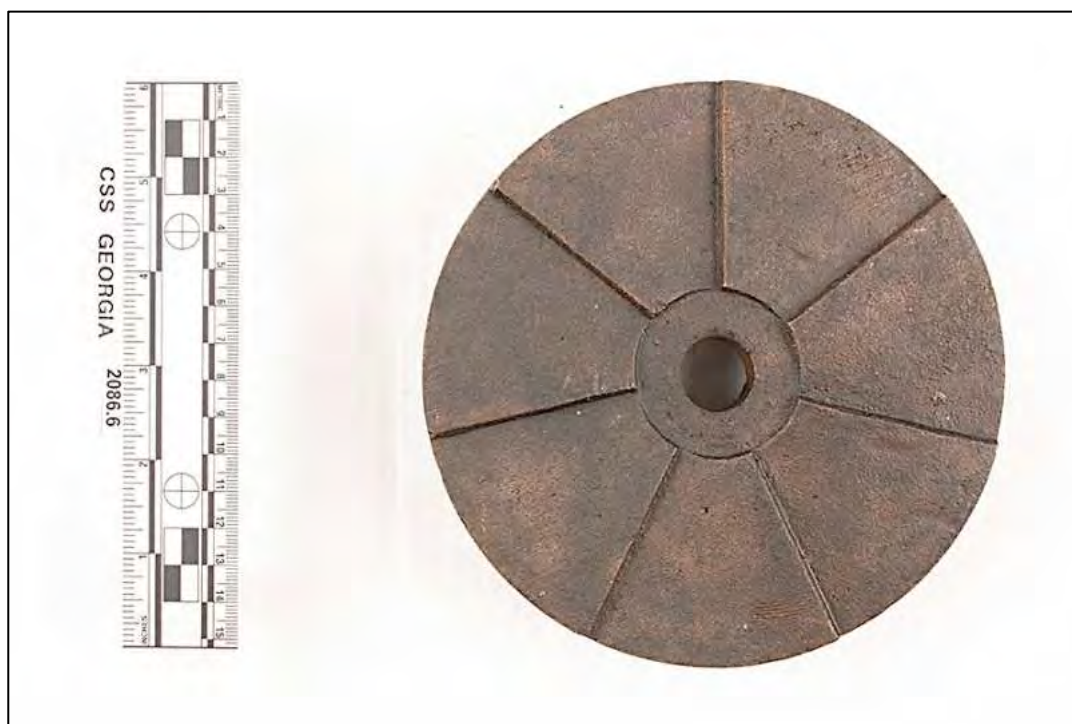


Figure 6-387. Brooke copper ratchet disc sabot, Artifact 2806.6. This faceted face fit onto the faceted end of the Brooke shell. Note the inset circle surrounding the bolt hole. This differs from other sabot like the one shown below, Artifact 1609, but is similar to other sabots like Artifact 4002.



Figure 6-388. Brooke copper ratchet disc sabot, Artifact 1609. Differing from the sabot above, it lacks the inset circle surrounding the bolt hole.



Figure 6-389. The shallow copper saucer, bowl or basin appearance of the aft face of a Brooke copper ratchet disc sabot, Artifact 794. Interestingly, this is a spent or fired sabot indicated by the grooving on its exterior side. The hammer marks may have been a result of fitting the sabot onto the shell prior to firing.



Figure 6-390. The square-headed iron bolt employed to fasten the sabot (see above) to the Brooke round, Artifact 2086.6.

The purpose of this somewhat complex mechanism was to use the high pressures from rapidly expanding gases produced by burning black powder to distort the rim of the relatively soft copper sabot into the rifling of the Brooke gun to impart a stabilizing spin to the 6.4-inch Brooke shell. That successful engagement with the rifling might be achieved by a Brooke ratchet disc sabot may be seen in a comparison of the two Brooke shell examples presented in Bell (2003:173, 174) and discussed above as comparative examples. When compared to the unfired 'Long' shell, the engagement of the 'Carolina' sabot with the ten-groove rifling of the gun from which it was fired can be clearly seen the distortion of the copper in the profile view of the shell and in the near decagonal shape given to the originally circular ratchet disc sabot. We can see these comparative differences because of the intact condition of the 'fired' shell due to the failure of its time fuze to detonate the bursting charge of the projectile.

All the Brooke shells recovered during the field phase of this project had Archer safety pin percussion fuzes. Additional Archer fuzes were recovered individually. Dr. Robert S. Archer patented the basic design of this fuze; Confederate States patent number 70, issued January 7, 1862 (Biemeck 2013:240). It was said of Dr. Archer in a period newspaper article about Tredegar Iron works that "many of the improvements have here been originated... may be traced to the practiced skill and the experience of Dr. Robt. S. Archer...who was formerly in the U.S. Navy for many years, as surgeon, and who has devoted a considerable portion of his life to experimenting in fire-arms, projectiles, &c." (*Richmond Enquirer*:4). The basic Archer fuze design was adopted by the Confederacy as their standard percussion fuze. Archer fuzes and those in the Archer pattern were produced in a number of types, sizes and variations so numerous that Biemeck (2013:242) found them to defy cataloging and made a broad classification of the Archer fuze into six basic patterns. The Archer safety pin percussion fuzes recovered from the CSS *Georgia* site match those classified by Biemeck as "Archer Percussion Fuze, Thick Head, Type 1" (Biemeck 2013:240). Biemeck (2013:240) provides a simple line drawing of the type; additionally, an example of a CSS *Georgia* Archer fuze from a recovery predating this project is presented in Jones' *Artillery Fuzes of the Civil War* (Jones 2001:53).

As a representative example of a CSS *Georgia* Archer fuze from among the fuzes that have completed conservation, a fuze was selected for examination and photography that had been deactivated, disassembled and that included all its principle components in a relatively good state of preservation; as may be seen in Figure 6-391. This sample Archer fuze had been removed from one of the recovered Brooke shells and shares that shell's identification and provenience (Artifact 4091). The Biemeck "Thick Head, Type 1" Archer fuze is an assembly of five metal components most commonly made of copper and only occasionally made of brass due to the scarcity of that alloy in the Confederacy (the south lacked a native source of tin). These components consist of the main body, an internal slide, percussion cap, threaded retaining plug, and, removable safety pin. The overall length of the main body of the representative fuze was measured at 2.15 inches with 1.46 inches of that length below the head having the threads that secured the fuze in the matching threaded fuze hole on the 6.4-inch Brooke shell.

A small off-center hole for the removable safety pin was drilled through the treaded portion at a right angle to the main axis and just below the base of the head. The interior has a centered 0.44-inch diameter cylindrical hollow to accept the internal slide with percussion cap. This hollow interior stops at the head and is threaded at the open end for the retaining plug. The head on the main body of the fuze is a 1.25-inch diameter cylinder with 0.5-inch vertical sides surmounted by a convex top that adds an additional 0.19 inch for an overall thickness to the head of 0.69 inch. The large diameter of this head provided solid seating on the Brooke shell, and its thickness gave a substantial anvil for the percussion cap to strike. The fuze head had both a 0.19-inch wide screwdriver slot across the top, and, vertical 0.25-inch wide lug notches (spanner slots) on the sides that would fit a naval fuze wrench; for driving the fuze into the fuze hole on the nose of the Brooke shell.



Figure 6-391. Archer safety pin percussion fuze from CSS *Georgia* after conservation showing all components. Artifact 4091 from Brooke Shell Artifact 4091. Internal slide with percussion cap at bottom.

The second largest component of the fuze assembly was the internal slide, which fit within the 0.44-inch diameter hole in the main body of the fuze. The slide had a percussion cap nipple at the head end and a hole, central to the axis, which led from the nipple to the base of the slide in a direct line toward the base of the fuze and the powder chamber of the Brooke shell. The slide was secured within the fuze body by the threaded retaining plug (or end cap). The plug prevented the slide from being thrown into the powder chamber of the Brooke shell when the gun was fired. Of note, the threaded retaining plug was a more secure option than more fragile pins used on other fuzes of the period (Biemeck 2013:240). The plug had two spanner holes for driving it into the threaded base of the fuze body, and a central hole to permit fire from the percussion cap to carry through to the bursting charge in the powder chamber of the shell.

The final metal component of this Archer fuze was the removable safety pin. The pin was inserted sideways through the fuze in the off-center hole drilled below the head and through the threaded portion of the main body of the fuze, as may be seen in Figures 6-392 and 6-393 showing a bent safety pin within a broken fuze. When the safety pin was in place it blocked the slide, thereby preventing premature detonation of the shell by restricting the percussion cap from impacting the head end of the slide chamber. The pin was a significant safety feature designed by Dr. Archer and found on most fuzes that followed his pattern (Biemeck 2013:240). When the safety pin was in place it not only prevented premature detonation but, by noticeably preventing the fuze from being seated onto the nose of the Brooke shell, provided munitions handlers and gun crews with visual confirmation the shell was ‘safe’. In combat the safety pin would be removed, the archer fuze would be seated on the 6.4-inch Brooke shell using a screwdriver or naval fuze wrench before loading the live/armed shell into the gun. When the shell was fired from the Brooke gun and the Archer fuze properly struck an object at the end of its flight the slide would slam the percussion cap against the head of the fuze firing the mercury fulminate within the percussion cap. The detonation of the percussion cap would immediately ignite a solid flash composition or instantaneous flash wick within the central hole in the slide, transmitting fire down the fuze through the hole in the retaining plug and into the powder chamber thus detonating the shell.



Figure 6-392. Side view of a conserved but broken Archer fuze showing the position of the safety pin or wire, Artifact NP5.



Figure 6-393. Top view of the Archer fuze clearly showing the off-center position of the safety pin or wire, Artifact NP5. Also note facets for screwdriver or naval fuze wrench.

The Archer safety pin percussion fuze was a rugged design manufactured for, and used by, Confederate forces from 1861 until the war ended. When Archer's safety pin was in place the "...projectile could be dropped or shipped under rough handling conditions without any chance of an accidental detonation" (Biemeck 2013:240). These fuzes were hand made by skilled machinists who turned the components from bar stock or solid castings. Because of the labor involved and the limited supply of copper, Archer fuzes were expensive to produce. As a result, the Archer was reserved for large caliber projectiles used by shore batteries and naval forces (Biemeck 2013:240; Jones 2001:52).

Dahlgren IX-Inch Spherical Shell

The Dahlgren IX-Inch spherical shells or balls recovered from the CSS *Georgia* site were designed by Commander (later Admiral) John A. Dahlgren, U.S. Navy (1809 to 1870). Dahlgren began his naval career as a midshipman in 1824 and died in 1870 while still in service, stationed at Washington Navy Yard. It was his work at Washington Navy Yard from 1847 to 1863 and again following his return after service with the fleet that earned him the honor of being called the ‘Father of American Naval Ordnance’ and remembered as a leading pioneer in the development of naval guns and munitions. Beginning with boat howitzers, Dahlgren successfully developed rifled cannon (4-, 4.4-, 5.1- and 6-inch), ‘modern’ smoothbore guns (9-, 10-, 11- and 15-inch), and munitions for those weapons. It is the spherical shell with time delay fuze developed by Dahlgren for the IX-Inch gun that is of interest here. A small coincidence relating to this project: Admiral Dahlgren was in command of the South Atlantic Blockading Squadron and offshore with supplies for General Sherman’s army when Fort McAllister fell and the CSS *Georgia* was scuttled.

The experimentation, development and adoption of shell guns and explosive time delay shells for naval use was a major innovation during the first half of the nineteenth century. Against warships of that period the time delay shell was potentially far more destructive than solid shot or impact detonated munitions. In his book on the subject “Shells and Shell Guns” Dahlgren pointed out that “The shell is intended to explode while lodged in the mass of the ship, disuniting its structure, and driving out more or less of the structure in fragments” (Dahlgren 1856:205). Based on experimentation, Dahlgren noted, “the advantages of shell over shot, where ships are concerned, is sufficiently great to need no more than a fair statement” (Dahlgren 1856:215). Regarding a series of experiments conducted by the French, Dahlgren spoke of shells which had “...been so embedded (in the ship’s hull) as to encounter a resistance nearly equal on all sides; wherefore, the explosion acting in every direction drove out the timber laterally and inwardly as well as outwardly, so as to breach the side (of the ship) entirely through” (Dahlgren 1856:214). Against the hulls of wooden warships that were still a standard during the Civil War, solid shot might penetrate causing some serious damage, the explosion of a percussion shell may be expected to follow the path of least resistance outside of the hull, while a single properly embedded time delay shell could sink the ship. Had the shell that is today still embedded in the sternpost from the USS *Kearsarge* successfully detonated, the CSS *Alabama* might have been victorious off Cherbourg. The spherical IX-Inch Dahlgren shells with time delay fuzes recovered during this project had been aboard the CSS *Georgia* as ship killers.

All the recovered shells had Alger pattern naval water-cap time delay fuzes in place and both shells and fuzes were rendered inert by qualified explosive ordnance disposal personnel. These shells were most likely acquired by the Confederacy after capturing the Gosport Navy Yard (present day Norfolk Navy Yard) in April 1861 when, in addition to IX-Inch Dahlgren guns, they took the yard’s stock of shot and shell, including a substantial stock of 9-inch spherical shells (Biemeck 2013:495). Confederate production of 9-inch shells is not known and it may be likely they had sufficient numbers from Federal stocks taken at Gosport Navy Yard to satisfy their needs (Biemeck 2013:494).

Sixty-nine spherical 9-inch shells were recovered. Many of those shells have completed conservation and an example is presented here as Figure 6-394. The diameters of a half dozen selected shells from among those that have completed conservation were measured and ranged from 8.73 to 8.8 inches. Many of the shells had brass bushings in the fuze wells and one of those (Artifact 1983.3) had a small anchor stamp as may be seen in Figure 6-395. The bushing of shell had a measured outside diameter of 1.25 inches and a threaded interior diameter of 0.75 inch. The depth of the fuze well was measured at 2.50 inches, perhaps indicating the interior had a flat surface at the top of the shell. Biemeck discusses four patterns for the interiors of Dahlgren shells (Biemeck 2013:495). An initial experimental model had a spherical interior without any

flat surfaces and was discontinued almost immediately. Another shell had flat interior surfaces at both the top (fuze well) and bottom intended to improve balance during flight; these shells are rare and may have had only experimental or limited production. The third and fourth patterns had either a flat top (most commonly found on 8-inch shells) or flat bottom (most commonly found on 9-inch shells). Examples of each of the last two types (8-inch with flat top and 9-inch with flat bottom) were recovered from the USS *Westfield* and photographs of a sectioned example of each are presented here as Figure 6-396. Further research and possible sectioning of a 9-inch shell is recommended when conservation of all recovered shells has been completed.



Figure 6-394. Spherical shell for IX-Inch Dahlgren recovered from the CSS *Georgia*, Artifact 1983.3. Its fuze has been removed.



Figure 6-3954. Anchor stamp in the fuze well bushing of a spherical IX-Inch Dahlgren shell.

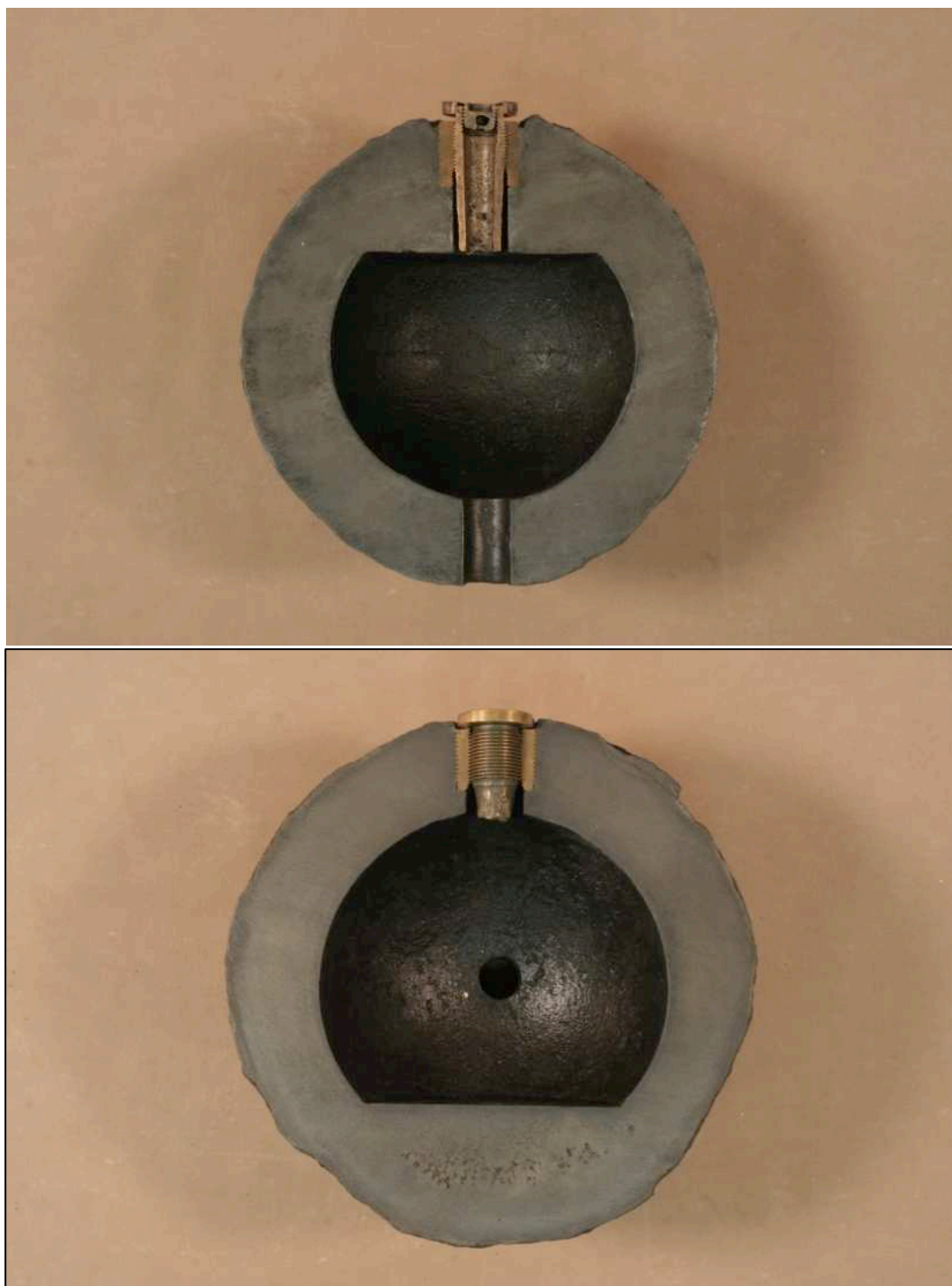


Figure 6-396. Sectioned 8-inch Columbiad shell (top) and IX-Inch Dahlgren shell (bottom) from the USS *Westfield*. Note the top 'flat' on the Columbiad and bottom 'flat' on the Dahlgren; also note severe deterioration on lower end of Dahlgren's water-cap fuze due to hydrogen sulfide gas generated by deterioration of the shell's black powder (as presented in Biemeck 2013).

As noted above, all of the recovered IX-Inch Dahlgren shells had naval water-cap time fuzes. In addition, the artifact inventory would indicate at least eleven additional water-cap fuzes recovered separately; ten listed under the subcategory as “BRA&PB” (brass and lead) and at least one more (Inventory 3284.2) as brass (“BRA”) only. These naval water-cap fuzes are of a design developed by Cyrus Alger (1781-1856), a Boston iron founder and inventor. Alger was considered one of the principle metallurgists of his time and held numerous patents. Alger founded the South Boston Iron Company, which became “...famed for the excellent ordnance there manufactured” (Fiske and Wilson 1886:48). The firm produced large numbers of artillery projectiles for Federal service during the War of 1812 and, in 1834, made the first rifled cast iron gun in the United States. That cast, rifled gun was possible due to Alger having developed significant improvements to the strength of cast iron (Van Slyck 1879:587). Cyrus Alger began experimenting with shells and fuzes in 1840 and by 1843 had supplied them for service aboard the frigate *Cumberland* (Van Slyck 1879:588). His early fuze designs were used with “outstanding” success during the Mexican-American War of 1846-1848 (Jones 2001:9). Alger worked to improve and develop this naval fuze and introduced a perfected version in 1857 that was supplied to the Navy from that date through the Civil War. Jones presents Federal examples that have Naval Ordnance Department stamps on top of the fuze flange and included examples for each of the years 1857 through 1865 (Jones 2001:10).

No identification markings or date stamps appear on the flanges of recovered CSS *Georgia* naval water-cap fuzes. While the Confederates did use stocks of Federal water-cap fuzes, they found it necessary to produce their own to fit the captured stock of spherical shells already fitted with fuze wells threaded for Alger pattern fuzes. Confederate ordnance officers were familiar with Alger pattern fuzes and, knowing it to be an effective design, produced their own version almost identical to the pre-war Federal design. Having no native source of zinc the confederates were generally unable to use brass and Biemeck has noted that the most notable feature of confederate water-cap fuzes is that most were made of copper (Biemeck 2013:236, 237). Jones has stated in ‘Artillery Fuzes of the Civil War’ that: “Knowing full well how effective the US naval water-cap fuze had been in Federal service, the Confederate Ordnance Department proceeded to duplicate it exactly. Many of these CS imitations appear identical and operated the same as Federal water-cap fuzes but without any markings on the flange” (Jones 2001:19). It may be concluded with reasonable certainty that the recovered fuzes, particularly if made of copper rather than brass, are of Confederate manufacture. While the CSS *Georgia* naval water-cap time fuzes appear to be of Confederate manufacture, they are of the Alger pattern and are, essentially, copies of pre-war Federal fuzes.

Jones and Biemeck both present variations on Confederate naval water-cap fuzes. Biemeck suggests that the high quality of known examples of Confederate water-cap fuzes indicates production had likely been “...under the watchful eye of John M. Brooke or the Selma Naval Ordnance Works”; and Jones specifically mentions manufacture of at least one type at the arsenal at Selma, Alabama (Biemeck 2013:237). Several examples presented by Jones compare favorably with CSS *Georgia* fuzes (Jones 2001:19-21). Biemeck has recognized three basic patterns for CS Naval water-cap fuzes: “standard pattern,” “modified design” and “long range” (Biemeck 2013:236-238). CSS *Georgia* examples closely match Biemeck’s “CSA Alger Standard Pattern, Type 1” time fuze (Biemeck 2013:237).

A representative example of a CSS *Georgia* water-cap fuze was selected for examination and photography from among a limited number of such fuzes that have completed conservation, and it is presented here in Figure 6-397. This water-cap fuze was recovered separate from any IX-Inch Dahlgren shell during mechanical recovery (Artifact 1983.3, see shell above). A complete unused example of a water-cap time fuze would consist of four metal components: the copper main body, copper water-cap, lead safety patch, and, lead base plug. Example 1983.3 had the main body, water-cap and safety patch. No examples of the lead base plug have been identified from among the fuzes and shells. The water-cap of this fuze remains within the main

body. The main body of the fuze would have contained, within its hollow interior, the slow-burning composition that would have ignited the bursting charge within the Dahlgren shell. This main body has an overall length of 2.44 inches, matching both the Jones and Biemeck examples (see above). As already noted, the flanged head exhibits no observable stamps or markings as might be expected on a pre-war or Union Navy fuze. This head measures 1.25 inches in diameter with a flange thickness of 0.19 inch and has two square lug notches (spanner slots) on the perimeter to accept a wrench for threading the fuze into the shell. The top of the head has a recessed area, 0.75 inch in diameter, for accepting the lead safety patch and retains (not removed in conservation) the water-cap in a (presumably) threaded hole of 0.56-inch diameter. From below the water-cap, and down to the base of the main body, is a fuze channel that measures 0.44 inch diameter at the base. The exterior below the flanged head is threaded for the first 0.94 inch and has a smooth slightly tapered surface for the remaining 1.31 inches down to the discharge end of the main body. The water-cap that remains threaded within the main body is the essential component of the Cyrus Alger design. This water-cap measured 0.56 inch in diameter and has two square lug notches (spanner slots) on the sides, similar to those on the head of the main body but proportionally smaller. The top of the water-cap has a shallow flat recessed area measuring 0.37 inch in diameter, also similar to the safety patch recess on the head of the main body of the fuze but serving a different function (see below). At the bottom of the flat recess in the top of the water-cap are three small holes. These holes are the ends of flash channels that follow a crooked (zigzag) path through to the bottom of the water-cap and the interior of the main body. The two remaining metal parts of a complete fuze assembly, the safety patch and safety plug (missing) were made of lead. The missing safety plug would have been in the lower end of the main body to seal the fuze from the environment and to prevent an accidental detonation of the bursting charge if an installed fuze were prematurely ignited. When the shell was fired from a gun, the plug was knocked loose by the rapid acceleration exposing the powder train of the fuze.



Figure 6-397. Alger pattern naval water-cap time delay fuze from the spherical IX-Inch Dahlgren shell above, Artifact 1983.30.

At the opposite end of the fuze assembly the lead safety patch would have been set within the flat recess at the top of the fuze body thereby covering the water-cap and sealing the fuze. The safety cap would likely have had an attached pull-tab and would have had stamped markings (“10 SEC,” “15 SEC,” etc.) to indicate the burn time (time delay) in seconds. A number of lead safety caps were recovered with intact pull-tabs and/or discernable time delay marks (including Artifacts 2504.6, 2520.9, 2960.1, 3081.1, and 3129.1), a safety cap with intact pull-tab and clear time stamps is provided here as Figure 6-398. In addition to the four metal parts, a complete original fuze may have had a printed-paper label over the lead safety patch. Under the lead safety patch there would be, on top of the water-cap, a flash powder wafer and, below that, “mealed powder” (fast burning black powder of the smallest grain size) filling the crooked (zigzag) flash channels down to the final combustible component, a paper slow-burn fuze.

In combat the gunners would remove the lead safety cap from the Alger water-cap fuze before loading the IX-Inch Dahlgren shell in the gun. Upon firing the gun, the lead safety plug would be broken from the base of the fuze by inertial energy from the blast. The burning propellant charge of the gun would ignite the flash wafer which would transmit the burn almost instantly through the powder within the water-cap flash channels to ignite the timed slow burning paper fuze below. If, during the flight to target, the shell were to ricochet (skip) on the water the crooked (zigzag) path of the Alger water-cap flash channels would prevent water from splashing directly onto, and extinguishing, the slow burning paper fuze. In ship to ship naval combat the Dahlgren shell would, ideally, fully embed itself within the side of an enemy warship where it might be expected to do the maximum structural damage after the slow burning fuze reached the shell’s powder chamber, detonating the bursting charge.



Figure 6-398. Lead safety cap in place on the head of an Alger water-cap time delay fuze that retains an intact pull-tab and displays clear “10”/“SEC” time delay markings, Artifact 2357.1.

Similar to the Brooke rounds and the 6-pounders discussed below, the IX-Inch Dahlgren shell would have required a sabot for firing from the gun. However, only a single sabot for a 9-inch ball was recovered. Illustrated in Figure 6-399, it was still attached to a round placed backward into Cannon No. 5 to render the cannon unusable. Probably only still present because it was protected inside the cannon, it was recovered at CRL Texas A&M University in their attempt to remove the shell. Figure 6-400, a IX-Inch Dahlgren shell seated on its wooden sabot, shows what the shells on the CSS *Georgia* would have appeared. It is attached with thin iron bands that have been tightened or cinched down with twine. As stated at Civilwarartillery.com, “In the case of a smoothbore projectile a wooden sabot, made of poplar, basswood, linden, or other close grained wood, was used to hold the projectile with its fuze forward and in the center of the bore. Solid shot had the sabot attached with two crossed tin straps. If the wooden sabot was tied to a cartridge bag, the entire round was then referred to as fixed ammunition” (Civilwarartillery.com 2019).



Figure 6-399. Artifact 1621.1, the only wooden sabot recovered for a IX-Inch Dahlgren shell on the site. It was recovered when trying to remove a round placed backward into Cannon No. 5 to render the cannon unusable at the time of scuttling. Still in conservation.



Figure 6-400. Illustration of a “US 9” DAHLGREN CANNONBALL on sale at auction described as “One of the finest examples of a IX-Inch Dahlgren cannonball on its original twine is still wrapped around the sabot straps. Would have been fired out of a 9” Dahlgren smoothbore cannon. You will never find a better specimen in private hands! CONDITION: Very fine to excellent.” Sold at Auction on October 4, 2005 for \$3,600 (As presented at icollector.com 2019).

6.4-Inch Tennessee (Mullane) Bolts

The solid cast iron Tennessee (Mullane) bolts recovered during the project are of a design attributed to Capt. Lardner Gibbon, Confederate Army ordnance inspecting officer at the Tredegar Foundry during the first year of the Civil War. Previously, and commonly, referred to in modern references as ‘Mullane’ projectiles after their supposed inventor, period documents from the Civil War refer to projectiles of this design as ‘Tennessee’, ‘Tennessee Shell’ or ‘Tennessee Sabot’ etc. About Mr. Mullane, little information is available except that his application to the Confederate patent office was denied in preference to the 1856 U.S. patent of Dr. John B. Read (also credited as the inventor). Dr. Read’s patent bares similarities to the Tennessee design, but Read’s basic patent was for a wrought iron cupped sabot embedded within the base of a shell as opposed to the bolted-on copper disc that characterize the Tennessee. Recently (2003), Jack Bell published documentary evidence firmly establishing that it was Capt. Gibbon who had designed this type of copper sabot projectile (Bell 2003:398, 399). As with Mr. Mullane, little information is readily available regarding Capt. Gibbon. Following an incident where, in his capacity as ordnance inspector, he refused payment for Tredegar invoices on legal grounds. General Gorgas, C.S. Army Chief of Ordnance, who had authorized those purchases, had Gibbon transferred to Charleston, after which Gibbon was “...scarcely mentioned for the rest of the war” (Bell 2003:399).

The 6.4-inch Tennessee (ex: Mullane) projectiles from the CSS *Georgia* are solid cast iron bolts (non-explosive) intended for use against federal ironclads. The blunt end design would be expected to deliver maximum impact against the armor plate of those warships by directly transferring kinetic energy carried by the solid mass of the bolt. Projectiles of the Tennessee pattern, both bolt and shell, were made in a wide range of sizes with examples recorded in most calibers used by the Confederacy up to 10 inches. Within an individual caliber there may be considerable variation in design for both shells and bolts. What distinguishes a Tennessee projectile from among the numerous other artillery projectile designs of the Civil War is the sabot. Tennessee sabots were thick copper discs with a shallow rounded saucer (dish, bowl) shape, the convex surface of which was attached to the base of the projectile. Bell (2003) has identified two Tennessee sabot designs. Type I was an early design where the projectile had three wrought iron pins driven or cast into its base. These pins fit into three matching holes in the copper disc sabot. Besides being a difficult fabrication, the pins had a reputation for a tendency to shear off. In the Type II it was the base of the projectile that had three holes while the copper sabot had three protruding studs cast into the convex surface. These copper studs would be inserted into holes on the base end of shell or bolt. The copper studs were much thicker than the iron pins, and found to be less likely to shear (Bell 2003:400). The purpose of the pins of Type I and the studs of Type II was to transfer to shell or bolt the rotation that had been imparted to the sabot by the guns rifling, giving stability to the projectile during its flight to target. The sabots of the 6.4-inch bolts recovered from the CSS *Georgia* site are of Bell's copper studded Type II variation.

The heavy 6.4-inch bolts recovered during the project closely resemble a specific example identified by Bell as a "CS 6.4-inch Tennessee Type II Long Flat Top Bolt" (Bell 2003:416). Of the 49 Tennessee bolts recovered, none had attached sabots. Curiously, only one Tennessee sabot was recovered and that one bent and distorted. At the time of this writing none of the bolts had entered conservation and from among those in wet storage a representative example (Artifact 2416.5) was selected for examination and photography, and is presented here as Figure 6-401. This solid cast iron bolt may be basically described as primarily cylindrical with one end squared (base) and one blunt. Measured at 11.2 inches long, the blunt top of the bolt is nearly flat with a very minor convexity that transitions to the side with a sharp angle at about 2.5 inches from the center. Below the blunt, slightly convex, top, the side gradually increases in diameter in a gentle curve to the top of the first bourrelet. This bourrelet is 6.37 inches in diameter and, at from 6.75 to 7.94 inches above the base, is the top portion of the cylindrical main body of the bolt. Below the 1.19-inch wide first bourrelet the bolt continues at a reduced diameter of 6.22 inches (0.15 inch, 0.125 inch less than the bourrelet) to the top of the second bourrelet. Matching the upper bourrelet, the lower is also 6.37 inches in diameter and, at the same 1.19-inch width, continues at that diameter down to the base of the bolt. The flat base of the bolt is plain except for four holes. There is a central hole (presumably threaded) 0.5 inch in diameter that retains a broken portion of the iron fastener (bolt) that would have secured the sabot. Surrounding the central fastener hole are three 0.875-inch diameter holes intended to receive the three studs of the copper sabot. These three holes are spaced equidistant from each other with their centers at 1.56 inches from the center of the bolt hole at the center of the base of the bolt.



Figure 6-401. Solid cast iron Tennessee bolt with sabot (modern nut and bolt on lower side of projectile are for electrolytic reduction as part of the conservation process), Artifact 2416.5.

It is the stud holes in the base of the bolt and the studded copper sabot that specifically identify a munition as being among Capt. Gibbon's Tennessee projectiles. The solid copper Tennessee sabot (Artifact 3200.1) found separate from any bolt has received full conservation. This solitary sabot was examined and photographed, and is presented here in Figure 6-402. Although distorted, this one example is basically a 6.25-inch diameter disk, 0.625 inch thick. That disk was once of a shallow 'saucer' or 'dish' shape, convex on the top (studs) and concave on the bottom. The concave bottom of the examined sabot is plain, with no features except a 0.75-inch diameter hole at the center. This hole would have accepted the bolt that secured the sabot to the base of a projectile. On the convex (top) surface of the sabot are the three studs of about 0.75-inch diameter that inserted into the correlating holes on the base of a bolt. As with the holes on the projectile, the centers of the studs are a uniform distance from the center of the disk (1.75 inches) and spaced equidistant from each other. The studs are circular and somewhat conical, tapering narrower from base to flat top. Additionally, the sides of the studs closest to the center of the disk are shorter (0.5 inch) than the opposite sides closest to the outside of the disk (0.69 inch), likely representing a compensation for the convex curvature of the top of the sabot. It should be noted that the measured distance from sabot center to studs (1.75 inches) is 0.11 inch greater than the measured distance from center of base to center of holes (1.56 inches) on the projectile. This is perhaps due to the distorted state of the sabot affecting the measurement, but it is also possible the examined solitary sabot (recovered separately) does not match the specific Tennessee bolt examined and measured.



Figure 6-402. Tennessee pattern solid copper sabot with its three distinctive studs, Artifact 3200.1.

It has been suggested that the distorted shape of the examined sabot is due to it having been on a bolt that was fired from a gun (6.4-inch Brooke). However, an examination of photographs of various Tennessee bolts and shells indicates the distortion is due to forces other than those exerted by discharge from a piece of artillery. In three photographic examples of 6.4-inch Tennessee projectiles specifically identified by Bell as having been fired, the attached sabot had been thoroughly and completely flattened flush against the base of the projectile, eliminating the original saucer/dish shape and showing none of the distortion apparent on the recovered example (Bell 2003:413, 419, 421). In the flattening of a Tennessee sabot by the pressure exerted on it by the black powder detonation in a gun the overall diameter of the copper sabot disc is enlarged to engage the rifling of the gun's barrel. The examined sabot displays a smooth edge with no obvious signs of having engaged the lands and grooves of a rifled gun. In two of the three photographs of fired projectiles presented by Bell the effect of rifling on the Tennessee sabot is clear. Additionally, in another photograph of an unfired Tennessee projectile the sabot has not been flattened (retaining significant separation between outer edge of sabot and base of projectile) and, yet, this unfired sabot displays a bend or distortion very much like that of the recovered example (Bell 2003:420).

Capt. Gibbon's Tennessee projectiles were an important addition to Confederate munitions in the first year of the war. In a letter to Lt. John Brooke from Lt. Catesby R. Jones (commanded CSS *Virginia* against USS *Monitor*) from March 1862, Jones stated: "the best shell we have is an Army shell (inverted saucer) invented by a Tennessean..." (Brooke 2002:62). The value of the design to the armed forces of the Confederacy increased as the war progressed. Of great importance was the ease of manufacture of the Type II Tennessee projectiles. Unlike many of the more complicated projectiles of the period, the iron and copper parts could be cast separately

and easily assembled. Small local foundries incapable of manufacturing the more complex designs could produce the Type II. As a result, the use of Capt. Gibbon's Tennessee projectiles increased as the logistical system of the Confederacy declined toward the end of the war.

Grape Shot and Canister

Two closely related munitions recovered from the CSS *Georgia* site and listed on the artifact inventory are 'Grapeshot' and 'Canister'. These are munitions in which a larger gun fires a massed assembly of smaller projectiles (typically lead or iron shot) at intermediate or short-range targets. These masses of shot effectively transform a piece of artillery into a giant shotgun.

Grape shot was an assembly of solid cast iron shot bound together as one munition. This was accomplished in two configurations: 'Grape Stands' and 'Quilted Grape'. Quilted grape consists of a base plate and central pole around which three to five staggered tiers of iron shot are bound together inside of a close fitting heavy cloth cover. The cloth cover was bound to the shot with cord or wire tightly secured outside the cloth in a diagonal pattern between the shot. The overall finished shape of quilted grape provided the name for this class of munition as its appearance had a resemblance to a bunch of grapes.

A Grape stand was a more recent development that was heavier and more expensive to produce than quilted. A typical grape stand had fifteen iron components: nine solid shot, two plates, two iron rings, nut and bolt. The shot were bound in three tiers between top and bottom plate with the iron rings between the tiers to hold the shot in place when the bolt was secured through the plates and along the centerline of the tiers of shot (Figure 6-403). Shot, plates and rings were, of necessity, carefully fashioned in diameters to match the bore diameter of the gun for which they were intended. The end plates had depressions on their interior surfaces to cup and hold the shot. These plates were made of wrought iron rather than cast so as not to shatter when fired. Both quilted grape and grape stand were designed to break apart when discharged from a gun. While the relatively smaller solid iron shot of grape were not expected to penetrate the hulls of warships or do serious structural damage, grape served a dual purpose in naval warfare. As with use in field combat, grape served as an anti-personnel munition, although, relative to land engagements, the effect in naval warfare was diminished by protection afforded by solid gunnells, hammock netting and the fact that a significant portion of an opposing crew might be serving below deck on traditional warships, or, by the solid armor of the new ironclads. As an additional purpose in naval warfare grapeshot was of sufficient size to cause severe damage to rigging (lines, blocks, spars and sails), guns, gun carriages and accessory equipment, potentially affecting the outcome of an engagement with the un-armored wooden warships that were still a standard of navies in the mid-nineteenth century (Bell 2003:99, 100; Biemeck 2013:538, 539).

Canister is a short-range antipersonnel munition. It was typically a cylindrical can usually made with thin sheet metal sides and filled with lead or iron shot and packed with sawdust between the shot for solidity and to improve dispersion when the round was fired. The top and bottom ends of a round of canister might be made of sheet metal, wood or iron plate. While lead balls were common for use in smaller field pieces, large caliber guns would have shot of cast iron. Apparently made for guns of most sizes, it has been documented that U.S. Navy monitors carried canister for their large guns including IX-Inch and XV-Inch Dahlgrens. Canister was a comparatively simple but effective munition. When fired, the sheet metal can burst open and the shot spread out in a conical spray of lethal high velocity metal. Bell has noted, "By the beginning of the Civil War, canister was recognized as the most deadly form of antipersonnel weapon" (Bell 2003:90).



Figure 6-403. Illustration of a “US 32-POUNDER STAND OF GRAPE with nine iron balls surrounded by two rings and the top and bottom plate and center bolt.” Sold at Auction October 4, 2005 for \$3,100 (as presented at icollector.com 2019).

With regard to the identification of canister and grapeshot in the artifact inventory, there appears to have been some confusion as to terminology during the fast-paced mechanized recovery phase of the project. For example, items on the inventory are listed as “Grape Shot Canister” (Artifact 2588.1), “Grapeshot Canister” (five examples), “Possible Grapeshot” (three examples), and others where the entry for description is followed by a question mark. It is entirely understandable that, in consideration of the fast pace of the operation and the vast numbers of artifacts recovered, individuals without expertise in Civil War ordnance made inventory entries that were unclear regarding closely related munitions. Following analysis of conserved artifacts these discrepancies were resolved and the provenience of the two types were resolved. And it is clear, that there is an abundance of related artifacts, and that there are complete grape stands and that canister was present. It may be expected that most of the approximately two hundred pieces in the artifact inventory are individual iron shot and other component parts for grape or canister. It is certain that a number of complete grape stands were recovered as evidenced by photographs taken during the recovery phase, an example of which is presented here in Figure 6-404. An examination of the artifact inventory suggests perhaps a provisional total of 16 complete grape stands (Artifacts: 2069.1, 2069.2, 2069.4, 2381.5, 2396.2, 2582.1, 2588.1, 2647.2, 2660.1, 2664.1, 2692.9, 3190.1, 3238.1, 3262.1, 3264.2, and 3265). Of these 16, none had completed conservation and only one (Artifact 2069.1) was in the process, undergoing mechanical cleaning at the time of this writing.



Figure 6-404. Numerous complete stands of grape shot were also recovered, as well as partial stands and loose shot.

The grape stand undergoing conservation (Artifact 2069.1) was measured and photographed as the only complete stand that had been cleaned and mostly disassembled and available for examination. It is presented here as Figure 6-405. As can be seen in the photograph the two end plates remain connected to the bolt. The stand had the standard nine matching shot. These measured 2.85 inches in diameter, closely conforming to the maximum (2.90 inches) and (considering surface lost to corrosion) minimum (2.86 inches) diameters for 32-pounder (6.4-inch) grape as presented by both Bell and Biemeck based on Confederate specifications (Bell 2003:100; Biemeck 2013:539). It should be again noted that for grape, both stand and quilted, the shot "...had to be cast precisely to fit within the diameter of the projectile" (Bell 2003:100). The top and bottom wrought iron plates were 0.51-inch thick and 6.125 inches in diameter. Both plates had the interior indentations to help secure the top and bottom tiers of shot; these indentations measured 0.36 inch deep and 1.625 inches in diameter, conforming to a segment of a sphere the diameter of the shot. The metal of the two rings of this grape stand had been lost to graphitization; however, one of those rings was replicated with a casting made from the concretion that had formed around it. That casting measured 6 inch in diameter with a cross

section measuring from 0.45 to 0.55 inch. The bolt that held the assembly together measured 8.75 inch long with a 0.5-inch diameter. The nut that remained threaded to the bolt measured 1.0 inch square and 0.5 inch thick. The head end of the bolt, which remains fused to the bottom plate, appears to have been beveled and countersunk to provide a flat/flush surface to the bottom of the bottom plate.



Figure 6-405. Grape stand in the mechanical cleaning stage of conservation, showing end plates, bolt, reconstructed ring and three of the nine shot, Artifact 2069.1.

While the presence of grape stands is a certainty, there is yet no specific and definitive evidence of quilted grape. The organic components of cloth, cord and perhaps wood are far less likely to be preserved and recovered than the entirely iron components of a grape stand. That quilted grape was a part of the CSS *Georgia's* munitions may be likely as it has been stated that the Navy (Union?) preferred quilted grape and used it extensively throughout the war (Biemeck 2013:538, 545). Quilted grape was, although complex in its own way, simpler to manufacture than a grape stand.

Although the possibility of quilted grape on the CSS *Georgia* remains speculative, the presence of canister, however, may be inferred despite the lack of any complete rounds. That an example of a complete round of canister was not recovered from the site may, as with the organic components of quilted grape, be attributed to the thin sheet metal used in making the rounds. Sheet metal tends to suffer severe degradation in a marine environment and, if surviving, might have suffered severe damage or destruction during historic salvage operations or other heavy disturbances such as dredging. That canister was aboard the CSS *Georgia* may be inferred from the presence of small iron shot that does not conform to the necessary standard sizes of grape specified for large caliber guns. While the exact number of such shot will be known following the final phases of recovery and the conclusion of conservation, examples that have undergone conservation were available for accurate measurement and provenience for these is presented in Figure 6-385 showing location. A group of seven smaller iron shot recovered together were

selected as a representative sample (Artifact 2075.4), a similar set of four shot (Artifact 2074.5) may be seen in Figure 6-406. These seven shot measured from 2.02 inches in diameter (two examples) at the small end to 2.41 inches for the largest, with only the two smallest having the same diameter. The shot in canister did not require the specified and standardized uniformity of grape. While the can that held the shot would be fabricated to close tolerances to fit the bore of a specific gun, the shot within the can could be of any smaller size. Surviving examples of both 6.4-inch and 9-inch Confederate canister rounds are presented in Bell, who specifically mentions their use in the 6.4-inch Brooke and IX-Inch Dahlgren (Bell 2003:94, 96). Of interest in Bell's text on 6.4-inch canister, he notes that a canister in this caliber was recovered from the CSS *Neuse* in North Carolina (Bell 2003:94). Of greater interest, Bell records that the iron shot in both 9-inch canister and 32-pounder (6.4-inch) canister were 2.06 inches in diameter, a close match to the 2.02- to 2.41-inch diameters of the measured small iron shot from the CSS *Georgia* (Bell 2003:96).



Figure 6-406. Examples of small iron shot indicative of the presence of canister rounds, Artifact 2074.5.

6-Pounder Shot

Warfare in North America saw the use of 6-pounder smoothbore guns from the Colonial era through the end of the Civil War. In the years following the War of 1812 until 1841, a variety of 6-pounder models (or patterns) were produced by American foundries for the military. These smoothbores were predominantly made of cast iron. In 1841, the U.S. Army adopted a standardized design for the 6-pounder field gun to be produced in bronze. The model 1841 remained the standard pattern into the Civil War. Highly regarded as the workhorse of field artillery in the war with Mexico (1846 to 1848), early in the Civil War the 6-pounder was found to be insufficient for field service against larger 'modern' guns such as the 12-pounder smoothbore 'Napoleons' introduced in 1857. The significance of this change may be seen in the decline in field use of the 6-pounder by Confederate armies by the percentage use of those guns in three major battles of the first three years of the war.

At First Manassas (Bull Run) in 1861 smoothbore 6-pounder field guns comprised nearly three quarters (41 guns, 74.5 percent) of the Confederate artillery, at Shiloh in 1862 6-pounders

accounted for slightly more than half (58 guns, 53.2 percent), and, by Gettysburg in 1863 Lee's Army of Northern Virginia fielded only one 6-pounder out of 272 guns (0.3 percent). It is recorded that in early 1863 General Lee sent almost all his bronze 6-pounders to be melted down and the metal re-cast as 12-pounder Napoleons (Daniel and Gunter 1977:12). While no longer suitable for use in the field during major battles, Confederate land and naval forces would make use of any available artillery, including obsolete iron smoothbore 6-pounders.

Included among the artifacts recovered from the CSS *Georgia* were solid shot presumed to be for the 6-pounder gun, Cannon No. 1 that had been located east of the East Casemate. These shot are represented by Artifact 4001 and Artifact 3264.1 in the inventory. Figure 6-407 shows provenience of all recovered 6-pounder shot. Artifact 4001 is a single isolated piece of solid shot (Artifact 4001), remarkable in that it is the only isolated 6-pounder shot recovered. Artifact 3264.1 (Grab G-620), however, was one of the truly extraordinary finds: an intact and largely complete wooden box containing 6-pounder shot. When the heavily encrusted board covering the box was removed it was revealed that the box contained fourteen iron 6-pounder shot bound in a concretion, as can be seen in Figure 6-408, a photograph taken soon after the box had been deposited on the deck of the barge.

Following recovery, the box of shot was placed in wet storage pending conservation. At present the box and its contents have reached various points in the conservation process. Mechanical cleaning has been completed for all parts of the assemblage and the iron shot has finished conservation. During mechanical cleaning the box was found to contain not only iron 6-pounder shot but also an accompanying wood sabot for each, as can be seen in Figure 6-409. Conservation for the wood box and wooden sabots is ongoing and, presently, unavailable for direct examination.

The box has been measured at 24.75 inches long and 11 inches wide with a height varying between 7.25 inches on a better preserved portion and 6 inches where more eroded. The approximately 11-inch wide by 2-foot long board that covered the upper portion of the box when it was deposited on deck by Grab G-620 appears to have been nailed to the sides. There is no evidence for an opposite board of similar dimension. The sides of the box are particularly well preserved along the edge that adjoined the surviving cover board. Photographs of those edges appear to show nail holes that should match similar holes on the cover board. The boards that formed the sides of the box were joined at the corners with mortise and tenon construction, the two boards of the short ends having small tenons that fit with large tenons of the long side boards. While the edges of the side boards that adjoined the cover board are smooth and well preserved, the opposite edges of those side boards are entirely eroded and offer no definitive indication of their original width or the original height of the box. It may be that the munitions box was taller, and potentially much taller than the measured maximum of 7.25 inches, particularly if the box had originally contained complete fixed rounds with attached powder charges. That the extant covering board may have been the bottom of the box rather than the top may also be indicated by the lack of hinges and hasps that might be expected for a lid offering ready access to ammunition. It should be stated, however, that there is no clear indication of attached powder charges, and no cloth or cord was observed adjoining or adhering to the sabots during mechanical cleaning. Some cordage (not necessarily indicative of powder charges) may have been observed in preserved dunnage that filled space between shot and sabots, but this awaits further study. Of additional note, the well preserved 'top' of the box versus the missing 'bottom' board and severely deteriorated 'bottom' edges of the side boards offers strong evidence that this munitions box had originally been inverted (upside down) relative to its recovered orientation. The 'flipping' of the box to a shot-side-up orientation may be explained by gradual widening of the deeper channel slope by erosion following dredging of the navigation channel adjacent the area of the CSS *Georgia's* remains.

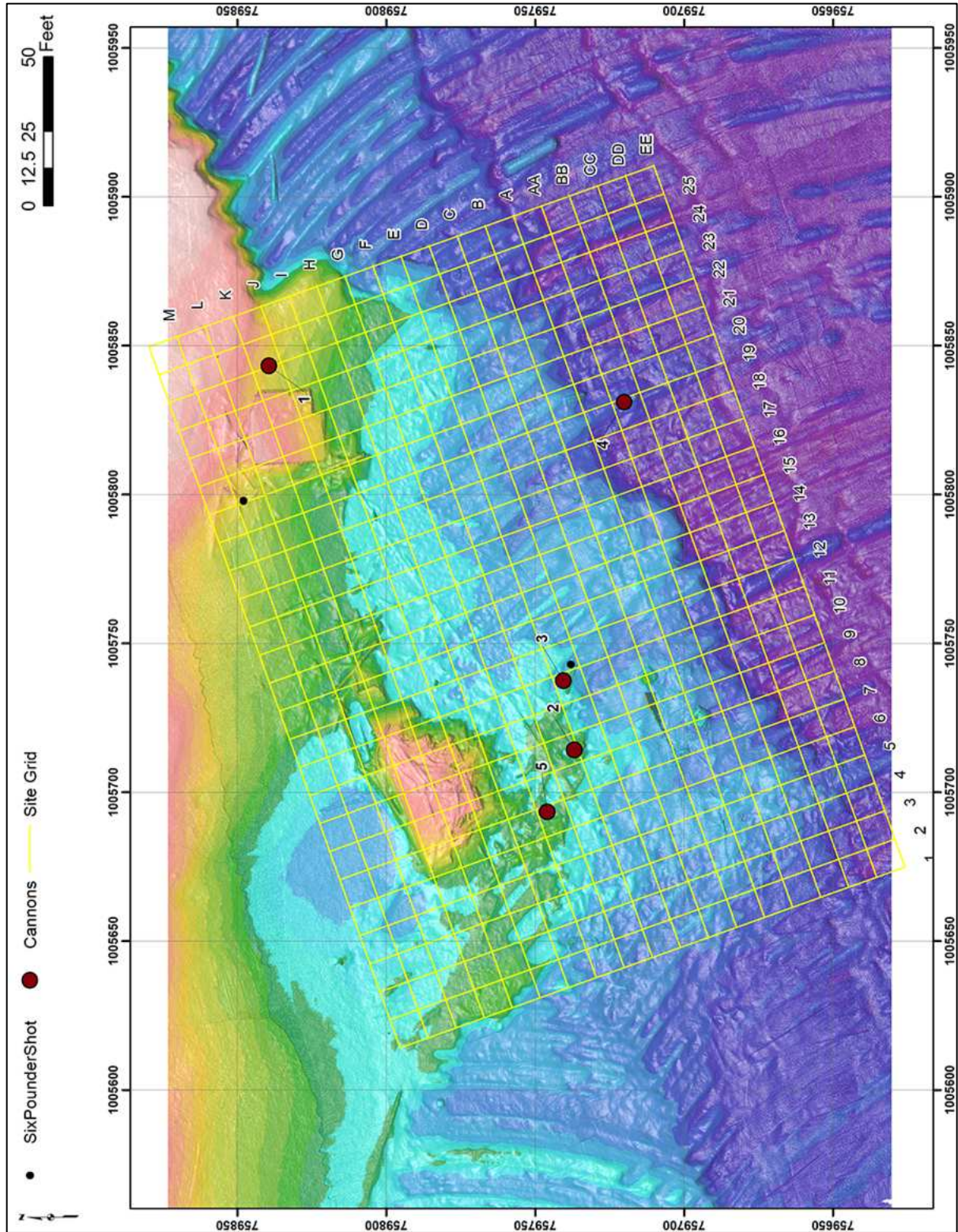


Figure 6-407. 6-pounder shot locations. The box of shot was located just north of the East Casemate near the 6-pounder cannon.



Figure 6-408. Wooden box at time of recovery with cover removed revealing fourteen 6-pound shot, Artifact 3264.1.



Figure 6-409. 6-pound munitions case following conservation with shot and wood sabots revealed, Artifact 3264.1.

The 14 solid iron shot from the box have completed conservation and were available for examination. One representative example (Inventory 3264.1.6B) was measured at 3.5 inches in diameter and was noted to have a visible mold line around approximately three quarters of its circumference. The remaining 13 shot were of similar size and appearance. The measured diameter may be less than the original standard diameter for 6-pounder shot (3.58 inches) due to corrosion loss. Similarly, an original weight for a “6-pounder” of 3.58-inch diameter would have been 6.1 pounds, while this example weighed 3.83 pounds. Four other conserved shot from the box (3264.1.2B, 3264.1.4B, 3264.1.7B and 3264.1.10B) weighed between 3.99 pounds (.2B) and 5.41 pounds (.10B). This substantial weight loss is likely due to graphitization of a portion of the cast iron in each 6-pounder shot. Each of these solid cast iron shot were nested in a matching sabot within the munitions box. Only small remnants of the sheet metal strapping that would have secured shot to sabot were recovered during conservation. Comparative examples recovered from a nearby freshwater location had them. There have been recoveries of 6-pounder shot, each complete with sabot and two sheet metal straps wrapped over the projectile and secured to the wood sabot with square nails. These recoveries were reportedly made from the Oconee River at Milledgeville, Georgia (State Capital 1804-1868; Dickey and George 1993:28), and period references support the likelihood of the Oconee River recovery, recording that Col. William Hawly’s 3rd Wisconsin Infantry threw “170 boxes of fixed artillery ammunition” into the Oconee River in November of 1864 (O.R., 1902:207, 212, 248-49). Presented in Figure 6-410, an example of one of the sabots recovered from the Oconee River closely resembles a type of sabot recovered with the 6-pounder munitions box.



Figure 6-410. Photograph of a 6-pounder solid shot recovered from the Oconee “Professionally conserved...Tin straps very good to fine and wood sabot in fine condition.” Sold at Auction October 4, 2005 for \$3,600 (As presented at icollector.com 2019). Note it has cylindrical-type sabot.

The sabots found mated to each of the fourteen 6-pounder shot were recovered from within the concretion that filled the interior of the munitions box. The sabots are generally well preserved with some apparent material loss and possible distortion. The sabots came in two distinctly different type. Both types and the whole assemblage of fourteen sabots may be seen in Figures 6-411 to 6-143, a photograph taken after mechanical cleaning. The predominant type, with eleven examples, may be described as a tall, truncated cone, while the remaining three sabots may be described as short and cylindrical. Both types were lathe turned and both had flat bases opposite a cupped end that closely conformed to the shape of 6-pounder shot. The tall sabots had a base end that measured approximately 2.25 inches in diameter; that diameter expanded to c.3-inch over a c.2.75-inch rise to the thick lip of the shot cup (all measurements are approximate and based upon photographs as the sabots were in conservation and unavailable for direct examination). At the lower end of each tall sabot are three grooves that would have accommodated cord used to secure the powder charge to form a complete round of fixed ammunition. The three examples of short sabot were basically cylindrical in shape with vertical sides. These short sabots measured only about 1.25 inches tall but with a larger diameter, at c.3.37-inch, than the maximum for the tall sabots, and, closer to the measured 3.5 inches in diameter of the 6-pounder shot. With the shorter stature, it is perhaps natural the short sabot design incorporated only one groove for securing the powder charge. It is the short sabots from the CSS *Georgia* munitions box that that bare a close resemblance to comparative examples recovered from the Oconee River at Milledgeville, Georgia, and it may be appropriate to speculate a common origin. Both tall and short sabots appear to have noticeable differences in comparison to others from the same type within the group. Whether these differences are due to their original manufacture or to deterioration and distortion from more than a century of submergence is presently uncertain. As with other artifacts and artifact groups, the completion of conservation will allow detailed examination of the sabots and a study of the materials and construction of the rare and extraordinary 6-pounder munitions box.



Figure 6-411. The 14 6-pounder sabots after conservation, showing both predominant tall conical type and the three examples of the short cylindrical form, Artifact 3264.1.



Figure 6-412. 6-pounder shot with one of the eleven tall conical sabots, Artifact 3264.1.3AB.



Figure 6-413. 6-pounder shot with one of the three short cylindrical sabots, Artifact 3264.1.2AB. Compare this sabot with the complete example shown in Figure 6-408 above.

Powder Tanks

A number of Powder Tank components were recovered from the site. Employed to safely contain and store gunpowder in the form of charges for the guns or cartridges for small arms, Powder Tanks were generally square bronze and copper boxes of varying capacity. Illustrated in Figure 6-414, the tank tops had two handles along with a central, circular lid that was hinged on one side with a screwable toggle that tightly fastened the lid to the box. The lid was fitted with a gasket that sealed onto a lip on the circular opening. As stated in the 1866 Ordnance Instructions for the United States Navy:

“The powder-tanks containing charges for each class of guns are to be stowed on their sides, with the lids next the alleys and hinges down, near the magazine scuttles through which these charges are to be delivered; the charges for “ordinary firing” nearest the scuttle. When tanks are emptied they are to be stowed on the upper shelves in order that the powder may be kept, as much as possible, below the waterline.

The tanks are never to be opened unless by special order, or when powder is actually required for service; and then no more of the lids are to be unscrewed than is necessary for immediate supply. The strictest attention to this regulation is required of the Gunner, as experience has proved that the preservation of the powder in good condition depends upon the entire exclusion of damp air” [U.S. Navy 1866:Part 1, Pg. 9, 11].



Figure 6-414. U.S. Navy Powder Tank, 16-x-14 inches, Copper Alloy. NHHC-1990-129-A, Artifact Collection photograph number (as presented at Flickr.com 2019).

Their provenience illustrated in Figures 6-415, numerous tops and bottoms of the powder tanks were recovered, specifically 25 complete tops and 11 complete bottoms. Curiously, the sides or wall were not present on any of the powder tank components. It has been speculated that these may have been pure copper and were salvaged with the bronze tops and bottoms thrown back overboard. However, it seems that the bronze would be valuable as well. It is also, possible but less likely the ALL(?) copper sides have disintegrated.

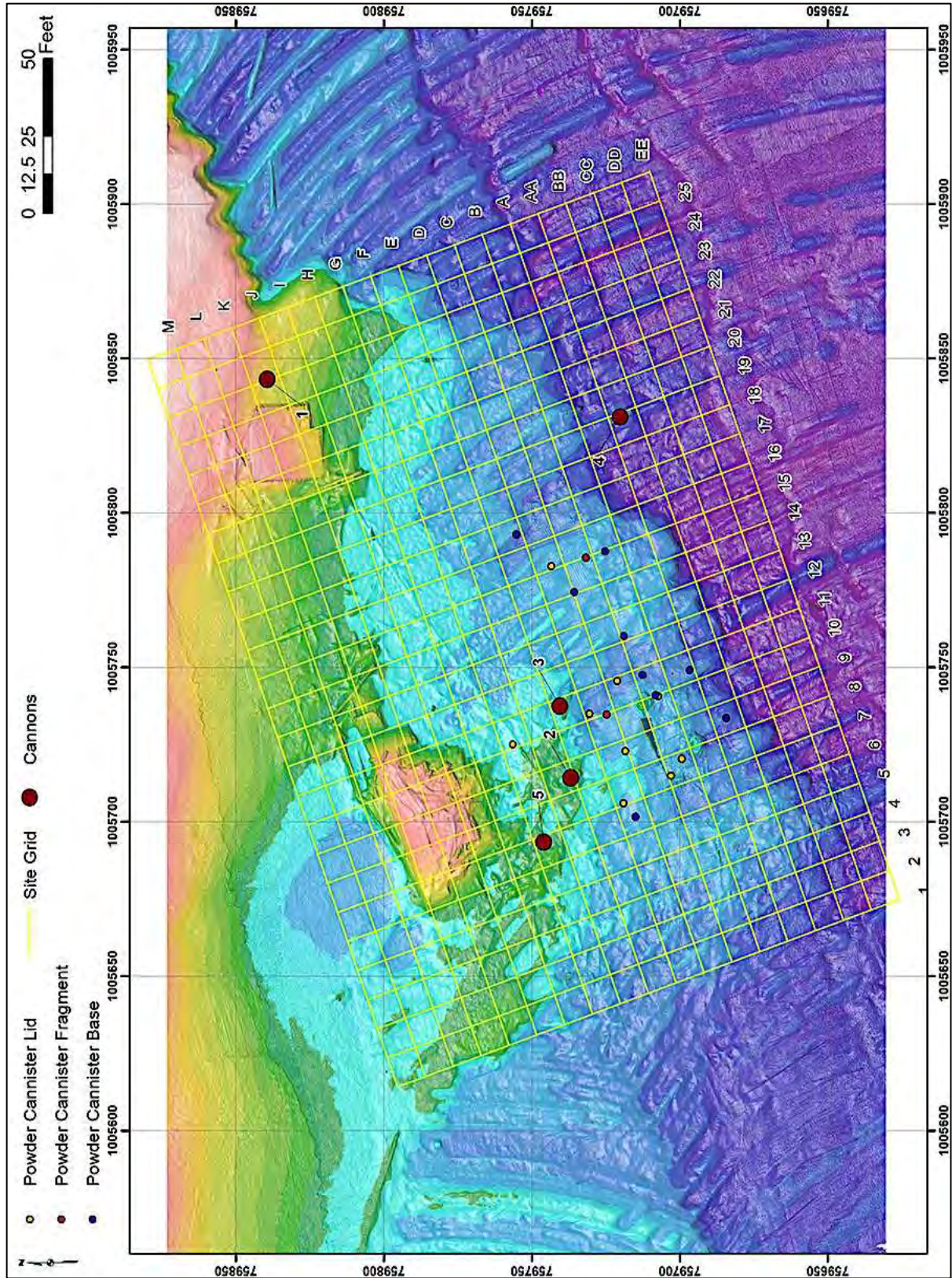


Figure 6-415. Provenience of the 25 complete powder tank tops and 11 complete recovered.

Figures 6-416 to 6-418 shows Artifact 3288, a complete Powder tank top with handles and the circular opening and the still extant, hinged lid. Note the rubber-gasket lined channel on the lid that seats onto and seals over the raised lip around the circular opening. Figure 6-419, Artifact 268, is a complete powder tank base.



Figure 6-416. Powder tank top showing the handles and the circular opening and the still extant, hinged lid. Note the rubber-gasket lined channel on the lid that seats onto and seals over the raised lip around the circular opening.



Figure 6-417. Powder tank top showing the handles and the still extant, circular hinged lid with closing screw toggle, and handles. Artifact 3288. Compare this with Figure 6-415 above, an exact match.



Figure 6-418. Powder tank lid toggle screw employed to tighten lid to top of tank. Artifact 3288, an exact match with that seen in Figure 6-413 above.



Figure 6-419. Powder tank base interior showing the raised lip that the side would have soldered to.

SMALL ARMS

Unassociated with the cannon, but still in the Arms Group, numerous small arms including a mostly complete pistol, eight Enfield bullet cartridges, 90+ bullets of varying caliber for pistol and rifle, two bullet molds, two gunflints, and two sword and five bayonet hilts were recovered. Table 6-615 is from the archival study which illustrates the known small arms that were originally aboard. Figure 6-420 is the location of the actual small arms recovered.

Firearms

Of the 120 firearms inventoried aboard the CSS *Georgia* in 1863 (Table 6-15), to date none have been found. A single shot either percussion or flintlock pistol, Artifact 3263.1 was recovered, but this type of weapon does not appear on the inventory. Although there is no mention of single shot pistols being standard issue to the Confederate soldiers as seen in the inventory the use of non-standard issue weapons is not unheard as the Confederate military used whatever was available and soldiers often utilized their own personal, non-issued weapons (Coggins 2004:5). The absence of the other pistol and rifle types in the artifact assemblage is not surprising, as these were most likely wanted and easily carried by the abandoning crew members.

At this time, the wooden handle and brass components of the pistol are undergoing conservation treatment. A more in depth analysis will be possible once all conservation efforts are completed and the pistol is reassembled. As seen in Figures 6-421 to 6-424, the brass hardware and wooden handle are present but the barrel, hammer and lock plate are missing, making definitive identification of the caliber and model difficult.

The pistol measures 295 millimeters in overall length and 39 millimeters wide at the stock where the barrel would have been. There is metal reinforcement along the bottom of the handle all the way to the trigger guard, and along the back, terminating where it would have been connected to the barrel, as seen in the figures above as well as the pre-conservation X-ray seen in Figure 6-425. The brass band that wrapped around the barrel and its supporting hardware are present. The band is 18 millimeters, the piece connected to the band is 50 millimeters long by 9 millimeters wide and the unconnected piece measures 74 millimeters long by 7 millimeters wide.

Table 6-15. List of Small Arms on Board the CSS Georgia, July 17, 1863.

19 Maynard rifles
30 Enfield rifles, with saber bayonets
50 belts, cartridge boxes, etc.
50 cavalry pistols
21 revolvers (Colt)
37 cutlasses
39 boarding pikes
1200 musket caps
500 pistol caps
400 Maynard caps
300 revolver cartridges
400 Maynard cartridges
800 Enfield cartridges
500 pistol cartridges
5 blue lights
5 rockets

Source: Swanson and Holcombe 2007:83

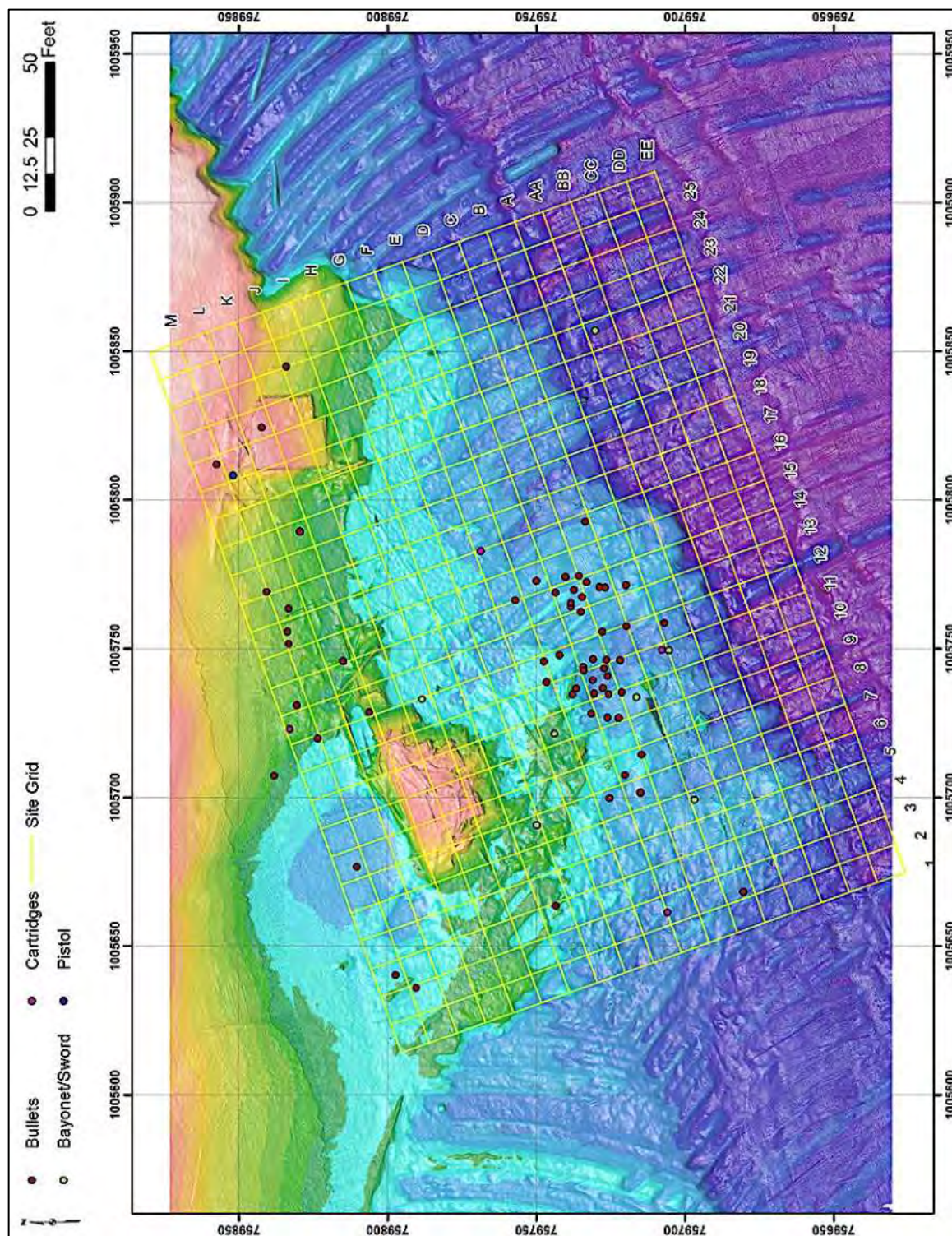


Figure 6-420. Provenience of all small arms recovered on the site.



Figure 6-421. Artifact 3263.1. Side view.



Figure 6-422. Artifact 3263.1. Opposite side view.



Figure 6-423. Artifact 3263.1. Bottom view.



Figure 6-424. Artifact 3263.1. Top view.

As seen in Figure 6-426, a cast was created at CRL of the area where the breech and lock plate would have been exposed, and depicts the internal workings of the now-absent lock plate. A comparison between Figure 6-426 and 6-427, a lock plate from a 1842 percussion pistol, may indicate that the recovered pistol is in fact a percussion pistol.



Figure 6-425. Pre-conservation X-ray image of the pistol.



Figure 6-426. Internal mold that depicts the internal workings of the now-absent lock plate.



Figure 6-247. Internal view of lock plate from working 1842 percussion pistol (image courtesy of *Guns Magazine*).

Bullets and Cartridges

Of the nearly 2000 small arms round shown in Figure 6-421, 153 rounds of varying caliber and make were recovered from the *CSS Georgia*.

.577 Caliber Enfield

To date, 42 smooth and three 3-ring .577 caliber bullets have been identified as being used by the Enfield muzzle-loading rifle. The two bullets seen in Figures 6-428 and 6-429 are variants of Minie Balls recovered on the site.

Rifled firearms require a tight fit between the bullet and the bore of the barrel, in order to engage the rifling twist. This twist produced better accuracy and range but created an inherent flaw in all muzzle-loading firearms, slow reloading speeds. Early projectiles were often hammered down the barrel using a specialized ramrod and mallet (Coggins 2004:26). Named for its inventor, Claude Minie, the Minie ball was a later development that countered the inherent problem of muzzle loading rifled firearms. This hollow expanding bullet was slightly smaller than the barrel bore, and had a hollow concavity in which a plug was placed. At the time of firing, this wooden plug would be forced up the bullet, expanding it and engaging the rifling of the barrel (Dougherty 2009:1-2). Early renditions were plugged with lead, but this proved to be inconsistent. In later editions, the lead plug was replaced with soft wood. Figures 6-430 and 6-431 below shows the flat hollow end of an Enfield Minie ball with the plug engaged and with the plug removed.

The conical shape and concavity of the bullet were accomplished by machine pressing a slug of lead between two punches. For the bullets manufactured in England, the punch that formed the concavity was often engraved with raised lettering as a way to check for wear. These bullets measured 26.5 millimeters long by 13 millimeters wide. Several of the smooth bullets located show a molded “57” on the inside, as seen in Figure 6-432, indicating that at least a few rounds were purchased from England.



Figure 6-428. Recovered .577 caliber Minie Ball bullets; Artifact 2104.4.



Figure 6-429. Recovered .577 caliber Minie Ball bullets; 2104.4(top) 2599.2 (bottom).



Figure 6-430. End of an Enfield rounds with wooden plugs in place; artifacts number 2104.4.



Figure 6-431. End of an Enfield rounds with wooden plug removed to illustrate the concavity; Artifact 2104.4.



Figure 6-432. "57" stamped on the inside of a .577 smooth bullet; Artifact 2056.1.

The discovery of a probable bullet mold seen in Figure 6-433 indicates that the sailors and/or soldiers aboard the ship were making smooth Enfield bullets. Only half of the 4-inch long bronze (?) mold has been found, but the shape of the round is clearly visible. Additionally, the internal measurement is 15-x-33 millimeters, nearly matching some of the rounds recovered. There is no raised ring on the inside of the mold indicating it produced smooth .577 rounds. However, the concavity press has not been found.

The three-ring variant Enfield bullets share the same dimensions as the smooth Enfields, but are of Union manufacture, intended for the .58 Caliber Springfield rifles (Thomas and Thomas 2013:38). They measure 26.5 millimeters long by 14.5 millimeters wide. The bullets were manufactured in the same way, but the molds themselves differ to accommodate the three rings. Union manufacturers also marked their bullet press, often with a "US" or a star (Thomas and Thomas 2013:40), however no markings have been found in any of the three ring variants to date.



Figure 6-433. Bullet mold for and Enfield round; Artifact 2480.8.

Maynard

Breech loading firearms were the preferred weapons aboard a ship where space was limited, as they were smaller, and faster to reload than muzzle loading rifles. This would give sailors aboard the *CSS Georgia* a better chance of repelling boarders (Reed n.d.:83). Although no examples of the rifles have been found, 63 rounds and 3 cartridges were recovered.

The Maynard .50 Caliber carbine was a breach-loading rifle invented by Dr. Edward Maynard in 1851. It utilized several innovations that set it apart from other rifles (Drury and Gibbons 1993:63). While many rifles of this time used paper cartridges, Maynard rifles used brass cartridges, but without primer. Instead, they relied on an external ignition, either a percussion cap or Maynard's patented tape and primer system. Once the primer was ignited, the small hole at the bottom of the cartridge allowed the powder charge behind the bullet to ignite, and the metal kept gasses from being blown back, thus forcing the round out the barrel at great speeds. Maynard also built into his a rifle a chamber to accept the cartridge, which was slightly larger than the bore of the barrel. The theory of this innovation was that if the cartridge is larger than the bore, it couldn't get jammed into the barrel. A small metal disc, either steel or brass, was also soldered to the base of the cartridge, which was wider than the cylindrical casing. A small hole was then drilled through the bottom at the center. Waterproof wax sealed the hole in the bottom making it waterproof and the thick casing wall allowed for multiple reuses (Tunis, pg. 113). The bullets these cartridges fired had a solid base with a conical nose and a single groove measuring 13.3 millimeters in width by 22.4 millimeters long. The cartridges with the bullet loaded measured between 40 and 45 millimeters in length (Thomas and Thomas 2013:18).

Figure 6-434 is two of the still loaded Maynard cartridges. The cartridges measure 33 millimeters long not including the bullet and 45 millimeters long including the bullet, 13 millimeters wide at the cartridge and a much wider 21 millimeters at the base. The wider bottom disc is unique to Maynard cartridges. Note the center hole seen in Figure 6-435 used for igniting the powder charge.

Illustrated in Figure 6-436, examples of two Maynard bullet variants have been recovered, both having a single ring but slightly different in shape. One variant has a solid base and a distinct ring. It measures 21 millimeters long by 12 millimeters at the base, and the shape and measurement match previously recorded rounds (Thomas and Thomas 2013:18-19). The second variant of Maynard bullet has a ring located farther up from the solid base. The bullets measures 20 millimeters long and 12 millimeters at the base, still coinciding with previously recorded Maynard bullets (Thomas and Thomas 2013:18-19).



Figure 6-434. Recovered Maynard .50 Caliber cartridges (artifacts 1910.9).



Figure 6-435. Base of the recovered Maynard cartridges.



Figure 6-436. Examples of Maynard .50 Caliber bullet variants recovered from the site (note top left is not a Maynard).

.44 Caliber Pistol Round

To date four .44 caliber dual ring pistol bullets have been recovered. The bullet as seen in Figure 6-437 measure 16.7 millimeters long by 11.2 millimeters wide and have a solid base. Without and evidence of cartridges or makers mark, and with so many similarly shaped and sized bullets of this caliber, it is difficult to determine the bullets manufacturer. It is likely that these rounds were used for the LeMat pattern revolver mentioned in the archival research completed by Mary Beth Reed (n.d.:83), which came in a .44 caliber version (Drury and Gibbons 1993:48).

Ball Projectiles

Fifteen round or ball projectiles were discovered in two different sizes, a 13.2 millimeters and a 17.2 millimeters variant. Neither have any evidence of cartridge or makers mark, so it is difficult to determine manufacture or even what firearm these would have been used for. Figure 6-438 is an example of the 17.2 millimeters size ball projectile. The diameter of 17.2 is close to rounds used in .69 caliber smooth bore rifles although without any evidence of a cartridge it is impossible to reach a definitive conclusion (Thomas and Thomas 2013:49). Figure 6-439 shows the smaller ball projectile.

The 13.2 millimeters diameter resembles a .5 caliber round possibly used in a pistol such as a LeMat revolver with a smooth bore barrel. However, without any evidence of a cartridge it is not possible to draw a conclusion at this time. It is also important to note that these projectiles may be from an earlier time. Further research into this possibility is required.



Figure 6-437. Example of the .44 Caliber dual ring bullet, Artifact 1891.6.



Figure 6-438. 17.2 millimeters ball projectile, Artifact 2690.4.



Figure 6-439. Example of the 13.2 millimeters ball projectile, Artifact 2643.4.

Edged Weapons

At the time of the Civil War, swords and bayonets were more ceremonial or intimidation tools found within a soldier's kit. Never the less several examples of each weapon type were recovered from the *CSS Georgia*.

Swords

Two model 1832 foot-artillery swords were recovered. The M1832 foot artillery sword was developed and manufactured by Nathan P. Ames, and had multiple variations in blade size and shape. The identifiable portion of this sword is the grip, with the straight set perpendicular to the grip. The grip was fashioned to look like feathers, with an eagle molded into the pommel (Hickox 1992:1-2).

The hilt shown in Figure 6-440, artifact 2480.1, is the more worn of the two. The expected eagle that that should be set in the pommel is missing, the cross guard shows signs of significant wear, and even some of the unique feather-like grip is worn away. There is no evidence of inscriptions. The hilt measures 164.52 millimeters long, 107.25 millimeters wide at the cross guard, and 36 millimeters at the widest point of the grip. The tang, or section where the blade would fit into the hilt, measures 25.89 millimeters long by 7.45 millimeters wide on one end, but 5.4 millimeters wide on the other, indicating this may have been a one sided or blade.

Figure 6-441 below shows the less worn hilt, Artifact 1851.10. Note that the eagle in the pommel and feather molding of the grip are very well preserved. The hilt still contained the tang, or part of the blade that was inserted into the hilt and fastened with the three bolts seen on the side of the hilt.



Figure 6-440. 1832 short artillery sword, Artifact 2480.1.



Figure 6-441. 1832 foot artillery sword (Artifact 1851.10).

Figure 6-442 clearly shows stippling on the cross guard. The figures “7(c) 2*D GR*T” are plainly visible. These letters stand for 7th Company 2nd Georgia Regiment. This second hilt has the exact measurements as the first shown in Figure 6-440 (164.43 millimeters long by 107.8 millimeters wide at the cross guard and 36 millimeters wide at the grip). The difference in measurement is the tang. The tang measures 26.24 millimeters long by 7.7 millimeters wide. This rectangular shape indicates a double edges sword instead of a single edge. Associated with the sword hilts is a brass scabbard tip (or chape) as seen in Figure 6-443. It measures 106 millimeters long by 49 millimeters at the widest point. These measurements of the chape and position on the two bolt holes seen in Figure 6-440 match known collection pieces used with 1832 short artillery swords (Hickox 1992:1-2).



Figure 6-442. Image of cross guard of 1832 foot Artillery sword showing inscription that stands for 7th Company 2nd Georgia Regiment (Artifact 1851.10).



Figure 6-443. Chape of a scabbard, Artifact 2503.1.

Bayonets

Six bayonet hilts were recovered, all being saber or sword-type bayonets. Ironically no examples of Enfield bayonets have been recovered, as this was the type of rifle found on the ship. At the time of the Civil War, bayonets were basically reduced to ceremonial or intimidation tools. With both saber and socket Civil War bayonet types illustrated in Figure 6-444, socket bayonets that fit directly over the muzzle were rendered obsolete by the multi-purpose sword or saber bayonets (Coggins 2004:24). A saber bayonet was a short sword with a small ring on the side of the cross guard to fit over the muzzle, and a locking and releasing mechanism at the end of the hilt to accept a notch fixed to the rifle (Coggins2004:100-102). Most saber bayonets shared a common design with a few alterations depending on rifle attachment, but with minor modifications they could be fit to almost any rifle. Figure 6-445 is an example of one of the two bayonets originally made for a PS Justice 2 rifle.

These bayonet hilts measure 124 millimeters long by 89 millimeters wide at the crosspiece, and both are missing the lock and release mechanism as seen at the rear of the hilt (Figure 6-446). The inner diameter of the ring that slid over the muzzle as seen in Figures 6-447 is 20.5 millimeters, which could easily accommodate the .58 caliber rifle.

The notch mortise slot seen in Figure 6-448 is curved at the curved end and measures 35 millimeters in length by 7 millimeters wide, a design seen in other PS Justice II bayonets (Graff 2003:60).



Figure 6-444. Examples of Saber and Socket-type Civil War bayonets, from top to bottom two sabre bayonets, first with a 20" blade and scabbard. Second is a 20" blade, no scabbard. Third are two Martini-Peabody bayonets with a 22" blades and scabbards. Bottom is a .58 cal. socket bayonet with an 18" blade (as presented at Cowan's Auction House 2019).



Figure 6-445. PS Justice II rifle bayonet hilt, Artifact 976.



Figure 6-446. PS Justice II showing crosspiece, tang slot and muzzle ring (top), mortise slot and tang bolt (bottom) of Artifact 976.



Figure 6-447. PS Justice II showing crosspiece, tang slot and muzzle ring (top), mortise slot and tang bolt (bottom) of Artifact 976.



Figure 6-448. PS Justice II showing notch slot near the pommel.

Artifact 2103.6, the bayonet hilt seen in Figure 6-449 was used with an 1855 Mississippi rifle. This hilt is solid brass with the same type of lock and release mechanism seen near the pommel. The hilt measures 122 millimeters long by 94 millimeters wide at the crosspiece. The muzzle ring measures 22.5 millimeters wide, meaning it could easily accommodate a .58 caliber muzzle. Note the addition piece or bracket located on top of the muzzle ring. This piece is unique to Mississippi rifle bayonets of this time period.

The next bayonet hilt seen in Figure 6-450 was made for a Remington Zouave rifle. Illustrated in Figures 6-451 through 33, Artifact 2505.7, measures 121 millimeters long and 93 millimeters wide at the crosspiece of the hilt, the muzzle ring measures 23 millimeters wide at the inner diameter which is compatible with a .58 caliber rifle. Unique to this bayonet is a second tang stud found in the middle of the crosspiece. The mortise slot also differs from either the Mississippi or the PS Justice II. It measures 60 millimeters long, 6 millimeters at the widest point near the pommel and 4 millimeters at the narrowest.

The next hilt seen in Figures 6-454 to 456 was made for a model 1860 Sharps rifle. The hilt is brass and measures 122.5 millimeters long by 90.5 millimeters wide at the crosspiece, and 18.8 millimeters wide on the inner diameter of the muzzle ring, making this compatible with a .58 caliber rifle.



Figure 6-449. Artifact 2103.6, a Mississippi rifle bayonet hilt.



Figure 6-450. Civil War 'Zouave' style Saber Bayonet with Leather Scabbard. Total length of this bayonet is 24 $\frac{3}{4}$ " while the blade itself is about 20" long. Issued with the Remington "Zouave" Rifle, a.k.a. United States Percussion Model 1863 Rifle. Sold at auction for \$350 (as presented in The Horse Soldier 2019).



Figure 6-451. Zouave rifle bayonet hilt, Artifact 2505.7.

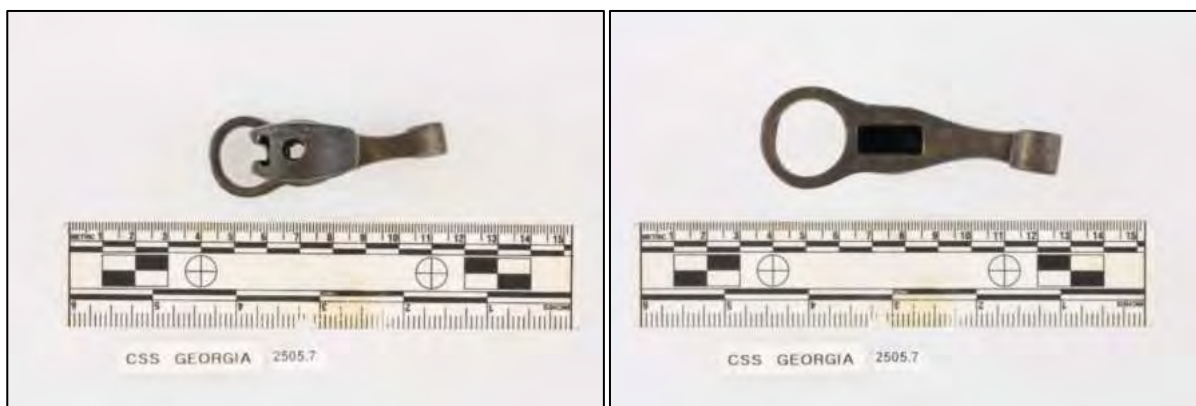


Figure 6-452. Zouave tang stud, mortise slot (left), tang slot, muzzle ring and crosspiece (right).



Figure 6-453. Zouave mortise slot.



Figure 6-454. Sharps bayonet hilt, Artifact 2189.1.

This hilt is made very similar to all the others with one difference, the mortise slot. As seen in Figure 6-456 the mortise slot is much longer than the other examples measuring 58 millimeters long by 8 millimeters at the widest point and 6 millimeters at the narrowest. The design and measurements are similar to known examples.



Figure 6-455. Sharps bayonet with muzzle ring, tang slot, crosspiece (top), mortise slot and tang bolt (bottom) visible, Artifact 2189.1.



Figure 6-456. Sharps Mortise slot, Artifact 2189.1.

Also associated with the bayonets is a brass piece of a scabbard called a locket, Artifact 1824.14. A locket is a metal piece either on the top or, in this case, the top of a scabbard, and was set into what is called a frog or small leather holder that was either connected to a soldier's belt or to a strap that was slug over the shoulder. The locket measures 67 millimeters long and 42 millimeters wide. The center hole, as seen in Figure 6-457, would have been where the frog bolt, connecting the scabbard to the frog, would have been. Notice the two small retaining bolt holes at the top of the locket.

Figure 6-458 illustrates the locket's inner dimensions also known as the throat. It measures 33 millimeters wide by 10 millimeters at the widest by 8 millimeters at the narrowest. Without a maker's mark it is impossible to determine the point of origin.



Figure 6-457. Bayonet locket front. Scale in centimeters, Artifact 1824.14.



Figure 6-458. Locket "throat," Artifact 1824.14.

Gun Flints

Eight gunflints were recovered from the *CSS Georgia*. There are two types, blade and spall, each being of English origin based on their black to dark grey coloration (Witthoft n.d.:36). Figures 6-459 and 6-460 show a spall gunflint. Spall gunflints have several distinguishing characteristics, such as a wedge shape, two ventral surfaces, a bulb of percussion, and show retouching or additional knapping (Blanchette 1975:49) on the edges as seen Figure 6-459. Spall gunflints were produced by striking a core of flint with a hammer to make large flints, then striking those to make smaller flints. These were then retouched for size, shape and a pronounced striking edge (Hamilton 1998:142-145). Figure 6-460 is a closer view of the flint. Note the two ventral surfaces seen upper right and lower left, the bulb or percussion at the bottom, and worked or retouched edges on the right and left sides. The overall shape is rectangular, measuring 33 cm long, 25 cm long and 9 cm at the tallest point.

One possible blade gunflint has been identified, as seen in Figure 6-461. Blade gunflints were produced by striking a worked or prepared core with a special hammer. The English technique produced flints that square with angular ventral sides and a trapezoidal in cross section. There were usually two blades, with the shorter acting as the heel and the longer acting as the working edge (Hamilton and Emery 1988:13). The recovered gunflint exhibits the angular ventral side. It is roughly trapezoidal in cross section, but appears to be a partial flint. It measures 33 millimeters long by 28 millimeters wide, making it nearly square. It should be stated that this is not a definitive identification as it might represent a prehistoric artifact.



Figure 6-459. English Spall Gunflint. Scale in centimeters, Artifact 2540.2.



Figure 6-460. Spall gunflint showing wedge shape. Scale in centimeters, Artifact 2540.2.



Figure 6-461. Possible blade gunflint. Scale in centimeters, Artifact 2802.9.

MACHINERY, HULL, AND CASEMATE: A STRUCTURAL ANALYSIS

Very little information on the design and construction of the ironclad CSS *Georgia* survives in either the historical or the archaeological record. Investigation of historical sources identified document the poor performance of the vessel due to inadequate steam machinery, the complications of maintenance and operation as a floating battery, and the miserable conditions associated with onboard service. Additional information for reconstruction of the casemate came from the historical record in the form of published artists representations. Drawings published by Frank Leslie in 1862 and 1863 vary considerably in the casemate configuration (Figures 6-462 and 6-463). However, the location of the funnel appears consistently aft. That evidence suggests that CSS *Georgia*'s steam machinery was located well aft in the hull. The height of the casemate appears exaggerated in comparison with most of the Confederate ironclads and the angle of repose, resembling close to 45 degrees, appears consistent. That 45-degree angle is confirmed by at least one contemporary observer (Barnwell 1981:207).

Similarly, archaeological evidence associated with the surviving remains of the CSS *Georgia* are equally limited. The surviving physical evidence does not represent a complete wreck site. Instead, the *in situ* remains of the ironclad represent the residue of a salvage operation. Structural evidence of CSS *Georgia* was limited to fragments of the armored casemate. Evidence of the steam propulsion machinery survived but is also fragmentary. Ordnance represent the third major element of physical evidence at the site. With only two small identifiable hull components recovered, consequently, it is virtually impossible to accurately reconstruct the vessel's hull.

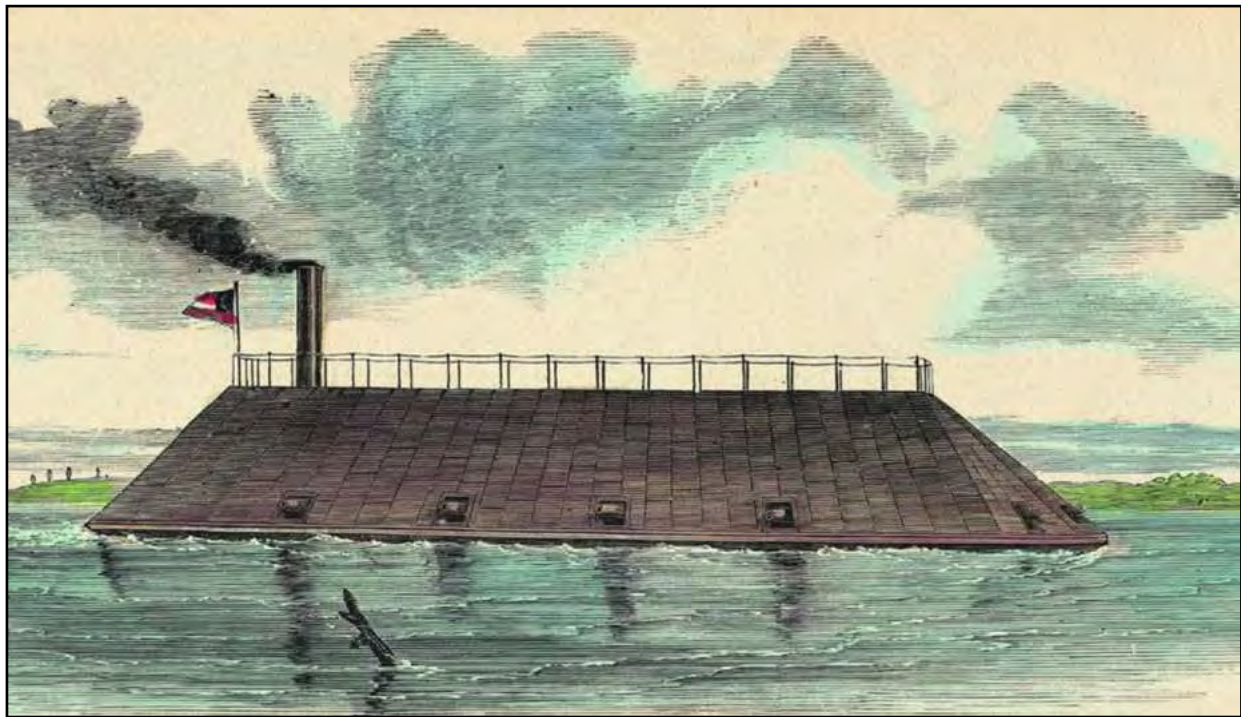


Figure 6-462. Illustration of the CSS *Georgia* published in Frank Leslie's *Illustrated History of the Civil War* in 1862.



Figure 6-463. Illustration of the CSS *Georgia* published in Frank Leslie's *Illustrated Newspaper* 21 February 1863.

Recovery of the surviving remains of the CSS *Georgia* in 2015 and 2017 provided significant clues to the configuration of the vessel's casemate and steam machinery. Using data from elements of the ironclad that remained at the salvage site, it is possible to develop a hypothetical reconstruction of the armored casemate and the primary steam machinery. While archaeological evidence from the site significantly enhances our understanding of the CSS *Georgia*'s casemate design and construction, designs for the hull remain hypothetical, as no evidence of that element of the ironclad was ever identified at the salvage site. Based on limited historical information and archaeological data associated with other Confederate ironclads and floating battery designs several possible configurations have been generated. As will be discussed below, each of the hypothetical designs was developed to support a 120-foot long by 44-foot wide casemate reconstruction.

Propulsion Machinery

No historical evidence survives concerning the type of boiler(s), steam machinery, and propulsion system that were used in the CSS *Georgia*. Fortunately, evidence of the boiler, primary steam machinery, and propulsion system were recovered from the site. Numerous fragments of fittings, valves, eccentrics, steam chests, and slide valves have also been recovered but cannot yet be reconstructed for inclusion in this assessment of CSS *Georgia*'s design and construction. However, using available evidence the casemate and primary steam machinery can be determined with a higher level of confidence than previously possible.

Elements of the boiler that were recovered consisted of fire tubes, grate bars, firebox and ashpit doors, and part of the ashpit base with firebrick (Figure 6-464). As discussed above, numerous firebricks employed within the construction of the boiler were present, those embossed with the makers mark "Brooklyn Fire-Brick Works," the most predominant type, were recovered along with the fire door, tubes, and grates. As stated above, the Brooklyn Fire-Brick Works was

established in 1854, in Redhook, New York. Although only supposition, the bricks could have made their way to Savannah as ballast or perhaps have been built into the boiler for another vessel that was then placed into the CSS *Georgia*. Figure 6-465 illustrates the ashpit door recovered from Unit 6-E.

Two other components of the boiler recovered were fire grates and fire tubes. Illustrated in Figure 6-466 are fire tubes recovered from Unit 7-D during Mechanized Recovery. Just over 10 feet long and 4 inches in diameter, these tubes were recovered from a large concentration identified during initial diving investigations prior to Mechanized Recovery along with heavy iron plate in Unit 7-D. Of the 69 fire grate artifacts recovered approximately 12 are complete, while the rest are fragments, with the complete examples coming mainly from Grid 7-E adjacent from where most fire tubes were recovered. Note Units 7-D and 7-E are immediately adjacent to Unit 6-E where the boiler door was recovered. Illustrated in Figures 6-467 and 6-468, the grates are double-veined and have a standard length of 55 to 56 inches (4.58 to 4.67 feet) and 5 inches high at center. A grate schematic is presented in Figure 6-469.

Figure 6-470 presents a map of provenience for the boiler components along with steam machinery. It shows a concentration for both in the same location, a location just south of the West Casemate's 54 feet of solid run of armor, its lack of gunports in the length evidence as well for the location of boiler and machinery.



Figure 6-464. Firebrick, fire grates and ash pan or boilerplate fragments recovered from Unit 7-E just south of the West Casemate.



Figure 6-465. Boiler face or front fragment with one of the ashpit doors prior to being placed into electrolysis. Firebrick was still attached to the inside of the boiler face just below door. Artifact 1844.02 from Unit 6-E just south of the West Casemate.

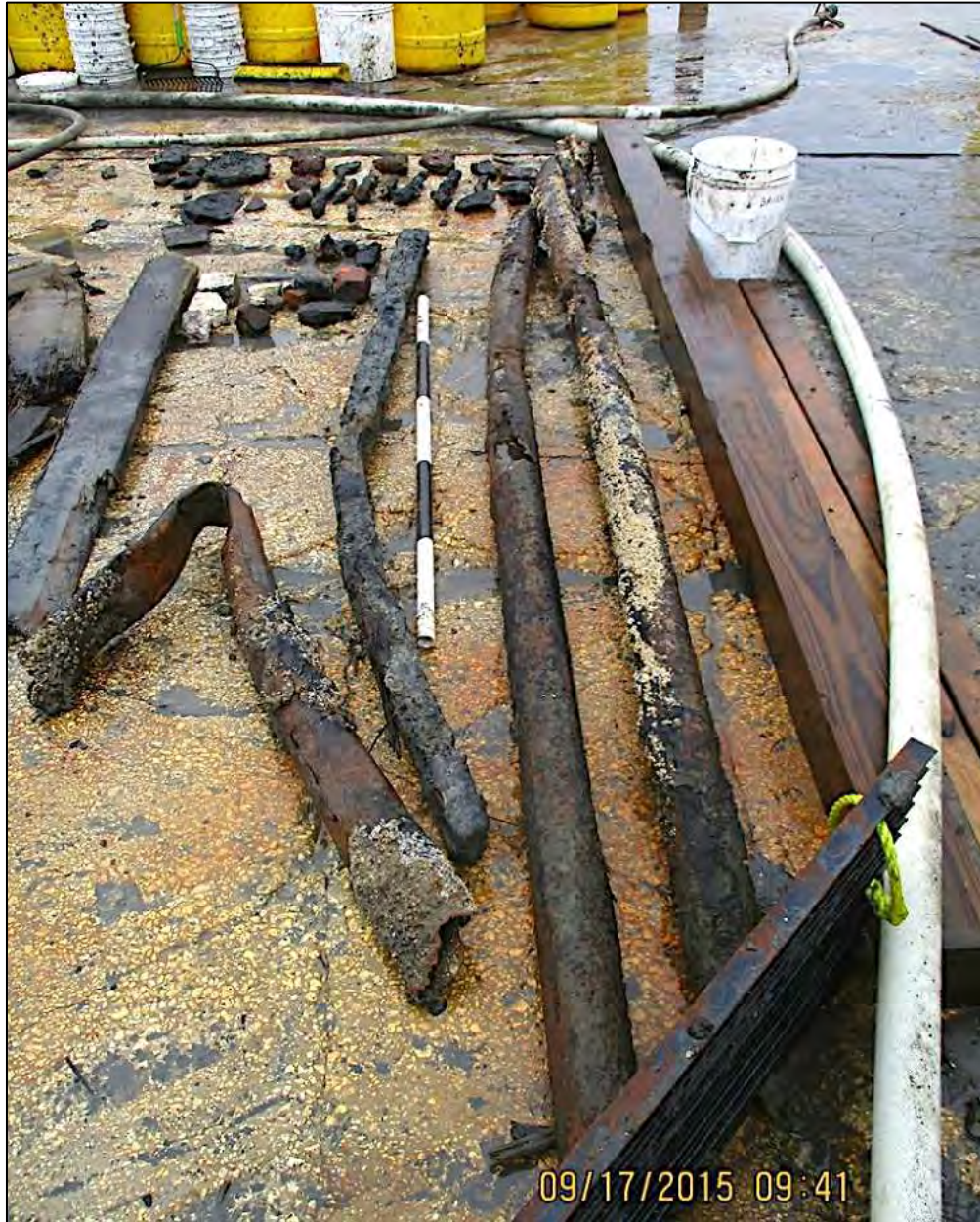


Figure 6-466. Fire tubes recovered from Unit 7-D during Mechanized Recovery. Just over 10 feet long and 4-inches in diameter, these tubes were recovered from a large concentration identified during initial diving investigations prior to Mechanized Recovery along with heavy iron plate in Unit 7-D.



Figure 6-467. Artifact 1844.22, double-veined fire grate, side view.



Figure 6-468. Artifact 1844.22, double-veined fire grate, end view.

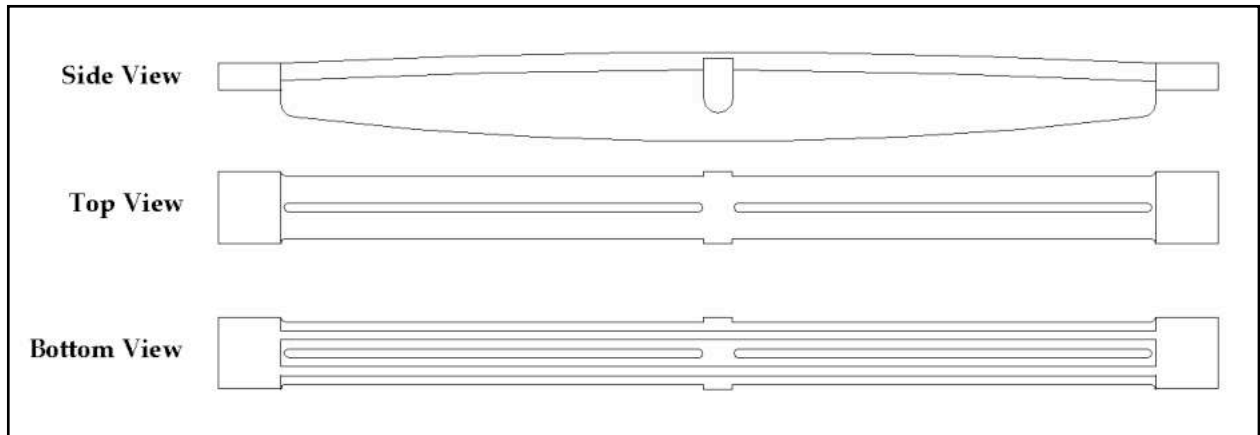


Figure 6-469. Grate bar schematic.

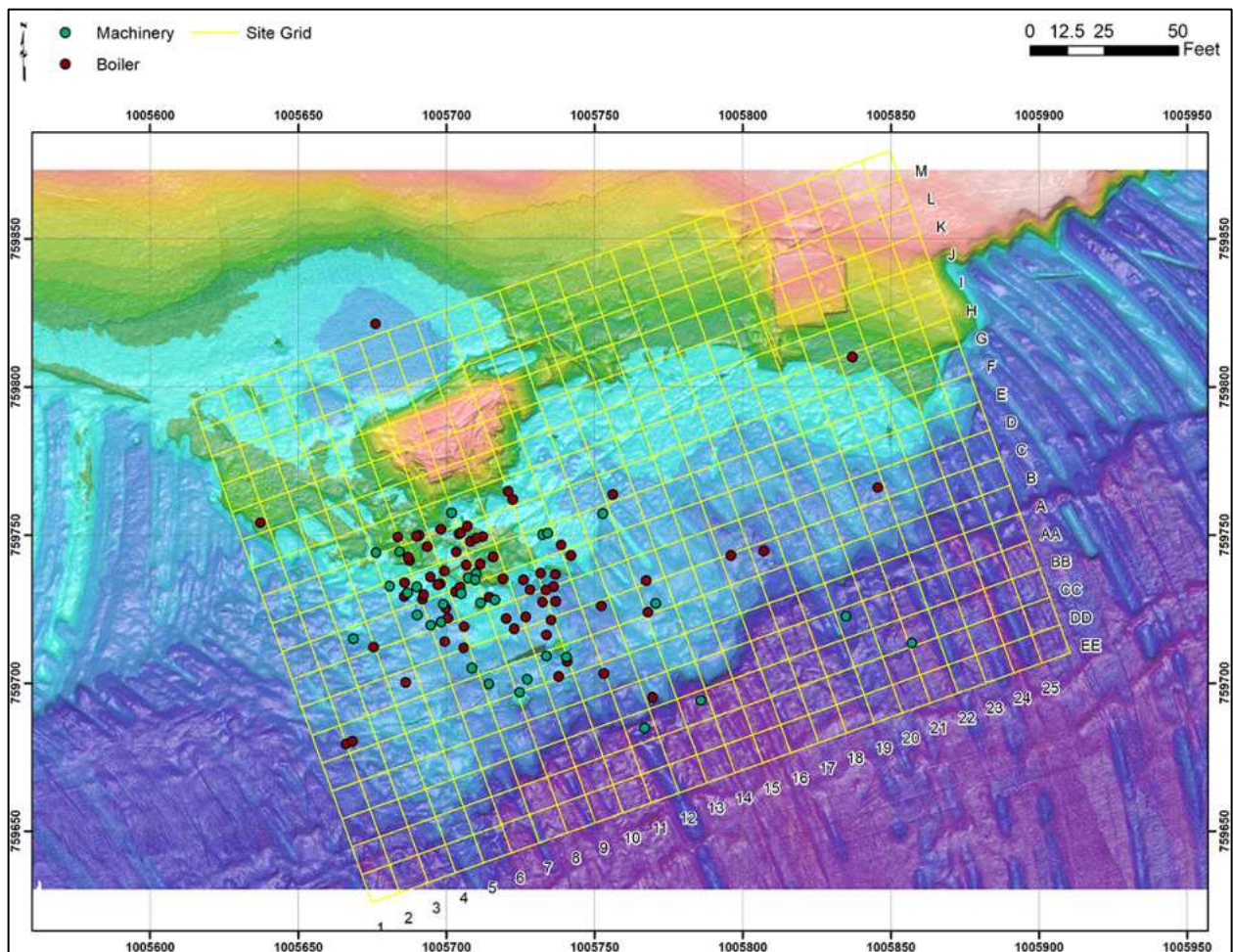


Figure 6-470. Provenience map of boiler and machinery components.

The documented remains suggest that CSS *Georgia*'s boiler was a type developed by Robert L. Stevens. The Steven's return fire tube boiler employed a modified locomotive-style adapted for marine application (Figure 6-471). The Steven's return fire tube boiler design became a common boiler for use in tugs and small steam vessels in the mid-nineteenth century. A drawing of the Steven's return fire tube boiler-type constructed for use in the tug *James Gray* illustrates

the design and dimensions (Figure 6-472). The *James Gray* was constructed in Philadelphia, Pennsylvania by Reaney, Neafie & Co. and launched on 15 February 1857 (Mariners Museum MS102 Folder 5 211).

The Stevens-style boiler was designed around a rectangular firebox and a horizontal, cylindrical, return, fire tube water chamber (Figure 6-473). This was perhaps the most common U.S. design until the last quarter of the nineteenth century. An excellent example was found in the remains of a nineteenth-century tug excavated on Hutchinson Island across the river from Savannah in 1992 (Figure 6-474). A measured drawing of the Fig Island tug illustrates the boiler size and design (Figure 6-475).

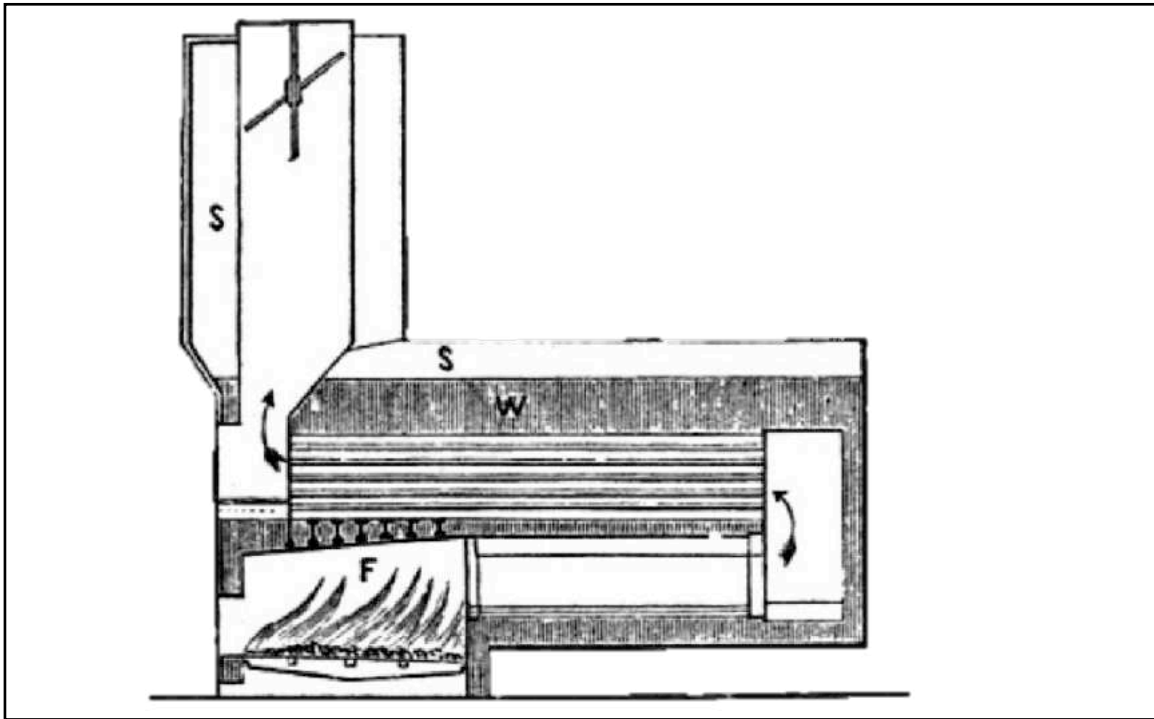


Figure 6-471. Steven's return fire tube boiler illustration from 1832.

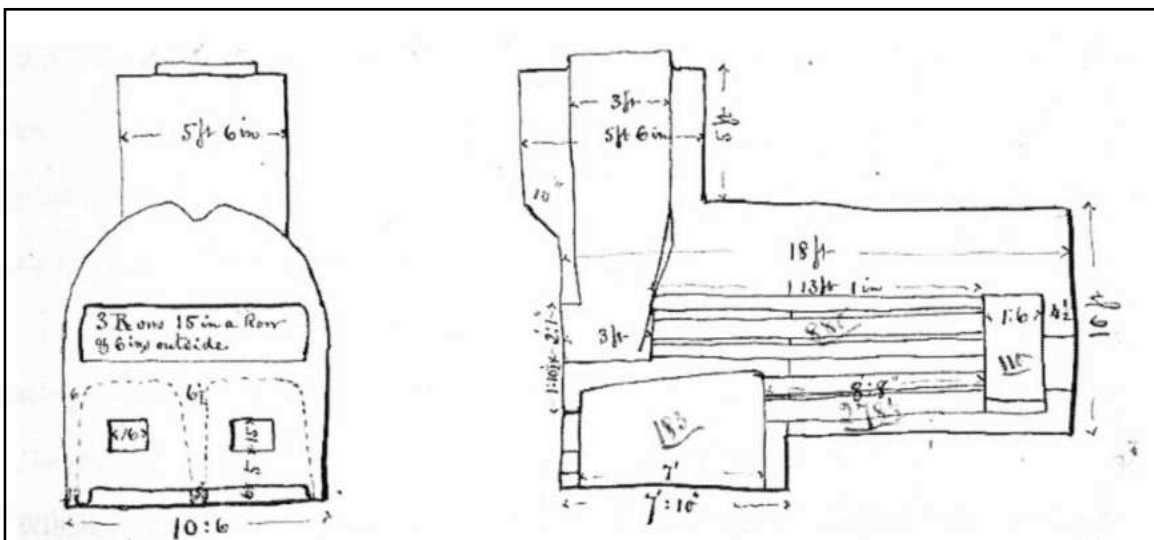


Figure 6-472. Boiler drawing for the *James Gray* built in 1857 (Mariners Museum MS102 Folder 5 211).

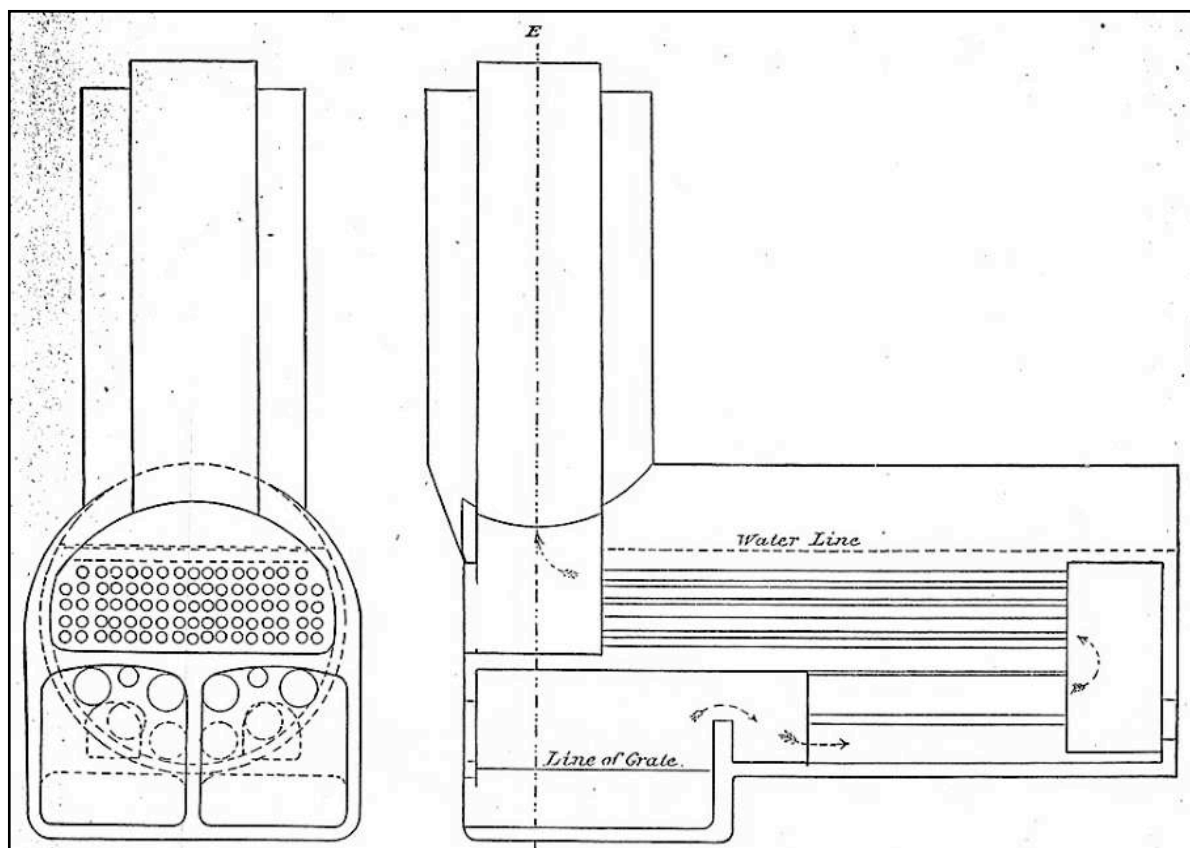


Figure 6-473. Return tube boiler drawing (U.S. Department of the Interior 1888:57).



Figure 6-474. Fig Island tug with Stevens-style boiler excavated by TAR in 1992.

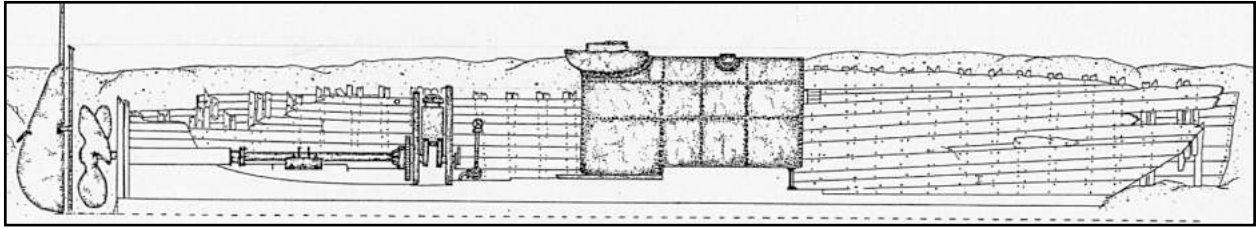


Figure 6-475. Starboard view of the Fig Island tug illustrating the boiler and steam machinery.

Measurements from the Fig Island tug boiler compare favorably with the 10-foot 3-inch long 3-inch diameter fire tubes recovered from the CSS *Georgia* salvage site. Recovered grate bars, each 4-foot 8-inch long, also compared favorably with those inside the Fig Island tug boiler.

Recovered fragments of firebox and ashpit doors, a portion of the firebox face, and a corner and section of the floor of the ashpit with firebricks also contributed to adapting the Fig Island tug boiler design to the CSS *Georgia*'s reconstruction (Figure 6-476). While other designs could have been adapted to the surviving physical evidence, the Stevens-type configuration offers the best fit. In the boiler reconstruction profile red indicates evidence from the Fig Island tug and black indicates physical evidence from the CSS *Georgia* salvage site.

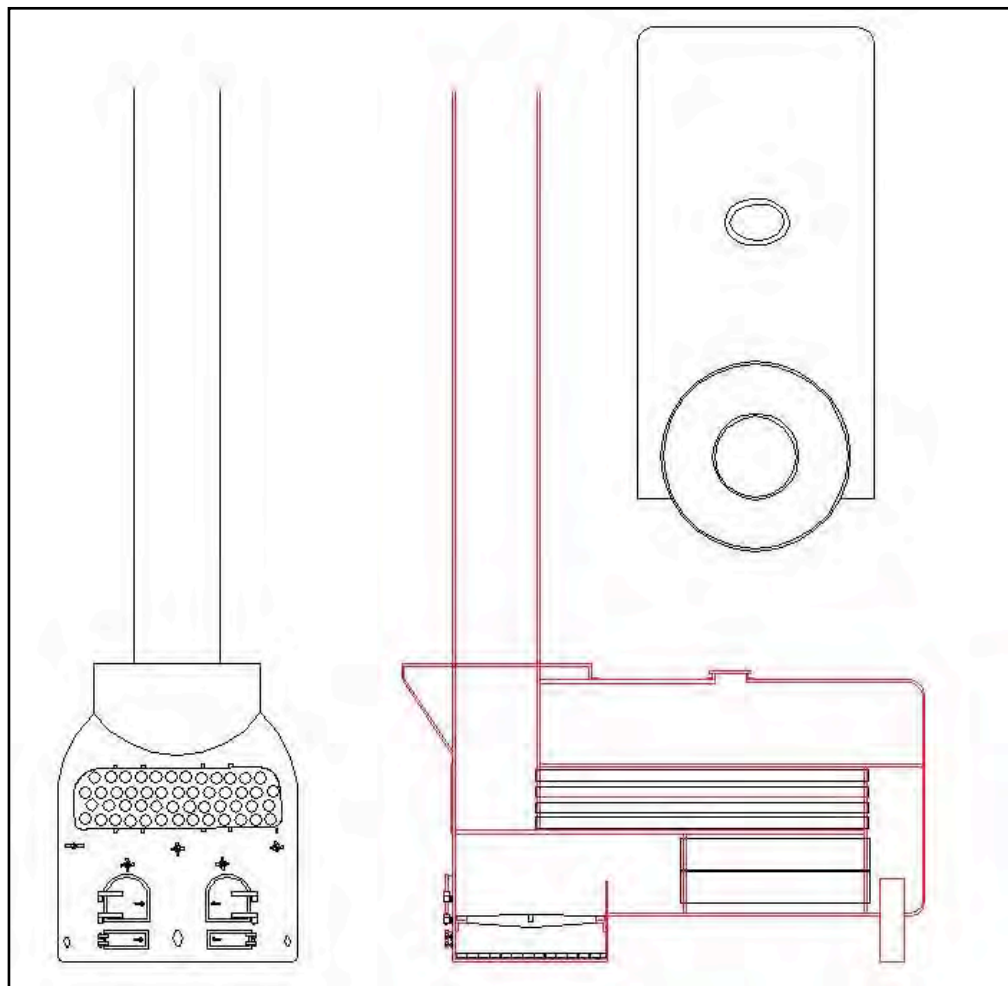


Figure 6-476. Configuration of the boiler proposed for CSS *Georgia* based on historical and physical evidence.

The Stevens design was common and readily available from numerously equipped small vessels such as tugs and eastern river propeller steamers. The Fig Island vessel confirms a historical association of the Stevens design return tube boiler with the City of Savannah. As it was perhaps one of the most widely used and readily available steam generators at the time of CSS *Georgia*'s construction, that boiler configuration has been used in reconstruction. The volume of low-pressure steam generated by the size of the hypothetical boiler likely would have contributed to the CSS *Georgia*'s lack of performance. Red details in the boiler longitudinal section represents evidence from the Fig Island tug and black details represent data from the CSS *Georgia* salvage site.

Because of the salt and sediment content of the Savannah River, the CSS *Georgia* was fitted with one or more steam condensers. What appears to be one of the condensers measured 9 feet 4 inches in length and 20 inches in diameter (Figure 6-477). Cylindrical condensers were not uncommon during the period and most vessels operating in salt, brackish, or high-sediment environments likely would be fitted with a condenser. The length and diameter of the cylinder suggests that there was one condenser for each of the CSS *Georgia*'s steam cylinders.

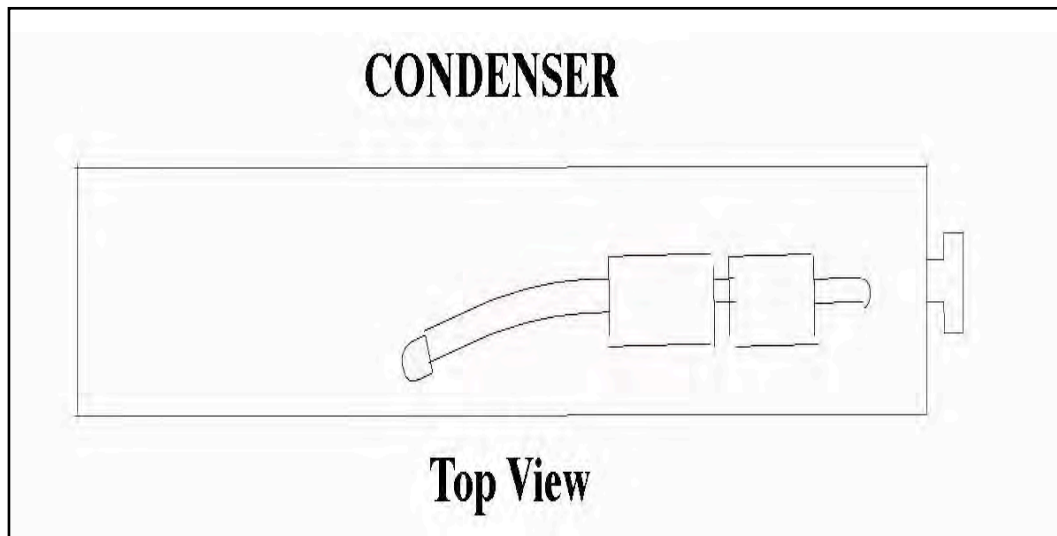


Figure 6-477. 2015 schematic of condenser while still underwater.

Until the first detailed investigation of the site by Panamerican and TAR in 2003, virtually nothing was known about the primary steam and propulsion machinery associated with the CSS *Georgia*. That investigation identified steam cylinders, a propeller and shaft, and a few boiler parts. Those data left considerable latitude for speculation about the design and details of the propulsion machinery. However, the evidence did support the first speculation about what powered the ironclad. Machinery recovered during the 2015 and 2017 Operations produced much more evidence about the CSS *Georgia*'s propulsion. Recovered elements of the CSS *Georgia*'s machinery support a much more detailed reconstruction than previously possible.

Historical sources indicate that the CSS *Georgia* was powered by “a double engine and twin propellers” (Barnwell 1981:203, 206-208; Melton 2002:19). That description has been confirmed by machinery recovered from the salvage site. A single propeller with attached shaft was identified in 2003 and recovered in 2015 (Figures 6-478 to 6-480). The configuration of the shaft bearing and attached struts confirm that the propeller was one of two fitted on either side of the sternpost (Figure 6-481). The diameter of the recovered propeller appears to have been close to 7 feet 2 inches in diameter. The propeller was attached to a section of shaft 13 feet 9 inches in length (Figure 6-482). Only one propeller was present on site.



Figure 6-478. Artifact 1614, a triple-bladed propeller, being lifted onto the barge (recovered from Unit 2-F).



Figure 6-479. End view of propeller showing the hub shaft bushing (center) and remaining strut mount (left).



Figure 6-480. 3-D end-on image of Artifact 1614, a triple-bladed propeller recovered from Unit 2-F. Note the broken blades. Shaft bushing and strut mounts removed during conservation; shaft bushing in center of the shaft.

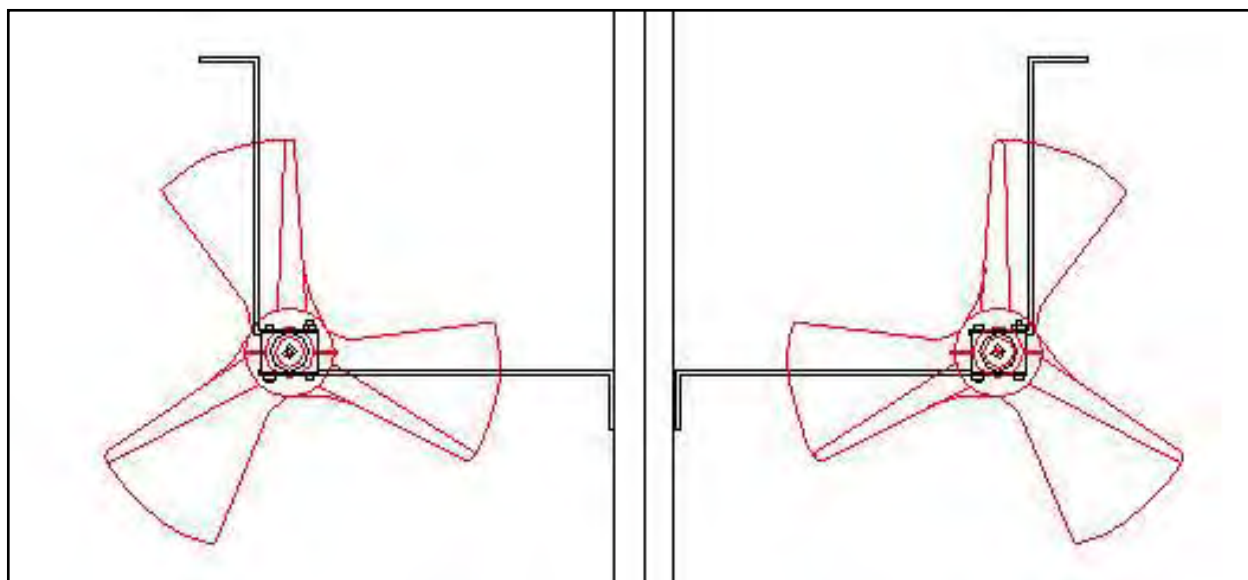


Figure 6-481. Configuration schematic of the twin propellers, shaft bearings, and struts; stern post in center.

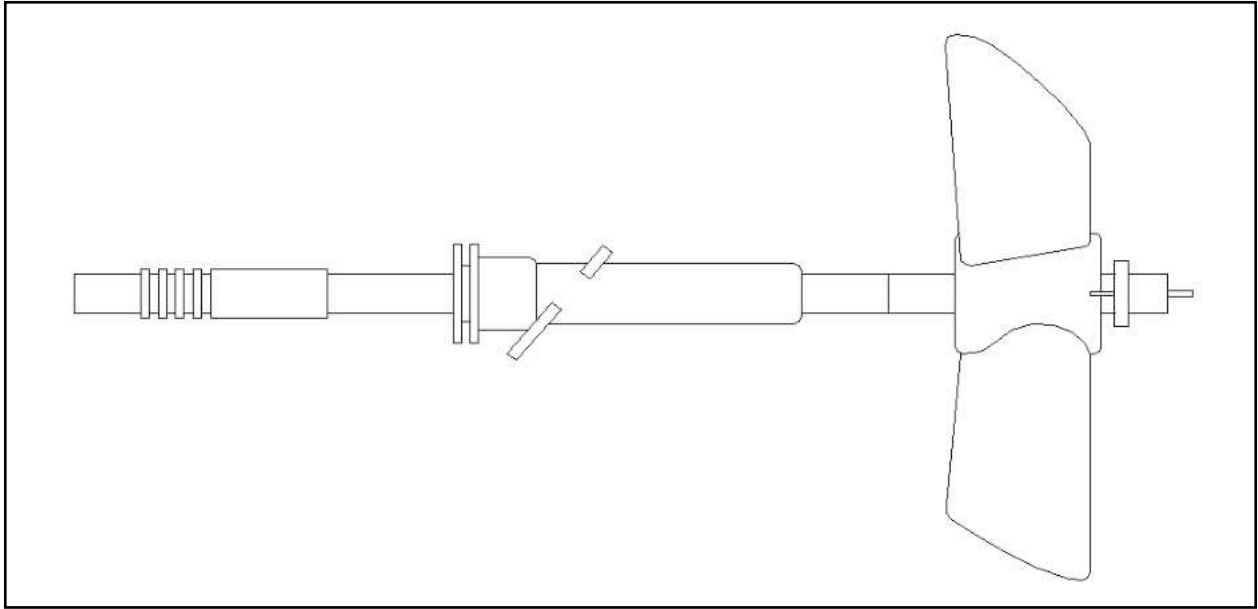


Figure 6-482. Schematic of propeller shaft and propeller (shaft bushing and strut removed).

The propeller shaft was 6 inches in diameter except for two areas. Ten inches aft of the inboard end four collars 8 inches in diameter served a thrust bearing (Figure 6-483). Aft of the thrust collars a 17.5-inch long, 8-inch diameter section of the shaft that could represent a sleeve joining the 6-inch aft section to a short forward section turned down to produce the thrust collars. Nineteen inches aft of the collar is a compression collar for a stuffing gland fitted to the end of a 4-foot 2-inch through-hull fitting. The through-hull was cast with backing plates on the top and bottom to facilitate attachment to the inside of the hull. The plates were cast at a 45-degree angle indicating the angle of the wooden hull.



Figure 6-483. Four collars near the end of the propeller shaft that served a thrust bearing.

From the aft end of the through-hull fitting the shaft extended for 24 inches before entering the 22-inch long propeller hub. Aft of the propeller hub the shaft measured 5.25 inches in diameter, indicating a conical fitting for the hub. A mortice in the aft face of the propeller hub and the shaft served a 2.5-inch wide, 16.75-inch long key that locked the two together. Aft of a collar the shaft extended another 6 inches, and the end was fitted with a center bolt and two pins to lock a round plate in place aft of the fitting that contained the shaft bushing and strut mounts.

Elements were recovered of a pillow block with the thrust bearing was a base and cap matching the four collars on the propeller shaft (Figures 6-484 to 6-487). The cast iron base and cap were fitted for top and bottom sections of the bronze bearing that was held in place by collars fore and aft of the pillow block.

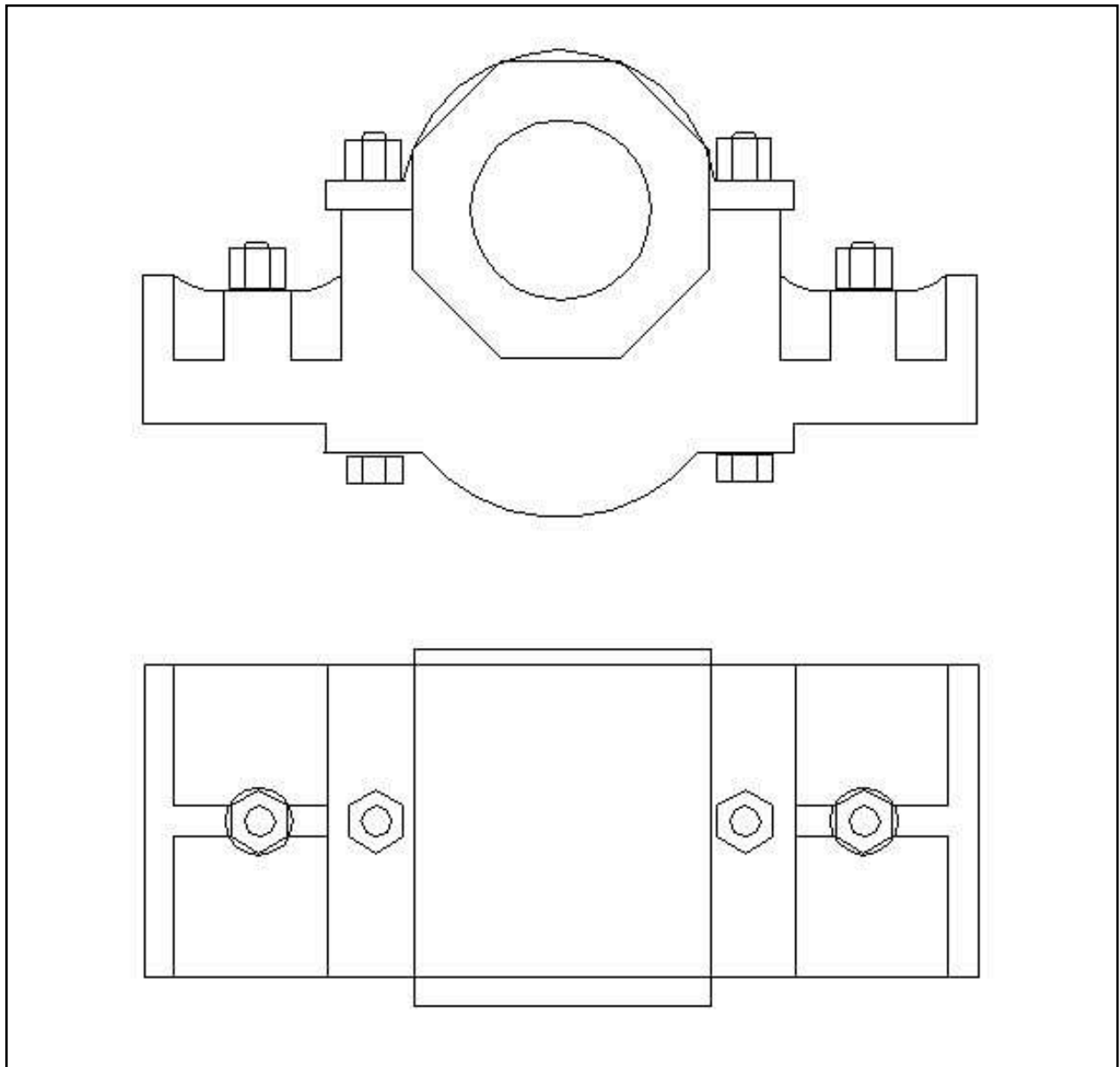


Figure 6-484. Front and top views of the pillow block thrust bearing.



Figure 6-485. Recovered from G-125, Artifact 1909.05, a bearing pillow block recovered from Unit 6-E and half of a four-collared bronze thrust bearing recovered from the same grab that would have attached to the propeller shaft.



Figure 6-486. Conserved Artifact 1909.05, bearing pillow block recovered from Unit 6-E.



Figure 6-487. Internal view of half of four-collared bronze thrust bearing.

A counterbalance flywheel was recovered from the site in 2015 (Figures 6-488 to 6-490). The flywheel measured 3 feet in diameter and 5 inches thick. The 6-inch wide hole through the center was reinforced in the back and machined for two keys that secured its orientation on the propeller shaft. A second hole 12 inches off center and opposite the counterbalance was fitted with a 5-inch diameter capped shaft for a connecting rod. The shaft was secured to a reinforced area on the back of the flywheel with a key. A series of fourteen 1.25-inch square holes in the back side of the flywheel provided the means of temporarily attaching a lever to rotate the wheel and move as associated piston off bottom and top dead center.

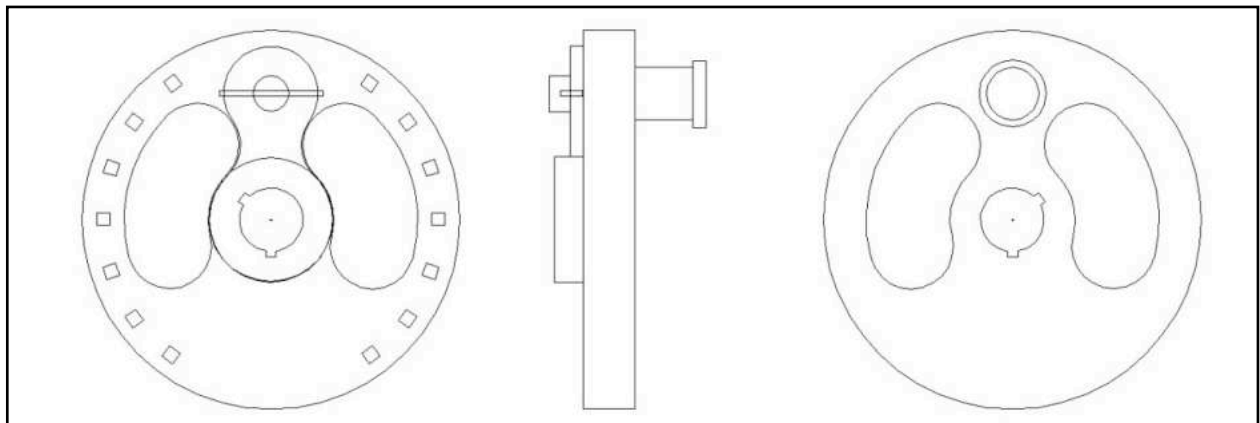


Figure 6-488. Flywheel (left to right) rear, side, and front views.



Figure 6-489. Shown at the time of Mechanized Recovery, counterbalance flywheel that was connected to the end one of the vessel's two propeller shafts, and turned by a crank connected to one of the two steam cylinders, which would then turn the propeller. The crank attachment is the projection at top. Artifact 1899.17 recovered from Unit 6-C.



Figure 6-490. Conserved Artifact 1899.17, a counterbalance flywheel recovered from Unit 6-C. Three feet in diameter and 5 inches thick, this is the opposite side from Figure 6-490.

An end of a connecting rod was recovered and permitted that element of the CSS *Georgia*'s propulsion machinery to be hypothetically reconstructed (Figure 6-491). The reconstructed length of the connecting rod was 4 feet on shaft centers to accommodate positioning of the steam cylinders in relation to the propeller shaft.

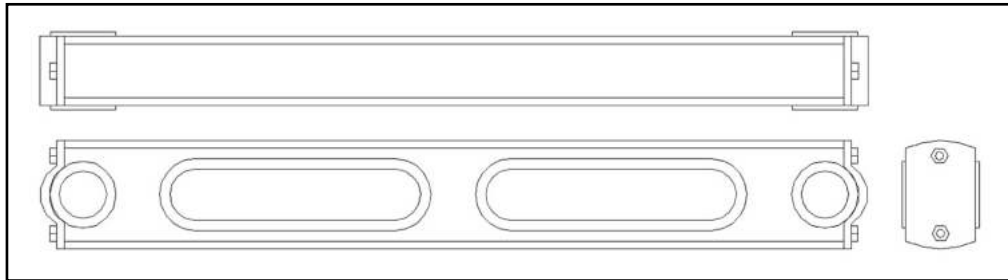


Figure 6-491. Side, top, and end views of the reconstructed connecting rod.

Two steam cylinders were recovered from the site. One, more intact than the other, was used to record design and construction features (Figures 6-492 to 6-495). The steam cylinder measured 33 inches in length including the end plates. Measured at the cylinder head, the maximum diameter was 24 inches. However, the diameter of the cylinder in between the flared ends, excluding a reinforce in the center, was only 18 inches. With 1-inch thick cylinder walls, the bore would be 16 inches. The top of each end of the steam cylinder was cast with ports for steam and exhaust. Where the piston rod exited aft end of the cylinder the end cap was cast to accommodate a stuffing gland. For mounting the cylinder was cast with longitudinal plates. Each of the cast plates was fitted with a base plate that could be fitted into heavy timbers that served as a bed for the machinery. It should be noted that the two steam cylinders located and mapped during the 2003 investigation could not be relocated in 2015, even after extensive searching. Triangulation techniques using the 2003 data were employed as were extensive diver sweeps in the previously mapped locations. Despite these efforts, they were not found in 2015, but would be recovered during the 2017 during Mechanized Clearance in the channel some 90 feet from their original 2003 mapped location, and amazingly together in the same grapple (Figure 6-496).



Figure 6-492. Artifacts 5055.01 and 5055.02, steam cylinders, immediately after recovery from Unit 11-CC.



Figure 6-493. View of one steam cylinder.



Figure 6-494. View of one steam cylinder end.

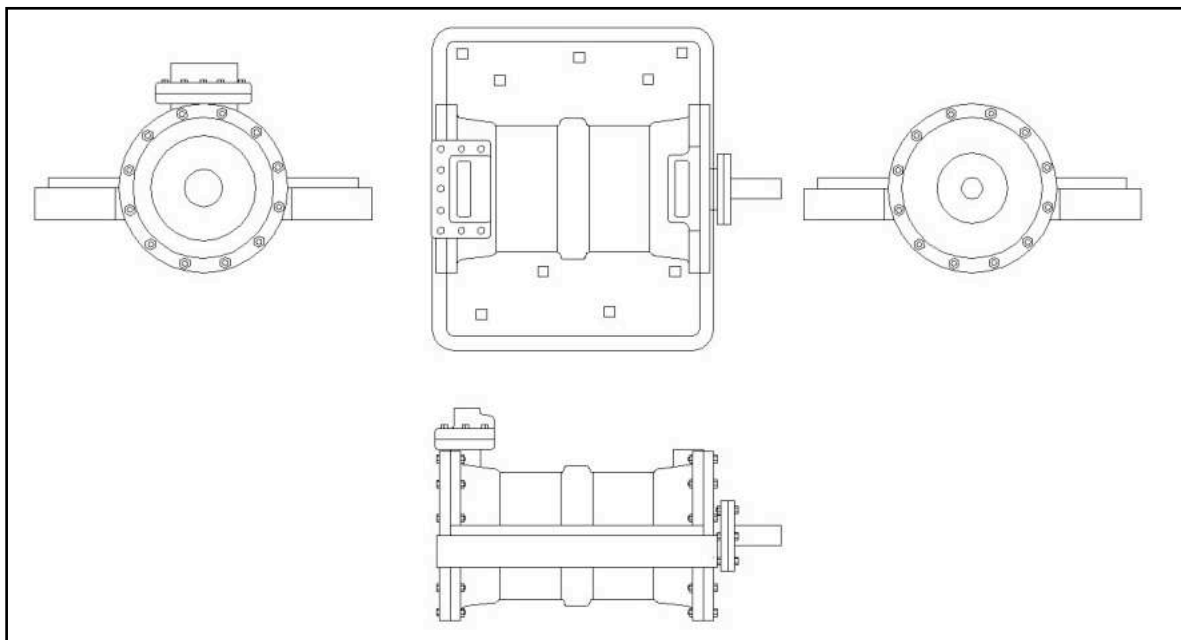


Figure 6-495. Top, side, and end view schematics of the CSS *Georgia* steam cylinder.

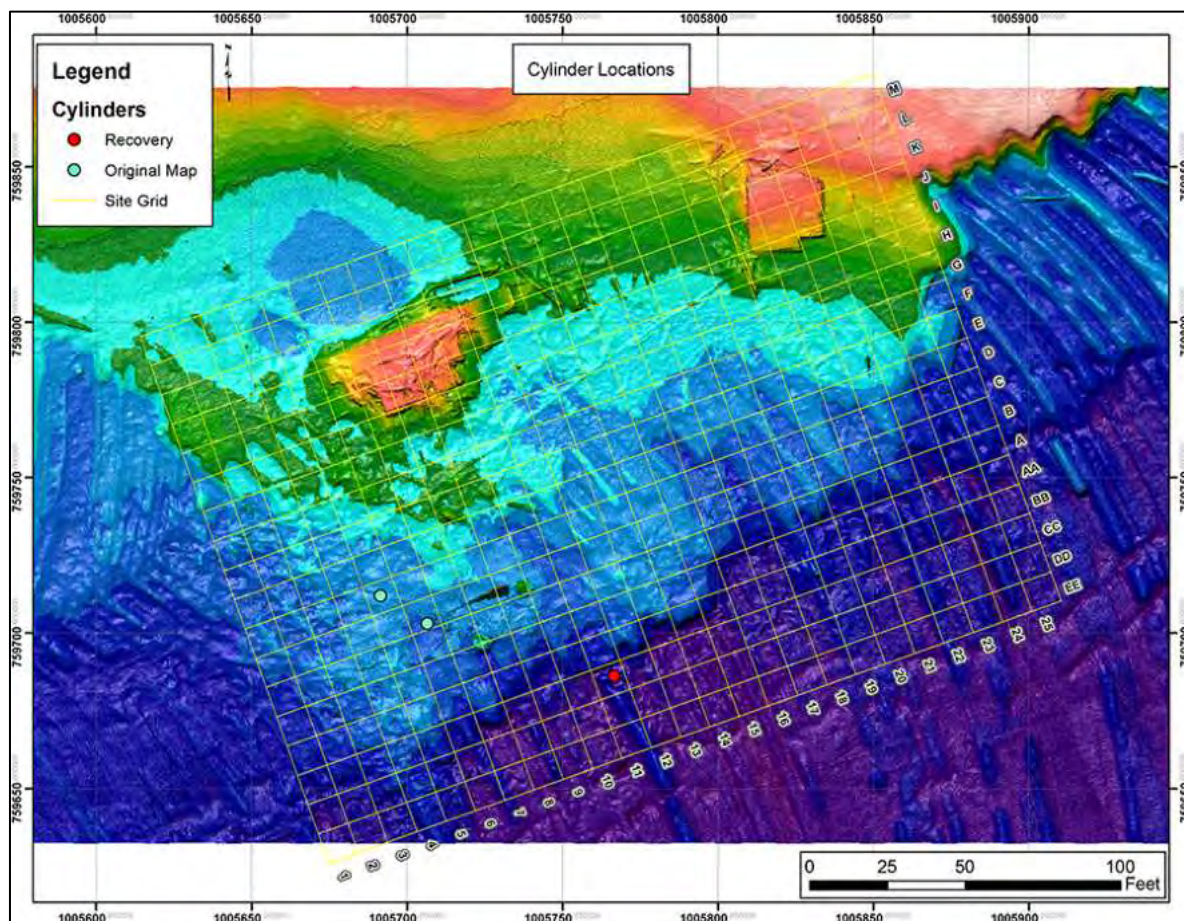


Figure 6-496. Provenience map of the two cylinders showing their 2003 mapped locations and their 2017 recovery locations. Both the fact that they were found so far away and recovered together in one grab is amazing.

One of the heavy cast iron side plates, 6 feet 3 inches long, 12 inches in width, and 2 inches thick, was recovered intact (Figures 6-497 to 6-499). The only one recovered of the four that would have been originally present, the ends of the side plate were drilled and chamfered for special bolts with ball heads that could be tightened to maintain positioning and tension. A 3-foot long, 9.75-inch wide, and 2-inch thick plate was attached to the outboard face of the side plate. That plate lapped 3 inches above the side plate to facilitate mounting the 3-inch wide, 3-foot long crosshead guide. The back side of the side plate was cast with reinforcing that served to stabilize mounting on the engine bed timbers and butting against the longitudinal mounting plates on the steam cylinder.

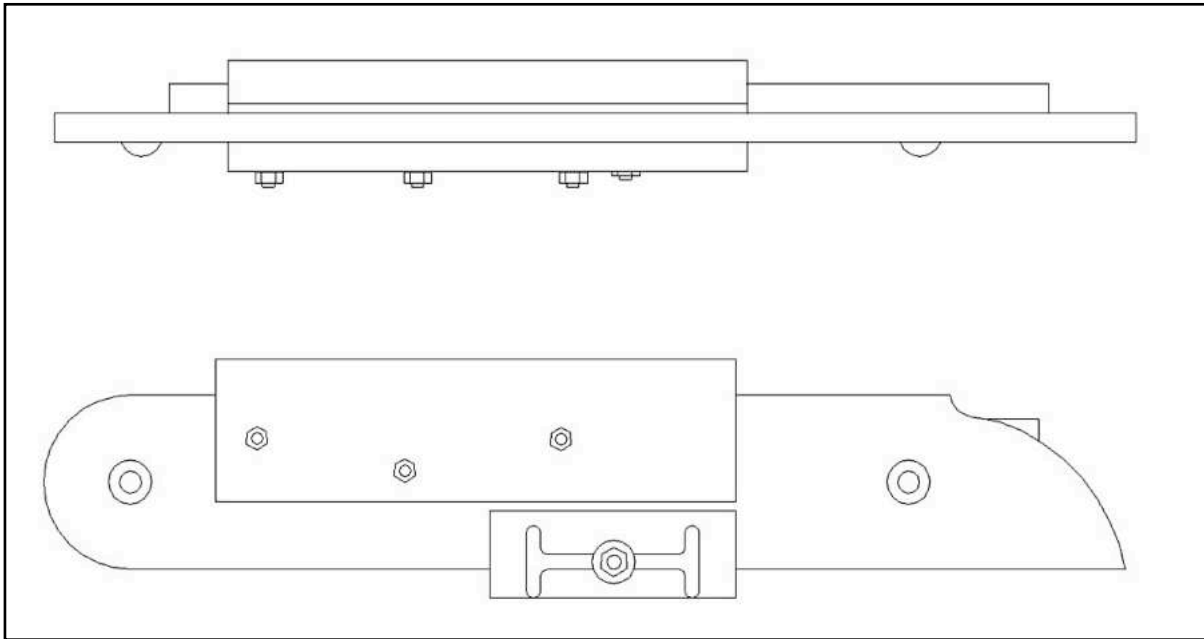


Figure 6-497. Schematic of side plate with crosshead guide.



Figure 6-498. View of Artifact 5052.04, a side plate, immediately after recovery in 2017; recovered from Unit 12-BB adjacent to the two cylinders.



Figure 6-499. View of Artifact 5052.04, a slide plate after conservation; recovered from Unit 12-BB immediately adjacent to the cylinders.

Several elements of the crosshead were recovered, which permitted that feature to be reconstructed (Figure 6-500). The crosshead was cast 17.5 inches in length, 7 inches in height, and of 8.75 inches in width. It was cast with a reinforcing lip that surrounded the hole for the 3-inch diameter piston rod. A wedge went through the crosshead and piston rod to secure the connection. One side of the crosshead was machined for a 4-inch diameter wrist pin seated in a recess of the same diameter machined into the other side. The sides of the crosshead were fitted with slide plates that could be replaced to compensate for wear.

In addition to the primary elements of steam machinery described here, material recovered from the salvaged site included the remains of a Worthington direct-acting steam pump (Artifact 1861.13; recovered from Unit 5-F). Before cleaning and conservation, the rubber valves in the pump chamber provided a diagnostic clue that led to identification. An illustration of the patented Worthington steam pump was identified in an 1852 issue of the *Proceedings from the Institute of Mechanical Engineering* (Figures 6-501 and 6-502). The remaining pump component consisted of a bronze valve plate containing 33 valves encased in a copper housing, and whose base is a domed cast iron cover (Figures 6-503 to 6-508). Aboard the CSS *Georgia* the Worthington was likely used to pump exhaust steam from one or both of the primary cylinders to a condenser. Another unprocessed example of material from the site illustrates a yet to be identified element of machinery within the Worthington. Until the inspection plate in the end is removed and the interior inspected, it is impossible to determine if the object is a steam drum, a mud drum, or possibly a condenser (Figure 6-509).

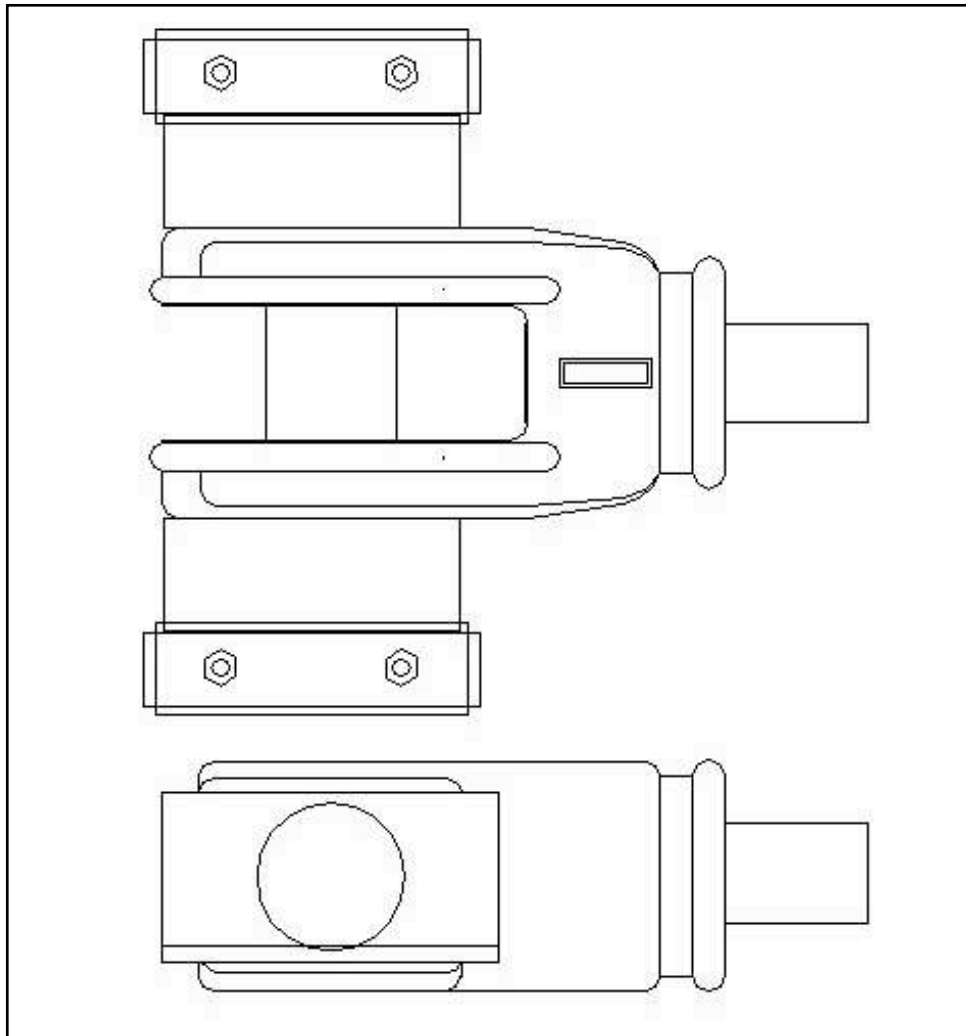


Figure 6-500. Crosshead for piston rod, top and side views.

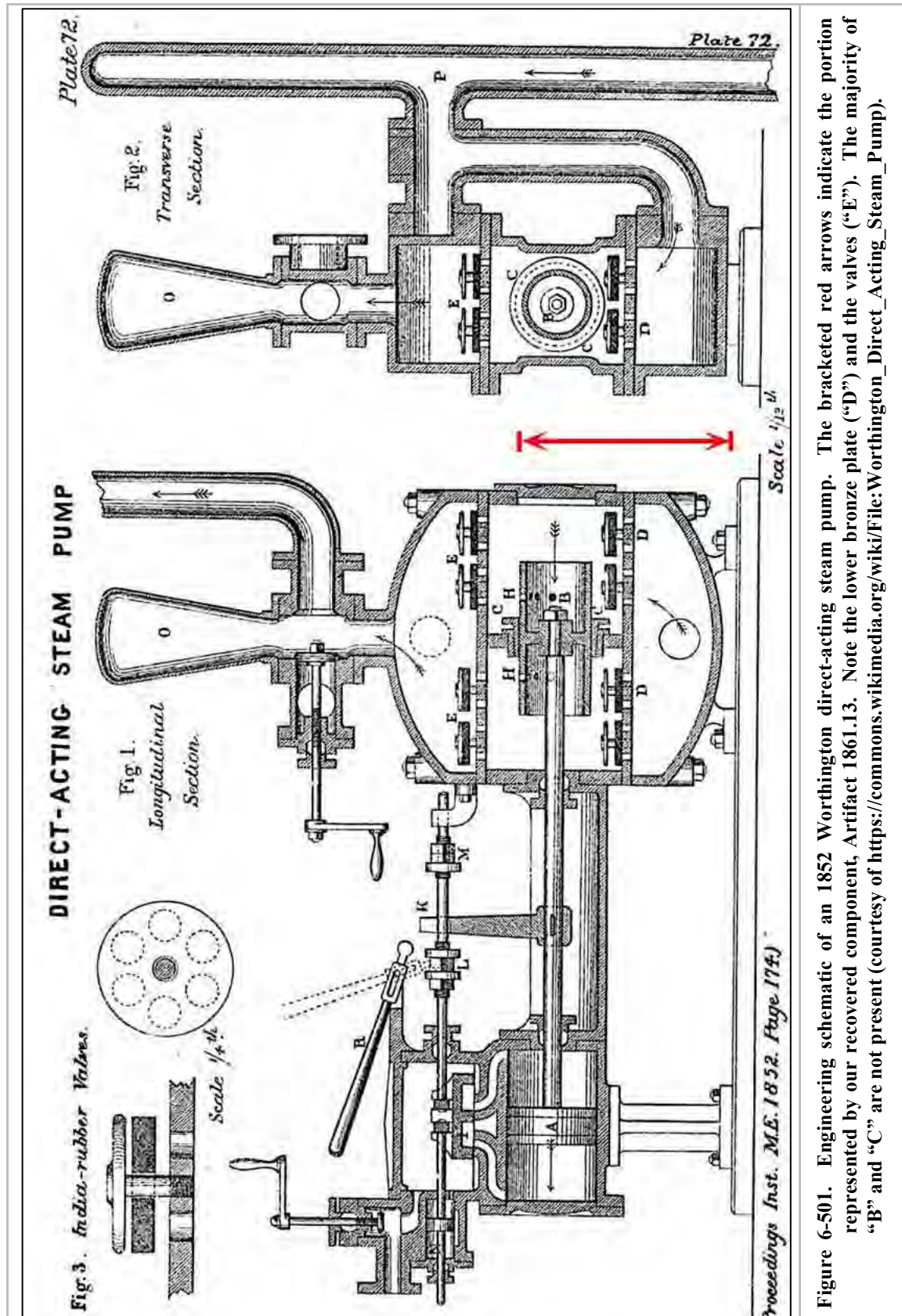


Figure 6-501. Engineering schematic of an 1852 Worthington direct-acting steam pump. The bracketed red arrows indicate the portion represented by our recovered component, Artifact 1861.13. Note the lower bronze plate ("D") and the valves ("E"). The majority of "B" and "C" are not present (courtesy of https://commons.wikimedia.org/wiki/File:Worthington_Direct_Acting_Steam_Pump).

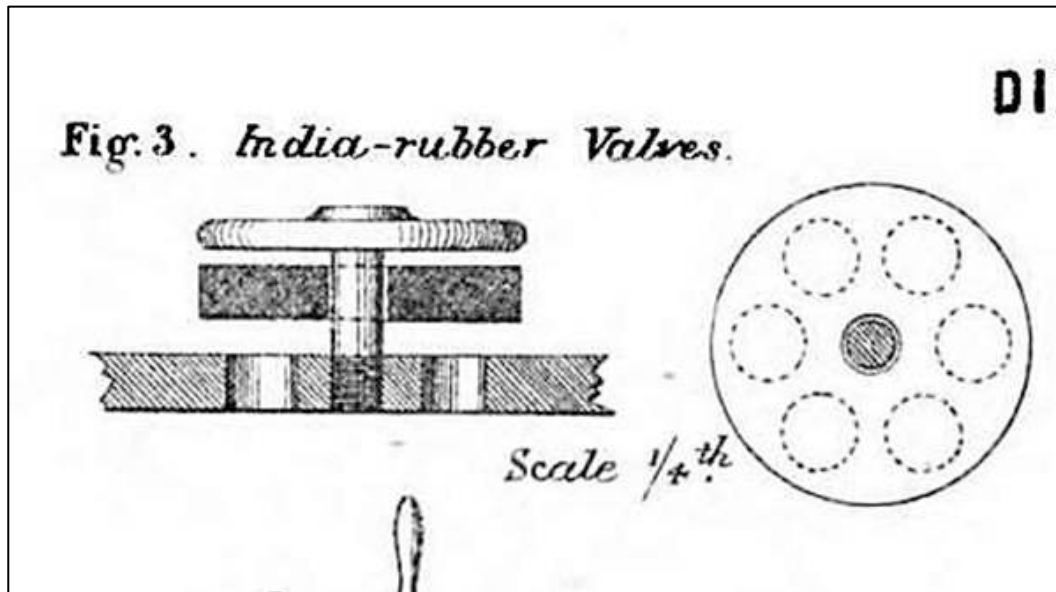


Figure 6-502. Excerpt from 1852 engineering drawing above of one of the early generation Worthington valves. Compare with the valves and gaskets on the recovered pump below (courtesy of https://commons.wikimedia.org/wiki/File:Worthington_Direct_Acting_Steam_Pump).



Figure 6-503. Artifact 1861.13, Worthington steam pump component recovered from Unit 5-F. Note the valves and their black circular rubber gaskets, all surrounded by a copper housing.



Figure 6-504. Opposite side of the Worthington direct-acting steam pump, Artifact 1861.13. The bronze plate with its valve holes can be seen underneath the concreted iron in Figure 6-505.



Figure 6-505. Artifact 1861.13 after conservation. Shown are the Worthington direct-acting steam pump copper housing with bronze valve plate. Two valves have been reinserted.



Figure 6-506. Artifact 1861.13, a Worthington direct-acting steam pump plate, bronze valve plate after conservation, base view. The iron covering would have attached to this side.



Figure 6-507. Close up of one of the bronze, spring-loaded valves of Artifact 1861.13 put in place after conservation as a demonstration; rubber gasket has been removed.



Figure 6-508. Artifact 1861.13, Worthington direct-acting steam pump cast iron cover. This attached to the base of the bronze valve plate above and is thought to represent the bottom of the pump.



Figure 6-509. Unidentified drum with inspection fitting in the end and pipe connections.

Hull Remains

One of the most perplexing aspects surrounding the wreck site is the absence of the hull. Large sections of casemate remain on-site, but to date the location of the hull has remained a mystery. Was it salvaged, destroyed by dredging, or does it rest elsewhere? We do not know. Representing an extremely small percentage of what would have been the hull, only two fragments identifiable as hull were recovered. Shedding little light on the hull and its disposition, one such item is Artifact 1905.3, a portion of the rudderpost that was recovered from Unit 6-E free of any other attached timbers (Figure 6-510). With a remaining length of 5 feet, the 12-inch wide by 6-inch thick timber has an attached bronze gudgeon at the top of the timber that has a cut (or butt) end. The gudgeon straps have been broken at the bronze drift that fastened it in place. The impressions and fasteners for where another gudgeon would have been present are approximately 3 feet below the intact gudgeon. As discussed below, it is thought the CSS *Georgia*, built as a scow or barge, employed a single rudder, the support for which is represented by Artifact 1905.3.



Figure 6-510. Artifact 1905.3, a rudderpost with a bronze gudgeon recovered from Unit 6-E. Note the gudgeon straps have been broken at the bronze drift that fastened it in place.

Illustrated in Figure 6-511, the only other piece recovered that was identifiable as a hull fragment was Artifact 1953.3, a small section of the side of the deck (or bulwark), identifiable as such because it retained a large iron cleat. The cleat is 3 feet in length and fastened by drift bolts through and atop two 9-inch high 11-inch wide oak timbers. A 3-D model created by CRL of the artifact is presented in Figure 6-512.¹



Figure 6-511. Artifact 1953.3, a small section of the side of the deck (or bulwark) with a large iron cleat recovered from Unit 8-F.



Figure 6-512. 3-D image of Artifact 1953.3, a small section of the side of the deck (or bulwark) with a large iron cleat recovered from Unit 8-F (courtesy CRL Texas A&M University).

¹ This 3-D model can be found at the CRL Texas A&M University website (<https://skfb.ly/6NUs6>) along with 3-D images of other CSS *Georgia* artifacts.

CASEMATE

Based on the recovered structural remains, the casemate of CSS *Georgia* was approximately 120 feet in length on deck. That dimension reflects the combined length of the two sections of casemate that comprise virtually all of the surviving vessel structure. The larger casemate section measured 75 feet in length and the smaller section measured 43 feet. The width of both sections measured 24 feet, the length of a piece of rail. One end of each surviving section of casemate structure was built diagonally or progressively shortened to create an angle of 45 degrees. The third, and smallest, section of casemate structure appears to be the upper element of either the forward or aft end of the casement. That fragment measures 12 feet across the top and approximately 18 feet across the base.

Each section of the recovered casemate was constructed of 24-foot lengths of 3.5-inch high railroad iron rail attached to 8 inches of horizontal oak that was attached to 12 inches of vertical pine timbers (Figures 6-513 and 6-514). The 12-inch pine timbers of the casemate frame were fastened to one another using horizontal drift pins and spikes in a staggered arrangement similar to that employed in the hull of the CSS *Neuse* and CSS *Jackson*. The horizontal courses of 8-inch thick oak were attached to the lower 12-inch thick pine timbers by bolts and treenails. The 16-inch total wood thickness corresponds to historical accounts that her woodwork was about 15 inches of solid timber.

Reconstruction of the casemate was based on 24-foot widths angled at 45 degrees with 2 feet extending below a rebate on the inside of the pine timbers that appears to represent the deck beam joint (Figure 6-515). This rebate was recorded on the internal side of the East Casemate running the entire length near the base of the casemate. It can be seen clearly in Figure 6-516, an orthomosaic taken of the underside of the casemate while it was on its iron lift frame.

Based on the presence and location of the deck joist/beam rebate, if the casemate and hull of the CSS *Georgia* were attached similarly as the CSS *Savannah*, the top of the hull timbers might have been positioned below the deck beams (Figure 6-517). The joint between the casemate and hull, also like the CSS *Savannah*, could have been reinforced with shelf timbers on the inside, and boxing between the hull and extension of the bottom of the casemate forming the knuckle (Figure 6-518).

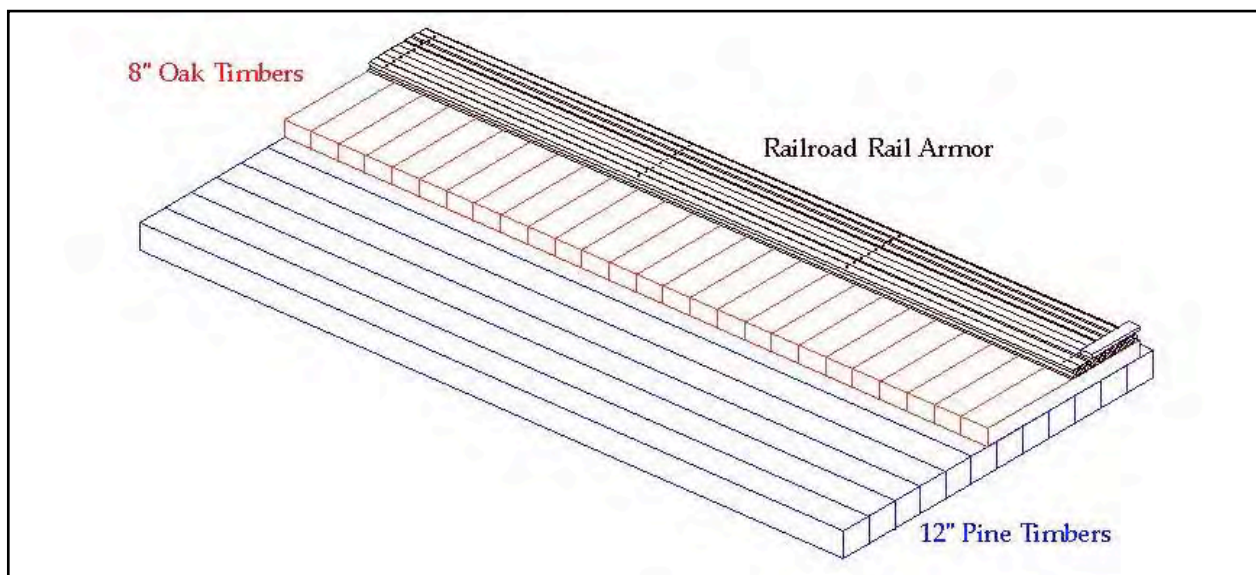


Figure 6-513. Casemate timber and armor construction configuration.



Figure 6-514. Orthomosaic of East Casemate end view, casemate base at left, top at right. Rail is on top of and fastened to 8-inch thick horizontal oak that was attached to 12-inch thick vertical pine timbers (at bottom). The large pine timbers formed the interior wall of the ironclad.

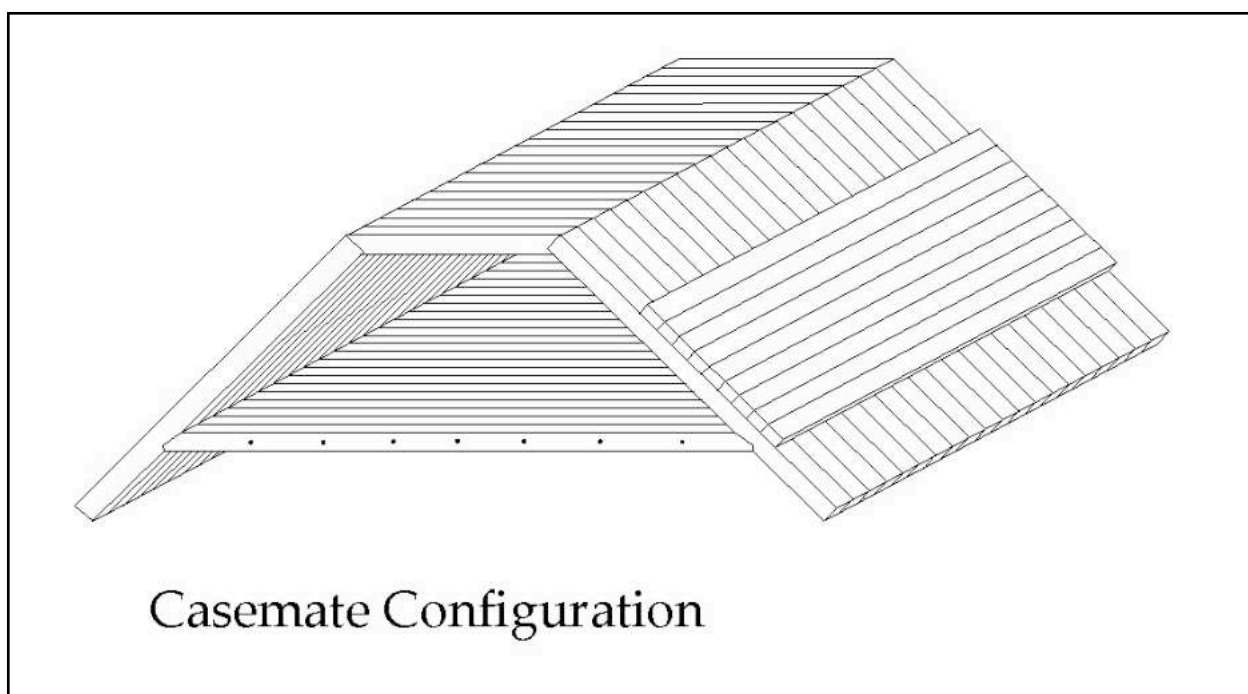


Figure 6-515. Casemate timber construction configuration showing rebates in the pine timbers for deck beams.



Figure 6-516. Orthomosaic of underside of the East Casemate. Base of the casemate is at bottom. Note the line of deck rebates cut into the vertical pine timbers just above the base. Also note the two vertical mortices cut into the face of one of the timbers near the center, their purpose unknown.

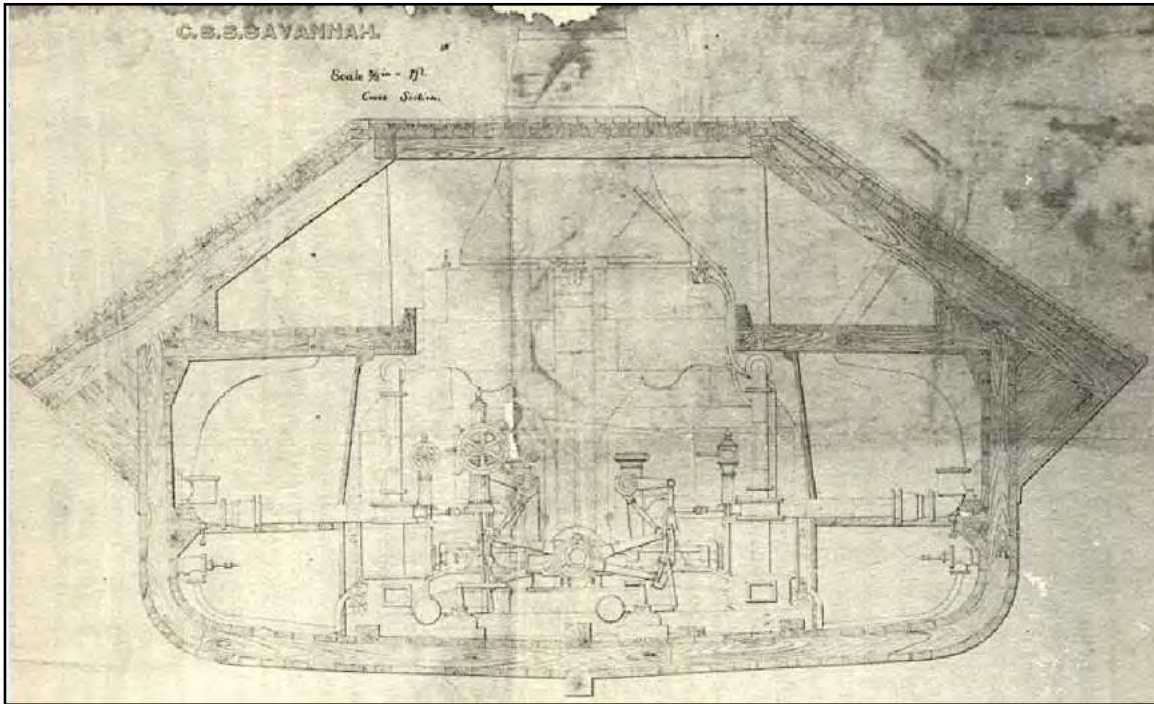


Figure 6-517. Cross section of the CSS *Savannah* illustrating the casemate overlapping the hull, shelf timbers, and knuckle configuration (as presented in Still 1988).

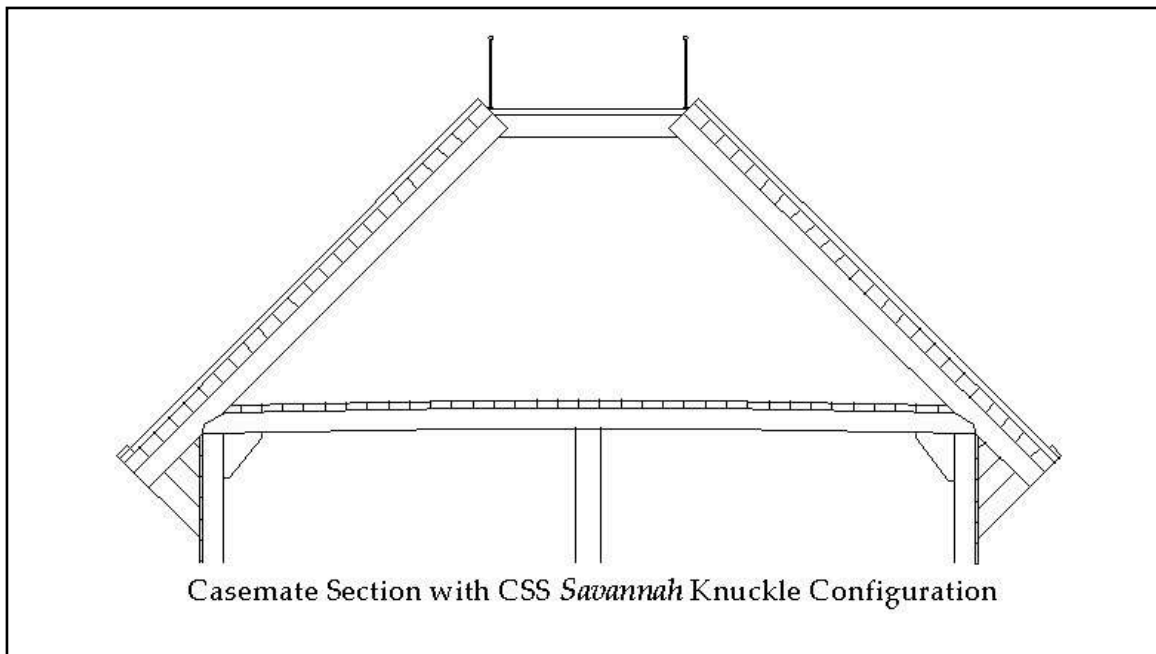


Figure 6-518. CSS *Georgia* cross section with deck rebates and CSS *Savannah* knuckle configuration.

The casemate was armored with 24-foot lengths of railroad iron except at each of its angled ends. It was comprised of two layers of interlocking rails with the first layer of rail fastened upright to the wood backing, and the second layer placed upside down and interlocked between the first layer. With the method illustrated in Figures 6-519 and 6-520, the best description of her armor is given in a June 1862 letter in which states, "...her woodwork is composed of about 15 inches

of solid timber, upon which is a double layer of railroad iron fitting into each other, and then a composition of iron filings and some kind of cement...laid upon the irons so as to cover the inequalities to make it solid and keep it from shaking” (Swanson and Holcombe 2003:74). Analysis of the casemates indicates at least seven different rail profile shapes, including a half rail (Figure 6-521). The half rail was a functional shape, while the other six possibly represent issues associated with different foundries.



Figure 6-519. Cross section of cut rails for integrity testing showing how the rails were interlocked in two layers, forming a solid flat surface on both sides. Material between rails may be iron fillings as noted above. All rails are shaped alike.



Figure 6-520. Close up of rails showing four different rail shapes. Also note the black pitch which has oozed out due to heat and possible filler to the right, both may represent “...a composition of iron filings and some kind of cement...laid upon the irons so as to cover the inequalities and to make it solid and keep it from shaking” (Swanson and Holcombe 2003:74).

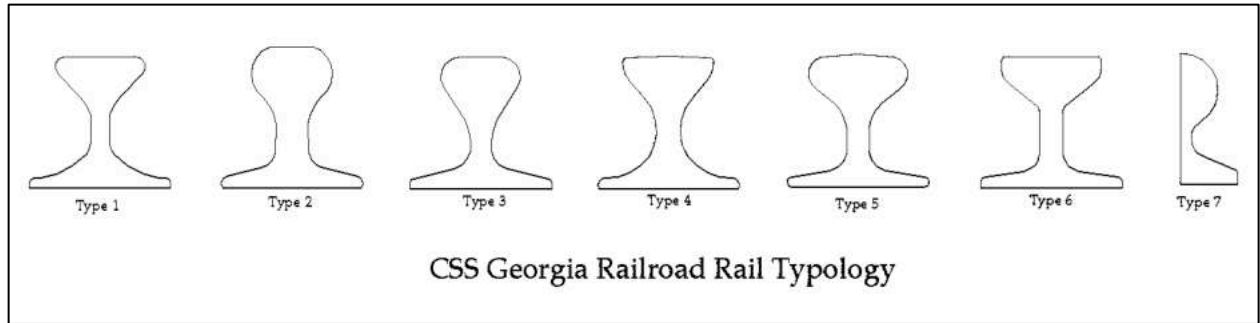


Figure 6-521. Field drawing of the seven different rail shapes on the West Casemate. Compare these rail shapes to Figures 6-519 and 6-520.

Spikes and bolts also were employed in fastening the two layers of interlocking rail armor to the wooden casemate structure (Figure 6-522). Railroad spikes were used to secure the upright rails to the oak base, the spikes placed through holes drilled into the foot or base of the rail. Bolts were used to secure the inverted rails to the 8-inch oak and 12-inch pine timbers, the bolts placed through a hole drilled through the center of the rail, passing through both timbers and fastened with a washer and nut on the inner face of the pine timber.

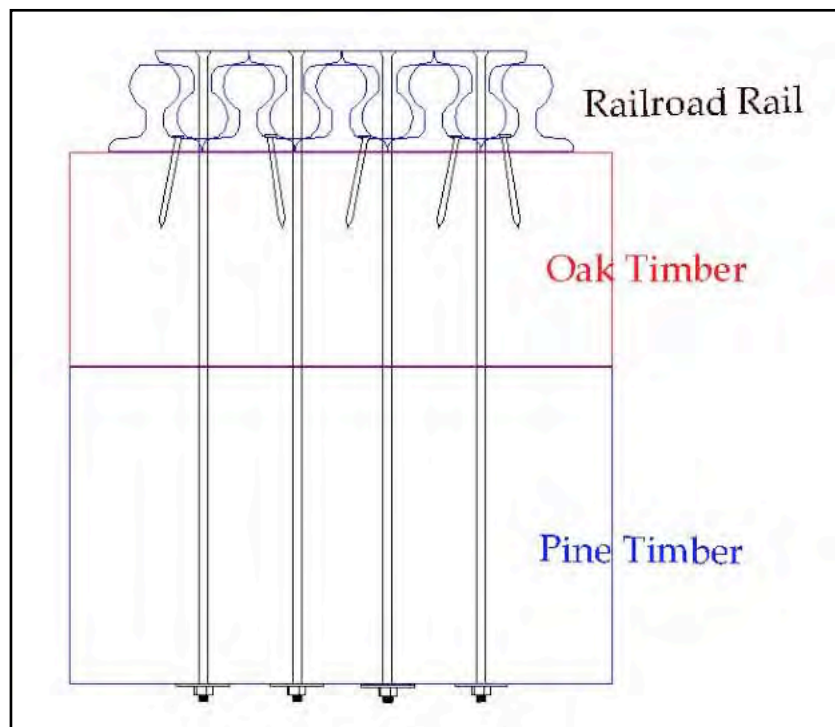


Figure 6-522. Configuration of fasteners that attach rail armor to the wooden casemate structure.

Illustrated in Figure 6-523, the bolts that fastened the inverted rail to the wood backing were located roughly 6 inches from either end of each 24-foot rail section and two rows of additional bolts were positioned 8 feet from each end. Also visible in the photograph is another row of rectangular fastener holes located on the seams of the inverted rails 2 inches in from the end. Present on both ends of the rail, these are thought to have fastened a no-longer-present foot or shelf along the outer face of the rails. Illustrated in Figure 6-524 is a close up of the through bolt fasteners on the inverted rails on a section of cleaned casemate.

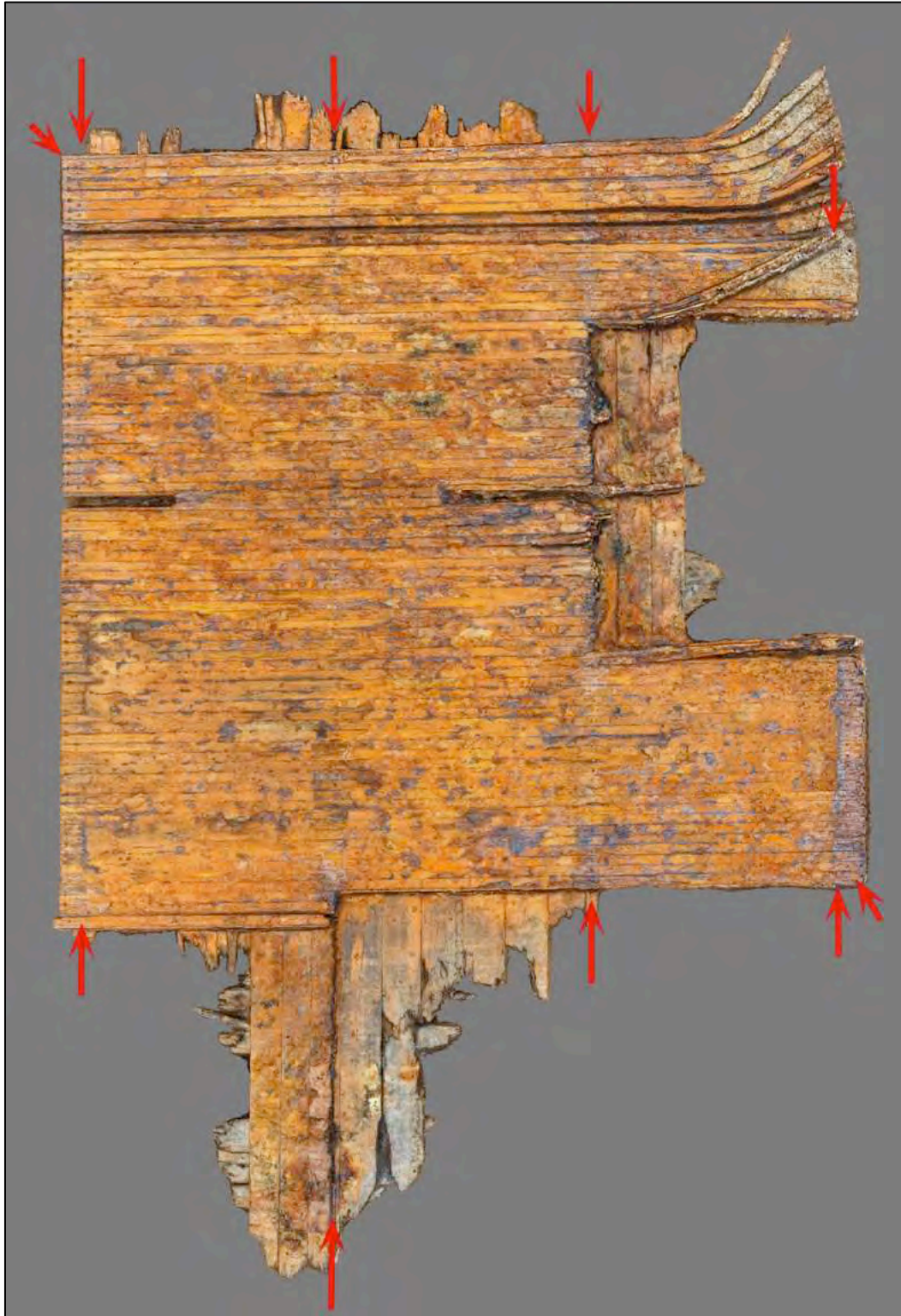


Figure 6-523. Orthomosaic of the West Casemate showing line of bolts that fastened the rail to the wood backing. Their locations identified with the straight arrows, they are located roughly 6 inches from either end of each 24-foot rail section, and two rows of additional bolts are positioned 8 feet from each end. Identified with diagonal arrows are rows of rectangular fastener holes located on the seams of the rails 2 inches in from each end. These are thought to have fastened a no-longer-present foot or shelf along the outer face of the rails.



Figure 6-524. Bolts were used to secure the inverted rails to the 8-inch oak and 12-inch pine timbers, the bolts placed through a hole drilled through the center of the inverted rail.

Based on evidence found on the single intact gunport cutout in the casemate, bolts were placed roughly 6 inches above and below the cut rails forming the gunport (Figure 6-525). The actual gunports were formed with cast iron 4 inches thick, 6 feet 1 inch long, and 2 feet 5 inches wide with their outer upper and lower faces beveled with a circular angle on the exterior side (Figure 6-526). The cast gunport sides were formed as half rails to accommodate overlapping and interlocking attachments with adjacent rails on the casemate (Figures 6- 527). The gunport has holes drilled in each of their corners, most likely to fasten to casemate wood backing (Figure 6-528). A schematic of the fastening pattern for railroad rail bolts on the casemate, as well as adjacent to the gun port is presented in Figure 6-529.



Figure 6-525. Orthomosaic of gunport (Lift WC-7) from West Casemate. At left is the 27-inch wide as-built cut-out for the cast iron gunport. The base of the casemate is at far right. It will be found to be the only gunport on the entire length of the West Casemate. Center arrow marks line of fasteners just to the right of the gunport that is found only below the gunport. The two other arrows point to line of fasteners that go completely across the casemate.



Figure 6-526. Artifact 1701, the actual gunports were formed with cast iron 4 inches thick, 6 feet 1 inch long, and 2 feet 5 inches wide (27 inches) with their outer upper and lower faces beveled with a circular angle on the exterior side.



Figure 6-527. Artifact 2049, the gunport sides were cast in the shape of a half section of rail to accommodate overlapping and interlocking attachment with adjacent rails on the casemate.



Figure 6-528. Artifact 2049, the gunport has holes drilled in each corner, most likely to fasten the gunport to casemate wood backing.

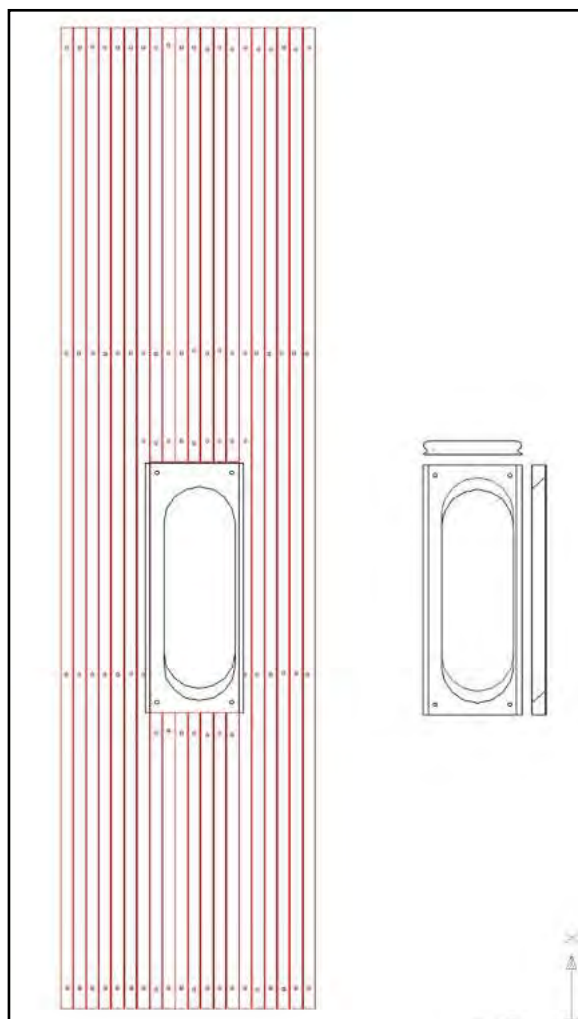


Figure 6-529. Schematic of the fastening pattern for railroad rail bolts on the casemate, as well as adjacent to the gun port. Gunport casting schematic included.

RECONSTRUCTION

Reconstruction of the CSS *Georgia*'s casemate is based primarily on evidence recovered from the salvage site. The length of the casemate sides was dictated by the 24-foot standard length of railroad rails. Sections of the casemate at the salvage site indicate that the base of the casemate length was 120 feet. Using a 45-degree angle for the sides indicated by historical documentation, contemporary illustrations, and evidence associated with the recovered structure, this casemate reconstruction appears relatively accurate. A plan view of the reconstructed casemate is illustrated with gunports for ten cannon in Figure 6-530. Casemate structure at the salvage site indicates that the aft 54-foot section of the structure where the steam machinery was located was not fitted with gunports. In that area the gun deck over the boiler would likely have been iron grate or iron beams and plate to reduce the potential for fire. That would result in four ports per side forward of the machinery. With 16 feet between the gunport centers there would have been adequate room on deck for servicing the weapons. That spacing would also have placed the forward port close to the location of the gunport identified in the east section of surviving casemate. Although no identifiable evidence appears to survive, at least a portion of the top of the casemate structure would likely have been grated. That would have facilitated dissipation of heat and gun smoke in an engagement. It would have also contributed to frequent complaints about damp conditions aboard the ironclad.

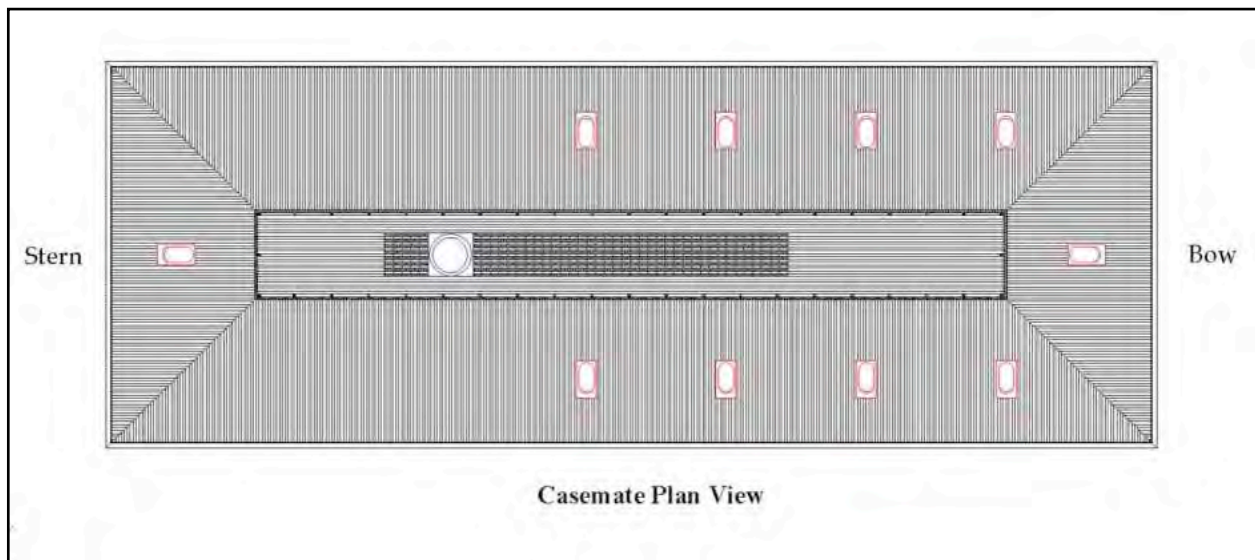


Figure 6-530. Plan view of the reconstructed casemate with ports for ten guns.

The accurately established height of the gunports in the casemate armor, 8 feet above the base, indicates the gun deck was approximately 4 vertical feet above the base of the top of the hull. That height was additionally reinforced by a rebate in the pine timbers of the casemate that appears to have served as a seat for the deck beams (Figure 6-531). The ends of the deck beam timbers were likely supported by horizontal and vertical timbers to carry the weight of the CSS *Georgia*'s artillery. With a deck width of 30 feet 8 inches there would have been sufficient clearance for recoil of the guns. Even if in the apparently unlikely event that port and starboard weapons were fired simultaneously, effective use of the truck tackle would have precluded any serious hazard. In the reconstruction only one gunport has been located forward and one gunport aft. In the bow one gun on a pivot carriage could have fired from all three forward ports.

The reconstruction includes 3 inches of camber in the gun deck that would channel water to the watercourses and assist in absorbing the energy of gun recoil. Over the boiler and machinery, the gun deck has been fitted with a ventilation grate to relieve heat and provide air for the boiler.

A similar grate has been designed into the top of the casemate for that purpose and to facilitate clearing smoke from the gundeck (Figure 6-532). The fore and aft extremities of the top of the reconstructed casemate have been covered with wood and railroad iron for protection from the elements and plunging shot (see Figure 6-530).

Reconstruction of the casemate affords some insight into both the design and displacement of the hull that was constructed for the CSS *Georgia*. The 120-foot long by 44-foot wide casemate dictates basic dimensions for the hull. The hull form and length of the bow and stern could vary considerably. However, the type of steam machinery found at the wreck site indicates that the hull was designed without sufficient hydrodynamic efficiency to support expectations for “gunboat” performance. That eliminates virtually all the complex forms that have been previously considered (see James and Watts 2007).

One of the critical factors in determining hull form is the displacement required to support the weight of the vessel and armor, machinery, fuel, ordnance, supplies, and personnel. The weight of the casemate and its armor can be calculated using the 120-foot length and 24-foot width of the sides and 44-foot length and 24-foot width of the ends (see Figure 6-530). Those figures produce 2,304 square feet per side of the casemate. Using the 44-foot width and 24-foot height of the ends produces 672 square feet. Doubling both those values produces a total square footage of 5,952; less approximately 100 square feet for gunports leaves a total of 5,852 square feet.

The weight of railroad iron rails varied considerably during the nineteenth century. Using a conservative weight of 18 pounds per foot of railroad iron and the figure of 6 linear feet per square foot, a figure of 108 pounds per square foot is produced (Holcombe, personal communication, 2004). Using 108 pounds per square foot and 5,904 square feet, the total weight of rail iron appears to be at least 355.58 tons. Armor on the casemate roof and grating has been calculated at 36.78 tons. Fasteners could add another 12 tons to the weight of armor. The total weight of the armor and fasteners in the casemate reconstruction has been calculated to be approximately 404.36 tons.

The weight of wood in the casemate, including a gun deck, can also be calculated. White oak and water oak weigh approximately 47 pounds per square foot cured. Long leaf yellow pine weighs 41 pounds per square foot cured. While green wood weighs more than those figures, cured wood would have been preferred for construction; whether it was available is unknown. Based on evidence from the wreck site, each square foot of casemate would be composed of a 4-inch layer of oak, a 12-inch layer of pine, and a final 8-inch layer of pine. The 4-inch layer of oak would weigh approximately 16 pounds, the 12-inch layer of pine would weigh 41 pounds, and the 8-inch layer of pine would weigh about 28 pounds per square foot. Each square foot of casemate would weigh 85 pounds. With 5,904 square feet of structure, less 710 to compensate for the 45-degree bevel on each edge, the total weight would be 250.92 tons. The weight of a gun deck constructed of 12-inch square beams on 24-inch centers and 4-inch pine planks would be an additional 77.66 tons. The top of the casemate could add an additional 20.3 tons of wood. Fasteners could make up another 22 tons to the weight of the casemate structure. The total weight of wood and fasteners in the casemate reconstruction has been calculated to be approximately 370.88 tons.

Construction details associated with surviving remains of the casemate confirm that the structure was built of both pine and oak. The casemate frame was fashioned from 12-x-12-inch pine timbers positioned vertically. The outer liner was a layer of 8-inch thick oak planks also attached horizontally. Casemate armor consisted of two vertical layers of railroad iron. The first layer attached upright over the 8-inch oak exterior. The second layer of rail was inverted. Each inverted rail was placed between two of the initial rails and was attached through the casemate structure by up to four 0.75-inch iron bolts (see Figure 6-522). Although the method of attaching

the casemate to a deck or hull remains to be positively ascertained, it appears to have rested on the top of the hull, and likely one or several shelf timbers. The method of attachment to the top of the casemate also remains to be determined, but it is possible that the vertical 12-inch pine timbers of casemate were notched into top timbers of similar dimensions.

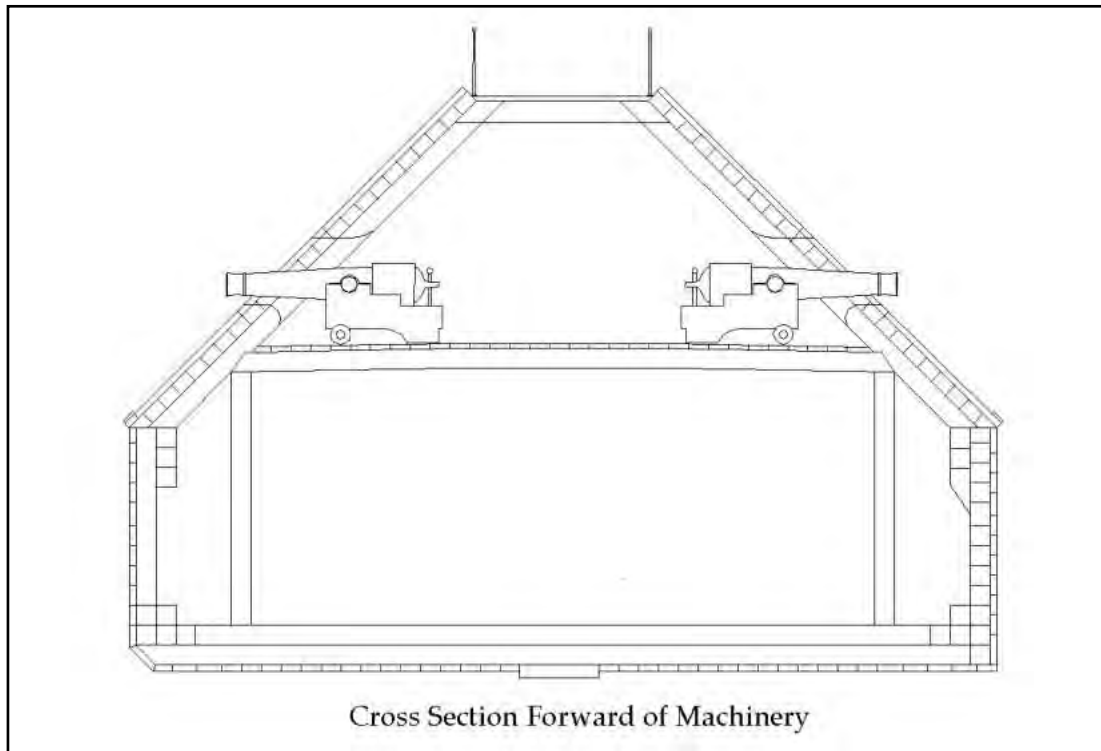


Figure 6-531. Cross section of the reconstruction at the location of gunports forward of the machinery.

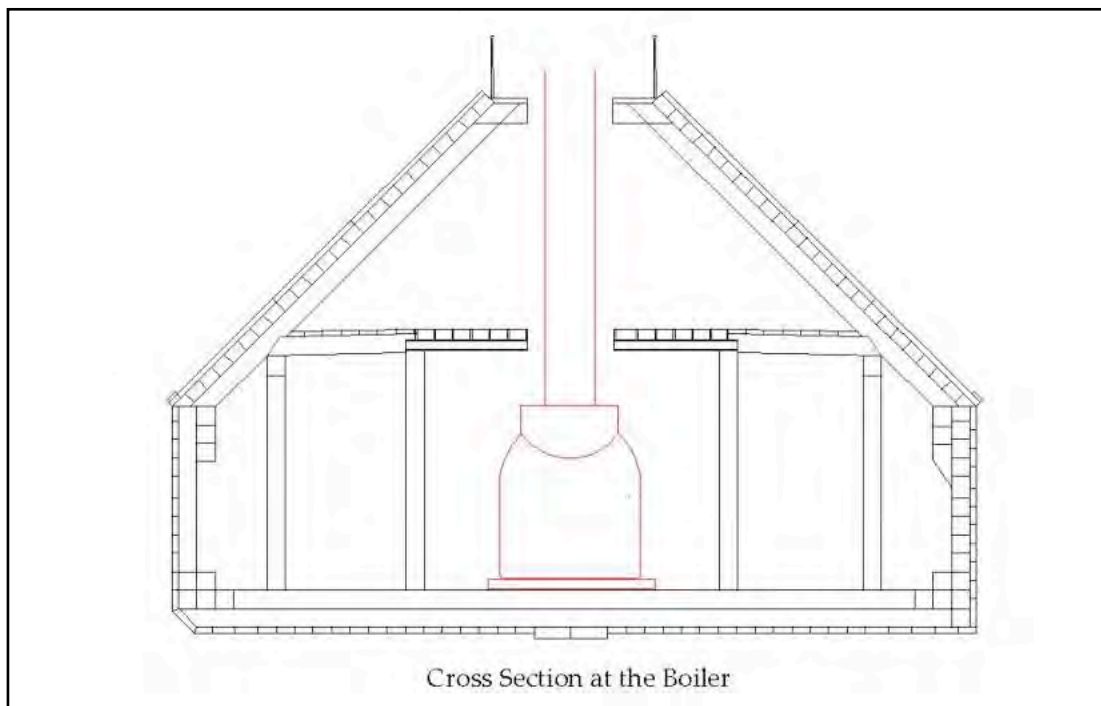


Figure 6-532. Cross section of the hull and casemate at the boiler flue.

Primary Propulsion Machinery

Steam machinery recovered at the salvage site also provides clues to the hull design. A single propeller and shaft were recovered. The diameter of the propeller and features associated with the struts and shaft confirm that CSS *Georgia*'s stern was designed to accommodate twin screws. The two recovered steam cylinders and counter balanced flywheel for the propeller shaft suggest that each propeller was powered by a single cylinder (Figure 6-533). The steam cylinders were mounted on wood timbers. Those timbers also supported the heavy cast iron side bed plates for the crosshead guides, pillow blocks, and thrust bearings for the shaft. Mounting plates cast into the through-hull fitting that also contained the stuffing gland indicate that the aft end of the hull was either ramped like a barge at 45 degrees or positioned in a stern with vertical sides joining the sternpost at 45 degrees like the CSS *Mississippi* and CSS *Louisiana* (Figure 6-534).

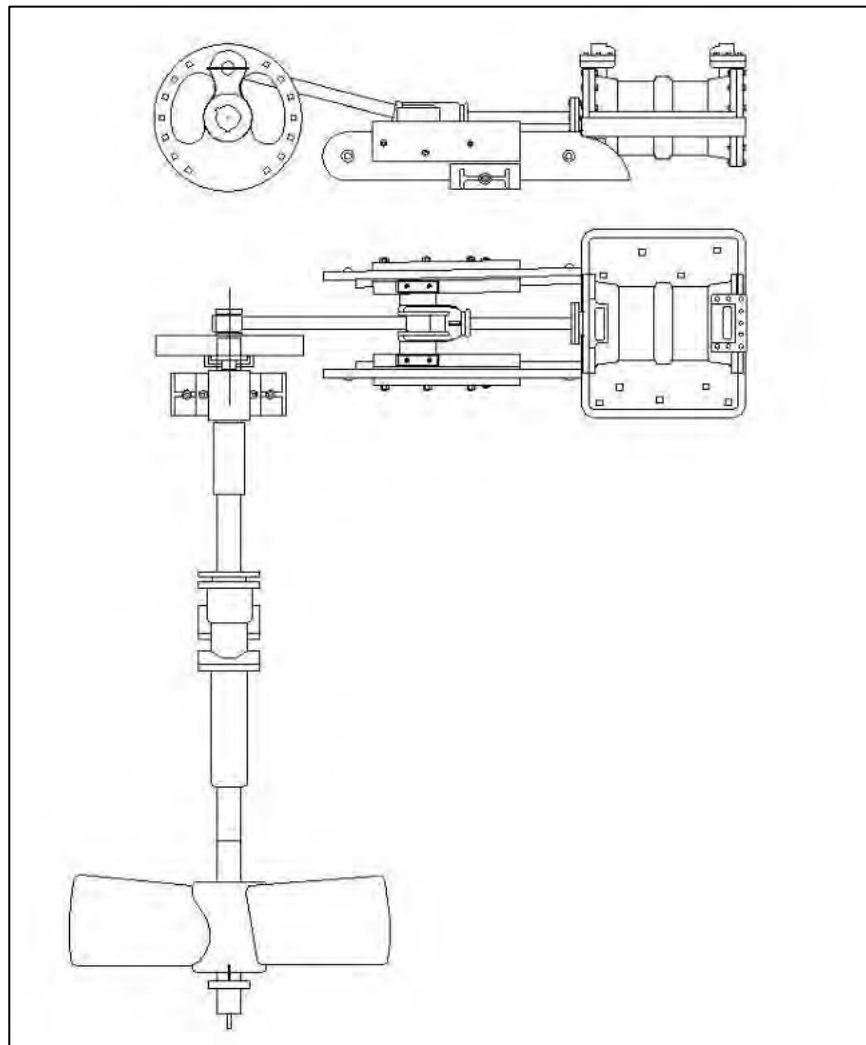


Figure 6-533. Schematic of two steam cylinders, one of each that turned a counter balanced flywheel which, fastened to the end of the propeller shaft, turned both the shaft and the propeller.

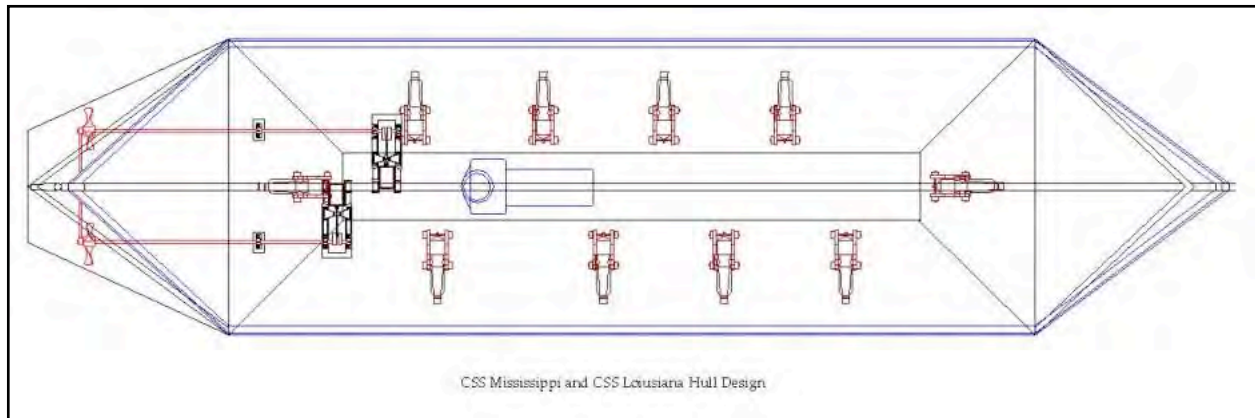


Figure 6-534. The CSS *Mississippi* and CSS *Louisiana* hull configurations plan view under the CSS *Georgia* casemate.

Although both the CSS *Mississippi* and CSS *Louisiana* were dramatically larger than the CSS *Georgia*, their hull designs would have been relatively easy to construct and required no compass timber (i.e., naturally curved). As the design of the CSS *Mississippi* was conceived by a southern Georgia planter, entrepreneur, and politician Nelson Tift (Holcombe 1993:44), his hull-form ideas may well have been shared with the designers and builders of the CSS *Georgia*. In fact, Tift visited Savannah in the fall of 1861 and apparently conferred with H.F. Willink (Swanson and Holcombe 2003:47). However, that configuration seems less likely, as more time and material would have been required for construction and the propeller shafts might have been longer than the one recovered. If the CSS *Georgia* was designed and constructed like the CSS *Mississippi* and CSS *Louisiana*, her performance might have been much improved and the design replicated; however, that was not the case. For example, the CSS *Savannah* was constructed with a much more sophisticated and hydrodynamic seagoing design.

The most simplistic of the hypothetical hull configurations previously considered is a barge. While no doubt one of the least likely to have been hydrodynamic, that design could certainly have carried the vessel's weight and would have insured the ironclad's almost complete lack of performance under power. Based on the steam machinery recovered at the site and data from both the historical and archaeological record, a total weight for the CSS *Georgia*'s propulsion equipment has been calculated at 42 tons. That figure includes boiler water weight. The CSS *Georgia* could have easily carried 100 tons of coal and that weight was used for fuel in the designs. The total weight of ordnance, including cannon, carriages, shot, and powder has been calculated at 50.5 tons. That figure is based on a ten-gun main battery and two small deck guns. Potable water and supplies could easily have added another 8 tons, and the crew and their possessions could have weighed 6 tons. Those figures total 981.74 tons the hull design would have had to carry in addition to the 775.24-ton casemate weight.

In a letter written on May 19, 1862, the day the CSS *Georgia* was launched, Gazaway Bugg Lamar noted that the armor had not been completed "on the roofing and the bow and stern." While that could mean the fore and aft sections of the casemate itself, it could also suggest that the hull extended beyond the casemate and plans called for cladding those decks (Swanson and Holcombe 2003:33).

Based on the concept that the hull extended only marginally beyond the casemate, a barge-like hull would have provided the most appropriate form and displacement. That design would have also ensured the hydrodynamic problems that could have been, in part, responsible for the lack of speed and maneuverability of the CSS *Georgia*. However, this form would be the most unthinkable configuration that anyone familiar with even the rudiments of ship design and

construction would adopt. As the design for the CSS *Georgia* may never have been approved by the Confederate Chief Naval Constructor, it may well have lacked engineering merit. However, the participation of men such as A.N. Miller, G.B. Lamar, and likely J. Tattnall should have ensured that the design was the most functional and seaworthy given the resources available.

The most elementary design for the hull of CSS *Georgia* could have been a barge with ramped ends. That form could have been quickly built and would have required only saw-cut timber for construction. A barge hull design would have required little of the shipwrights' skills necessary for a more complex and hydrodynamic form. The February 21, 1863 Frank Leslie's illustration suggests that there were short decks or bulwarks on submerged deck structures fore and aft of the casemate (see Figure 6-436).

A barge-built hull of sufficient strength to support the 120-foot long, 44-foot wide casemate of the CSS *Georgia* likely would have been slightly longer but equal in width. The additional length would have provided buoyancy at the bow and stern to compensate for loss due to the ramps and additional weight of the casemate ends. In the stern additional displacement would be necessary to compensate for machinery weight and provide a configuration adaptable for twin screws. In the reconstruction, the bow has been extended 12 feet forward of the end of the casemate and the bow ramp is 45 degrees. As with traditional heavy barge construction, the bottom might have been cross-framed with 1-foot square floor timbers. The method of attachment might have been staggered drift pins like that employed in constructing the bottom of the CSS *Jackson*. The sides of the hull would likely have been constructed of stacked and similarly pinned 1-foot square timbers. It is also possible that the sides of the barge were constructed of vertical, 1-foot square timbers notched into the floor timbers and fastened with staggered pins. In either case, the chine and gunnel would have been reinforced by heavy longitudinal timbers. Two chine concepts have been illustrated in the barge section drawings. On the right the floors and sides of the hull form a 90-degree angle. While simpler to build, that configuration would have been more susceptible to damage than the beveled chine illustrated on the left side of the hull. At the gunnel those timbers would have formed a clamp or shelf to accommodate the casemate.

The ramps could have been constructed of either longitudinal or athwartships timbers. The top and bottom of the ramps would likely have been reinforced by heavy timbers and the top would have included a shelf or clamp for the deck. The stern, aft of the ramp would have no doubt been formed by a platform extending aft to protect the propellers and rudder. A skeg and deadwood would have extended aft to accommodate the rudder and cutlass-bearing mounts. The entire structure would likely have been planked with 2.5- to 3-inch oak. The interior of the barge would have been strengthened with heavy stringers that would also have provided a platform for machinery and support for deck structures. Both the fore and aft decks might have been fitted with a timber structure extending from the casemate corners to the bow and stern to provide some marginal protection from water on the bow and stern. That arrangement is suggested in one of the contemporary artistic illustrations of the vessel. Both the bow and stern decks have been fitted with bulwarks to channel water away from the casemate and provide deck space necessary for vessel handling.

Because of the size of the propellers, 7 feet 3 inches in diameter, a draft in excess of that would have been desirable. Submerged to a depth of 11 feet, the short barge hull would have provided approximately 1,556 tons of displacement. The weight of the vessel, machinery, ordnance, fuel, supplies, and crew with minimal equipment has been calculated at 1,284.5 tons. That would provide approximately 271.5 tons of reserve buoyancy. A portion of that could have been used to ballast the bow of the CSS *Georgia*, thus compensating for the machinery and fuel weight aft of amidships and still maintain a relatively comfortable reserve.

Steam machinery in the barge configuration would have been in the stern (Figure 6-535). The boiler would have been mounted between the stringers on a heavy timber bed designed to support a layer of firebrick or cement insulation. Bunkers for coal would likely have been located outboard of the boiler on both sides of the hull. Aft of the boiler the steam cylinders would have been mounted on athwartships beds of sufficient length to provide for pillow blocks with thrust bearings for the forward end of the propeller shaft and flywheel. Additional pillow blocks would have supported each shaft between the engine and a stuffing gland. A bearing supported the end of each shaft and was attached to the ramp and deadwood by 1-x-4-inch struts (Figure 6-536).

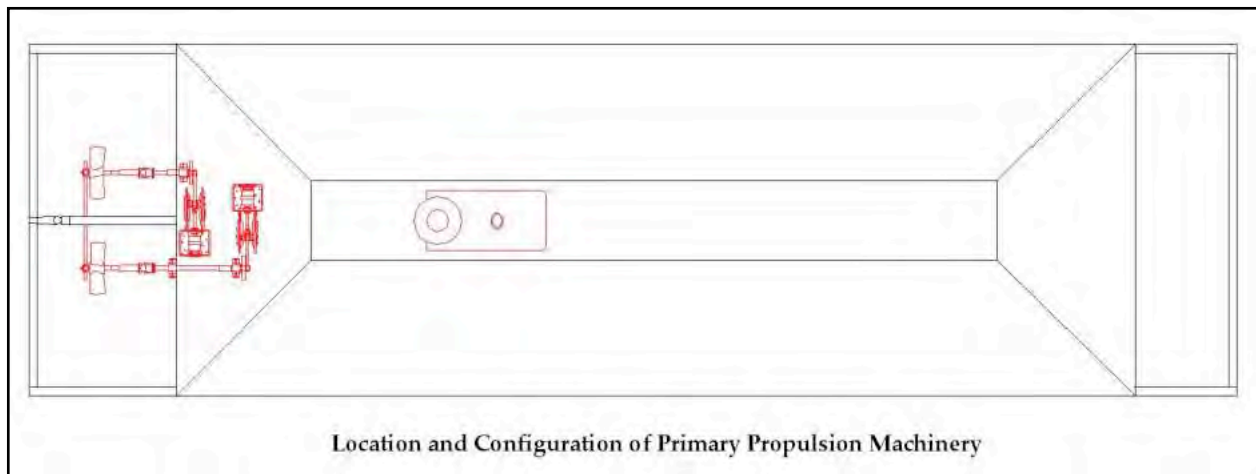


Figure 6-535. Barge hull configuration with location of the primary steam propulsion machinery.

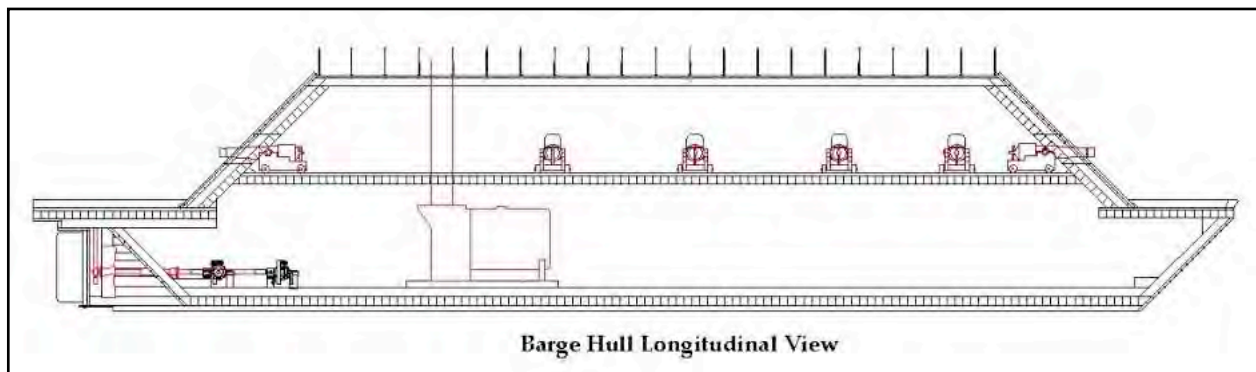


Figure 6-536. Casemate and primary steam propulsion machinery in a barge hull reconstruction.

While adoption of the barge hull form could have simplified construction, that configuration would have created serious propulsion and navigation problems. While those problems might have been acceptable in a floating battery, they would have seriously compromised the vessel's capacity to operate as a gunboat. The ramp stern would have, to a degree, restricted the flow of water to the propellers, potentially causing cavitation and loss of efficiency. That would have made any potential for speed highly unlikely. That design would have also resulted in a potential loss of rudder efficiency. To a degree, it might have been compensated by judicious use of the two propellers at the low speeds required to navigate the battery from one location to another. For a combat gunboat, that would appear to have been unacceptable. The ramp design of the bow would have only increased the problems associated with navigation.

There were clearly guarded expectations for speed and handling prior to trials of the vessel. With at least some input into design and construction by Confederate naval constructors and Savannah shipwrights, it would appear that the barge hull design would not appear to be a very likely candidate regardless of the simplicity of construction. However, in the final analysis, numerous factors could have dictated design and construction compromises that would otherwise have made the barge hull form unacceptable.

VII. ARCHAEOLOGICAL CLEARANCE AND REDEPOSITION

PHASE IV: FINAL ARCHAEOLOGICAL CLEARANCE

Consisting of two objectives and conducted concurrently with Phase V: 2015 and 2017 Redeposition and Burial of Selected Artifacts and Vessel Components, the Final Archaeological Clearance Phase of 2015 commenced immediately upon completion of the 2015 Mechanized Site Recovery Phase and ran from October 25 to 28, 2015. The 2017 Archaeological Clearance Phase was conducted from July 28 to July 30.

- Objective 1—Remote Sensing Survey
- Objective 2—Archaeological Diver Clearance

OBJECTIVE 1—REMOTE SENSING SURVEY 2015

Conducted prior to Archaeological Diver Clearance, the site was resurveyed via sidescan sonar in order to locate vessel-related material that was not recovered during the previous phase. Figures 7-01 and 7-02 present the 2015 site mosaic: one with a grid and the other without. Figure 7-01 shows site coverage relative to the grid. Without the grid, Figure 7-02 allows a visual assessment of the remaining material and essentially shows, apart from a few sections of rail, and of course the two casemates, a general lack of material remaining on the site. Figures 7-03 and 7-04 show the individual casemates and indicate a lack of material, with the exception of several isolated sections of rail. Unrecovered, the casemates remained in these locations. The images, Figures 7-05 and 7-06, of the 2017 survey of the site after casemate and remaining Mechanized Recovery show a river bottom void of material, which the Diver Clearance confirmed.

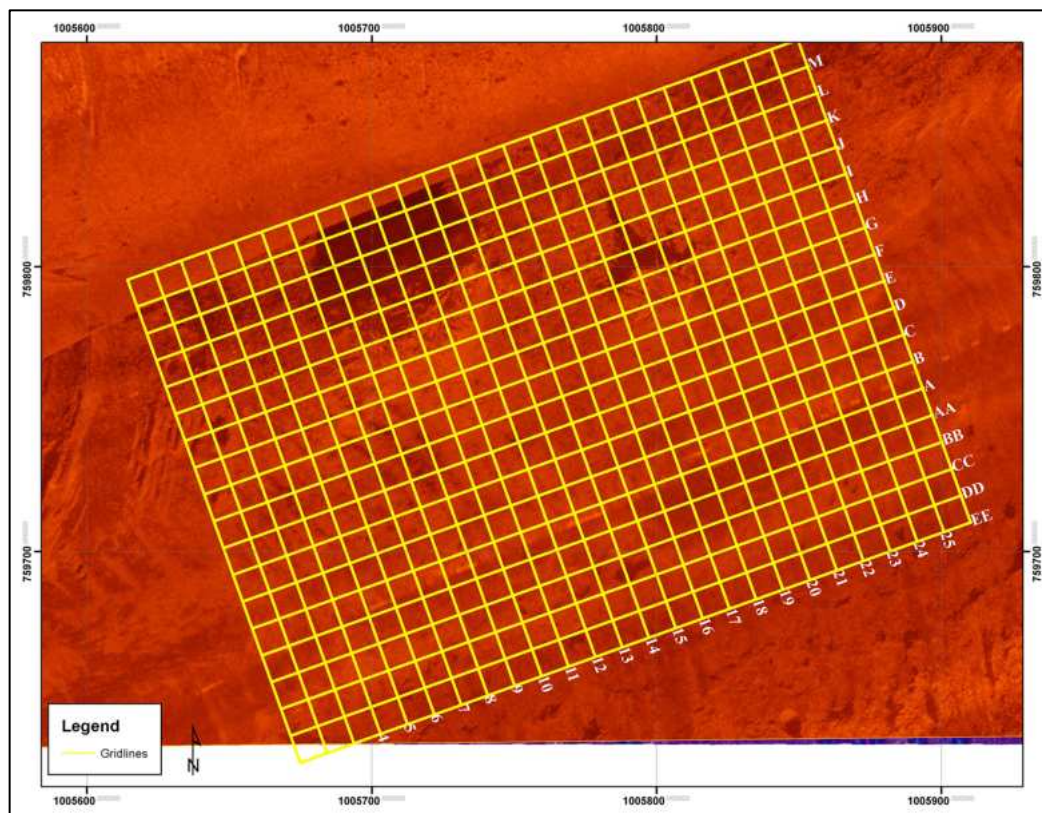


Figure 7-01. Sonar mosaic showing coverage relative to the site grid (north is up).

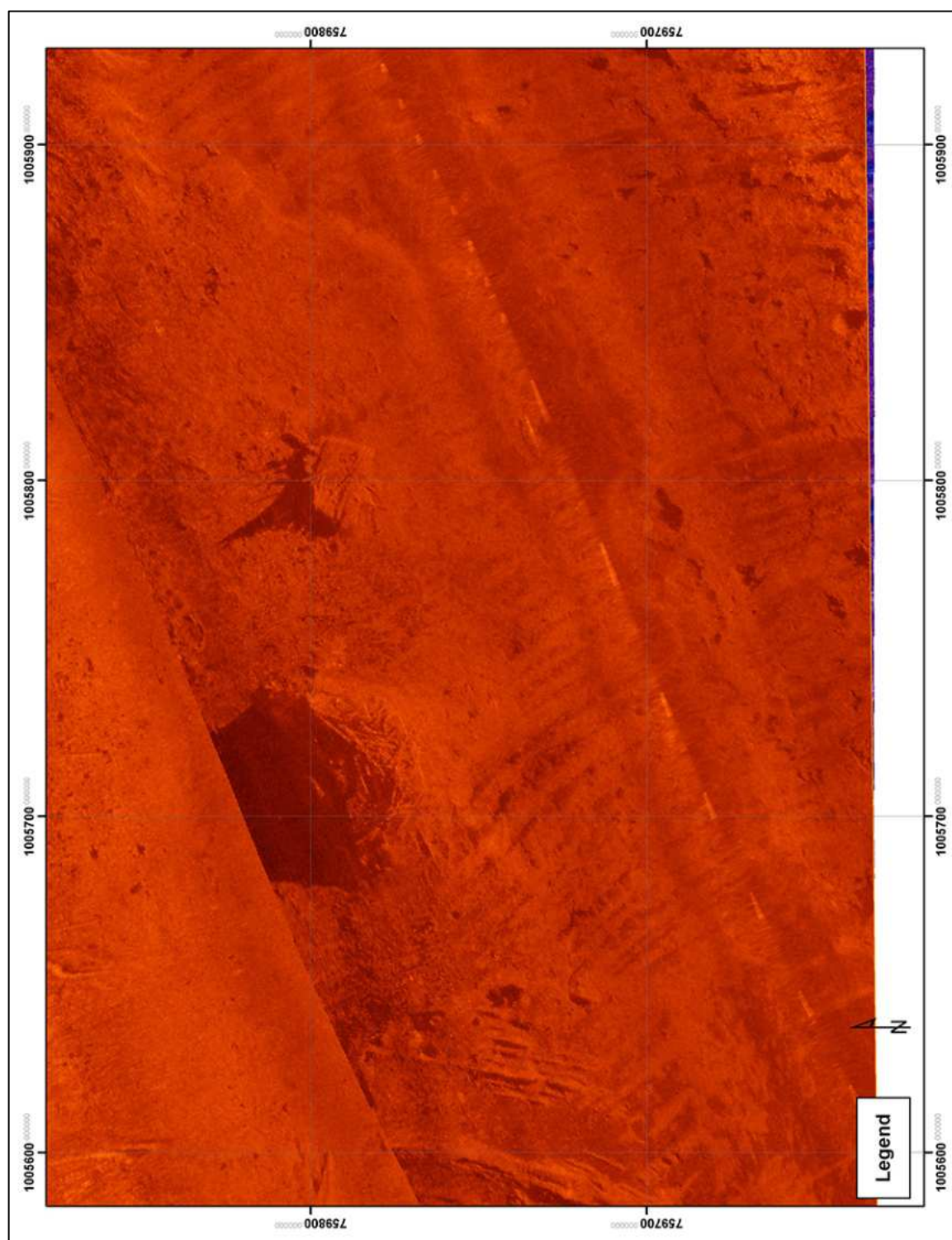


Figure 7-02. Sonar mosaic without grid allows a visual assessment of the remaining material and essentially shows, except for a few sections of rail, and of course the two casemates, a lack of material remaining on the site (north is up).

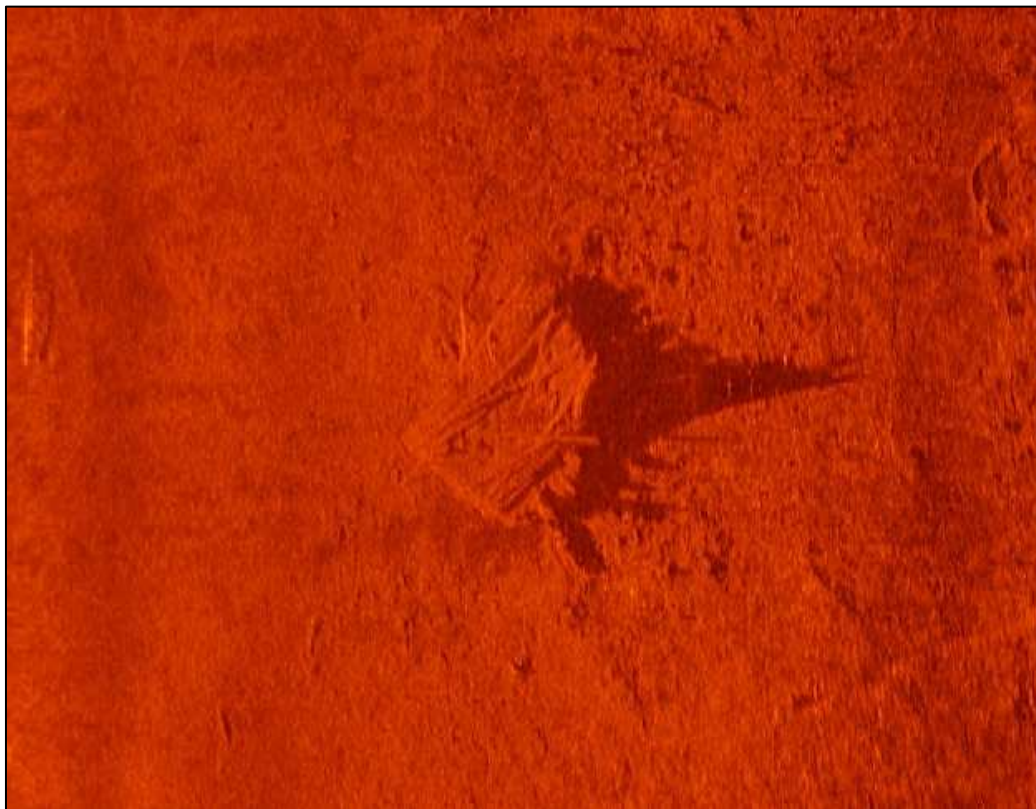


Figure 7-03. Sonar image of the East Casemate after 2015 Mechanized Site Recovery Phase.

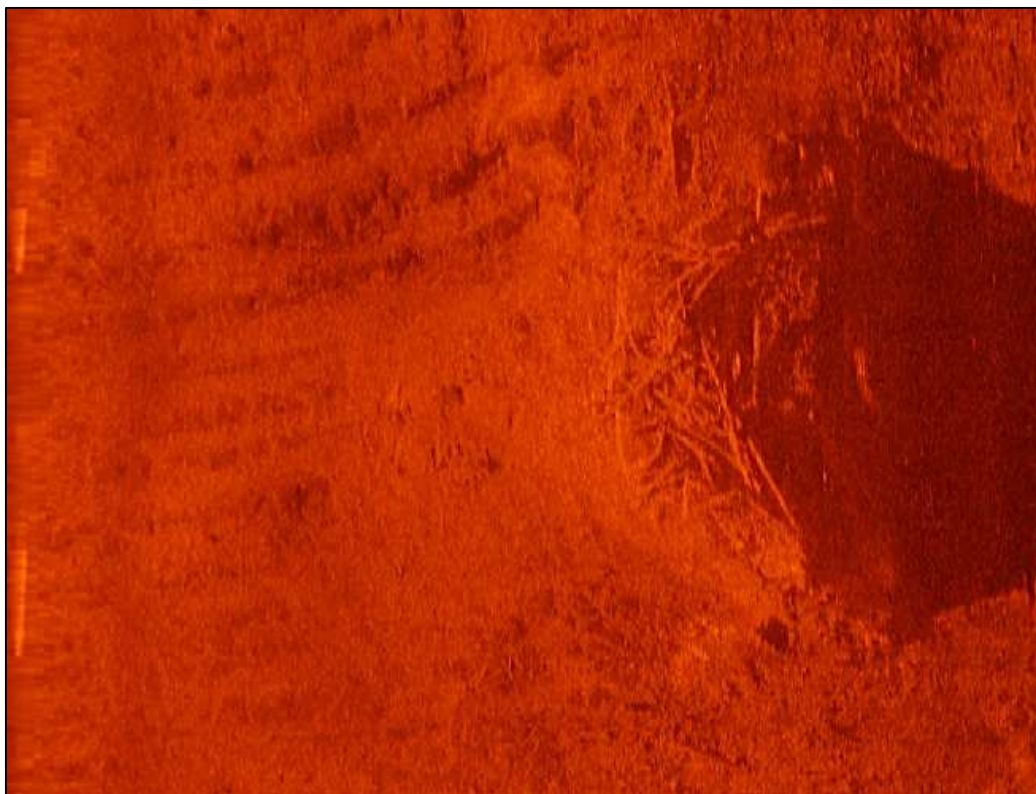


Figure 7-04. Sonar image of the West Casemate after 2015 Mechanized Site Recovery Phase.

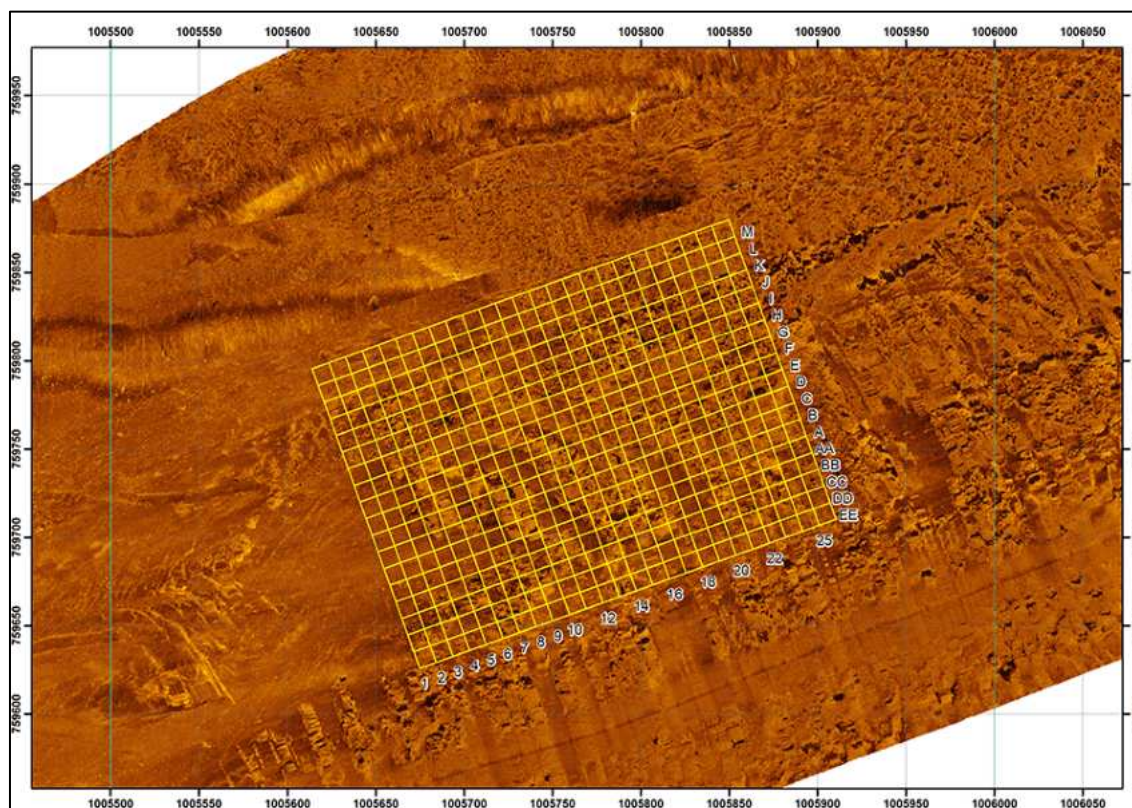


Figure 7-05. 2017 Sonar mosaic showing coverage relative to the site grid (north is up).

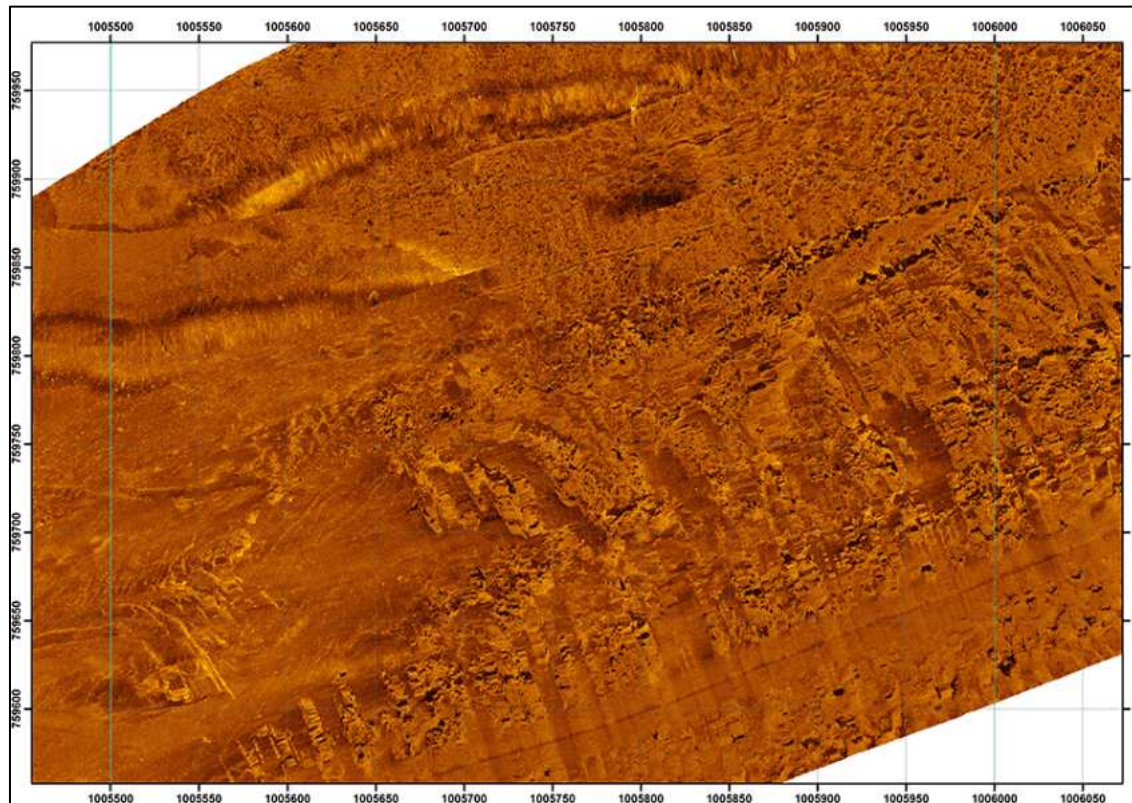


Figure 7-06. 2017 Sonar mosaic showing coverage (north is up).

OBJECTIVE 2—ARCHAEOLOGICAL DIVER CLEARANCE

Following Remote Sensing Survey Clearance, sweeps of the site by archaeological divers were conducted to locate and recover any remaining artifact material. In 2015, the first dive consisted of numerous arcs conducted from the Cannon 2 and 3 areas south to past the channel marker weights and into the DMM concentration area. The area was observed by the diver to be clear of artifacts; only small fasteners and some small segments of railroad iron were encountered. Importantly, no DMM was observed.

On the second dive, additional arcs were conducted in the area of machinery, generally south and southwest of the West Casemate. The diver located and recovered a complete bronze, powder box lid from Unit 9-A and cleared the area, as very few artifacts were observed. Importantly, no DMM was located. The third dive covered the original East Casemate location, to the north, and to the south. The only artifact observed was a single 6-foot rail. Again, no DMM was encountered. On the fourth and final dive a series of arcs were conducted through the DMM concentration, Cannon 4, and South Casemate areas. The diver spent several minutes sweeping the South Casemate arriving at negative findings. Sweeping over the Cannon No. 4 area, the diver located and recovered a Sabot in Unit 21-BB. Several lengths of rails were observed downriver from Cannon No. 4 in dredge scars. Numerous arcs were then conducted in the DMM concentration area and a single Dahlgren ball was located in Unit 14-B. The DMM location was marked with USBL positioning and left in place (Figure 7-07). It would not be relocated nor recovered in 2017.

In 2017 after casemate and mechanized recovery, diver clearance was conducted that focused on the southern area within the central DMM. A 20-foot diameter area around the coordinates for the 2015 Dahlgren shell was searched, but with negative findings. The bottom was found to be a “moonscape” of pockmarks from the mechanized recovery. A cluster of artifacts including a bronze gunpowder canister top and a bronze gun carriage compressor was located on one dive in Unit 10-AA. This area was clam-shelled after the dive with five Brooke shells and several other artifacts recovered. This was followed by a final dive to clear the area with nothing observed.

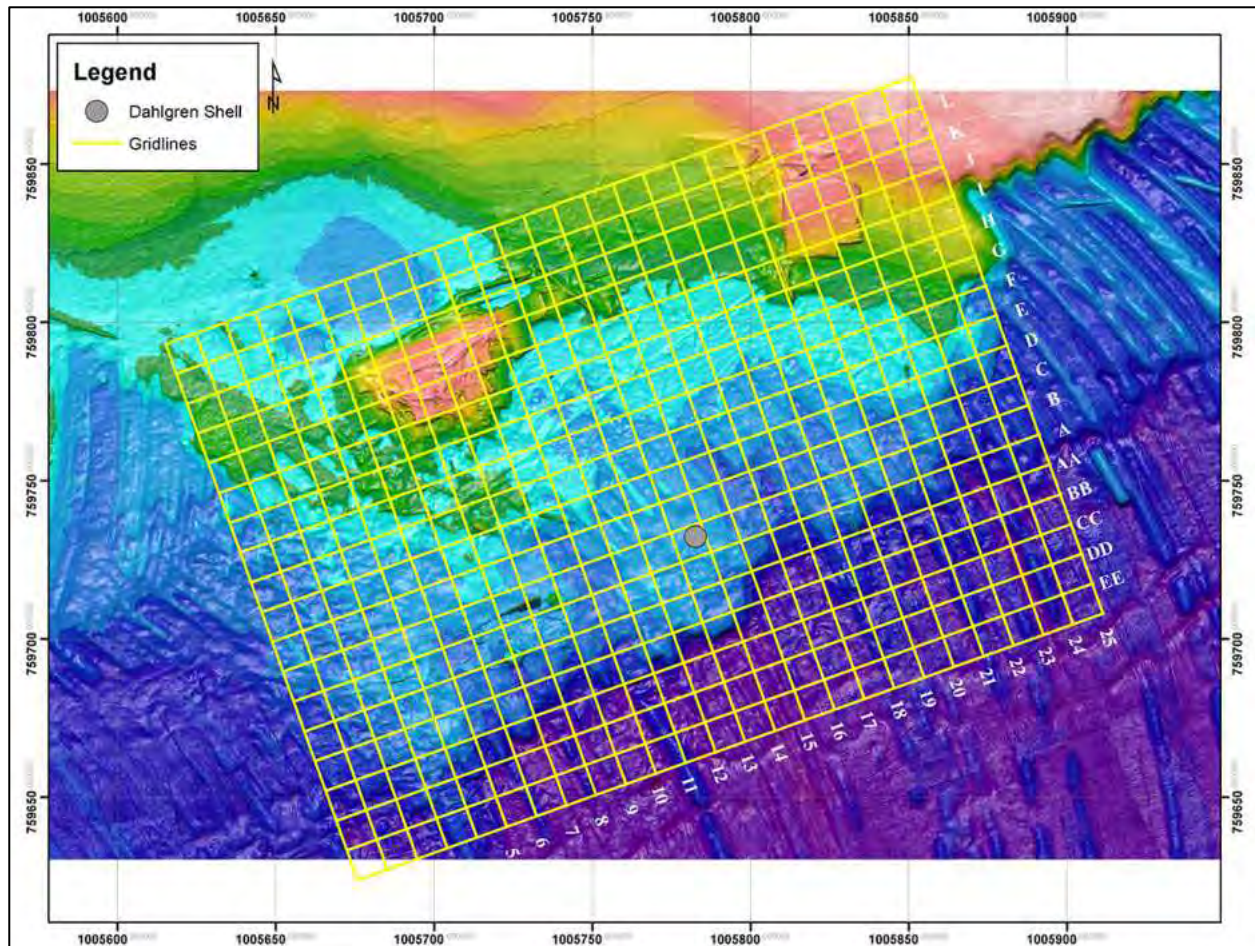


Figure 7-07. Location of the Dahlgren DMM that was still on site in 2015. It was not relocated nor recovered in 2017.

PHASE V: 2015 AND 2017 REDEPOSITION AND BURIAL OF SELECTED ARTIFACTS AND VESSEL COMPONENTS

As previously discussed, prior to implementing the Redeposition and Burial of Selected Artifacts and Vessel Components Phase in 2015, both a subbottom profiler survey and exploratory dives with hydroprobing to assess bottom sediments were conducted to determine the best reburial location within the Sediment Basin (Figure 7-08). Based on those data, the excavation of a suitable pit for deposition was made and the site prepared. Conducted during the Archeological Data Recovery Phase, results of the survey and diving are presented in Figures 7-09 to 7-11. The subbottom results showed deep unconsolidated sediments throughout the Sediment Basin just off the bank slope edge. Diver assessment with hydroprobing confirmed this finding with the diver sinking past their waste in what was described as “fluff” or “ooze,” with the 10-foot hydroprobes easily inserted and finding no hardbottom.

Based on these findings an area of approximately 150-x-75 feet was selected for reburial. Conducted concurrent with the Final Archaeological Clearance Phase from October 25 to 28, 2015, the material barge loaded with reburial roll-off containers was moved into position parallel to the selected reburial location. Contained in ten roll-offs, out of the 29,718 artifacts recovered

from the site in 2015, 16,697 artifacts (56.18%) weighing 125 tons were reburied. Note that this weight includes 12.5 tons of roll-offs (at 2,500 pounds apiece), and literally tons of mud.

Prior to reburial, a long sheet of plastic was placed in each container to cover the artifacts. Then each roll-off was filled with mud to form an initial layer over the artifacts to keep them in place and to enable the containers to sink immediately. Figure 7-12 shows the containers being filled with the clamshell, and Figure 7-13 shows the consistency of the fill, as it flowed out holes in the container.

All placed vertical to the material barge, the first container was lowered to the bottom and let sink in, then lifted and lowered again to allow it to penetrate deeper (Figure 7-14). A sidescan sonar survey was then conducted, the results of which showed the container to be below the riverbed in a crater or depression. A diver was sent in to verify burial, and the diver found that the container sat in a depression and that its top was 3 feet below riverbed grade; however, the top still projected about 6 inches above the bottom of the depression, indicating sediment would be required to cover it.

With this data showing that the methodology was successful, the remaining nine containers were placed in the same manner next to one another in a line. As illustrated in Figure 7-15, ten containers were placed in order from west to east, “C7, C9, C3, C5, C8, C1, C6, CA, C2/4, and CB.” The location of all containers was obtained with GPS (Table 7-01) at the center of the harness cable prior to it being released from the crane. Once all containers were placed, almost a full day was spent covering the containers with mud from the opposite side of the barge to ensure total coverage.

The same methodology was conducted for the reburial of four additional artifact-filled containers in 2017, as well as the East and West Casemates (Figures 7-16 and 7-17), although their placements were “offshore” the original line of ten containers. Numbered 97 to 100, the mud-filled container weights were No. 97 at 32 tons, No. 98 at 28 tons, and No. 99 at 26 tons (a weight was not obtained for No. 100). The weight for the East Casemate was 23.5 tons without the iron lift frame (43.5 tons with) and the West Casemate was 40 tons without the frame (60 tons with). The locations of all reburial items are presented in Figure 7-18 and the GPS coordinates are presented in Table 7-01.

With the reburial of the casemates and four containers, the field project was complete except for artifact shipment and demobilization, which took place on Monday July 31, 2017.

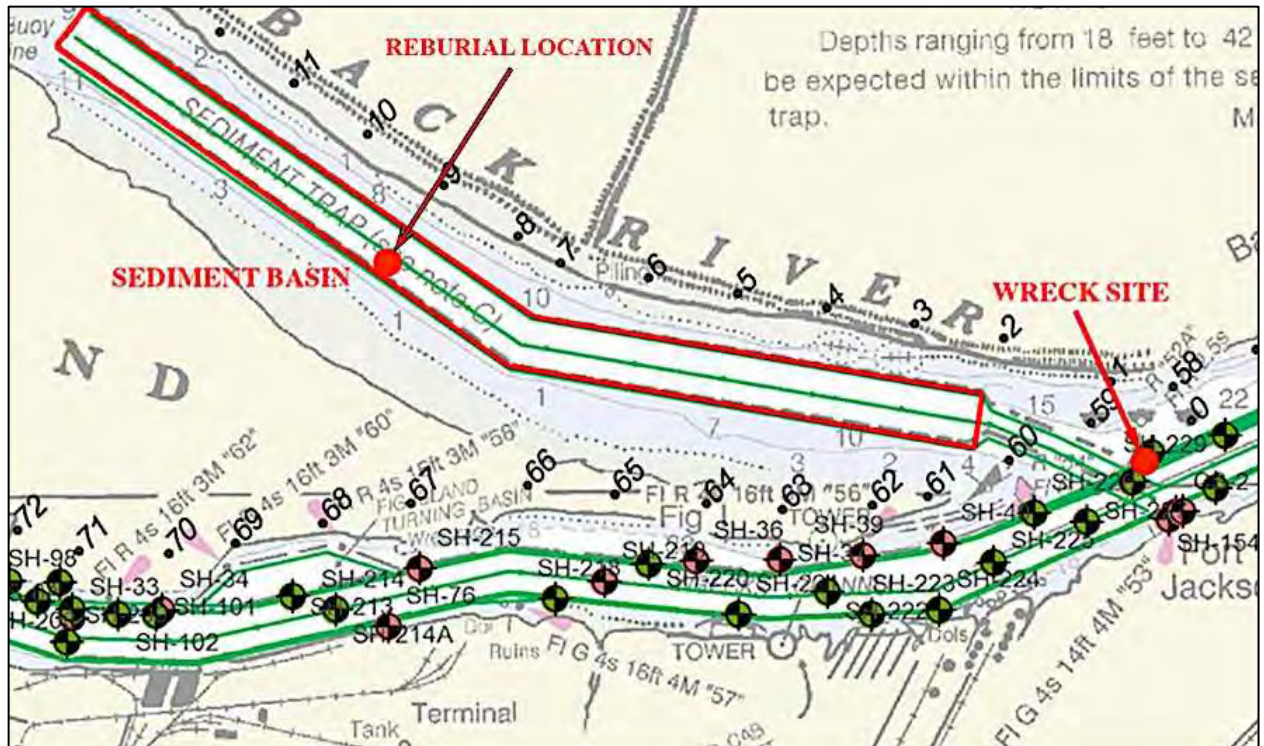


Figure 7-08. Reburial location in the Sediment Basin. Note its location relative to the wreck site.

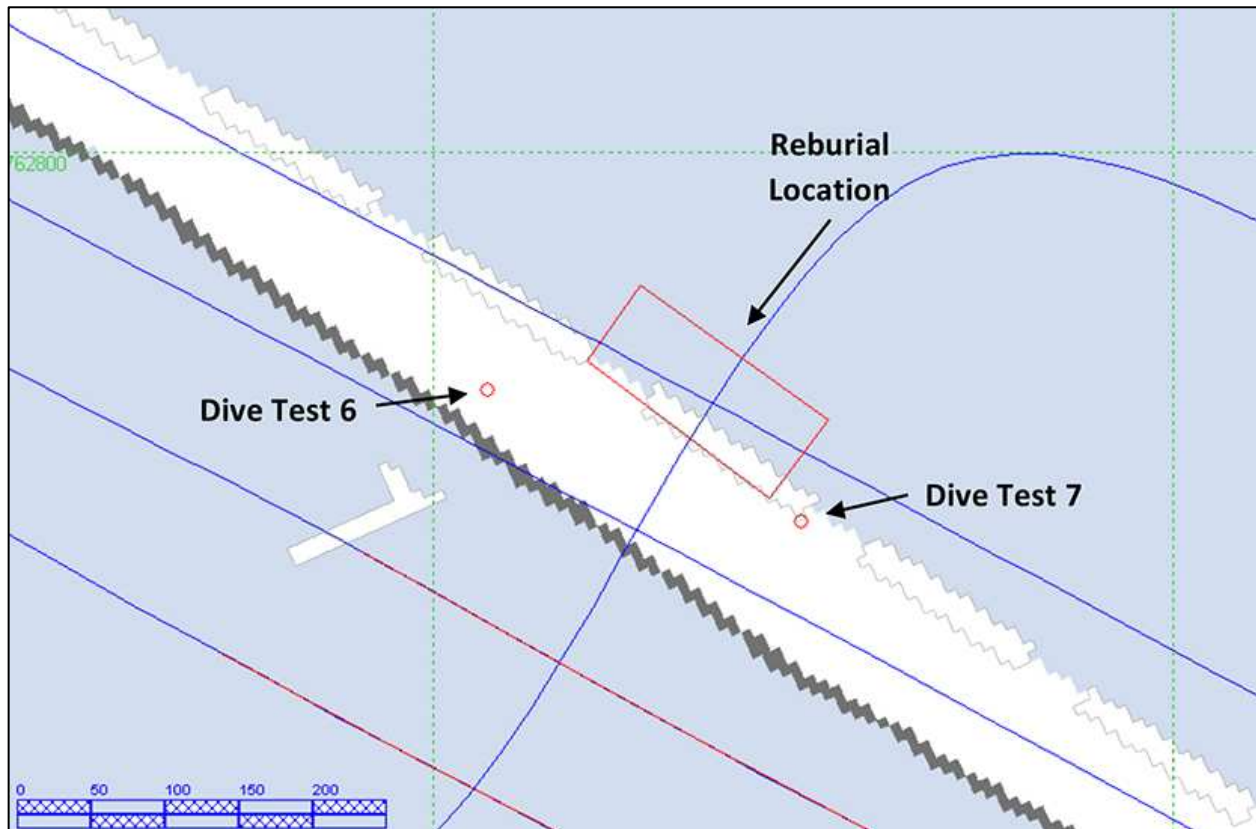


Figure 7-09. GIS image showing selected reburial location and hydroprobe locations. Reburial location was placed at just offshore the edge of the bank slope in an area of deep unconsolidated sediments.

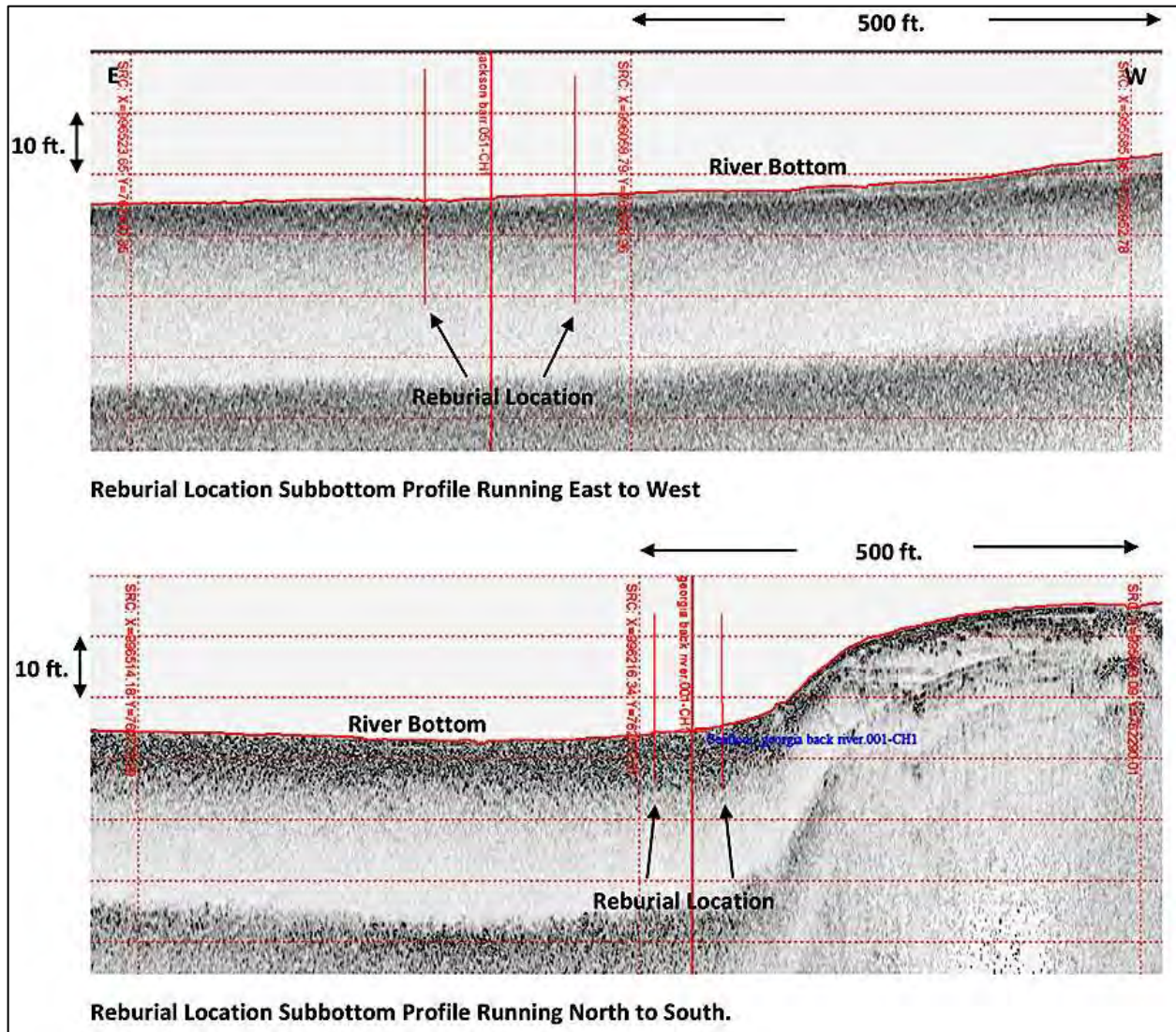


Figure 7-10. Profiles of the selected reburial location between the arrows. Note almost 30 feet of nonconsolidated sediments.

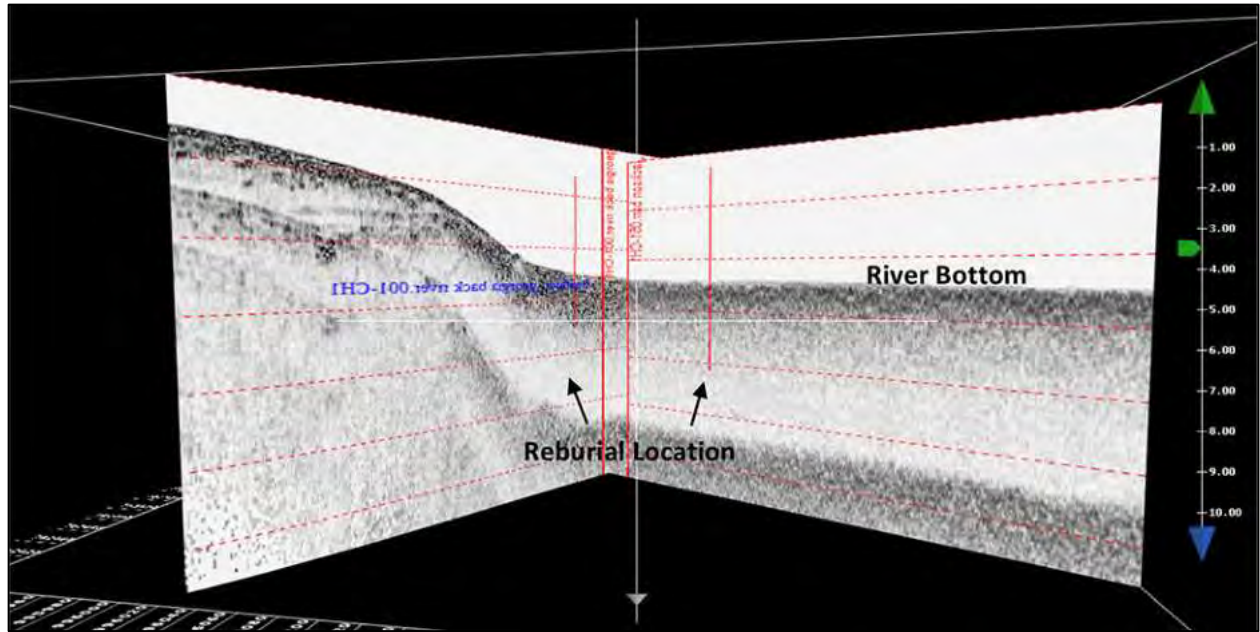


Figure 7-11. 3-D image looking northwest up the Sediment Basin showing reburial location at the bottom of the bank slope between the arrows.



Figure 7-12. Clamshell filling containers with bottom sediments to keep the artifacts in place and enable the containers to sink immediately. Dive barge on the right was employed to send divers for burial verification.



Figure 7-13. This figure shows the consistency of the fill and reflects the consistency of the bottom sediments. Almost an ooze, it covered the artifacts and in spots flowed out holes in the container.



Figure 7-14. All containers were lowered perpendicular to the material barge. Note the mud filling the container.

Table 7-01. Roll-Off Container and Casemate Coordinate Locations.

Container	Easting	Northing
C1	996186	762681
C2/4	996213	762656
C3	996138	762710
C5	996155	762699
C6	996196	762671
C7	996106	762727
C8	996176	762693
C9	996125	762724
CA	996203	762662
CB	996244	762631
97	996,169	762,823
98	996,168	762,806
99	996,185	762,770
100	996,292	762,716
East Casemate	996,313	762,838
West Casemate	996,240	762,813

Georgia State Plane NAD 83 Survey Feet

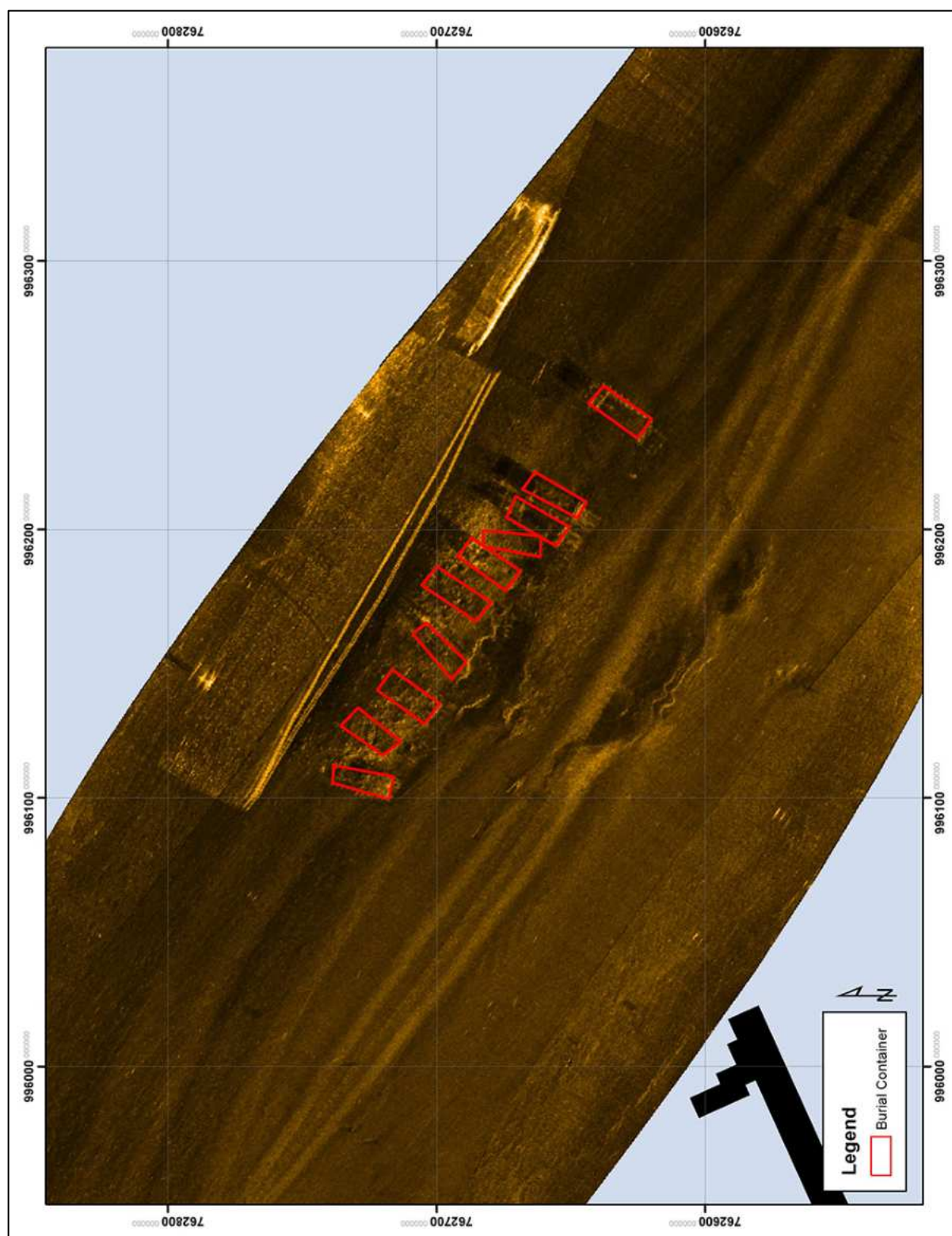


Figure 7-15. Sonar mosaic showing containers in place prior to coverage with mud during the 2015 reburial phase.



Figure 7-16. Lowering of East Casemate during reburial. The frame and bridle were reburied as well.

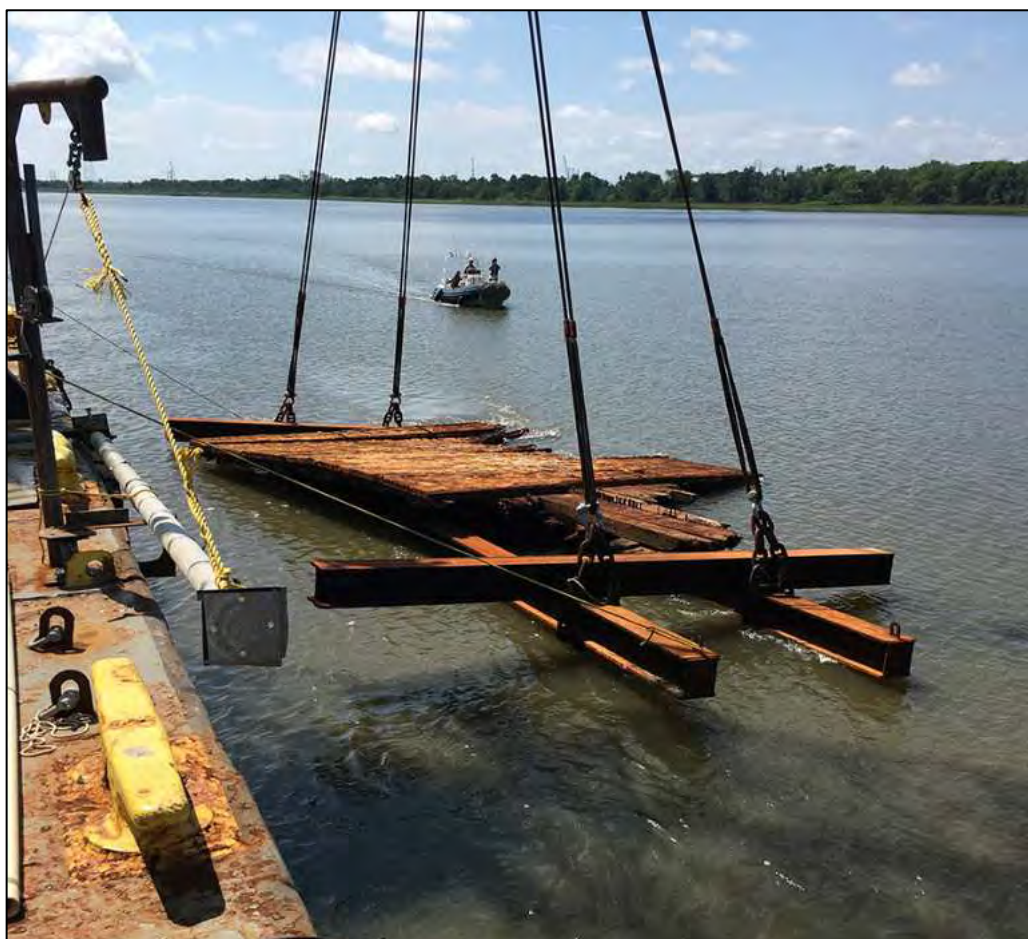


Figure 7-17. Lowering of West Casemate during reburial. The frame and bridle were reburied as well.

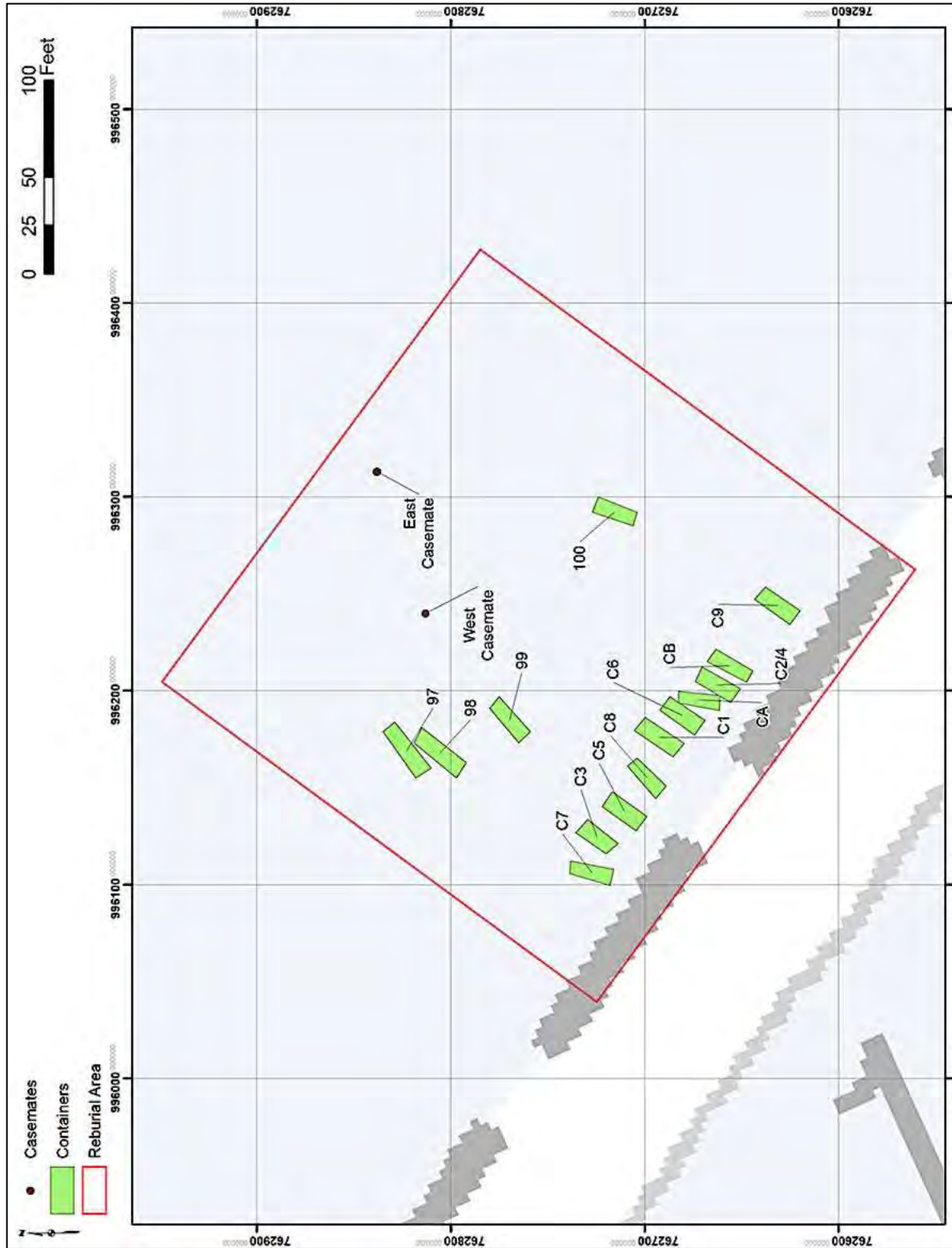


Figure 7-18. Reburial locations of 14 containers and casemates (see Table 7-01 for center coordinates).

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VIII. CONCLUSIONS

Conducted from the beginning of January to the end of October 2015, and then again from mid-June through July 2017, the archaeological investigations of the CSS *Georgia* and recovery of artifacts, ordnance, machinery, and vessel structure can only be described as a very successful undertaking. A result of the efforts of numerous teams and phase-specific personnel, the success of what was a complex and at times difficult project was based on a Research Design focused on *in situ* documentation, systematic recovery, and preservation of the archaeological record and surviving physical evidence at the wreck site. While actual field requirements would initiate several changes to proposed methodology, all of which had to be approved with NHHHC permit amendments (Appendix A), many aspects of the project were more successful than could be imagined like the Mechanized Recovery of Artifacts, during which artifact recovery was literally amazing. Presented below is a summary of the 2015 and 2017 Operations aspects:

2015

- 198 Units mapped
- 160 dives conducted by Panamerican
- 107 two-person dives conducted by MDSU-2
- 661 grapple tests conducted
- 1,441 clamshell grabs conducted
- 240 DMM recovered
- 5 cannon recovered
- 29,718 artifacts recovered
- 13,021 artifacts weighing 140 tons shipped to CRL for conservation
- 16,697 artifacts weighing 100 tons reburied (subtracting roll-offs and mud fill)
- South Casemate recovered

2017

- 42 single-person dives conducted by Donjon
- 5 dives conducted by Panamerican
- East Casemate recovered
- West Casemate recovered
- 436 grapple tests conducted
- 402 clamshell grabs conducted
- both steam cylinders recovered
- 6 DMM recovered
- 3,064 artifacts recovered
- 580 artifacts weighing 25 tons shipped to CRL Texas A&M University for conservation (weight approximate)
- West Casemate weighing 40 tons reburied
- East Casemate weighing 23.5 tons reburied
- 2,484 artifacts weighing approximately 110 tons reburied (subtracting roll-offs and mud fill calculated at same weight of roll-off at 2,500 pounds a piece)

Now that the investigation is complete, it is safe to say the number of recovered artifacts far exceeded anyone's expectations, and to some degree the ability to quickly process and conserve them, even by CRL, the largest conservation lab in the country. While a majority of diagnostic artifacts have been conserved over the past four years, countless others are currently in various stages of conservation and will be unavailable for thorough analysis for some time. This is not unexpected given the artifacts are from a salt-rich marine environment, with time being required to remove all damaging chlorides.

Several of the artifacts remain in conservation and are not readily available for analysis, including machinery components (e.g., the two steam cylinders, two of the large guns, etc.). With many still in water-filled vats covered in concretion, depiction and analysis of some of these artifacts for the report was based solely on photographs, measurements, and analysis quickly compiled immediately after initial recovery while briefly on deck prior to packaging and shipment to CRL.

Regardless, this report serves to illustrate the methodologies employed, fieldwork accomplished, array of artifacts recovered, and many aspects of the site including artifact distribution patterns, which themselves are extremely revealing. For instance, when we look at the distribution maps for machinery, boiler parts, and tools, they cluster in an area adjacent to and just south of the West Casemate, an area that also contains Cannons 2, 3, and 5, as well as the majority of carriage components and cannon hardware. Brooke and Dahlgren shells cluster as well, but mainly in an area between and south of both casemates. The Bolts further segregate themselves from the Brooke and Dahlgren shells in a cluster just to the east or downriver from the main DMM concentration. With this in mind, many questions arise: does the main area of machinery, boiler parts, tools, and cannon mark the actual wreck site or is it representative of salvage; why is there an absence of material underneath the casemates; why is the DMM concentration somewhat removed; and the intrusive (?) prehistoric materials, one of the largest assemblages on the wreck, what does it mean for other materials like the historic ceramics and glass? Are they intrusive as well? Discussed below, the following site aspects are both revealing as well as perplexing, raising questions that we have endeavored to answer, however, the answers for some are still elusive.

- The West Casemate has an angled end indicating it is one end of a casemate side
- The East Casemate has an angled end indicating it is one end of a casemate side
- Total length of the remaining West Casemate section is 75 feet and the remaining East Casemate section is 43 feet; together it is thought they form one side of the vessel's casemate with a total length of approximately 120 feet
- From the angled end of the West Casemate to the single recorded gunport is a distance of 54 feet of solid casemate; free of gunports, this area of casemate is thought to be where the engines and boilers would have been
- The presence of this solid casemate indicates that this is the port side of the vessel
- From the angled end of the East Casemate to the single gunport location recorded in 1987 is a distance of 31 feet
- There is an absence of artifact material underneath both casemates
- The South Casemate, while it could represent armoring of a deck, is most likely the face of the vessel's casemate
- The starboard side of the vessel's casemate is no longer on-site and assumed to have been removed
- No lower hull remains besides the odd timber; its absence is unexplained

- Only two gunport cutouts were recorded on the casemate: one recorded on the West Casemate in 2017; and one no longer extant on the East Casemate recorded in 1987
- Gunport fragments cluster mainly with the cannon, boiler, and machinery, again opposite and south of the West Casemate
- The machinery, boiler parts, and tools cluster in an area adjacent to and just south of the West Casemate
- The vessel was powered by two engines, each driving a single propeller
- Both engines were recovered, but only one propeller was still on-site
- The single propeller is generally in the correct spot relative to the boiler and stern of the West Casemate
- There is evidence that some of the machinery was disassembled by removing nuts from Bolts, either prior to sinking to help in scuttling or during salvage
- Cannon 2, 3, and 5, as well as the majority of carriage components and cannon hardware, cluster in an area adjacent to and just south of the West Casemate (along with boiler and machinery)
- Cannon 2, 3, and 5, however, are not located near either of the two known gunports
- Brooke and Dahlgren shells cluster in an area between and well south of both casemates
- Bolts segregate themselves from the Brooke and Dahlgren shells in a cluster just to the east or downriver from the main DMM concentration
- The bronze powder boxes are only represented by their tops and bottoms; the absence of their copper sides is possibly indicative of salvage
- Absence of personal arms and effects is most likely reflective of the abandonment of the vessel in an organized fashion
- The largest artifact assemblage is prehistoric material consisting of over 4,000 ceramic sherds and 17 PPKs; what does their presence indicate for the possibility of intrusion for the other artifact types (e.g., historic ceramics, glass, etc.)?
- The collection of gun sights and percussion locks recovered from the CSS *Georgia* represents one of the largest extant assemblages of these types of artifacts to date

The investigation and recovery of the CSS *Georgia* generated considerable insight into the nature and scope of the surviving vessel structure and the archaeological record associated with those remains. One of the most significant issues addressed by the on-site investigation was a determination of the amount and condition of surviving vessel structure at the wreck site. The investigation established that the surviving remains of the Civil War ironclad are limited, and that the lower hull of the vessel no longer exists. Two large sections and a smaller third section of iron casemate are present along with the vessel's propulsion machinery including two steam cylinders, one propeller and shaft, five cannon, boiler components, and miscellaneous, small diagnostic artifacts; however, the hull is nonexistent. While several items such as a rudderpost fragment, and a bulwark and bit were recovered from the site, the majority of the lower hull was not present. Was it salvaged, destroyed by dredging, or does it rest elsewhere? The absence of lower hull and the impacts to the existing components have to be a direct result of historic salvage along with maintenance dredging operations, as well as environmental factors such as the presence of the *Teredo navalis* worm. The surviving sections of casemate, as well as all the recovered material, lay on a base of Miocene clay. This dense clay that forms the riverbed prevented downward migration of virtually any material associated with the CSS *Georgia*. Each section of the casemate and all artifacts were found to be resting on top of the clay.

Evidence that the CSS *Georgia*'s hull has been completely destroyed or does not exist in association with the casemate sections was reinforced by identification of the ship's steam machinery south and southwest of the West Casemate. That machinery included one of the vessel's propellers with an attached section of propeller shaft, strut, and stuffing gland. Originally fastened to and through the hull, no wood was present. To the southeast of the propeller two steam cylinders were identified in 3- to 4-foot deep dredge scars. Originally fastened to the base of the hull, no wood was attached to either cylinder or the engine slides. Numerous other machinery components, as well as fragments of a boiler, all originally positioned in the bottom of the hull, were also found in the area between the propeller and steam cylinders laying on the Miocene clay. The presence of machinery from the lower hull of the vessel lying directly on the clay riverbed is direct evidence that the hull of the ironclad has been completely destroyed (or removed?).

With respect to the two remaining casemate sections, we know from the site formation that impacts occurred over time to both the East and West Casemate with movements of portions of each casemate moved some distance, for instance the dislocation of the angled end of the East Casemate. However, the orientation of the East Casemate at a 90-degree angle from the West Casemate and at a distance of 75 feet away from the nearest point on the West Casemate argues for an extreme displacement event either during salvage or afterward. Also perplexing is the fact that there was a total absence of artifact material underneath both casemates. Laying on sterile bottom can only indicate they are not in their original scuttling location, as artifacts would have been trapped underneath as the wreck disintegrated over time. The dredge scars ending at the casemates on the site and their location with respect to the casemates, argue against the dredge having moved these huge sections. So does this leave salvage efforts as the reason for their displacement?

The question of salvage and its effects on the site or its role in site formation is one that underscores many aspects of the site and quite possibly answers many questions, especially those surrounding artifact distribution patterns. Similar to the missing hull, the starboard side of the vessel's casemate and the armored casemate roof are no longer present on-site. Is this evidence of salvage, or do the recovered disarticulated rails represent the remains? Evidence for salvage first comes to us from the historic record, with one testimony stating the wreck "...has been blasted, but not thoroughly, about eighty tons of iron having been removed. The engines and machinery are still in her..." (Annual Report of the Chief of Engineers to the Secretary of War 1872:657). This statement was written in November 1871, but we know that a year later Welles unsuccessfully attempted to prevent the USACE from advertising the wreck for sale, arguing he still had legal title and the right to salvage the iron himself. This might indicate the crew may still have been on the site during this period. Georgia's former wartime Adjutant General, Henry Wayne testified in 1866, that the CSS *Georgia*'s entire casemate was clad in an estimated 491 tons of Brunswick & Florida Railroad iron and others stated "...she is said to have 500 tons of iron plating upon her and is a valuable vessel for the sake of her material only..." (National Archives Record Group 56, Entry 315, Box 27). We have estimated, based on weights obtained from the crane during raising, reburial, and transshipment that we recovered no more than 450 tons, effectively clearing the site of all wreck material. Obviously, the majority of weight recovered is associated with recovered rail but we do not have absolute weight data to make conclusive statements, only projections. We do not have total weights for the machinery, ordnance, and other artifacts recovered, as well as those that were not retained, such as the huge amount of coal, miscellaneous fasteners, etc. that were reburied. The rail probably is responsible for at least half the recovered weight but no more than two-thirds of the 440 tons. This statement cannot be validated by the data in hand; however, based in part on an understanding of the amount of rail recovered during Mechanized Recovery of Artifacts that was not associated with casemate recovery, there did not appear to be enough rail to represent an entire disarticulated casemate side and armored roof. In fact, much of the disarticulated rail recovered was most likely associated with the missing sections of the West and East Casemates. It is suspected that

salvage is responsible for the missing casemate side, as well as its armored roof, together, which would have weighed much more than what was recovered. The exact amounts however will never be known.

Besides salvage of a portion of the casemate (and the hull?) there is other evidence of possible salvage on the site. Several pieces of steam machinery had missing Bolts and/or nuts. For instance, all three flanges on the steam drum (Artifact 1616) were unBolted, and on a brass steam pump (Artifact 1644) Bolts had been undone and threaded pipes were uncoupled. While this could also represent preparations for scuttling, other evidence, especially artifact provenience, seemingly argues for or points to salvage.

There is a cluster of three large guns in the same provenience as most of the boiler, brick, and machinery components indicating that the guns were not in their original scuttled location. They were not located near either of the two known gunports cutouts on the casemates or where the other cutout ports would have been if present. In fact, they are opposite the solid West Casemate section, a 54-foot stretch lacking gunports, and which marks the area of boiler and machinery, the boiler and machinery artifacts generally in their correct location with respect to this solid stretch of armoring. It should be mentioned that eight of the cast iron gunport fragments were also clustered with the three guns.

Additional odd clustering is present in the location of the DMM. The majority of both the Brooke and Dahlgren shells cluster together in the central southern edge of the site. The Bolts form another separate cluster just downriver or east from the Brooke and Dahlgren cluster. Basically removed from the rest of the site, especially with respect to the Bolts, does their clustering represent their location at the time of scuttling or raise the possibility that they were redeposited? While further research on munitions storage on ironclads may reveal clues to their provenience, currently their clustering seems artificial or secondary to their scuttling location.

With the post-scuttling movement of the heaviest pieces like the East Casemate, the original provenience of all materials is brought into question. We know that the northern end of the East Casemate was displaced between 1986 and 2003. And between 2003 and 2017, the vessel's two steam cylinders had been displaced, as they had been dragged 90 feet from their 2003-mapped location. Although this indicates ongoing site morphology and artifact movement, clustering of so many artifacts does not appear as random movement like the cylinders, but reflects, in the case of the three guns and DMM, a secondary placement from their original scuttling location. While one gun may have been moved over time, it is unlikely that all three guns were moved together into a cluster, and then within the machinery and boiler cluster, or vice versa for that matter.

While we have focused on the larger, heavier artifacts, the smaller, more easily moved classes of recovered artifacts also raise the issue of original *in situ* provenience versus intrusion into the site. Although totally unassociated with the wreck, but perhaps the most prolific artifact type found on site and undoubtedly the most surprising (at least for their numbers) was prehistoric ceramics. Surpassing historic ceramics in number, and represented by mainly small fragments, an amazing 4,140 prehistoric sherds were recovered. The provenience of the prehistoric materials, some dating to the Late Archaic, shows an almost site-wide distribution, and seemingly indicates a concentration or swath along the northern side of the site, as if the CSS *Georgia* was acting as a catchment for ceramics coming downstream (or upstream with the tide?). Their presence raises another question: if indeed the CSS *Georgia* is acting as a catchment, are the other artifacts (e.g., glass, historic ceramic, buttons, smoking pipes, etc.) also washing in? This is especially true of the historic ceramics and glass, as both artifact types have the exact same distribution pattern as the prehistoric sherds. Furthermore, we know that many of the dateable ceramics and glass recovered from the site postdate the 1864 scuttling of the site,

indicating much of the glass and ceramics is intrusive, washing into the site, and unassociated with the *CSS Georgia*.

Many of the issues of salvage, missing components, artifact provenience, movement, and intrusion will remain unanswered. However, the investigation and recovery of the *CSS Georgia* generated extensive physical data concerning the design and construction of casemate and steam machinery. The most specific information concerns the dimensions and construction details of the armored casemate with evidence indicating it was 120-foot long by 44-foot wide. This in turn dictates basic dimensions for the hull with steam machinery providing important clues to design. Most likely barge-built with a scow stern, in the final analysis the configuration of the hull form of the *CSS Georgia* will never be known, as no recognizable evidence of that feature of the vessel was extant. While it is possible a more detailed analysis of the recovered secondary steam machinery could add considerable detail to what has been determined to have powered the *CSS Georgia*, this, however, must be tempered with the fact that a very small percentage of her original machinery was still present. Regardless, although the *CSS Georgia* was not a “shipwreck” in the true sense of the word, as we have shown, the recovery of material from the salvage site has contributed significantly to what is known of the “Mud Tub,” as marine archaeologist Judy Wood often and affectionately called the ironclad.

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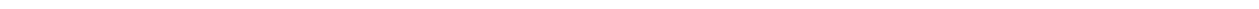
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APPENDIX A: PERMITS

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NHHC Archaeological Research Permit

For

Ship and Aircraft Wrecks under the Jurisdiction of the Department of the Navy

NHHC PERMIT NUMBER: NHHC-2014-002

NAME OF PRINCIPAL INVESTIGATOR: Stephen James

AFFILIATION: Panamerican Consultants, Inc.

ADDRESS: 91 Tillman St., Memphis, TN 38111

PHONE: 901-454-4733 **FAX:** 901-454-4736 **E-MAIL ADDRESS:** jamesposse@aol.com

PROJECT TITLE: Recovery of the CSS *Georgia*

NAME OF THE SHIP WRECK OR BUREAU NUMBER OF THE AIRCRAFT WRECK: CSS *Georgia*

LOCATION (LATITUDE AND LONGITUDE AND/OR UTM DATA): Savannah River, 1005674 E, 759779 N
Georgia State Plane East Feet, NAD 83

NAME, ADDRESS, AFFILIATION AND RELATIONSHIP OF COLLEAGUES TO BE COVERED BY PERMIT:

Panamerican- Steve James, Andy Lydecker, Matt Gifford, Erica Gifford, Matt Elliot, James Duff,
Michael Murray, Loren Clark, Jeff Pardee, Will Wilson

Tidewater Atlantic Research (TAR) Gordon Watts, John Broadwater

FUNDING SOURCE: U.S. Army Corps of Engineers, Savannah District, No. W912HN-12-D-0016

SCOPE OF INTRUSIVE WORK ALLOWED: Only Phase I intrusive data recovery activities described in the permit application submitted by the applicant on 22 November 2014 are authorized. These Phase I activities, which include 150 days of work to undertake the six objectives outlined in the permit application and described in detail in the 2014 Final Research Design, must be conducted as per the methodology stipulated in those two documents submitted to NHHC. Subsequent phases of operation, including large artifact recovery, ordnance handling, and mechanized site clearance, will be considered under a separate permit application. NHHC is to be consulted in the instances identified within the stipulated permit application. NHHC requests that copies of archaeological records and data are submitted as part of the final report of the operation.

DURATION OF PERMIT: 1 January 2015 – 31 December 2015

Signature of Permittee on this permit denotes acceptance of Naval History & Heritage Command terms and guidelines applying to this permit. Permittee accepts responsibility for all damages and liabilities incurred during permitted activity.

APPLICANT SIGNATURE

DATE

2/1/15

DIRECTOR, NHHC SIGNATURE

DATE

12/18/2014

J.B. THOMAS, JR., PhD, By Direction



NHHC Archaeological Research Permit

For

Ship and Aircraft Wrecks under the Jurisdiction of the Department of the Navy

NHHC PERMIT NUMBER: NHHC-2015-003

NAME OF PRINCIPAL INVESTIGATOR: Stephen James

AFFILIATION: Panamerican Consultants, Inc.

ADDRESS: 91 Tillman St., Memphis, TN 38111

PHONE: 901-454-4733 **FAX:** 901-454-4736 **E-MAIL ADDRESS:** jamesposse@aol.com

PROJECT TITLE: Recovery of the CSS Georgia

NAME OF THE SHIP WRECK OR BUREAU NUMBER OF THE AIRCRAFT WRECK: CSS Georgia

LOCATION (LATITUDE AND LONGITUDE AND/OR UTM DATA): Savannah River, 1005674 E, 759779 N

Georgia State Plane East Feet, NAD 83

NAME, ADDRESS, AFFILIATION AND RELATIONSHIP OF COLLEAGUES TO BE COVERED BY PERMIT:

Panamerican- Steve James, Andy Lydecker, Matt Gifford, Erica Gifford, Matt Elliot, James Duff, Michael Murray, Loren Clark, Jeff Pardee, Will Wilson

Tidewater Atlantic Research (TAR) Gordon Watts, John Broadwater

FUNDING SOURCE: U.S. Army Corps of Engineers, Savannah District, No. W912HN-12-D-0016

SCOPE OF INTRUSIVE WORK ALLOWED: Only Phase II intrusive data recovery activities described in the permit application submitted by the applicant on 25 May 2015 are authorized. These Phase II activities, which include 66 days of work to undertake the objectives outlined in the permit application and described in detail in the 2014 Final Research Design, must be conducted as per the methodology stipulated in those two documents submitted to NHHC, and in accordance with revised methodologies for Phase II work set forth in the document "NHHC Comment Replies" submitted 15 June 2015. Subsequent phases of operation, including Phase III Mechanized Site Clearance Recovery and Phase IV Final Archaeological Clearance will be considered under a separate permit application. NHHC is to be consulted in the instances identified within the stipulated permit application. NHHC requests that copies of archaeological records and data are submitted as part of the final report of the operation.

DURATION OF PERMIT: 18 June 2015 – 19 June 2016

Signature of Permittee on this permit denotes acceptance of Naval History & Heritage Command terms and guidelines applying to this permit. Permittee accepts responsibility for all damages and liabilities incurred during permitted activity.

APPLICANT SIGNATURE

DATE

6/26/15

DIRECTOR, NHHC SIGNATURE

DATE

18 JUNE 2015

J.B. THOMAS, JR., PhD. By Direction



NHHC Archaeological Research Permit

For

Ship and Aircraft Wrecks under the Jurisdiction of the Department of the Navy

NHHC PERMIT NUMBER: NHHC-2015-003-Addendum

NAME OF PRINCIPAL INVESTIGATOR: Stephen James

AFFILIATION: Panamerican Consultants, Inc.

ADDRESS: 91 Tillman St., Memphis, TN 38111

PHONE: 901-454-4733 **FAX:** 901-454-4736 **E-MAIL ADDRESS:** jamesposse@aol.com

PROJECT TITLE: Recovery of the CSS Georgia

NAME OF THE SHIP WRECK OR BUREAU NUMBER OF THE AIRCRAFT WRECK: CSS Georgia

LOCATION (LATITUDE AND LONGITUDE AND/OR UTM DATA): Savannah River, 1005674 E, 759779 N
Georgia State Plane East Feet, NAD 83

NAME, ADDRESS, AFFILIATION AND RELATIONSHIP OF COLLEAGUES TO BE COVERED BY PERMIT:

Panamerican- Steve James, Andy Lydecker, Matt Gifford, Erica Gifford, Matt Elliot, James Duff,
Michael Murray, Loren Clark, Jeff Pardee, Will Wilson

Tidewater Atlantic Research (TAR) Gordon Watts, John Broadwater

FUNDING SOURCE: U.S. Army Corps of Engineers, Savannah District, No. W912HN-12-D-0016

SCOPE OF INTRUSIVE WORK ALLOWED: Only Phase II intrusive data recovery activities described in the permit application submitted by the applicant on 25 May 2015 are authorized. These Phase II activities, which include 66 days of work to undertake the objectives outlined in the permit application and described in detail in the 2014 Final Research Design, must be conducted as per the methodology stipulated in those two documents submitted to NHHC, and in accordance with revised methodologies for Phase II work set forth in the documents "NHHC Comment Replies" submitted 15 June 2015 and "Mechanized Recovery Test" submitted 3 August 2015. Subsequent phases of operation, including the revised Phase II Casemate Recovery, Phase III Mechanized Site Clearance Recovery, and Phase IV Final Archaeological Clearance will be considered under a separate permit application. NHHC is to be consulted in the instances identified within the stipulated permit application. NHHC requests that copies of archaeological records and data are submitted as part of the final report of the operation. This document supersedes permit NHHC-2015-003 issued 26 June 2015.

DURATION OF PERMIT: 18 June 2015 – 19 June 2016

Signature of Permittee on this permit denotes acceptance of Naval History & Heritage Command terms and guidelines applying to this permit. Permittee accepts responsibility for all damages and liabilities incurred during permitted activity.

APPLICANT SIGNATURE

Stephen James

DATE

8/14/15

DIRECTOR, NHHC SIGNATURE

J.B. Thomas, Jr.

DATE

4 Aug 2015

J.B. THOMAS, JR., PhD, By Direction



NHHC Archaeological Research Permit

For

Ship and Aircraft Wrecks under the Jurisdiction of the Department of the Navy

NHHC PERMIT NUMBER: NHHC-2015-005

NAME OF PRINCIPAL INVESTIGATOR: Stephen James

AFFILIATION: Panamerican Consultants, Inc.

ADDRESS: 91 Tillman St., Memphis, TN 38111

PHONE: 901-454-4733 **FAX:** 901-454-4736 **E-MAIL ADDRESS:** jamesposse@aol.com

PROJECT TITLE: Recovery of the CSS *Georgia*

NAME OF THE SHIP WRECK OR BUREAU NUMBER OF THE AIRCRAFT WRECK: CSS *Georgia*

LOCATION (LATITUDE AND LONGITUDE AND/OR UTM DATA): Savannah River, 1005674 E, 759779 N
Georgia State Plane East Feet, NAD 83

NAME, ADDRESS, AFFILIATION AND RELATIONSHIP OF COLLEAGUES TO BE COVERED BY PERMIT:

Panamerican- Steve James, Andy Lydecker, Matt Gifford, Erica Gifford, Matt Elliot, James Duff,
Michael Murray, Loren Clark, Jeff Pardee, Will Wilson

Tidewater Atlantic Research (TAR) - Gordon Watts, John Broadwater

FUNDING SOURCE: U.S. Army Corps of Engineers, Savannah District, No. W912HN-12-D-0016

SCOPE OF INTRUSIVE WORK ALLOWED: Only section 3.3.1 of "Final Phase 3 Permit" application submitted by the applicant on August 28, 2015 is authorized, as per methodology presented in option 1. NHHC is to be consulted in the case that the recommended course of action stipulated in the permit application fails, prior to further attempts at recovery of the Southeast casemate of the CSS *Georgia* site. All other sections of "Final Phase 3 Permit" remain under review and are not presently authorized. The present permit authorization modifies the scope of NHHC-2015-004.

DURATION OF PERMIT: 18 August 2015 – 19 August 2016

Signature of Permittee on this permit denotes acceptance of Naval History & Heritage Command terms and guidelines applying to this permit. Permittee accepts responsibility for all damages and liabilities incurred during permitted activity.

APPLICANT SIGNATURE

DATE

29 Aug 2015

DIRECTOR, NHHC SIGNATURE

DATE

28 Aug 2015

JAMES KUHN, By Direction



NHHC Archaeological Research Permit

For

Ship and Aircraft Wrecks under the Jurisdiction of the Department of the Navy

NHHC PERMIT NUMBER: NHHC-2015-006

NAME OF PRINCIPAL INVESTIGATOR: Stephen James

AFFILIATION: Panamerican Consultants, Inc.

ADDRESS: 91 Tillman St., Memphis, TN 38111

PHONE: 901-454-4733 **FAX:** 901-454-4736 **E-MAIL ADDRESS:** jamesposse@aol.com

PROJECT TITLE: Recovery of the CSS Georgia

NAME OF THE SHIP WRECK OR BUREAU NUMBER OF THE AIRCRAFT WRECK: CSS Georgia

LOCATION (LATITUDE AND LONGITUDE AND/OR UTM DATA): Savannah River, 1005674 E, 759779 N
Georgia State Plane East Feet, NAD 83

NAME, ADDRESS, AFFILIATION AND RELATIONSHIP OF COLLEAGUES TO BE COVERED BY PERMIT:

Panamerican- Steve James, Andy Lydecker, Matt Gifford, Erica Gifford, Matt Elliot, James Duff,
Michael Murray, Loren Clark, Jeff Pardee, Will Wilson

Tidewater Atlantic Research (TAR) - Gordon Watts, John Broadwater

FUNDING SOURCE: U.S. Army Corps of Engineers, Savannah District, No. W912HN-12-D-0016

SCOPE OF INTRUSIVE WORK ALLOWED: Approval of methodologies stipulated in "Final Phase 3 Permit" application submitted by the applicant on August 30, 2015 is authorized subject to the following provisions: a) Recovery, recordation, and reburial of the surviving West casemate section of CSS Georgia may only proceed as stipulated in section 2.3.1 without further consultation and if necessary authorization by DON; b) DON does not concur with stipulation that no alternative methods are available for the West casemate recovery and that future archaeological recovery is highly unlikely; c) Recovery of the Southeast casemate section may only proceed as stipulated in section 3.3.1.1 without further consultation and if necessary authorization by DON; d) Contrary to what is stipulated in "Final Phase 3 Permit" application, applicant concurs that Phase 3 will not conclude all fieldwork for the CSS Georgia Archaeological Mitigation Project if recovery, recordation and conservation or reburial of extant casemate sections is not undertaken under the present authorization.

DURATION OF PERMIT: 3 September 2015 – 2 September 2016

Signature of Permittee on this permit denotes acceptance of Naval History & Heritage Command terms and guidelines applying to this permit. Permittee accepts responsibility for all damages and liabilities incurred during permitted activity.

APPLICANT SIGNATURE

DATE

3 Sept 2015

DIRECTOR, NHHC SIGNATURE

DATE

2 Sep 2015

J.B. THOMAS, JR., PhD, By Direction

**Final Phase III Permit
8/30/2015**

INTRODUCTION

On 6 August 2015, the Naval History and Heritage Command issued a revised Phase 2 Permit that included the testing of a splitting tool (guillotine) and mechanized recovery. The results of the tests as well as lessons learned and future application are presented below. The lessons learned will guide the work to be performed in Phase 3, which includes recovery of the west casemate, mechanized recovery (including use of the grapple on the SE casemate) and reburial. The Phase 3 permit will conclude all fieldwork for the CSS Georgia Archaeological Mitigation Project as presented in the CSS Georgia Research Design dated November 2014. A copy of previously issued permits may be found in Appendix A for reference.

SECTIONING TEST RESULTS

With approval for sectioning testing obtained from NHHC, testing began at the West Casemate on a segment located immediately adjacent to the location from which the integrity test piece was recovered in November 2013. The segment measures 16 ft long x 7 ft wide with minimal wood beneath (see figure). The piece is clear of obstructions and disarticulated railroad iron. Using the USBL system, with the beacon attached to side of the Blade guide, the guide was set directly over center of Project (Figure 1). Using CODA, set the Blade gently down of Project. Employed two tag lines tied on either side of Blade guide and controlled on barge cleats to align guide parallel to rails prior to setting on Project. When set, dropped blade 3 feet. Viewed results in real time on CODA. Appeared to be movement and crane operator stated same as well. Did this on either end and in the Center on 4 drops. Not a lot of movement. Then placed in center and dropped it from 5 feet (5th time). Section appeared to split along seam and settle. Note: USBL allowed and indicated Blade drops placed along almost a single line, and CODA was employed by the archeologists to see the alignment of the blade, as well as height above the segment, with the result that the mechanism could be set down or placed “gently” on the project and parallel to rails (See Figure 2 below).

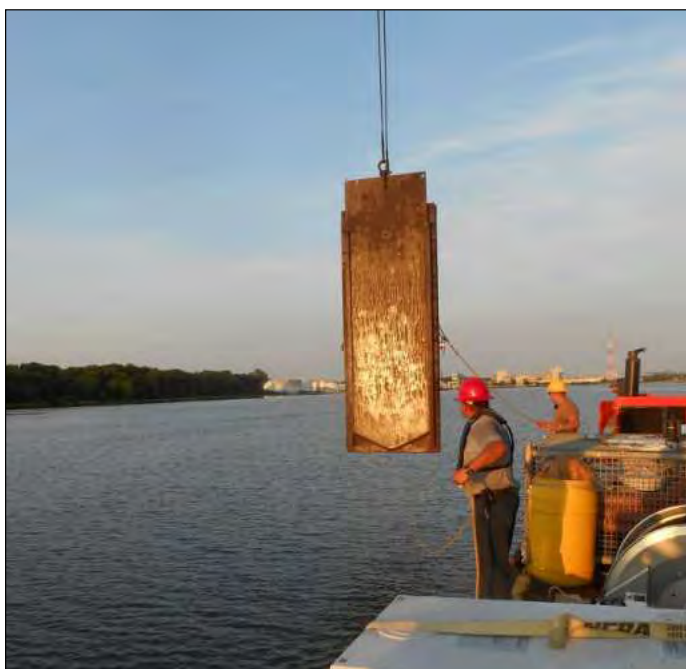


Figure 1. 7-ton sectioning blade and guide being lowered into position.

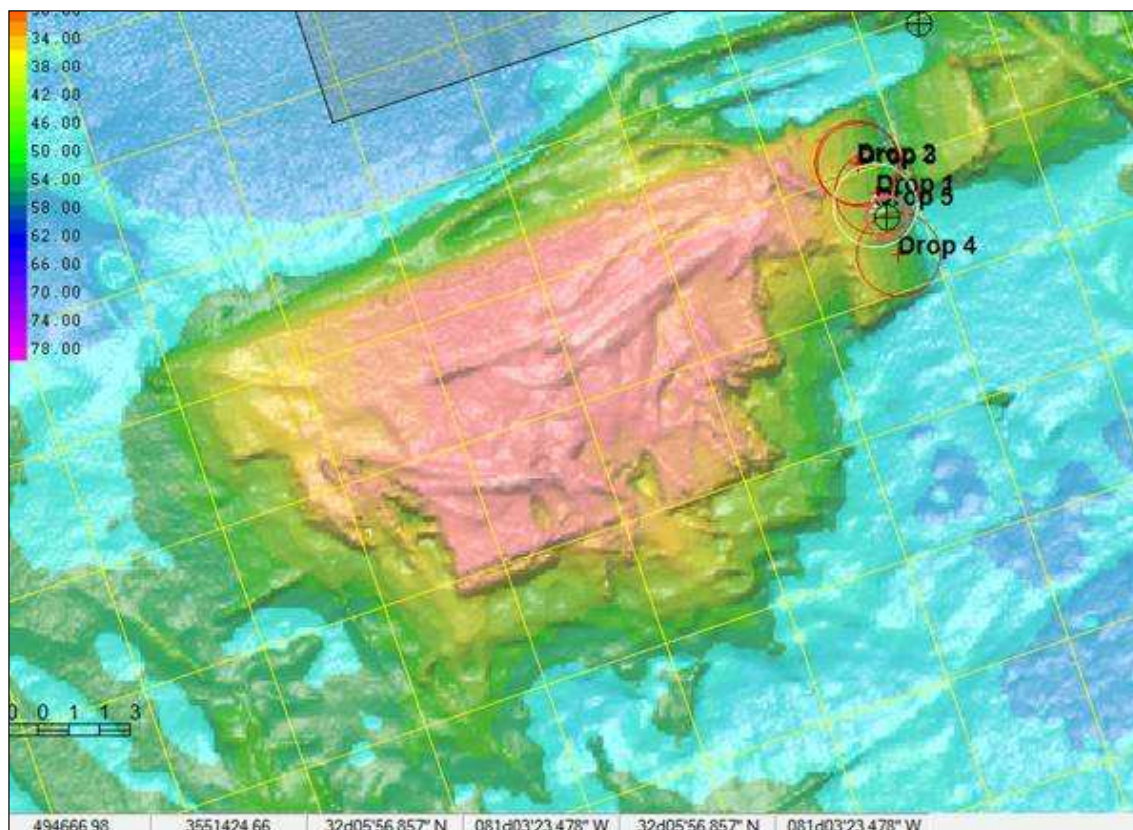


Figure 2. Sectioning locations on the West Casemate Test.

After sectioning, an archaeological diver was sent in on the next slack tide to examine the effects of the sectioning. The visibility was excellent at approximately 3 feet and the results of the sectioning were recorded on video. Diver stated that rails had separated along their entire length where blade had impacted, as well as where it had joined the casemate on its upriver side. Diver could detect little if any damage to the Casemate other than where blade struck with missing concretion. Diver stated that two 16-foot long and approximately 4-foot wide sections could now be raised with slings.

After the success of the test on the West Casemate, permission was verbally granted on-site by NHHC personnel to employ the system on the small South East Casemate segment. Two drops were conducted on Monday, August 10th, along a line 5 feet from the bottom edge. Inspection by divers the following Tuesday indicated no separation of rails. Blade was implemented again with higher drops at four locations with 3 drops each along the 5-foot line. Divers again surveyed segment and stated that the segment had “split about 70% along the length (12 feet) starting from the downriver end with about 30% (6 ft) still intact near the upriver end. Put a sling 3 feet on far downriver end where it was separated in attempt to lift it up to a short distance in an effort to separate it 100%. Could clearly see on CODA crane lift end of section off bottom, indicating it broke free along its length. Diver inspection showed it was a much smaller piece than anticipated (5 x 2). When lifted, Project was in fact 2 fragmented timbers and not railroad iron. Timbers originally appeared to be 6-inch by 16-inch oak that had one face up in water column, heavily damaged by teredo. Other side appears to have come clean off iron (rail) with

the rails crossing the wood at an angle. There is no clear idea of what happened with this segment, and it requires resurvey.

A meeting was then had with Bob Neyland, Jason Potts, Julie Morgan, and Steve James on-site to discuss the way forward as other means had proved unsuccessful to split the rails and concretions. Regardless of what means were utilized elsewhere on the site (West or South Casemate), the East Casemate (approx. 24 x 24 ft) could not be lifted without sectioning it into portions with the mechanism. NHHHC agreed to let the team split the most northern segment with the blade and then put divers in to rig it. If successful, NHHHC agreed the splitting mechanism could be utilized in other locations.. See Figure 3 for the segment locations.

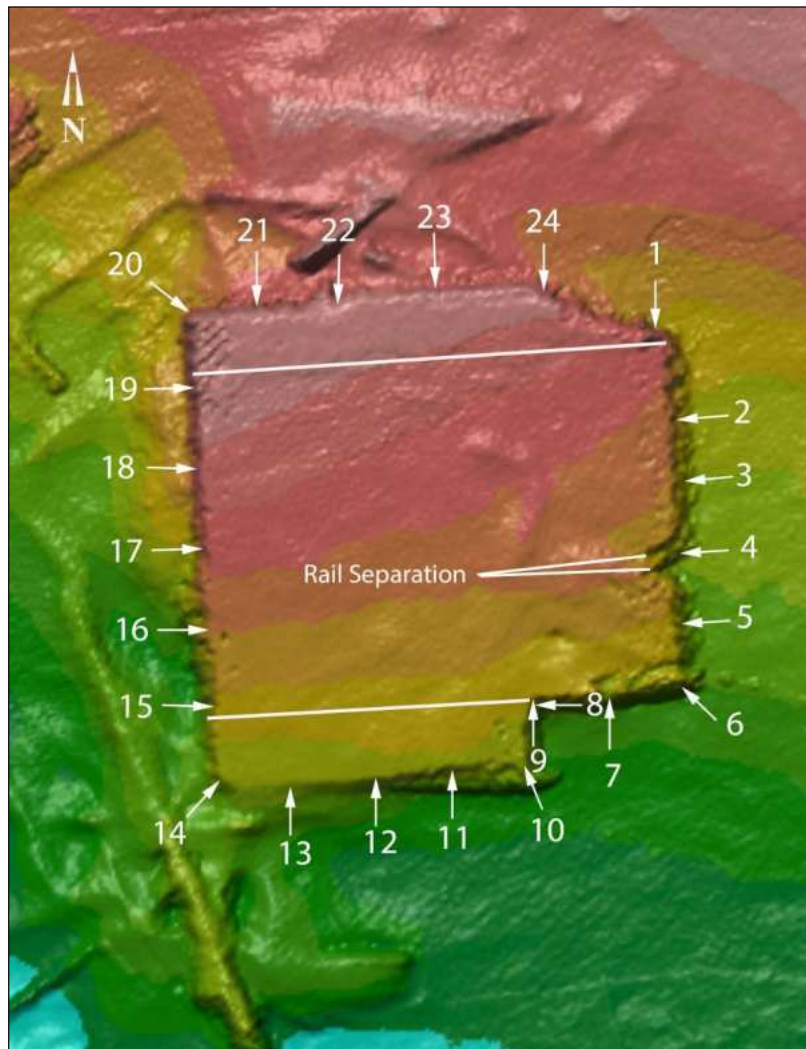


Figure 3. East Casemate showing North (top) and South (bottom) recovered segments as well as assessment data locations.

On Wednesday positioned the blade with the USBL and CODA on the northern segment. Four drop locations, all 4 feet in from north edge on East Casemate. The first operation in the center, 7 drops total, 3, 3, 3, 8, 8, 8, and 8 feet, that penetrated the rail. Second operation five foot east,

3 drops all 6 feet, that also penetrated. Third operation on eastern edge, with 2 drops at 6 feet, that also penetrated. Fourth operation was on the western edge, with 3 drops at 6 feet, and which also penetrated. Then we placed the entire guide gently along the top setting the guide down on segment from one foot to see if it would break free. We could observe on the CODA, the segment slowly moving and angling downward indicating separation. Divers in on next tide observed that section calved off. Rigged the section and it was successfully raised. Segment was recorded, banded, and placed in a roll-off container with water on the Material Barge. No evidence observed of any damage from the mechanism (Figures 4 and 5). Minimal wood was present which helped in the separation process.



Figure 4. Northern section on East Casemate segment successfully sectioned and raised.



Figure 5. Reverse side of northern segment recovered from East Casemate. Segment has been recorded, banded and is being readied for stabilization. Conservator is cutting away long bolts that secured timbers, and that have to be removed prior to shipping.

A similar operation was conducted the following day on the southern small 16 x 4 foot segment. Five placement locations, all with 8-foot drops. The first placement location was on the downriver end, 2 drops total, that separated through the iron. Second placement location was four foot further west, with 2 drops all from 8 feet the drops successfully separated the iron. Third drop on the center, with 4 drops at 8 feet that also separated. Fourth placement was conducted a little further west, with 2 drops at 8 feet that also separated. Fifth drop location centered on western end, three drops all 8 feet, separated. Similar to the northern segment, we could observe on the CODA the segment slowly moving and angling downward during the latter drops indicating separation. Divers went in and surveyed and rigged the segment for lifting. During the lift, 2 outer rails from one side fell off (were not slung on downriver side – just on upriver end) and the segment collapsed somewhat inward on itself. Brought to surface, the rigging on one end was observed to be unsafe, probably as a result of the 2 rails falling off. The segment was set back down on bottom, re-rigged on the following dive, and brought to the surface. Figure 6 shows that one rail was bent slightly, an effect from the blade drop.



Figure 6. Note bend in railroad iron from blade on edge of southern segment recovered from East Casemate.

After the lift of the small southern segment, sectioning commenced on what was now the southern segment which was comprised of a 6 foot width of rails ending at a large pre-2003 crack or rail separation approximately 6 feet in from the southern edge (see Figure 3 above). The first placement location was adjacent the crack on the downriver end. Seven drops from 8 feet were conducted until the blade observed by the crane operator to go through the segment. The second placement location was 3.5 feet to the west, with 10 drops from 8 feet until also observed to go through the segment. The third placement location was 2 feet west, with 7 drops from 8 feet. The fourth placement location was 7 feet to the west at the west edge with 7 drops from 8 feet until separation.

A subsequent survey of the segment indicated that while a split in the rails went across the casemate segment, there was not enough space in the upriver side of the crack for a hoisting sling. Divers rigged the downriver end and raised it in an attempt to separate entire segment but the entire casemate came off the bottom several inches as observed on the CODA. This indicates that the underlying wood is still intact at this location precluding separation with the blade.

Subsequently, a separation of a segment on the north side was attempted. Approximately 6 feet wide, and similar in size to the southern segment, drops were preformed on this segment with the same result. When rigged on the downriver end and lifted in an attempt to separate it, the entire casemate lifted several inches.

After discussions with Navy Salvage experts, because of the underlying wood, and inability of blade to create sectioned segments, it was decided to lift the remaining casemate as a whole (16 x 24 feet), the segments already removed resulting in a liftable weight (below 78,000 lbs).

LESSONS LEARNED

- USBL and CODA in concert work very well to position the splitting mechanism in the location of the intended split.
- The splitting mechanism must be employed in slack current.
- No two pieces of the casemate are alike. Subsequently, more or fewer drops may be required for a specific piece, and may not work well if wood is present.
- The tool is very effective on the outer areas on the casemate. This is the area where we do have wood data for the casemate sections (see Table 1 for east casemate data). The tool does not work effectively on areas with wood. These areas are generally where we do not have the data, i.e, underneath the center of the casemate.
- If substantial wood is present on the West Casemate, precluding successful mechanized separation of manageable segments (6 x 24 feet), then large lifts may be required, as well as alternative recovery methods discussed.
- Damage can be minimized with the separation tool. However, damage can occur during the rigging and lifting phase as we have seen with several rails falling off during the lift in and above the water column. Divers should be cognizant of rigging all rails on the segment even in zero visibility. Additionally loose rails should be recovered at a later date.

Table 1. East Casemate Assessment Data

Station	Elevation	Probe Depth	Bottom Sediment	Observations
	Above Bottom	Under Armor		
1	28"	7'	Soft Mud	Clear to 7' No apparent wood structure
2	24'	8'	Hard Clay	Clear to 8' No apparent wood structure
3	24"	7'	Hard Clay	Clear to 7' No apparent wood structure
4	21"	7'	Soft Mud	Clear to 7' No apparent wood structure
5	30"	8'	Clay	Clear to 8' length of probe
6	36"	7'	Clay	Clear to 7' under 24 inches of wood structure
7	32"	8'	Soft Mud & Clay	No apparent wood structure
8	24"	1'	Wood Structure on Clay	Wood immediately under armor at 1'
9	24"	1'	Soft Mud	Wood immediately under armor at 1'
10	28"	5'	Clay	Clear to 5' No apparent wood structure
11	24"	2'8"	Soft Mud	Deteriorated wood under armor
12	14"	0'	Wood Structure on Clay	Intact wood under armor
13	12"	0'	Wood Structure on Clay	Intact wood under armor
14	12"	6"	Wood Structure on Clay	Intact wood under armor
15	24"	6"	Gravel & Shellhash	Intact wood under armor
16	24"	1'	Soft Mud	Intact wood under armor

Station	Elevation	Probe Depth	Bottom Sediment	Observations
	Above Bottom	Under Armor		
17	24"	4'6"	Soft Mud	Possibly deteriorated wood at 3'
18	24"	3'	Soft Mud	Possibly deteriorated wood at 3'
19	34"	5'	Soft Mud	Thick mud at 5'
20	38"	8'	Sand and Mud	Clear to 7' No apparent wood structure
21	26"	5' 6"	Soft Mud	Thick mud at 5'
22	31"	4'	Soft Mud	Possibly deteriorated wood at 5 feet
23	19"	3'	Soft Mud & Gravel	Mud and possibly clay at 3'
24	24"	5'	Soft Mud	Possibly deteriorated wood at 6 feet

UTILIZATION IF APPROVED

Upon approval by NHHHC to use the splitting method via issuance of the Phase 3 Permit, the splitting mechanism will be employed as a means to separate casemate sections into smaller, more manageable (i.e., able to lift with slings and spreader bar with cranes on deck) sections. Splitting of more than 1 section at a time is not advised due to safety concerns. MDSU2 has stated that rails that may have been loosened during the splitting could create potential snagging hazards. The size of the sections split will be adjusted to maintain unique architectural features that will assist with reconstruction of the vessel. Provenience of the recovered casemate sections will be maintained using the methods as approved in Permit 2.

PROPOSED METHODOLOGY FOR RECOVERY OF REMAINING WEST CASEMATE

After extensive discussion and consultation, the project leaders are in agreement that the best way to recover the west casemate is by using a heavy lift asset to recover it intact. Other methods, while potentially effective, are deemed to be less effective and would likely damage the casemate more than the methodology outlined below. The methods that were considered less acceptable in favor of the heavy lift option were:

Method	Method Downsides
Breaking up the casemate with rail splitting mechanism and pieces individually rigged for recovery by divers.	<ul style="list-style-type: none"> • Rail splitter could damage sections. • Wood substrate could prevent splitting by absorbing shock load of splitter (as seen in other sections) • More time extensive due to more rigging evolutions required of divers
Tandum Lift by two smaller cranes	<ul style="list-style-type: none"> • Increase chance of single point of failure causing loss of project during lift • Crane assets would be on the high edge of their operating envelopes, increasing risk of failure • Failure of lift could result in injury or loss of equipment
Do nothing	<ul style="list-style-type: none"> • Casemate would need to be addressed at later date, with same constraints but with significantly larger costs due to already sunk mobilization costs in current effort

HEAVY LIFT RECOVERY. BECAUSE OF THE ABOVE ANALYSIS, THE RECOVERY TEAM REQUESTS AUTHORIZATION TO RECOVER THE WEST CASEMATE INTACT USING A HEAVY LIFT ASSET (SAVANNAH GIANT). THE RECOVERY WOULD BE ACCOMPLISHED USING THE FOLLOWING PROCEDURE.

- a. **Survey.** MDSU divers will thoroughly survey edges and top of west casemate, making particular note of
 - i. Condition,
 - ii. Access room underneath casemate,
 - iii. Debris on top of casement, if any, and
 - iv. Any condition that could prevent an intact removal of the piece, i.e. fully split rail section, access to sling areas blocked by iron or wood, etc.
- b. **Use Rail Splitter to Detach Appendage.** On the west side of the casemate, there is an approximate 8' x 15' appendage. This corner becomes an integral part of a heavy lift. If it can be removed to expose a much more intact part of the casemate it will serve two purposes. (1) Make the piece more symmetrical to make a balanced load more easily achieved, and (2) it will remove a potential failure point that would be directly under the slings, increasing likelihood of success. The piece would be recovered by rigging and the on-site crane. If this piece cannot be split and recovered, the salvage expert will design the lift plan to include this in the lift of the intact section.
- c. **Grapple Disarticulated Iron.** Following survey, the grapple will be used to clear disarticulated iron on top of west casemate section. Areas where the slings/rope will pass will be cleared of all debris. Some iron may remain on the casemate section if it does not impact the rigging of the section.
- d. **Diver Secondary Survey and removal of Slinging Obstructions.** Following removal of iron, and based on Coda Octopus and side scan data, divers will sling any remaining material obstructing insertion of slings.
- e. **Rigging of Lifting Beams.** Savannah Giant will be moored (using spuds) on the north side of west casemate section, with its two derrick booms positioned over the west casemate. A 50' spreader bar, rated at 500 tons, will be placed above two secondary spreader bars, each rated for 250 tons. The 50' spreader bar will be oriented perpendicular to the direction that casemate railroad iron runs, and suspended from the two derrick booms. The secondary spreader bars (18' long each) will be suspended from, and at opposite ends of, the main 50' spreader beam. The secondary beams will run in the same direction as the casemate rails. Two 120', 1-1/2" wire slings will be hung from the secondary beams, running parallel to each other and perpendicular to the casemate rails.
- f. **Rigging of Slings.** The two slings, now approximately 18' apart and perpendicular to the rails, will be lowered to the river bottom above the casemate. Divers will place the wire under the respective edges of the casemate (north and south sides) placing the wire as far from the edge of the rail ends as possible (1-3'). If necessary, a come-along will be rigged between the slings on both the east and west sides of the casemate to keep the slings a maximum of roughly 18' apart which will mitigate the chances of their slipping.
- g. **Lifting.** When divers are clear, and at low tide slack water, the derrick will begin its lift. With separate load cells on each of the derrick legs, the length of each wire can be adjusted to even out the load, thereby keeping the project as level as possible on its lift through the water column. When clear of the water column, the project will be inspected visually for any rigging concerns or potential points of failure. If all is well,

the project will be lifted to a height 10' above the water. If there is something amiss, the project will be slowly lowered to the bottom to correct the problem.

- h. **Landing on Barge.** With dunnage in place along its forward third, the 200' material barge, with its 120 ton crane placed aft to counteract the weight of the casemate, will be moved under the project, alongside the stern of the Savannah Giant. With the barge held in position by the tug, the west casemate will be slowly lowered onto the deck of the barge. Once all load has been transferred to the deck of the barge, the spreader beams will be disconnected from the slings and the Savannah Giant's mission will be complete.
- i. **Study and Future Deposition.** Archeologists will photograph and measure the west casemate and take whatever artifacts are required or necessary. The large casemate will be sectioned into smaller sections using a hydraulic jackhammer and banded. Only after sectioning will it be possible to position the sections bottom side up for photography. This is the same method that has been employed by the team for recordation of both sides of casemate recovered to date. The remaining pieces will be tagged and the casemate will be separated into sections appropriate for the study. Pieces remaining of the casemate that will not be conserved will be moved to a relocation site TBD in the Back River and reburied. The reburial will be done using the 120 ton crane aboard the barge.
- j. **Contingency plans.** In case the above method can not be safely accomplished due to an uncorrectable complication in its implementation, alternate methodology will be utilized. The next best method of those shown in the table above is the rail splitting mechanism method, used to split the project into 2-3 pieces so that the 120 ton crane can recovery them individually. The same study and reburial methodology will be used once the west casemate pieces are recovered.

METHODOLOGY FOR PREVENTING SEPARATION OF DISCRETE RAILS

Some fragments of the CSS Georgia casemate have considerably less structural integrity than others. This appears to be a factor of 19th century salvage, damage from dredging the navigation channel, damage from vessels hitting the wreck and/or damage from placement, servicing and removal of wreck buoys. Combined with adverse environmental conditions at the wreck site (e.g. virtually no visibility and high current) rigging casemate sections for recovery is a difficult process.

On occasion, partially separated railroad rails, exposed fasteners and surviving wood underneath sections have made effective choke rigging difficult. As a consequence loose rails have separated from less intact sections of casemate during lifting operations. Most of the lifts have been 100% successful and nothing has separated from the slings. While there is no way to guarantee that each lift will be that successful, every effort will be made to ensure that nothing will escape the sling set.

Where sections of casemate sections have less structural integrity and rails are loose additional restraints will be employed. Straps, not lifting, and/or line can be employed to contain loose rail. This would provide the highest level of assurance that loose material would not separate and slip out of the lift slings.

CASEMATE RECOVERY AND PROJECT SCHEDULE

The team must plan for alternative methods of casemate recovery should the above methodology prove ineffective, or if the project timeline for casemate recovery is exceeded. MDSU2's orders for CSS Georgia operations officially end COB 9 September 2015. Diving

operations may be continued to recover any remaining casemate sections following conclusion of MDSU2 team's fieldwork. However, unless new technology or approaches are identified, the continuation of such operations is unlikely to lead to results that differ from those that have been experienced to date. The remaining west casemate is the largest and heaviest section. Consultation with Paul Hankins, Vice President of Salvage Operations for Donjon Marine, SUPSALV, Army Corps of Engineers, Savannah District and NHHHC have determined that the Savannah Giant is the most reliable and safe methodology to recover that section using an archaeological recovery approach. If this proves unsuccessful, there are no alternative methods available and future archaeological recovery is highly unlikely. After removal of the casemate by Savannah Giant, PCI will conduct an archaeological survey of the area below the casemate section. It should be stated that PCI divers examined the sediments in the original location of the east casemate on 29 August 2015. No artifact concentrations, ordnance or wood timbers were present. Sediments approximately 2-4 inches deep rested above the Miocene clay. These are similar findings to what PCI observed during the excavations of sediments below the 2013 test section from the west casemate.

Dredging operations in the vicinity of the CSS Georgia wreck will not commence until 2017-18 based on the current funding stream for the Savannah Harbor Expansion Project. Before dredging occurs at the wreck site a Savannah District archaeologist will review the finalized dredging designs and determine if the remaining casemate section(s) will be impacted directly or indirectly by the dredging actions. If the designs can be altered to avoid impacting the remaining section(s) the Corps will take actions to do so, and the Savannah District archaeologist will re-initiate consultation with NHHHC and the SHPOs. If avoidance is not possible, Savannah will include removal of the casemate section(s) in the inner harbor dredging contract. Consultation with NHHHC, the SHPOs and possibly Advisory Council, if agreement between the parties cannot be reached, will be re-initiated to discuss the methods for recovery of the remaining casemate(s) and the level of archaeological survey and artifact recordation that will be undertaken.

If casemate recovery of the West Casemate section has not been completed by the time MDSU2 or commercial divers depart the wreck, casemate recovery activities will cease and mechanized recovery will be initiated as described in the permit application. All other phases of the project will be implemented and completed as scheduled with on-going discussions taking place between all agencies on options for west casemate recovery. No mechanized recovery of the west casemate will be undertaken until discussions between the agencies (NHHHC, USACE, SHPOs) have occurred.

MECHANIZED RECOVERY

As outlined in the research design for the CSS Georgia data recovery, dated November 2014, mechanized site clearance recovery (Phase III) is scheduled to occur immediately following recovery of all of the casemate sections. The mechanized clearance phase is presently estimated to last a total of 35 days (originally estimated at 10 days of grapple followed by 25 days of clamshell recovery). This time estimate is based on the following factors: 1) site size; 2) size of the machinery that will be used; 3) ability to clamshell/grapple continuously during a 10 hour work day; and 4) ability to maintain a pace for sorting and clearing screens that will not slow mechanized recovery.

MECHANIZED RECOVERY TEST RESULTS

A total of 6 Grapples and 6 Clamshells were conducted south of the West Casemate (see Figures 7 through 13). Performed between dives, all tests were conducted at times of high current. The first three Grapples were conducted Wednesday August 12th, while the remaining three were conducted the following day. The first Clamshell was conducted Friday August 14th,

and the remaining conducted the following Saturday. The first recoveries were slow in that the process was being worked out, with recordation methods, both in personnel and procedures, being refined.

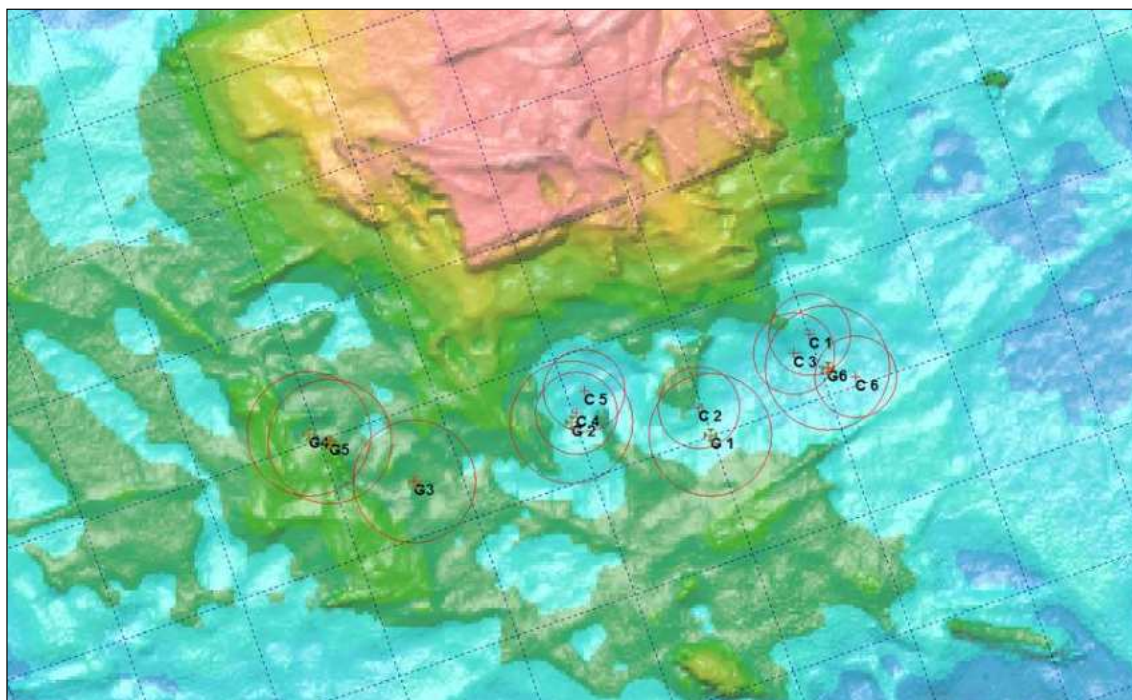


Figure 7. Locations of Grapple and Clamshell Tests south of the West Casemate.

GRAPPLE TESTS

First Grapple – G1 - 1122 hrs Wednesday. Just south of West Casemate in approximately Unit G-9. Lots of sediment, several large timbers one with a tenon on one end, chain, a little rail road iron. Methods to clean, sort, record and store artifacts were discussed and implemented (See Mechanized Recovery Form below).

Second Grapple – G2 - 1242 just to the west of G1. Lots of sediment, wood fragments, some railroad iron, pine resin chunk, “wheel barrow” handle, turn buckle. When processed method went quicker.

Third Grapple – G3 - 1258 – conducted immediately after Second. Processed this one prior to the second because very little recovery with very little sediment (railroad iron, barrel stave). Easily processed.

Fourth Grapple - G4 - 1104 hrs. Just upriver from G3. Two timbers and a small section of railroad iron. This grapple was quickly processed.

Fifth Grapple – G5 – 1113 hrs, conducted immediately after G4 and at same location to see if additional material would come up. Lots of sediment, some fragmented timbers, a small length of railroad iron, an axe head, two fragments of stoneware, and small fragment of anthracite. Did not process until G-6 placed on deck. Processing went quickly.

Sixth Grapple – G-6 – 1124. This one was east (downriver) G-1. Some sediment. Portion of one side of gun carriage with iron cap square. Wood is teredo eaten. This location is approximately 20 feet north of Gun #3.

CLAMSHELL TESTS

First Clamshell – C2 - 1245 hours (Friday). Placed first Clamshell, C1, at G6 where gun carriage fragment came from in Grapple. Placed this test material into prototype test screen. Two lengths of RR iron, brown lead glaze stoneware, aqua glass bottle base fragment. Found that door screen sections on prototype way to heavy and cumbersome to lift and unsafe. Small screens at ends also trapped sediment and did not work as intended. Had to remove all sediment with a shovel and sorted. Very time consuming.

Second Clamshell – C2 - 1321 hrs (Tests C2-C6 on Saturday). At G1. Very little material and sediment – silty mud with shell. One small section of railroad iron, several fastener fragments. A chain with pulley. This clamshell quickly processed.

Third Clamshell – C3 – 1336 hrs, conducted immediately after C2. At G6, same area as C1 but several feet to the SW. G6 is where gun carriage came from. Some sediment, silty mud with shell, some small fragmented timbers, a bronze trunnion cap (as opposed to iron on the carriage fragment from G6), complete soda bottle - Hutchinson stopper, several whiteware fragments possibly from the same vessel (no fresh breaks), several fasteners, and a section of iron plate.

Fourth Clamshell – C4 – 1436. This one is at G2 (area of large Resin chunk). Almost nothing recovered but one 10-foot length of RR iron.

Fifth Clamshell – C5 – 1449. This one is at G2 again as last test blocked (i.e., jaws held open) by RR iron. Again, almost nothing. One approximately 5-foot long eroded timber, plank-like, and almost no sediment.

Sixth Clamshell – C6 – 1458. Placed at G6 but just to the SE of C3 (6-8ft). When clamshell came up it appeared to have only one timber in the mouth blocking closure. This usually means loss of material or little recovery. While only a single timber, when deposited on deck it was found to be a gun carriage axle with both iron wheels. The gun carriage appeared to have lain on the bottom only slightly buried in the mud along its length with the exposed wood heavily “worm” eaten on three sides. Still a nice, recognizable piece with no damage from the Clamshell.

Note that all tests were conducted in peak current indicating validity of conducting Clamshells throughout the day similar to the Grapple. While none have been done at slack tide due to dive operations, if conducted at slack tide, they will go much quicker as far as locational placement. Note that time between C5 and C6 was 9 minutes.



Figure 8. Raising of a Grapple. Grapple G1 surprisingly collected more sediment as well as cultural material than clamshell. Material hosed off of barge to the right and away from wreck site. Grapple sample was easily sorted and washed with no loss of material even with the absence of a screen.



Figure 9. Photograph of Grapple G1 after initial wash.



Figure 10. Final washing of Timbers from Grapple G1 prior to recordation.



Figure 11. Clamshell grab being deposited into prototype screen.



Figure 12. Initial processing of a Clamshell grab. Screen was difficult to access and affected processing efficiency.



Figure 13. With large 6 x 6 inch screen raised, washing sediment through 2 horizontal screens. Weight and positioning of screens was found to be inadequate with numerous limitations on processing.

LESSONS LEARNED

Grapple and Clamshell Tests were conducted to determine efficiency of the methods, as well as to allow for the refinement of all associated procedures. While several of the methods proposed proved effective and require only minor modification, others were shown to require further consideration or were eliminated completely. The following points are “Lessons Learned” as well as procedural refinements.

- **USBL positioning.** The tests confirmed that the positioning system works very well for both pieces of equipment thus allowing for accurate provenience for all recovered artifacts. The USBL transponder was placed directly on the Clamshell and the Grapple using hose clamps. A GIS specialist monitored the beacon position on a computer screen from the command center on the equipment barge and provided direction to the crane operator so that the equipment could be precisely placed within the selected unit.

Positioning data and provenience information will be accomplished primarily through the use of the USBL system. As successfully shown during the Mechanized Recovery Test, the location of each Clamshell or Grapple recovery was accurately marked on the Multibeam Site Map with the footprint of each instrument also depicted on the map. Each location is recorded in a HyPack Target file for subsequent GIS employment. During Grapple or Clamshell recovery unit processing, the recovery unit is marked on the Recovery Unit Form. Input into the Mechanized Recovery Database, the database can and will be queried for artifact types, clustering, and relationship to nearby artifacts within adjacent recoveries. This will generally take place upon completion of the Mechanized Recovery, but as represented during the Testing Phase, locational relationships of artifacts are realized real-time (e.g., this was quite evident for the gun carriage components, with the types and locations readily apparent). This real-time information will be employed for in-field decisions on the need for additional recoveries in the same immediate adjacent areas.

- **Current.** Testing determined that current has minimal effect on the ability to accurately position the Grapple or the Clamshell. Both Grapple and Clamshell can work in high current meaning mechanized recovery can be conducted throughout the day and not just at slack tide. Clamshell, because of its profile takes slightly longer to position correctly onto a specified location than the Grapple during times of high current.
- **Materials Recovered.** The Grapple worked exceedingly well raising at times more sediment matrix than the clamshell. The mechanized recovery test revealed that similar artifact types were recovered by the two methods, as well as the amount of material. The team will employ both mechanisms at the same grid location, initially with the Grapple to remove the large material, i.e., railroad iron, followed by the Clamshell again at the same grid location. Some of the Grapple tests contained a considerable amount of sediment. It is possible the amount of sediment could be reduced as the crane operator becomes more accustomed to the site and using the equipment. Also, material was lost from the Clamshell during several of the tests when material prevented it from closing tightly. Artifact recovery was as follows: 127 artifacts were recovered with the Grapple averaging 21 artifacts per lift (low of 2, high of 46); 85 artifacts were recovered by Clamshell averaging 14 artifacts per lift (low of 1, high of 47).

Screening and sorting of recoveries will not be rushed. Based on the mechanized testing that was completed in August, it is estimated that a four person crew plus crew chief will complete the sorting and recordation process for one recovery (grapple or clamshell) per hour. When the clamshell breaks the surface the crew chief will record on the Mechanized Recovery Recordation Form whether the jaws of the clamshell closed fully resulting in a successful recovery, the general amount of material and the sediment or lack thereof. The chief will also record the apparent nature of structural remains and cultural material lost. Information for grapple will be similarly recorded. Grapple and clam shell recoveries will be carefully screened and sorted by a crew consisting of a crew chief and a team of four. Once

material is on deck it will be photographed from four quadrants. Any unique material will be additionally photographed. The collection will be washed using low pressure water and photographed from the same four quadrants. Each load of recovered material will be sorted, documented and prepared for reburial or conservation.

- **Screening.** The large prototype screen did not perform well during the test and will not be utilized during the mechanized phase. Testing determined that the weight of the mesh screens, lack of ability to drain adequately, and the overall height of the screens prevented the team from working safely or efficiently. The weight of the screens, especially, was a deterrent as the sections had to be lifted using a small walk behind crane. Owing to 11 of the 12 mechanized recoveries were washed, sorted and recorded on the deck, with no loss of artifacts, it has been determined that placement of recovered material directly onto the deck is the most effective and safe method, and will be utilized during the mechanized phase with minor modifications. Material from the Clamshell will still be screened, however, screening will take place on one side of the barge deck. Eight compartmentalized areas will be established along the outboard edge of one side the barge, four either side of the crane. Each segregated area will have its own screen at the outboard edge, comprised of $\frac{3}{4}$ inch expanded steel mesh set a 45 degree angle. Each screening station will be segregated from another with iron or wood bunks.
- **Sorting.** All artifacts brought up during mechanized recovery will be cleaned and initially sorted by the crew chief responsible for cleaning, sorting and documenting material in a specific grab sample. The crew chief will sort the cleaned artifacts into two groups – reburial or conservation. Artifacts that comprise the conservation group will be those that have diagnostic features such as tool marks, fasteners, fastener recesses or design and/or construction related features. The group of conserved artifacts will likely contain artifacts that after X-ray at CRL, will be determined non-diagnostic and will then be set aside for the second phase of reburial. The artifacts sorted for reburial will be those that have no diagnostic features and cannot contribute to vessel structural analysis or reconstruction or contribute to a better understanding of life on the CSS Georgia.

Project archaeological principal investigators will examine the material in each group to make the final decision on the diagnostic value of artifact. Fragments with no diagnostic value will be collectively photographed, identified by grab sample location and number and placed in a container with other non-diagnostic artifacts for reburial.

Two different roll on/roll off containers will be used to store artifacts. One will be specifically designated for iron, the other for organics that may be easily crushed. Several larger artifacts from each recovery unit will be tagged and the recovery group separated by others by large sheets of HDPE plastic. Each container will be filled at the end of the day with water following cease of that day's operation. At the start of the next working day the container must be drained to allow the team to place additional artifacts into the respective container, label and separate accordingly. That cycle will continue until the container has been filled with artifacts. Once a container is full with artifacts it will be filled with water until the reburial phase.

- **Sampling Process.** The crew chief will sort the artifacts into various categories and select artifacts that are potentially representative which will be sent for conservation. As described in the sorting process above, the PI will assess those artifacts in the representative/sample group and make a final determination of what is retained for conservation or grouped with reburied artifacts. We will err on the side of caution by retaining a larger sample which will then be culled in the lab during the accessioning process. The artifact inventory will provide a count of the number and types of artifacts that were recovered that day. The inventory will enable the team to keep a running total of the number of artifacts that have been selected as part of the representative sample for that artifact type. No fewer than 50 of each artifact type will be retained for the representative sample.

The majority of the representative fasteners that will be retained for conservation will come from the recovered sections of casemate. This will ensure that these fasteners are unequivocally associated with CSS Georgia. The casemate sections are going to be shipped to the CRL, where they will be recorded and processed for conservation. The short square section spikes, and the longer (~ 2') through bolts that fasten the iron rails through the entire wooden casemate structure will be counted and a good representative sample will be processed for conservation. The Lab personnel will know the total count, and will be able to extract complete specimens from the assemblage for the representative sample. Rough field counts indicate that the alternating rails have more than 15 spikes over their entire length. The East Casemate section could potentially have more than 15' of 24' long rails (90 rails), possibly holding more than 675 spikes. The Lab could easily select 50 to 100 good (i.e., straight, with head) spikes to be a good sample here. The through bolts are fewer in number, so the sample size would be smaller. We have yet to make an accurate count on this type of fastener, as the casemate sections will only be thoroughly processed in the Lab. These fasteners that are extracted directly from the casemate can be attributed directly to the CSS Georgia, whereas other fasteners recovered from the site may not necessarily be accurately identified as to their intended purpose. The wooden treenails used to secure the wooden beams in the casemate, will also be recorded, sampled and conserved.

Other fasteners as seen in the mechanized recovery that differ from those on the casemate sections will be kept for conservation in suitable numbers.

- **Recording Artifacts.** Methods described in the test amendment proposal proved effective and will be utilized during the mechanized phase with minor modification. An artifact catalog list has been developed to record every recovered artifact (Appendix B). All artifacts and material identified for reburial will be assigned a field provenience lot number and placed in labeled containers for transport to Back River. Field accessioning will use the recovered number Clamshell / Grapple number (i.e., Grapple #1, [G1], Clamshell #1 [S1], etc.) to record the artifacts. All clearly unique, significant and diagnostic artifacts, all of which are going to be kept for conservation, will be placed in container(s) labeled with the recovery number. Similar artifact types, e.g., ceramics, glass, organics, will be collected by type and placed in labeled Ziploc or plastic stored in their own containers. All significant or fragile artifacts (i.e., pistol) will be separated and stored individually, and accessioned with a unique number, photographed and recorded. Artifacts that fall into the representative sample group will be placed in their respective field provenience lot number container slated for conservation. The rest of the artifacts will be recorded and placed in labeled containers for reburial. These artifacts will be added to the database with an "r" prefix, for reburial.

All measured and scale drawings will be made in feet and inches as that was the method of measurement employed in the construction of the CSS Georgia, and all work of the site to date, that system will be used for recording material recovered from the wreck. The unit of measure will be added to the recording form, so that there is no margin for error. The scaled drawings were addressed in #4 above.

All decisions concerning assessment and sorting of timbers, wooden artifacts and other structural and nonstructural material from the CSS Georgia will be made by the project senior archeological staff.

- **Photography.** All artifacts will be photographed as a group in their respective group (i.e., reburial or conserved) after initial washing. Unique items for conservation will be photographed independently. This photography is in addition to an initial photograph of each mechanized recovery prior to initial washing and sorting. A scale will be placed in all photographs for reference.

- **Timbers and Wood.** Detailed drawings will be recorded for all diagnostic scantling using the Timber Recording Form shown below. These timbers will also be photographed. Wood samples will be collected from representative timbers but will not exceed 100 samples.

All wood timbers brought up during mechanized recovery that are destined for reburial will be cleaned and initially sorted by the crew chief responsible for cleaning, sorting and documenting material in a specific grab sample regardless. The crew chief will sort the cleaned timbers into two groups. Group one will be those that have diagnostic features such as tool marks, fasteners, fastener recesses or design and/or construction related features. Group two will be those timbers that have none of the diagnostic features associated with Group one and cannot contribute to vessel structural analysis or reconstruction.

Project archaeological principal investigators will examine the material in each group to make the final decision on the diagnostic value of each timber. Fragments with no diagnostic value will be collectively photographed, identified by grab sample location and number and placed in a container with other non-diagnostic wood for reburial.

Wood fragments with tool marks, fasteners, fastener recesses or design and/or construction related features will be further assessed by the archaeological principal investigators, archaeologists and the project conservator. Their assessment will focus on identifying timbers for conservation and curation.

All of the timbers identified for reburial will be documented and photographed. Documentation will be accomplished with measured scale drawings. All diagnostic features will be clearly identified and labeled. As many sides of each timber will be illustrated as are necessary for adequate documentation. Each diagnostic facet of the documented timbers will be photographed and unique features additionally recorded with close up images. Following documentation those timbers and/or wood fragments will be identified by grab sample location and number and placed in a container, with other non-diagnostic wood from the same grab, for reburial.

More unique timbers or wooden artifacts identified for conservation will be minimally labeled in the field with the recovery grab number. Like the gun carriage cheek piece and the carriage axle, wood artifacts will be wet stored and shipped to the conservation laboratory. Documentation will not be to the level of detail achieved for diagnostic material slated for reburial. Each artifact selected for conservation will be photographed in the field to provide positive identification at CRL. Timbers and wooden artifacts shipped to the conservation laboratory will be numbered and cataloged in the field.

- **Organics.** Any organics that are present (i.e., leather, textile, etc.) will be collected for subsequent analysis.

Material for Reburial. Material sorted and retained for reburial will be treated as described in the test amendment proposal. Material identified for reburial will be packed and stored for transport to the Back River. . Two different roll on/roll off containers will be used to store artifacts. One will be specifically designated for iron, the other for organics that may be easily crushed. Several larger artifacts from each recovery unit will be tagged and each recovery group will be separated by large sheets of HDPE plastic. Each container will be filled at the end of the day with water following cease of that day's operation. At the start of the next working day the container must be drained to allow the team to place additional artifacts into the respective container, label and separate accordingly. All material designated for reburial will be moistened and kept wet to the degree possible throughout daily operations using a spray system. That cycle will continue until the container has been filled with artifacts. Once a container is full with artifacts it will be filled with water until the reburial phase.

- **Personnel.** All decisions concerning assessment and sorting of timbers, wooden artifacts and other structural and nonstructural material from the CSS Georgia will be made by the project senior archeological staff.

The test mechanized recovery confirmed that a four-person crew is the minimum number that would be able to effectively screen and sort through each recovery. As stated in the mechanized test amendment proposal, 4, four-person crews of technicians (16 total), supervised by two (2) crew chiefs, will be able to effectively and methodically screen or sort through the material using the above described screening areas. There will be a designated recorder for each screen to record, document and identify the ultimate disposition of all artifacts recovered in each grapple or clamshell load using the Mechanized Recovery Recordation Form. Two (2) conservation specialists will be roving to ensure proper artifact sorting recording, and ultimate disposition (conservation or reburial containers). At least one of the two (2) Principal Investigators will supervise the screening process, along with insuring correct recovery location, interfacing with the USBL specialist and crane operator.

- **Sediments.** The Mechanized Recovery Recordation Form includes a line to record sediment type for each recovery.

USE OF GRAPPLE FOR CASEMATE RECOVERY

Please reference phone conversation between NHHC and the CSS GA team 26 August 2015 regarding recovery of the SE Casemate section. During that phone call the possibility and feasibility of recovering that section intact was discussed. Paul Hankins, Donjon Marine, VP Salvage Operations, proposed use of the grapple as the most viable method an intact lift. A description of how the grapple would be used is provided below. In the event that the SE casemate cannot be recovered intact, the remains will be recovered using the grapple and the rails will be reassembled and tagged on the barge as described in Permit 2.

OPTIONS FOR SOUTHEAST CASEMATE RECOVERY

1. Use grapple to lift (Chances of success/Failure: 90/10)

- Center grapple over Southeast casemate*
- Lower grapple onto casemate using Coda Octopus and UBL data*
- Verify grapple location*
- Slowly lift grapple to close jaws beneath casemate section, get section within the grapple's grasp*
- Monitor grapple lift to observe anything falling from grasp. If items appear to be falling from grapple, set back down and reevaluate position and/or grasp situation. Grapple could be opened and re-positioned for better grab.*
- Lift grapple to clear water and raise to deck*
- Slowly open grapple (on deck) to ease contents to deck*
- Process grapple contents IAW accepted archeological procedures*

PROS: No diving necessary, no risk to dive personnel
 Quickest, most easily accomplished methodology
 Seven points of contact to keep even pressure on piece
 All equipment available on barge
 Given inherent strength of casemates seen to date, very good chance section can be raised intact

CONS: Piece could still break apart when lifted or remote chance it could get damaged by grapple

2. Rig with Divers (40/60 chance)

- a. Survey
- b. Rig slings (with or without spreader bar depending on result of survey)
- c. Pick casemate with crane and set on deck

PROS: Uses onboard assets

No new equipment required

Low risk to divers

CONS: Only one small piece of casemate in current configuration can be rigged.

No other accessible corners of the casemate per latest survey

Piece will break apart when lifted

No way to ensure even distribution of load

Higher risk to crane if load breaks

Will require at least 2-3 dive cycles

3. Rig with Divers, Place on Frame on bottom and Lift (20/80 chance of success)

- a. Select Frame that SE casemate will fit on
- b. Place frame on bottom adjacent to SE casemate
- c. Survey
- d. Rig slings to lift SE casemate
- e. Lift casemate and set it on frame
- f. Survey frame/casemate arrangement and OK for lift
- g. Lift frame and casemate to deck

PROS: Most likely method to keep piece intact

CONS: Most difficult to accomplish. See #2 above. In addition:

Piece could break apart when lifted from bottom to frame

Very difficult to match frame to piece for final lift

Would require several days to build frame; place it; and ensure it was properly placed

Higher diver risk from multiple rigs (slings for piece and slings for frame)

Would require minimum of four dives

Must build frame structure

BACK RIVER REBURIAL

All artifacts and structural material from the CSS Georgia site that have been sorted and do not meet criteria for conservation will be scheduled for reburial. As previously described, all of the material scheduled for reburial will be documented, identified by tagging, bundled or wrapped in heavy plastic and placed in wet storage containers. Each bundle or package will be marked so that contents are easily identifiable without opening the container. An inventory of each container will be maintained along with a copy of all documentation including copies of drawings and photographs. Bundles and containers of artifacts and structural material will be placed in steel bins for storage until scheduled for reburial in the Back River.

In order to identify a suitable location for reburial of CSS Georgia material in Back River, a sub-bottom profiler survey will be carried out on the Georgia side of the silt basin. Using data from the sub-bottom profiler survey, a suitable site will be identified. Recent drilling conducted by

Savannah District in August 2015 in the sediment basin showed that the hydrographic survey elevations are extremely soft. The survey results likely represent a more fluid bottom rather than a hard bottom. Potential areas for reburial would be located further up the bank away from the basin; however, even in areas where the elevations are between 0 and -4 ft MLLW the hard bottom is closer to -20. It may be difficult to guarantee that the containers won't have more than 10 ft of sediment covering them. Every attempt will be made to find a reburial location where deposited containers will be maintained at depths no deeper than 10 ft below mud line. To eliminate the possibility of establishing a navigation hazard the site must also have at least 15 feet of water over the top of light sediment at Mean Lowest Low Water.

Once the reburial site has been identified and mechanical recovery has been completed all material slated for reburial will be transported up Back River by barge. The barge will be spudded down at the site and a crane will be used to place material containers on the bottom. The location of each container will be established using DGPS and Hypack navigation software. Each container will be plotted on a Georgia Quadrangle Sheet using Georgia East State Plane, NAD 83, US Survey foot coordinates. The crane lowering the containers will be fitted with a USBL or other georeferencing mechanism so the precise location and orientation can be recorded to aid any future retrieval undertaking.

After the final container has been deposited, a side scan sonar survey will be carried out to determine if all containers are settled into the light sediment and do not represent a hazard to navigation. After deposit the site will be surveyed sporadically using a sub-bottom profiler to determine how deep in the sediment the containers have settled. It is expected that the containers will be covered immediately with sediment but if settlement and sediment coverage is not satisfactory, additional sub-bottom surveys will be carried out each three months until the containers are sufficiently covered to prevent deterioration and unauthorized access.

A secondary reburial will take place after all of the artifacts have been fully identified back at CRL after accessioning. All of the smaller concretions, and sections of the larger ones, will be x-rayed to aid in their identification. Artifacts that fall into categories that have multiples will have been sampled in the field, and a representative sample for conservation will have been sent back to the Lab. If the Lab determines that an artifact is in poor shape for conservation, for a number of different reasons including; miss-identified artifact bleed, partial fastener in poor shape with little original surface, etc, then the Lab will place them in a secondary reburial container with water. All of these artifacts will have their own artifact numbers and will be reburied with the artifact number. These numbers can be checked on the database for location information as needed. The Lab will most likely use a 300 gallon HDPE Tote that is housed inside of its own aluminum cage on a pallet (< 3,000 lbs.). After the conservation process has been completed and the final reburial number has been determined, the artifacts slated for reburial will be shipped to the USACE Depot in Savannah. These containers could be moved relatively easily on a small boat, and taken to the reburial site in the Back River. GPS would be used to make sure that the locations of the new containers lie alongside the previously buried material.

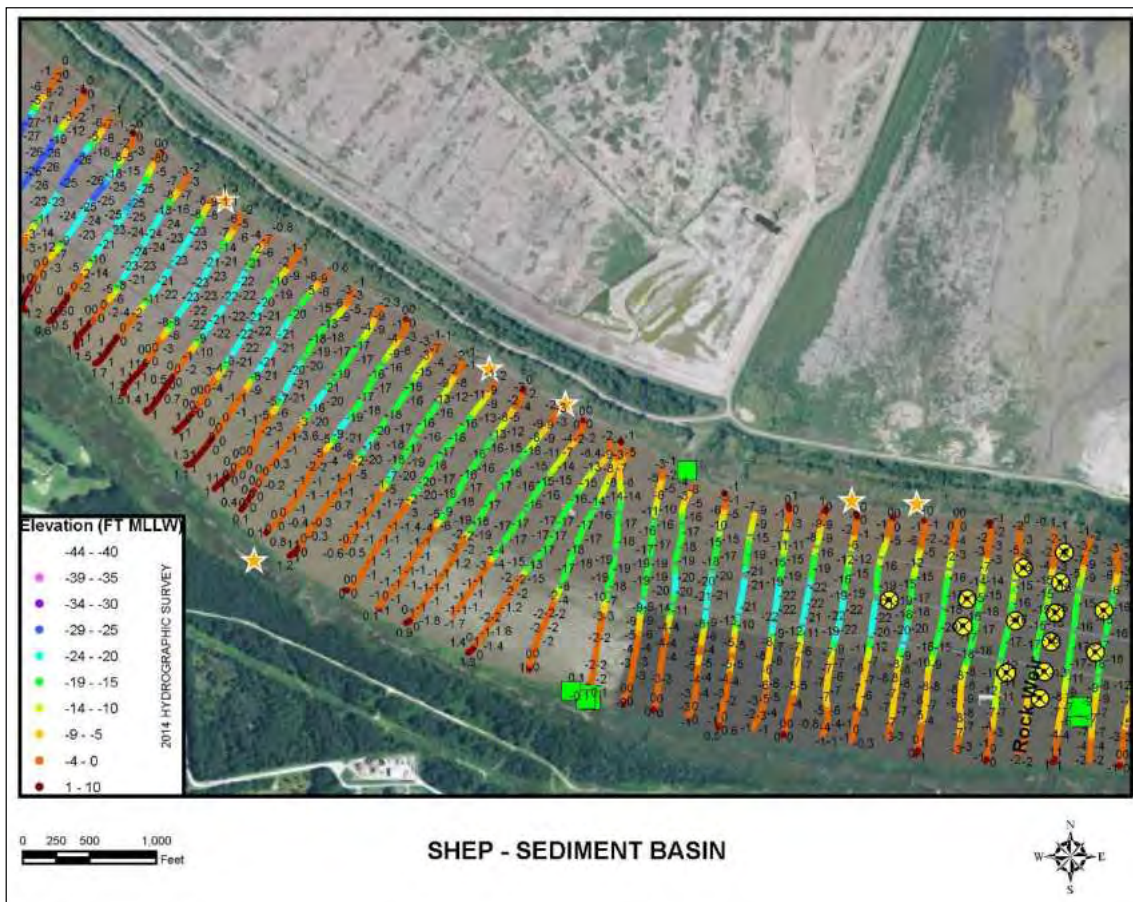


Figure 14. August 2015 Hydrographic Survey of Sediment Basin.

APPENDIX B: PROJECT PERSONNEL

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2015 Phase I: Archeological Data Recovery

Name	Company/Affiliation
Stephen James	Panamerican Consultants
Andrew Lydecker	Panamerican Consultants
Matt Elliot	Panamerican Consultants
James Duff	Panamerican Consultants
Michael Murray	Panamerican Consultants
William Wilson	Panamerican Consultants
Loren Clark	Panamerican Consultants
Jeff Pardee	Panamerican Consultants
Erica Gifford	Panamerican Consultants
Gordon Watts	Tidewater Atlantic Research
Julie Morgan	Army Corps of Engineers
Eric Crews	Army Corps of Engineers
Donnie Botswick	Army Corps of Engineers
Michael Ansley	Army Corps of Engineers
Julie Morgan	Army Corps of Engineers
Dave Bouchard	Capt. Offshore Retriever
Dan Morrison	Capt. Offshore Retriever
Joe Kimberly	Capt. Offshore Retriever
Parker Brooks	Texas A&M CRL
Jim Jobling	Texas A&M CRL
John Hamilton	Texas A&M CRL

2015 Phase II: Large Artifact Recovery

Name	Company/Affiliation
Stephen James	Panamerican Consultants Inc.
Andrew Lydecker	Panamerican Consultants Inc.
Matt Elliot	Panamerican Consultants Inc.
James Duff	Panamerican Consultants Inc.
William Wilson	Panamerican Consultants Inc.
Loren Clark	Panamerican Consultants Inc.
Jeff Pardee	Panamerican Consultants Inc.
Erica Gifford	Panamerican Consultants Inc.
Gordon Watts	Tidewater Atlantic Research
Jim Jobling	Texas A&M CRL
Parker Brooks	Texas A&M CRL
Chris Dostal	Texas A&M CRL
Julie Morgan	Army Corps of Engineers
Eric Crews	Army Corps of Engineers
Jason Potts	Navy MUDSU 2
Steve Askew	Navy MUDSU 2
Justin Wallace	Navy MUDSU 2
Spencer Puett	Navy MUDSU 2
Pete Kozminsky	Navy MUDSU 2
Cody Bumpass	Navy MUDSU 2
Calum Sanders	Navy MUDSU 2
Jonathan Pounders	Navy MUDSU 2
Tony Russo	Navy MUDSU 2
Chris Peterson	Navy MUDSU 2
Jimmy Crawford	Navy MUDSU 2
Kevin Kollar	Navy MUDSU 2
Frank Ormonde	Navy MUDSU 2
Manny Velez	Navy MUDSU 2
Travis Arneson	Navy MUDSU 2
Kurt Eberle	Navy MUDSU 2
Matt Greiner	Navy MUDSU 2
Overton Pierce	Navy MUDSU 2
Fernando Almazan	Navy MUDSU 2
Richard Bledsoe	Navy EOD Kings Bay
Kyle Masur	Navy EOD Kings Bay
Matt Demmer	Navy EOD Kings Bay
James Hebert	Navy EOD MU6
Wesley Holbrook	Navy EOD MU6
Kevin Butler	Navy EOD MU6
Nick Hursky	Navy EOD MU6
Tim Smith	Navy EOD MU6
Blake Midnight	Combat Camera Atlantic
Rick Thiel	NAVSEA/SUPSALV
Eric Brege	NAVSEA/SUPSALV
Jim Ruth	NAVSEA/SUPSALV
Dan Neverosky	NAVSEA/SUPSALV
Stephanie Brown	NAVSEA/SUPSALV
Eric MacDonald	NAVSEA/SUPSALV
Rick Sasse	NAVSEA/SUPSALV

Name	Company/Affiliation
Vince Jerecki	NAVSEA/SUPSALV
Don Fegley	ROH
Mary Savat	ROH
Paul Hankins	DonJon Marine Co.
Jeff Feld	DonJon Marine Co.
Wade Bradley	DonJon Marine Co.
Tom Hurst	DonJon Marine Co.
Jack Donald	DonJon Marine Co.
Juha (Sulo) Salonen	Salonen Marine
Jani (John) Salonen	Salonen Marine
Jason Kelley	Salonen Marine
Matthew P. Lingerfelt	Salonen Marine
Kevnada Myers	Salonen Marine
Rick Hughes	Salonen Marine
Christopher Neal Coats	<i>Little Bully</i> (Tug)- Captain
Mark Scomio	Savannah Event Catering
Danika Lemay	Savannah Event Catering
Laura Dunn	Savannah Event Catering
Michael Jordan	Cosmos Mariner

2015 Phase III: Mechanized Recovery

Name	Company/Affiliation
Stephen James	Panamerican Consultants Inc.
Andrew Lydecker	Panamerican Consultants Inc.
James Duff	Panamerican Consultants Inc.
William Wilson	Panamerican Consultants Inc.
Loren Clark	Panamerican Consultants Inc.
Jeff Pardee	Panamerican Consultants Inc.
Erica Gifford	Panamerican Consultants Inc.
Corinna Giles	Panamerican Consultants Inc.
Annie Carter	Panamerican Consultants Inc.
Justin Vogias	Panamerican Consultants Inc.
Rick Ramos	Panamerican Consultants Inc.
Michael Farmer	Panamerican Consultants Inc.
Melissa Costanti	Panamerican Consultants Inc.
Lauren Bridgeman	Panamerican Consultants Inc.
Jess Hendrix	Panamerican Consultants Inc.
Meghan Mumford	Panamerican Consultants Inc.
Zach Harris	Panamerican Consultants Inc.
Andy Derlikowski	Panamerican Consultants Inc.
Amanda Wilson	Panamerican Consultants Inc.
Becca Booker-DeMonbreun	Panamerican Consultants Inc.
Karen Martindale	Panamerican Consultants Inc.
Gordon Watts	Tidewater Atlantic Research
Jim Jobling	Texas A&M CRL
John Hamilton	Texas A&M CRL
Parker Brooks	Texas A&M CRL
Julie Morgan	Army Corps of Engineers
Rick Thiel	NAVSEA/SUPSALV
Eric Brege	NAVSEA/SUPSALV
Dan Neverosky	NAVSEA/SUPSALV
Vince Jerecki	NAVSEA/SUPSALV
Paul Hankins	DonJon Marine Co.
Jeff Feld	DonJon Marine Co.
Wade Bradley	DonJon Marine Co.
Christopher Neal Coats	<i>Little Bully (Tug)- Captain</i>
Juha (Sulo) Salonen	Salonen Marine
Jani (John) Salonen	Salonen Marine
Jason Kelley	Salonen Marine
Dave	Salonen Marine
Kevnada Myers	Salonen Marine
Rick Hughes	Salonen Marine
Mark Scomo	Savannah Event Catering
Danika Lemay	Savannah Event Catering
Laura Dunn	Savannah Event Catering
Michael Jordan	Cosmos Mariner

2017 Casemate Recovery & Mechanized Recovery

Name	Company/Affiliation
Stephen James	Panamerican Consultants Inc.
James Duff	Panamerican Consultants Inc.
William Wilson	Panamerican Consultants Inc.
Loren Clark	Panamerican Consultants Inc.
Jeff Pardee	Panamerican Consultants Inc.
Andy Derlikowski	Panamerican Consultants Inc.
John Rawls	Panamerican Consultants Inc.
Matt Mauss	Panamerican Consultants Inc.
Karen Martindale	*Panamerican Consultants Inc.
Meghan Mumford	*Panamerican Consultants Inc.
Hannah Fite	*Panamerican Consultants Inc.
Rick Ramos	*Panamerican Consultants Inc.
Michael Farmer	*Panamerican Consultants Inc.
Melissa Costanti	*Panamerican Consultants Inc.
Miguel Gutierrez	*Panamerican Consultants Inc.
Sullivan Ford	*Panamerican Consultants Inc.
Zach Harris	*Panamerican Consultants Inc.
Erica Gifford	*Panamerican Consultants Inc.
Gilson Killhour	*Panamerican Consultants Inc.
Rita Elliot	Panamerican Consultants Inc.
Matt Mauss	Panamerican Consultants Inc.
Gordon Watts	Tidewater Atlantic Research
Jim Jobling	Texas A&M CRL
Parker Brooks	Texas A&M CRL
John Hamilton	*Texas A&M CRL
Julie Morgan	Army Corps of Engineers
Brian Choate	Army Corps of Engineers
Rick Thiel	NAVSEA/SUPSALV
Dan Neverosky	NAVSEA/SUPSALV
Paul Hankins	DonJon Marine Co.
Jeff Feld	DonJon Marine Co.
Bill Wehnes	DonJon Marine Co.
Steve (Stu) Kirsch	DonJon Marine Co.
Tyler Osbourne	DonJon Marine Co.
Bill Naegle	DonJon Marine Co.
Billy Kratz	DonJon Marine Co.
Pavel Chlodnicki	DonJon Marine Co.
Pawell Stankiewicz	DonJon Marine Co.
Brian Yandoli	DonJon Marine Co.
John Ireland	DonJon Marine Co.
Brett Cooper	DonJon Marine Co.
Michael Jordan	Cosmos Mariner

* Present for Mechanized Recovery Only

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APPENDIX C: ARTIFACT DATABASE

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Note—For all Categories and Sub-Categories:

(COM) Composite
(OTH) Other
(SAM) Sample
(UNK) Unknown/Unidentified

CATEGORIES

(A) Architecture
(C) Ceramic
(E) Encrustation
(G) Glass
(M) Metal
(O) Organic
(R) Recent/Synthetics
(S) Stone

SUB-CATEGORIES**Architecture (A)**

(BRK) Brick
(FBR) Fire Brick
(MOR) Mortar
(TIL) Tiles
(WOR) Worked
(CON) Concrete

Ceramic (C)

(BEA) Bead
(CEW) Coarse Earthenware
(CRW) Creamware
(PIP) Pipe
(POR) Porcelain
(PRW) Pearlware
(REW) Refined Earthenware
(SLW) Slipware
(STW) Stoneware
(TIN) Tin Enameled
(WHW) Whiteware
(IST) Ironstone

Encrustation (E)

(CONC) Concretion, no type assigned

SUB-CATEGORIES**Glass (G)**

(BEA) Bead
(CAB) Case Bottle
(CUT) Cut Glass
(LIQ) Liquor Bottle (Hume#)
(MIR) Mirror
(ONB) Onion Bottle (INA#)
(PAN) Pane Glass
(PHA) Pharmaceutical
(STM) Stemware

Metal (M)

(AG) Silver
(BRA) Brass
(BRO) Bronze
(CUP) Copper
(FE) Iron
(MER) Mercury
(PB) Lead
(PEW) Pewter
(TIN) Tin

Organic (O)

(BON) Bone (Vertebrate)
(ETH) Ethnobotany
(HFR) Hair/Fur
(LTH) Leather
(PIT) Pitch
(ROP) Rope
(TEX) Textile
(WAX) Sealing Wax
(WOD) Wood
(ROS) Rosin
(COL) Coal/Charcoal

Recent (R)

(PLA) Plastic
(RUB) Rubber
(SNF) Synthetic Fibers

Stone (S)

(BAL) Ballast
(CHP) Chipped
(CUT) Cut
(GFL) Gun Flint
(GND) Ground
(NAT) Natural
(POL) Polished
(SLA) Slate
(PPT) Projectile Point

COLORS

(A) Amber
(B) Blue
(C) Clear
(DB) Dark Blue
(G) Green/Olive
(K) Black
(LB) Light Blue
(N) Brown
(R) Red
(V) Varied
(W) White
(Y) Yellow

Colors applied only if a distinctive characteristic. Applied mainly to ceramics, pipes, glass, and textiles.

FINAL STATUS CODES

[_] In box in upper left corner of artifact card

(C) COMPLETED, Cast Done
(X) COMPLETED, Done
(D) Discarded/Destroyed – Conservation Card Only
(M) Missing/Not @ CRL
(DN) Drawn/Recorded Only – No/Minimal Conservation
(T) In Treatment @ CRL
(XR) Artifact has been returned to Project Sponsor

STATUS

(I) Artifact has been inventoried, ready to process
(AC) Artifact card only
(DA) Artifact or number was deaccessioned
(F) Artifact recorded but left in the field
(PR) Portions of the artifact have been returned to Project Sponsor

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Appendix C: Artifact Database

C-1
CSS Georgia Archeological Data Recovery and Mitigation

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square
95	2018-051-		0170	No	NA	Composite	Iron	Epoxy		Fastener Shaft	1		Complete - Cast	PROBLEM BOX		NONE				5in	2.5in	2.5in	2in							FALSE						NA	NA	NA	NA	NA	12H
96	2018-051-		0171	No	NA	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	YB101		NONE				3in	2in	2in	0.5in							FALSE						NA	NA	NA	NA	NA	12H
97	2018-051-		0172	No	NA	Recent/Synthetic	Epoxy			Tip Of Spike	1		Complete - Cast	C1		2 SQUARE HOLES				3in	2.5in	2.5in	1.75in							FALSE						NA	NA	NA	NA	NA	12H
98	2018-051-		0173	No	NA	Metal	Iron			Concretion	1		Inventoryied - Ready to Process	YB101		NONE				5in	2in	2in	1in							FALSE						NA	NA	NA	NA	NA	12H
99	2018-051-		0174	No	NA	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	YB101		NONE				3in	2.5in	2.5in	1.5in							FALSE						NA	NA	NA	NA	NA	12H
100	2018-051-		0175	No	NA	Metal	Iron			Fastener	1		Inventoryied - Ready to Process	18WB12		NONE				7.5in	2in	2in	1.5in							FALSE						NA	NA	NA	NA	NA	12H
101	2018-051-		0176	No	NA	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	YB101		NONE				3in	2in	2in	1.5in							FALSE						NA	NA	NA	NA	NA	12H
102	2018-051-		0177	No	NA	Composite	Iron	Epoxy		Fastener	1		Complete - Cast	NHHC - Pallet 4 Medium Divided Tote 2	1	NONE				7in	2.75in	2in	2in							FALSE						NA	NA	NA	NA	NA	12H
103	2018-051-		0178	No	NA	Metal	Iron			Rail and Fastener	1		Inventoryied - Ready to Process	KP		NONE				22in	11in	5in	5in							FALSE						NA	NA	NA	NA	NA	12I
104	2018-051-		0179	No	NA	Composite	Iron	Wood		Iron Fastener with Wood Remains	1		Inventoryied - Ready to Process	YB158		NONE				21in	9in	3in	3in							FALSE						NA	NA	NA	NA	NA	12I
105	2018-051-		0180	No	NA	Organic	Wood			Wood	1	Fragment(s) of a 10 single artifact	Complete	C5		NONE				11in	3in	3in	4.5in							FALSE						NA	NA	NA	NA	NA	12I
106	2018-051-		0181	No	NA	Composite	Iron	Wood		Fastener with Wood Remains	1		Reburial	R		NONE				11in	4.5in	2in	2in							FALSE	8/10/2016	2/20/2015				NA	NA	NA	NA	NA	12I
107	2018-051-		0182	No	NA	Metal	Iron			Fastener (spike)	1		Complete	NHHC - Pallet 5 Large Tote 23	1	NONE				13in	1.5in	1.5in	1.5in							FALSE	6/25/2016				21	NA	NA	NA	NA	NA	12I
108	2018-051-		0183	No	NA	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	YB101		NONE				5in	3in	3in	2.5in							FALSE						NA	NA	NA	NA	NA	12I
109	2018-051-		0184	No	NA	Metal	Iron			Fastener head (spike)	1		Inventoryied - Ready to Process			NONE				6in	2in	2in	1.5in							FALSE						NA	NA	NA	NA	NA	12I
110	2018-051-		0185	No	NA	Metal	Iron			Fastener (spike)	1		Reburial	R		NONE				5in	1.75in	1in	1in							FALSE	8/10/2016					NA	NA	NA	NA	NA	12I
111	2018-051-		0186	No	NA	Composite	Iron	Epoxy		Spike Tip	1		Complete - Cast	PROBLEM BOX		NONE				3.75in	2in	2in	1in							FALSE	6/2/2015	10/19/2018				NA	NA	NA	NA	NA	12I
112	2018-051-		0187	No	NA	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	YB101		NONE				2.5in	1.5in	0.5in	0.5in							FALSE						NA	NA	NA	NA	NA	12I
113	2018-051-		0188	No	NA	Metal	Iron			Fastener	1		Reburial	R		NONE				9in	2.5in	1in	1in							FALSE	8/10/2016	3/27/2015				NA	NA	NA	NA	NA	12I
114	2018-051-		0189	No	NA	Stone	Natural Stone			Stone	1		Inventoryied - Ready to Process	STONE3		NONE				7in	3.5in	2.5in	2.5in							FALSE						NA	NA	NA	NA	NA	12I
115	2018-051-		0190	No	NA	Architecture	Concrete			Concrete	1		Complete	NHHC - Pallet 4 Small Tote 8	1	NONE				10in	9in	2in	2in							FALSE	11/2/2015					NA	NA	NA	NA	NA	12I
116	2018-051-		0191	No	NA	Metal	Iron			Fastener	1		Artifact Recorded and Left in Field			NONE				7in	2.5in	2.5in	2.5in							FALSE						NA	NA	NA	NA	NA	12I
117	2018-051-		0192	No	NA	Metal	Iron			Fastener fragment (spike)	1		Complete	NHHC - Pallet 4 Medium Divided Tote 2	1	NONE				7in	2.5in	2in	2in							FALSE	2/8/2016	3/27/2015			35	NA	NA	NA	NA	NA	12I
118	2018-051-		0193	No	NA	Metal	Iron			L-shaped concretion	1		Reburial	R		NONE				7in	6in	2in	2in							FALSE		3/27/2015				NA	NA	NA	NA	NA	12I
119	2018-051-		0194	No	NA	Metal	Iron			Fastener	1		Reburial	R		NONE				8in	1in	1in	1in							FALSE	8/10/2016	3/27/2015				NA	NA	NA	NA	NA	12I
120	2018-051-		0195	No	NA	Metal	Iron			Fastener	1		Reburial	R		NONE				6in	2.5in	1.5in	1.5in							FALSE	3/27/2015					NA	NA	NA	NA	NA	12I
121	2018-051-		0196	No	NA	Composite	Iron	Epoxy		Fastener	1		Complete - Cast	NHHC - Pallet 3 Medium Divided Tote 1	1	NONE				8in	2in	2in	2in							FALSE	3/28/2018	10/29/2018				NA	NA	NA	NA	NA	12I
122	2018-051-		0197	No	NA	Composite	Iron	Epoxy		Fastener	1		Complete - Cast	BOX 8	2	NONE				7in	7.5in	2in	2in							FALSE	7/31/2015	10/24/2018				NA	NA	NA	NA	NA	12I
123	2018-051-		0198	No	NA	Concretion	Concretion			Stanchion concretion	1		Unknown			NONE				11in	11in	10.5in	10.5in							FALSE						NA	NA	NA	NA	NA	13H
124	2018-051-		0198.01	No	NA	Metal	Iron			Square Stanchion Socket	1	Intact	Complete	NHHC - Pallet 6 Large Divided Tote 2	1	NONE														FALSE	2/8/2016	3/27/2015			35	NA	NA	NA	NA	NA	13H
125	2018-051-		0198.02	No	NA	Organic	Wood			Wood from around stanchion	1	Fragment(s) of a single artifact	Complete	C5																FALSE	6/20/2018	3/27/2015				NA	NA	NA	NA	NA	13H
126	2018-051-		0199	No	NA	Metal	Iron			Fastener	1		Inventoryied - Ready to Process	YB158		NONE				26in	3in	2in	2in							FALSE						NA	NA	NA	NA	NA	13H
127	2018-051-		0200	No	NA	Metal	Iron			Square fastener shaft	1		Complete	NHHC - Pallet 4 Large Divided Tote 1	1	NONE				14in	2in	2.5in	2.5in							FALSE	9/18/2017				25	NA	NA	NA	NA	NA	13H
128	2018-051-		0201	No	NA	Composite	Iron	Epoxy	Silicone Rubber	Bent Plate/Strap	4	Intact	Complete	NHHC - Pallet 6 Large Tote 26	1	NONE				10in	4.5in	1in	1in							FALSE	1/4/2019	3/27/2015			28	NA	NA	NA	NA	NA	13H
129	2018-051-		0202	No	NA	Metal	Iron			Fastener fragment	1		Reburial			NONE				9in	2.5in	2in	2in							FALSE	8/10/2016	3/27/2015				NA	NA	NA	NA	NA	13H
130	2018-051-		0203	No	NA	Metal	Iron			Fastener	1		Reburial	R		NONE				10in	2.5in	2in	2in							FALSE	11/23/2015	3/27/2015				NA	NA	NA	NA	NA	13H
131	2018-051-		0204	No	NA	Metal	Iron			Fastener	1		Reburial	R		NONE				11in	2.5in	2in	2in							FALSE	8/10/2016	2/20/2015				NA	NA	NA	NA	NA	13H
132	2018-051-		0205	No	NA	Recent/Synthetic	Epoxy			Fastener	1		Complete - Cast	BOX 8	2					6in	3in	2.5in	2.5in							FALSE	8/7/2015	10/24/2018				NA	NA	NA	NA	NA	13H
133	2018-051-		0206	No	NA	Metal	Iron			Fastener	1		Did Not Survive	DNS		NONE				4in	2in	2.5in	2.5in							FALSE		3/27/2015				NA	NA	NA	NA	NA	13H
134	2018-051-		0207	No	NA	Composite	Iron	Epoxy		Fastener	1		Complete - Cast	NHHC - Pallet 4 Medium Divided Tote 2	1	NONE				5in	2in	2.5in	2.5in							FALSE	3/28/2018	10/29/2018				NA	NA	NA	NA	NA	13H
135	2018-051-		0208	No	NA	Concretion	Concretion			Concretion	1		Artifact card only, artifact not at CRL			Hole on end				1.5in	1in	1in	1in							FALSE						NA	NA	NA	NA	NA	13H
136	2018-051-		0209	No	NA	Metal	Iron			Rail	1		Inventoryied - Ready to Process	YB153		NONE				19in	5in	4.5in	4.5in							FALSE						NA	NA	NA	NA	NA	14H
137	2018-051-		0210	No	NA	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	YB40		NONE				7in	6in	4in	4in							FALSE						NA	NA	NA	NA	NA	14H
138	2018-051-		0211	No	NA	Stone	Natural Stone			Stone	1		Inventoryied - Ready to Process	STONE2		NONE				6in	4in	3.5in	3.5in							FALSE						NA	NA	NA	NA	NA	14H
139	2018-051-		0212	No	NA	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	YB158		NONE				5.5in	3in	2.5in	2.5in							FALSE						NA	NA	NA	NA	NA	14H
140	2018-051-		0213	No	NA	Recent/Synthetic	Epoxy			Fastener shaft, round	1		Complete - Cast	BOX 8	2	NONE				4.5in	2in	1.75in	1.75in							FALSE	8/7/2015	10/24/2018				NA	NA	NA	NA	NA	14H
141	2018-051-		0214	No	NA	Metal	Iron			Fastener	1		Did Not Survive	DNS		NONE				6.5in	2in	1.5in	1.5in							FALSE		3/27/201									

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square		
189	2018-051-		0261	No	NA	Metal	Copper or Copper Alloy			Powder cannister lid fragment	1		Complete	PR-S3		NONE				6.5 in		8 in			3 in					FALSE	6/14/2019					21	NA	NA	NA	NA	NA	NA	11F
190	2018-051-		0262	No	NA	Metal	Iron			Fastener	1		Inventoried - Ready to Process	YB158		NONE				18.5 in		3 in		2.5 in					FALSE							NA	NA	NA	NA	NA	NA	11F	
191	2018-051-		0263	No	NA	Concretion	Concretion			Concretion	1		Artifact card only, artifact not at CRL			NONE				6 in		4.5 in		2 in					FALSE							NA	NA	NA	NA	NA	NA	11F	
192	2018-051-		0264	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101		NONE				7 in		5 in		1.5 in					FALSE							NA	NA	NA	NA	NA	NA	11F	
193	2018-051-		0265	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101		NONE				5.5 in		6 in							FALSE							NA	NA	NA	NA	NA	NA	11F	
194	2018-051-		0266	No	NA	Concretion	Concretion			Plate	1		Inventoried - Ready to Process	KP		NONE				7 in		7 in							FALSE							NA	NA	NA	NA	NA	NA	11F	
195	2018-051-		0267	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101		NONE				5 in		6 in							FALSE							NA	NA	NA	NA	NA	NA	11F	
196	2018-051-		0268	No	NA	Metal	Copper or Copper Alloy			Powder cannister base	1		Complete	NHHC - Pallet 5	1	NONE				18 in		18 in		0.5 in					FALSE	3/6/2018					28	NA	NA	NA	NA	NA	NA	11F	
197	2018-051-		0269	No	NA	Metal	Iron			Fastener	1		Reburial			NONE				4 in		3.5 in							FALSE			3/27/2015				NA	NA	NA	NA	NA	NA	NA	
198	2018-051-		0270	No	NA	Metal	Iron			Concretion	1		Reburial	R		NONE				14 in		4 in		3.5 in					FALSE	8/10/2016		3/4/2015				NA	NA	NA	NA	NA	NA	11M	
199	2018-051-		0271	No	NA	Recent/Synthetic	Epoxy			Fastener	1		Complete - Cast	BOX 8	2	NONE				6.5 in		2.5 in		2 in					FALSE	8/7/2015		10/24/2018				NA	NA	NA	NA	NA	NA	11M	
200	2018-051-		0272	No	NA	Metal	Iron			Fastener shaft, round	1		Complete	NHHC - Pallet 4 Large Divided Tote 1	1	NONE				6.5 in		2 in							FALSE	4/22/2016		3/27/2015			35	NA	NA	NA	NA	NA	NA	11M	
201	2018-051-		0273	No	NA	Metal	Iron			Concretion	1		Reburial	R		NONE				6.25 in		2 in		0.25 in					FALSE	8/10/2016		3/27/2015				NA	NA	NA	NA	NA	NA	11M	
202	2018-051-		0274	No	NA	Stone	Natural Stone			Stone	1		Inventoried - Ready to Process	STONE2		NONE				3.5 in		2.5 in		1.25 in					FALSE							NA	NA	NA	NA	NA	NA	11M	
203	2018-051-		0275	No	NA	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 6	PX1					4.5 in		4.5 in		0.25 in					FALSE	11/4/2015						NA	NA	NA	NA	NA	NA	9M	
204	2018-051-		0276	No	NA	Stone	Natural Stone			Stone	1		Inventoried - Ready to Process	STONE2						7.5 in		4 in		0.5 in					FALSE							NA	NA	NA	NA	NA	NA	9M	
205	2018-051-		0277	No	NA	Organic	Wood			Wood With Spike Mold	1		Inventoried - Ready to Process	YB48						16 in		4.5 in		3 in					FALSE							NA	NA	NA	NA	NA	NA	9M	
206	2018-051-		0278	No	NA	Metal	Iron			Fastener	1		Did Not Survive	DNS						7.5 in		2 in		1.5 in					FALSE							NA	NA	NA	NA	NA	NA	9M	
207	2018-051-		0279	No	NA	Composite	Wood		Concretion	Wood With Spike Mold	1		Inventoried - Ready to Process	YB48						6 in		7 in		2 in					FALSE							NA	NA	NA	NA	NA	NA	9M	
208	2018-051-		0280	No	NA	Organic	Wood			Wood	1		Inventoried - Ready to Process	YB157		NONE				10 in		3.5 in		2 in					FALSE							NA	NA	NA	NA	NA	NA	9M	
209	2018-051-		0281	No	NA	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 12	PX1	Check stamped pattern	Black			6.5 in		4.2 in		0.3 in					FALSE	9/14/2018						NA	NA	NA	NA	NA	NA	9M	
210	2018-051-		0282	No	NA	Stone	Natural Stone			Stone	1		Inventoried - Ready to Process	STONE2		NONE				4 in		3 in		1.5 in					FALSE							NA	NA	NA	NA	NA	NA	9M	
211	2018-051-		0283	No	NA	Concretion	Concretion			Spike Mold	1		Inventoried - Ready to Process	YB101		NONE				3 in		2 in		3.5 in					FALSE							NA	NA	NA	NA	NA	NA	9M	
212	2018-051-		0284	No	NA	Stone	Natural Stone			Stone	1		Inventoried - Ready to Process	STONE2		NONE				4.5 in		4 in		6.5 in					FALSE							NA	NA	NA	NA	NA	NA	9M	
213	2018-051-		0285	No	NA	Organic	Wood			Wood fragment	1		Inventoried - Ready to Process	YB157		NONE				26 in		9 in		5 in					FALSE							NA	NA	NA	NA	NA	NA	9M	
214	2018-051-		0286	No	NA	Composite	Iron		Epoxy	Fastener (spike)	1		Complete - Cast	PROBLEM BOX		NONE				5 in		2 in		0.5 in					FALSE	7/31/2015		10/19/2018				NA	NA	NA	NA	NA	NA	12F	
215	2018-051-		0287	No	NA	Concretion	Concretion			Fastener	1		Did Not Survive	DNS						5 in		2.5 in		2.5 in					FALSE			3/27/2015				NA	NA	NA	NA	NA	NA	12F	
216	2018-051-		0288	No	NA	Recent/Synthetic	Epoxy			Cast Of Plate/Strap	1		Complete - Cast	BOX 8	2					3.5 in		2 in		2 in					FALSE	7/31/2015		10/19/2018				NA	NA	NA	NA	NA	NA	12F	
217	2018-051-		0289	No	NA	Concretion	Concretion			Fastener	1		Inventoried - Ready to Process							3 in		1.5 in		2 in					FALSE							NA	NA	NA	NA	NA	NA	12E	
218	2018-051-		0290	No	NA	Composite	Iron		Epoxy	End If Spike	1		Complete - Cast	PROBLEM BOX		NONE				3.5 in		2.5 in		2 in					FALSE	8/13/2015		10/19/2018				NA	NA	NA	NA	NA	NA	12F	
219	2018-051-		0291	No	NA	Recent/Synthetic	Epoxy			Spike Fragment	1		Complete - Cast	BOX 8	2	NONE				7 in		3 in		2 in					FALSE	7/31/2015		10/24/2018				NA	NA	NA	NA	NA	NA	12F	
220	2018-051-		0291.01	No	NA	Organic	Textile			Fiber Fragments	1		Complete	C5															FALSE	6/20/2018							NA	NA	NA	NA	NA	NA	NA
221	2018-051-		0292	No	NA	Stone	Natural Stone			Stone	1		Inventoried - Ready to Process	STONE3		NONE				5 in		3 in		1 in					FALSE							NA	NA	NA	NA	NA	NA	12F	
222	2018-051-		0293	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB44						13 in		3 in		4 in					FALSE							NA	NA	NA	NA	NA	NA	12F	
223	2018-051-		0294	No	NA	Concretion	Concretion			Concretion	1		Artifact card only, artifact not at CRL							10 in		7 in		1 in					FALSE							NA	NA	NA	NA	NA	NA	12F	
224	2018-051-		0295	No	NA	Concretion	Concretion			Concretion	1		Did Not Survive	DNS						5.5 in		2 in							FALSE							NA	NA	NA	NA	NA	NA	12F	
225	2018-051-		0296	No	NA	Composite	Iron		Epoxy	Spike Fragment	1		Complete - Cast	PROBLEM BOX						4 in		2 in		1.5 in					FALSE	8/25/2015		10/19/2018				NA	NA	NA	NA	NA	NA	12F	
226	2018-051-		0297	No	NA	Concretion	Concretion			Plate	1		Inventoried - Ready to Process	YB101						12 in		10 in		2.5 in					FALSE							NA	NA	NA	NA	NA	NA	12F	
227	2018-051-		0298	No	NA	Metal	Iron			Fastener	1		Reburial	R						15 in		2 in		2 in					FALSE	8/10/2016		3/4/2015				NA	NA	NA	NA	NA	NA	12F	
228	2018-051-		0299	No	NA	Metal	Iron			Fastener	1		Reburial	R						14.5 in		6 in		3 in					FALSE	8/10/2016		3/27/2015				NA	NA	NA	NA	NA	NA	12F	
229	2018-051-		0300	No	NA	Metal	Iron			Fastener	1		Reburial	R						14.5 in		2.5 in		2.5 in					FALSE	8/10/2016		3/4/2015				NA	NA	NA	NA	NA	NA	12F	
230	2018-051-		0301	No	NA	Stone	Natural Stone			Stone	1		Inventoried - Ready to Process	STONE2						2.5 in		1 in		1 in					FALSE							NA	NA	NA	NA	NA	NA	12F	
231	2018-051-		0302	No	NA	Concretion	Concretion			Concretion	1		Artifact card only, artifact not at CRL							6 in		4 in		1 in					FALSE							NA	NA	NA	NA	NA	NA	12F	
232	2018-051-		0303	No	NA	Concretion	Concretion			Plate	1		Inventoried - Ready to Process	KP						12 in		11.5 in		3 in					FALSE							NA	NA	NA	NA	NA	NA	12F	
233	2018-051-		0304	No	NA	Architecture	Concrete			Concrete Fragment	1		Complete	NHHC - Pallet 4 Small Tote 11	1					6 in		6.75 in		2 in					FALSE	11/2/2015							NA	NA	NA	NA	NA	NA	12F
234	2018-051-		0305	No	NA	Concretion	Concretion			Plate	1		Inventoried - Ready to Process	YB101						6 in		6.5 in		1.5 in					FALSE							NA	NA	NA	NA	NA	NA	12F	
235	2018-051-		0306	No	NA	Concretion	Concretion			Plate	1		Inventoried - Ready to Process	YB101						6 in		4.5 in		1.5 in					FALSE							NA	NA	NA	NA	NA	NA	12F	
236																																											

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square				
286	2018-051-		0355	No	NA	Metal	Iron			Fastener	1		Complete	NHHC - Pallet 4 Large Divided Tote 1	1						10.25	in	1.5	in						FALSE	3/8/2016	3/27/2015			35	NA	NA	NA	NA	NA	NA	10D			
287	2018-051-		0356	No	NA	Metal	Iron			Disc-Shaped Weight	1		Complete	NHHC - Pallet 6 Large Divided Tote 2	1						4	in	1.75	in						FALSE	2/1/2016	3/27/2015			10.6	NA	NA	NA	NA	NA	NA	10D			
288	2018-051-		0357	No	NA	Composite	Iron	Wood		Fastener through wood	1		Inventoried - Ready to Process	YB101			Brown				5.5	in	5	in						FALSE							NA	NA	NA	NA	NA	NA	10D		
289	2018-051-		0358	No	NA	Metal	Iron			Fastener	1		Reburial	R			Brown				11.5	in	1.25	in						FALSE	8/10/2016	3/4/2015				NA	NA	NA	NA	NA	NA	10D			
290	2018-051-		0359	No	NA	Architecture	Concrete			Concrete Fragment	1		Complete	NHHC - Pallet 4 Small Tote 9	1		Brown				10	in	6	in						FALSE	10/30/2015						NA	NA	NA	NA	NA	NA	10D		
291	2018-051-		0360	No	NA	Composite	Iron	Epoxy		Square fastener, partial head	1		Complete - Cast	PROBLEM BOX			Brown				6.5	in	4	in						FALSE	7/31/2015	10/19/2018				NA	NA	NA	NA	NA	NA	10D			
292	2018-051-		0361	No	NA	Metal	Iron			Fastener	1		Reburial	R			Brown				13	in	2	in						FALSE	8/10/2016	3/4/2015				NA	NA	NA	NA	NA	NA	10D			
293	2018-051-		0362	No	NA	Organic	Wood			Buttstock	1		Complete	CS			Brown				3.5	in	3.75	in						FALSE	5/3/2018						NA	NA	NA	NA	NA	NA	10D		
294	2018-051-		0363	No	NA	Organic	Wood			Plank	1		Inventoried - Ready to Process	YB157			Brown				13	in	5.5	in						FALSE							NA	NA	NA	NA	NA	NA	10D		
295	2018-051-		0364	No	NA	Metal	Iron			Shackle	1		Inventoried - Ready to Process	KP			Brown				4	in	5	in						FALSE							NA	NA	NA	NA	NA	NA	10D		
296	2018-051-		0365	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101			Brown				2.25	in	2.5	in						FALSE							NA	NA	NA	NA	NA	NA	10D		
297	2018-051-		0366	No	NA	Stone	Natural Stone			Stone	1		Inventoried - Ready to Process	STONE3			Brown				4	in	3	in						FALSE							NA	NA	NA	NA	NA	NA	10D		
298	2018-051-		0367	No	NA	Metal	Iron			Firegrate End	1		Complete	NHHC - Pallet 6 Large Tote 25	1		Brown				18	in	5	in						FALSE	2/8/2016	4/23/2015				NA	NA	NA	NA	NA	NA	10D			
299	2018-051-		0368	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101			Brown				2	in	2.5	in						FALSE							NA	NA	NA	NA	NA	NA	10D		
300	2018-051-		0369	No	NA	Metal	Iron			Fastener	1		Reburial	R			Brown				17.75	in	1.5	in						FALSE	8/10/2016	4/23/2015				NA	NA	NA	NA	NA	NA	10D			
301	2018-051-		0370	No	NA	Metal	Copper or Copper Alloy			Cap Square	1		Complete	PR-S12			Brown				18	in	7	in		1	in			FALSE	5/7/2019					21	NA	NA	NA	NA	NA	NA	10D		
302	2018-051-		0371	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	KP			Brown				7	in	6	in						FALSE							NA	NA	NA	NA	NA	NA	10D		
303	2018-051-		0372	No	NA	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 6	PX1	Cord marked pattern	Brown				4	in	4.5	in						FALSE	6/25/2015							NA	NA	NA	NA	NA	NA	10D	
304	2018-051-		0373	No	NA	Glass	Liquor Bottle			Glass Bottle Base	2		Complete	NHHC - Pallet 6 Large Tote 28	1		Green/Olive				3	in	3.25	in						FALSE	10/5/2017							NA	NA	NA	NA	NA	NA	10D	
305	2018-051-		0374	No	NA	Concretion	Concretion			Fastener	1		Inventoried - Ready to Process	YB101			Brown				3.5	in	2	in						FALSE							NA	NA	NA	NA	NA	NA	10D		
306	2018-051-		0375	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101			Brown				3	in	2.5	in						FALSE							NA	NA	NA	NA	NA	NA	10D		
307	2018-051-		0376	No	NA	Metal	Iron			Washer?	1		Complete	NHHC - Pallet 5 Large Tote 23	1		Brown				3.5	in	3.25	in						FALSE	2/1/2016	3/27/2015				10.6	NA	NA	NA	NA	NA	NA	10D		
308	2018-051-		0377	No	NA	Stone	Cut Stone			Stone	1		Inventoried - Ready to Process	STONE3			Brown				6.5	in	4	in		2.5	in			FALSE							NA	NA	NA	NA	NA	NA	10D		
309	2018-051-		0378	No	NA	Metal	Iron			Fastener	1		Reburial	R			Brown				10	in	1	in						FALSE	8/10/2016	3/27/2015				NA	NA	NA	NA	NA	NA	10D			
310	2018-051-		0379	No	NA	Metal	Iron			Fastener	1		Did Not Survive	DNS			Brown				5.25	in	2.5	in						FALSE	12/17/2015	3/27/2015				NA	NA	NA	NA	NA	NA	10D			
311	2018-051-		0380	No	NA	Metal	Lead			Lead Patch	1		Complete	NHHC - Pallet 6 Medium Divided Tote 4	1		Brown				6.5	in	3.75	in						FALSE	9/7/2017							NA	NA	NA	NA	NA	NA	10D	
312	2018-051-		0381	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process				Brown				7	in	3	in						FALSE							NA	NA	NA	NA	NA	NA	10D		
313	2018-051-		0382	No	NA	Concretion	Concretion	Iron	Wood	Concretion	1		Reburial	YB155			Brown				3.75	in	2.25	in						FALSE	8/10/2016	3/4/2015				NA	NA	NA	NA	NA	NA	10D			
314	2018-051-		0383	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101			Brown				3	in	1.5	in						FALSE							NA	NA	NA	NA	NA	NA	10D		
315	2018-051-		0384	No	NA	Metal	Iron			Fastener	1		Reburial	R			Brown				7.5	in	2	in						FALSE	8/10/2016	3/27/2015				NA	NA	NA	NA	NA	NA	10D			
316	2018-051-		0385	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	STONE3			Brown				3	in	2	in						FALSE							NA	NA	NA	NA	NA	NA	10D		
317	2018-051-		0386	No	NA	Metal	Iron			Leg Irons	1		Complete	NHHC - Pallet 6 Large Tote 26	1		Brown				15.5	in	5	in						FALSE	3/20/2018	04/23/2015				32	NA	NA	NA	NA	NA	NA	10D		
318	2018-051-		0387	No	NA	Metal	Iron			Fastener	1		Inventoried - Ready to Process	KP			Brown				9.5	in	1	in						FALSE							NA	NA	NA	NA	NA	NA	10D		
319	2018-051-		0388	No	NA	Metal	Iron			Fastener	1		Complete	NHHC - Pallet 5 Large Tote 23	1		Brown				20	in	1.5	in						FALSE	02/08/2016	04/23/2015				35	NA	NA	NA	NA	NA	NA	10D		
320	2018-051-		0389	No	NA	Concretion	Concretion			Flat concretion	1		Did Not Survive	DNS			Brown				6	in	4	in						FALSE	12/17/2015	3/27/2015				NA	NA	NA	NA	NA	NA	10D			
321	2018-051-		0390	No	NA	Metal	Iron			Fastener, round	1		Complete	NHHC - Pallet 4 Large Divided Tote 1	1		Brown				10	in	1	in						FALSE	2/8/2016	3/4/2015				35	NA	NA	NA	NA	NA	NA	10D		
322	2018-051-		0391	No	NA	Metal	Iron			Fastener	1		Reburial	R			Brown				8.25	in	1.5	in						FALSE	8/10/2016	3/27/2015				NA	NA	NA	NA	NA	NA	10D			
323	2018-051-		0392	No	NA	Metal	Iron			Fastener	1		Complete	NHHC - Pallet 4 Medium Divided Tote 2	1		Brown				7	in	1.5	in						FALSE	3/23/2016	3/27/2015				18	NA	NA	NA	NA	NA	NA	10D		
324	2018-051-		0393	No	NA	Composite	Iron	Epoxy	Silicone Rubber	Leg Irons	1		Complete - Cast	DISPLAY, HELEN'S OFFICE							15	in	5	in						FALSE	8/7/2015	10/29/2018							NA	NA	NA	NA	NA	NA	10D
325	2018-051-		0394	No	NA	Composite	Iron	Wood		Hook Through Wood	1		Complete	BOX 18	2		Brown	503.8 g			6.75	in	4.125	in		1.02	in				FALSE	11/21/2018						35	NA	NA	NA	NA	NA	NA	10D
326	2018-051-		0395	No	NA	Stone	Natural Stone			Stone	1		Inventoried - Ready to Process	STONE3			Brown				3.25	in	3.5	in						FALSE							NA	NA	NA	NA	NA	NA	10D		
327	2018-051-		0396	No	NA	Metal	Iron			Fastener through plate	1		Inventoried - Ready to Process				Brown				11.5	in	4.5	in						FALSE							NA	NA	NA	NA	NA	NA	10D		
328	2018-051-		0397	Yes	NA	Ceramic	Ironstone			Bowl	1		Complete	BOX 7	2		Brown				9.25	in	7	in		2.25	in			FALSE	6/19/2018							NA	NA	NA	NA	NA	NA	10D	
329	2018-051-		0398	No	NA	Metal	Iron			Concretion (2 fasteners)	1		Inventoried - Ready to Process				Brown				8.75	in	1.75	in						FALSE							NA	NA	NA	NA	NA	NA	10D		
330	2018-051-		0399	No	NA	Metal	Iron			Fastener (bolt)	1		Complete	YB158			Brown				30	in	2	in						FALSE	2/8/2016						35	NA	NA	NA	NA	NA	NA	16J	
331	2018-051-		0400	No	NA	Composite	Iron	Epoxy		Fastener	1																																		

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square
380	2018-051-		0449	No	NA	Metal	Iron			Fastener	1		Did Not Survive	DNS			Brown			6.5 in	2 in	2 in	1.25 in						FALSE	12/17/2015		3/27/2015			NA	NA	NA	NA	NA	NA	13M
381	2018-051-		0450	No	NA	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	STONE3			Brown			2.5 in		2 in	0.5 in						FALSE					NA	NA	NA	NA	NA	NA	13M	
382	2018-051-		0451	No	NA	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	YB101						4 in	3 in	2 in							FALSE					NA	NA	NA	NA	NA	NA	13M	
383	2018-051-		0452	No	NA	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	YB101						6 in	4.5 in	3 in							FALSE					NA	NA	NA	NA	NA	NA	13M	
384	2018-051-		0453	No	NA	Stone	Natural Stone			Stone, porous	1		Inventoryied - Ready to Process	STONE2						8.5 in	6.5 in	4.5 in							FALSE					NA	NA	NA	NA	NA	NA	13M	
385	2018-051-		0454	No	NA	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 5	PX1	Simple stamped?	Black			4 in	2.5 in	0.5 in							FALSE	6/25/2015					NA	NA	NA	NA	NA	NA	13M
386	2018-051-		0455	No	NA	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	YB101						4 in	3.5 in	1 in							FALSE					NA	NA	NA	NA	NA	NA	13L	
387	2018-051-		0456	No	NA	Metal	Iron			Fastener	1		Inventoryied - Ready to Process							8.5 in	3 in	2.5 in							FALSE					NA	NA	NA	NA	NA	NA	13L	
388	2018-051-		0457	No	NA	Stone	Natural Stone			Stone	1		Inventoryied - Ready to Process	STONE3						2.5 in		2 in	0.5 in						FALSE					NA	NA	NA	NA	NA	NA	13L	
389	2018-051-		0458	No	NA	Metal	Iron			Fastener	1		Complete	NHHC - Pallet 4 Large Divided Tote 1	1				9.5 in	3.5 in	2.5 in							FALSE	2/8/2016		3/27/2015		35	NA	NA	NA	NA	NA	NA	13L	
390	2018-051-		0459	No	NA	Metal	Iron			Fastener	1		Complete	NHHC - Pallet 4 Medium Divided Tote 2	1				9.5 in	2.5 in	2.5 in							FALSE	3/23/2016		3/27/2015		18	NA	NA	NA	NA	NA	NA	13L	
391	2018-051-		0460	No	NA	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 6	PX1	Cord marked?	Black			3.5 in	3 in	0.5 in							FALSE	6/25/2015					NA	NA	NA	NA	NA	NA	13L
392	2018-051-		0461	No	NA	Stone	Natural Stone			Stone	1		Inventoryied - Ready to Process	STONE3						2.5 in	2 in	1 in							FALSE					NA	NA	NA	NA	NA	NA	13L	
393	2018-051-		0462	No	NA	Metal	Copper or Copper Alloy			Trigger Guard	1		Complete	C2						6.75 in	0.75 in	1.75 in							FALSE	8/7/2018				25	NA	NA	NA	NA	NA	NA	12M
394	2018-051-		0463	No	NA	Stone	Chipped Stone			Stone (chert)	1		Inventoryied - Ready to Process	STONE2						4 in	2.5 in	1 in							FALSE					NA	NA	NA	NA	NA	NA	L6	
395	2018-051-		0464	No	NA	Metal	Iron			Fastener	1		Did Not Survive	DNS						6.5 in	2 in	2 in							FALSE			3/4/2015			NA	NA	NA	NA	NA	NA	L6
396	2018-051-		0465	No	NA	Metal	Iron			Fastener, bent	1		Complete	NHHC - Pallet 5 Large Tote 23	1				13 in	3 in	2 in							FALSE	4/22/2016		3/27/2015			NA	NA	NA	NA	NA	NA	L6	
397	2018-051-		0466	No	NA	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	YB101						5 in	3 in	2.5 in							FALSE					NA	NA	NA	NA	NA	NA	L5	
398	2018-051-		0467	No	NA	Organic	Wood			Wood	1		Inventoryied - Ready to Process	YB157						10.5 in	2.25 in	1.5 in							FALSE					NA	NA	NA	NA	NA	NA	L5	
399	2018-051-		0468	No	NA	Metal	Iron			Fastener Head Concretion	1		Inventoryied - Ready to Process	18WB12						3.5 in	2 in	2.5 in							FALSE					NA	NA	NA	NA	NA	NA	L5	
400	2018-051-		0469	No	NA	Stone	Natural Stone			Stone	1		Inventoryied - Ready to Process	STONE3						5 in	3 in	3.5 in							FALSE					NA	NA	NA	NA	NA	NA	L5	
401	2018-051-		0470	No	NA	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	STONE3						2 in	2 in	0.5 in							FALSE					NA	NA	NA	NA	NA	NA	L5	
402	2018-051-		0471	No	NA	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 5	PX1	Simple stamped pattern	Black			5.5 in	3 in	0.5 in							FALSE	6/25/2015					NA	NA	NA	NA	NA	NA	L5
403	2018-051-		0472	No	NA	Stone	Natural Stone			Stone	1		Inventoryied - Ready to Process	STONE3						3.5 in	3 in	2 in							FALSE					NA	NA	NA	NA	NA	NA	L5	
404	2018-051-		0473	No	NA	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	DNS BUCKET						3.5 in	3 in	1 in							FALSE					NA	NA	NA	NA	NA	NA	L5	
405	2018-051-		0474	No	NA	Composite	Iron	Wood		Fastener through wood	1		Inventoryied - Ready to Process	YB48						10 in	5 in	2 in							FALSE					NA	NA	NA	NA	NA	NA	L5	
406	2018-051-		0475	No	NA	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 9	PX1	Simple stamped pattern	Black			3.5 in	3.5 in	0.5 in							FALSE	6/25/2015					NA	NA	NA	NA	NA	NA	4M
407	2018-051-		0476	No	NA	Stone	Natural Stone			Stone	1		Inventoryied - Ready to Process	STONE3						3 in	3 in	2 in							FALSE					NA	NA	NA	NA	NA	NA	7M	
408	2018-051-		0477	No	NA	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 6	PX1	Cord marked pattern	Brown			3 in	3 in	5 in							FALSE	6/25/2015					NA	NA	NA	NA	NA	NA	7M
409	2018-051-		0478	No	NA	Concretion	Concretion			Concretion	1		Did Not Survive	DNS						6 in	2 in	0.5 in							FALSE			3/27/2015			NA	NA	NA	NA	NA	NA	7M
410	2018-051-		0479	No	NA	Stone	Natural Stone			Stone	1		Inventoryied - Ready to Process	STONE						2.33 in	2 in	2 in							FALSE					NA	NA	NA	NA	NA	NA	7M	
411	2018-051-		0480	No	NA	Architecture	Brick			Brick	1		Inventoryied - Ready to Process	STONE3						2.75 in	2.25 in	2 in							FALSE					NA	NA	NA	NA	NA	NA	7M	
412	2018-051-		0481	No	NA	Concretion	Concretion			Concretion	1		Artifact card only, artifact not at CRL							2.5 in	2.5 in	0.5 in							FALSE					NA	NA	NA	NA	NA	NA	7M	
413	2018-051-		0482	No	NA	Composite	Iron	Wood		Fastener through wood	1		Inventoryied - Ready to Process	YB153						8 in	6 in	2 in							FALSE					NA	NA	NA	NA	NA	NA	7M	
414	2018-051-		0483	No	NA	Concretion	Concretion	Stone		Concretion	1		Inventoryied - Ready to Process	STONE3						3 in	4 in	2.5 in							FALSE					NA	NA	NA	NA	NA	NA	7M	
415	2018-051-		0484	No	NA	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	YB101						6.5 in	3.5 in	3 in							FALSE					NA	NA	NA	NA	NA	NA	7M	
416	2018-051-		0485	No	NA	Architecture	Brick			Brick	1		Complete	NHHC - Pallet 4 Small Tote 20	1		Red			5 in	4 in	3 in							FALSE	9/10/2015					NA	NA	NA	NA	NA	NA	7M
417	2018-051-		0486	No	NA	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	STONE3						4.5 in	3 in	1.5 in							FALSE					NA	NA	NA	NA	NA	NA	7M	
418	2018-051-		0487	No	NA	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 8	PX1		Black			2 in	2 in	0.5 in							FALSE	6/25/2015					NA	NA	NA	NA	NA	NA	3L
419	2018-051-		0488	No	NA	Organic	Bone			Bone	1		Complete	C5						3.5 in	1.5 in	1.5 in							FALSE	7/11/2018					NA	NA	NA	NA	NA	NA	3L
420	2018-051-		0489	No	NA	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process							3.5 in	1 in	2 in							FALSE					NA	NA	NA	NA	NA	NA	3L	
421	2018-051-		0490	No	NA	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 5	PX1	Cord marked pattern	Black			2.5 in	2.25 in	0.5 in							FALSE	6/25/2015					NA	NA	NA	NA	NA	NA	3L
422	2018-051-		0491	No	NA	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 11	PX1	Cord marked pattern	Black			2.75 in	2.5 in	0.5 in							FALSE	6/25/2015					NA	NA	NA	NA	NA	NA	3L
423	2018-051-		0492	No	NA	Architecture	Brick			Brick	1		Complete	NHHC - Pallet 4 Small Tote 1	1		Red			3 in	2.25 in	2.25 in							FALSE	8/25/2015					NA	NA	NA	NA	NA	NA	3L
424	2018-051-		0493	No	NA	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 11	PX1		Black			2.5 in	1.5 in	0.5 in							FALSE	6/25/2015					NA	NA	NA	NA	NA	NA	3L
425	2018-051-		0494	No	NA	Architecture	Brick			Brick	1		Complete	NHHC - Pallet 4 Small Tote 1	1		Red			4 in	3 in	3 in							FALSE	9/10/2015					NA	NA	NA	NA	NA	NA	3L
426	2018-051-		0495	No	NA	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 11	PX1		Black			3 in	2.5 in	0.75 in							FALSE	6/25/2015					NA	NA	NA	NA	NA	NA	4L
427	2018-051-		0496	No	NA	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 11	PX1	Simple stamped pattern	Black			3 in	3 in	0.5 in							FALSE	6/25/2015					NA	NA	NA	NA	NA	NA	4L
428	2018-051-		0497	No	NA																																				

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square	
476	2018-051-		0545	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101							4in		2in		1in					FALSE						NA	NA	NA	NA	NA	18E	
477	2018-051-		0546	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101							4.75in		3.5in		0.5in					FALSE						NA	NA	NA	NA	NA	18E	
478	2018-051-		0547	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101							5.5in		2.5in		1.5in					FALSE						NA	NA	NA	NA	NA	20E	
479	2018-051-		0548	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101							4in		4in		2in					FALSE						NA	NA	NA	NA	NA	20F	
480	2018-051-		0549	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	DNS BUCKET							3in		2.5in		1.5in					FALSE						NA	NA	NA	NA	NA	20F	
481	2018-051-		0550	No	NA	Metal	Iron			Fastener	1		Did Not Survive	DNS							12in		1.5in		1.25in					FALSE		3/27/2015				NA	NA	NA	NA	NA	20F	
482	2018-051-		0551	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	STONE3							2.5in		2.5in		1.5in					FALSE						NA	NA	NA	NA	NA	20F	
483	2018-051-		0552	No	NA	Stone	Natural Stone			Stone	1		Inventoried - Ready to Process	STONE2							7.5in		3.5in		2.5in					FALSE						NA	NA	NA	NA	NA	20F	
484	2018-051-		0553	No	NA	Recent/Synthetic	Epoxy			Fastener Head	1		Complete - Cast	BOX 8	2						5in		2.75in		2.5in					FALSE	8/13/2015		10/24/2018				NA	NA	NA	NA	NA	20F
485	2018-051-		0554	No	NA	Concretion	Concretion			Broken Plate	1		Inventoried - Ready to Process	DNS BUCKET							5.5in		2.5in		2in					FALSE						NA	NA	NA	NA	NA	20F	
486	2018-051-		0555	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101							7.5in		4.5in		1in					FALSE						NA	NA	NA	NA	NA	20G	
487	2018-051-		0556	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101							6in		2in		1in					FALSE						NA	NA	NA	NA	NA	20G	
488	2018-051-		0557	No	NA	Metal	Iron			Plate	1		Inventoried - Ready to Process	BARREL 30							28.25in		10.5in		2.5in					FALSE						NA	NA	NA	NA	NA	20G	
489	2018-051-		0558	No	NA	Composite	Iron	Wood		Fastener	1		Reburial	R							12in		4.5in		1.5in					FALSE	8/10/2016		3/27/2015				NA	NA	NA	NA	NA	19M
490	2018-051-		0559	No	NA	Composite	Iron	Wood		Wood with fastener void	1		Complete	NHHC - Pallet 6 Large Tote 26	1						9in		8.5in		2in					FALSE	11/2/2015		10/29/2018				NA	NA	NA	NA	NA	14M
491	2018-051-		0560	No	NA	Architecture	Brick			Brick	1		Complete	NHHC - Pallet 4 Small Tote 9	1		Red				3.5in		2.5in		2.5in					FALSE	8/25/2015						NA	NA	NA	NA	NA	19M
492	2018-051-		0561	No	NA	Metal	Iron			Long fastener	1		Complete	NHHC - Pallet 1 Large Tote 3	1						29.5in		3.5in		3in					FALSE	11/21/2017			21			NA	NA	NA	NA	NA	18M
493	2018-051-		0562	No	NA	Concretion	Concretion			Washer/Nut	1		Inventoried - Ready to Process	YB101							2.5in		2.5in		2in					FALSE						NA	NA	NA	NA	NA	18M	
494	2018-051-		0563	No	NA	Metal	Iron			Fastener	1		Inventoried - Ready to Process	YB158							15in		2in		2.5in					FALSE						NA	NA	NA	NA	NA	18M	
495	2018-051-		0564	No	NA	Metal	Iron			Eyelet/Strap End	1		Complete	NHHC - Pallet 4 Medium Divided Tote 2	1						3in		2in		0.5in					FALSE	4/19/2017						NA	NA	NA	NA	NA	18M
496	2018-051-		0565	No	NA	Metal	Iron			Fastener	1		Did Not Survive	DNS							18.5in		5.5in		2.25in					FALSE	12/17/2015		4/23/2015				NA	NA	NA	NA	NA	18L
497	2018-051-		0566	No	NA	Metal	Iron			Fastener, square	1		Reburial	R							11in		3.25in		2.25in					FALSE	8/10/2016						NA	NA	NA	NA	NA	17L
498	2018-051-		0567	No	NA	Stone	Natural Stone			Stone	1		Inventoried - Ready to Process	YB101							5.5in		2.5in		0.5in					FALSE						NA	NA	NA	NA	NA	17L	
499	2018-051-		0568	No	NA	Stone	Natural Stone			Stone	1		Inventoried - Ready to Process	STONE2							3.5in		1in		0.5in					FALSE						NA	NA	NA	NA	NA	17L	
500	2018-051-		0569	No	NA	Architecture	Brick			Brick	1		Complete	NHHC - Pallet 4 Small Tote 4	1		Red				3.5in		2in		1.25in					FALSE	8/25/2015						NA	NA	NA	NA	NA	19J
501	2018-051-		0570	No	NA	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 9	PX1	Cord marked pattern	Black				4in		2.5in		0.5in					FALSE	6/25/2015						NA	NA	NA	NA	NA	18J
502	2018-051-		0571	No	NA	Metal	Iron			Wire/Cable	2		Inventoried - Ready to Process	YB153							37in		2in		2in					FALSE						NA	NA	NA	NA	NA	18J	
503	2018-051-		0572	No	NA	Metal	Iron			Wire/Cable	3		Inventoried - Ready to Process	YB153							36in		2in		2in					FALSE						NA	NA	NA	NA	NA	17J	
504	2018-051-		0573	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101							3.5in		3.5in		2in					FALSE						NA	NA	NA	NA	NA	13E	
505	2018-051-		0574	No	NA	Composite	Iron	Epoxy		Fastener shaft, bent	1		Complete - Cast	BOX 8	2						5in		2.5in		2.25in					FALSE	7/31/2015		10/24/2018				NA	NA	NA	NA	NA	13E
506	2018-051-		0575	No	NA	Concretion	Concretion			Concretion	1		Artifact card only, artifact not at CRL								3in		3in		1in					FALSE						NA	NA	NA	NA	NA	13E	
507	2018-051-		0576	No	NA	Concretion	Concretion			Concretion	1		Artifact card only, artifact not at CRL								4.25in		2.5in		1.5in					FALSE						NA	NA	NA	NA	NA	13E	
508	2018-051-		0577	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	DNS BUCKET							3.5in		3in		1in					FALSE						NA	NA	NA	NA	NA	13E	
509	2018-051-		0578	No	NA	Concretion	Concretion			Concrete?	1		Inventoried - Ready to Process	DNS BUCKET							4in		3in		1in					FALSE						NA	NA	NA	NA	NA	13E	
510	2018-051-		0579	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101							5in		1.5in		0.25in					FALSE						NA	NA	NA	NA	NA	13E	
511	2018-051-		0580	No	NA	Concretion	Concretion			Concretion	1		Artifact card only, artifact not at CRL								3.5in		3.5in		3in					FALSE						NA	NA	NA	NA	NA	13E	
512	2018-051-		0581	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101							7in		5in		1in					FALSE						NA	NA	NA	NA	NA	13E	
513	2018-051-		0582	No	NA	Stone	Natural Stone			Stone	1		Inventoried - Ready to Process	STONE3							2.5in		2.5in		2in					FALSE						NA	NA	NA	NA	NA	13E	
514	2018-051-		0583	No	NA	Metal	Iron			Chain	2		Complete	NHHC - Pallet 2 Large Tote 17	1						21in		11in		4in					FALSE	11/28/2017		4/23/2015		14		NA	NA	NA	NA	NA	13E
515	2018-051-		0584	No	NA	Glass	Liquor Bottle			Glass Bottle Base	1		Complete	NHHC - Pallet 6 Large Tote 28	1		Green/Olive				3.75in		3.5in							FALSE	10/5/2017						NA	NA	NA	NA	NA	14G
516	2018-051-		0585	No	NA	Organic	Wood			Wood	1		Inventoried - Ready to Process	YB157							10in		4in		3in					FALSE						NA	NA	NA	NA	NA	14E	
517	2018-051-		0586	No	NA	Concretion	Concretion			Concreted fastener	1		Reburial	R							5.5in		2in		1.5in					FALSE	12/17/2015		3/27/2015				NA	NA	NA	NA	NA	14E
518	2018-051-		0587	No	NA	Metal	Iron			Plate	1		Inventoried - Ready to Process								16in		12in		2in					FALSE						NA	NA	NA	NA	NA	14E	
519	2018-051-		0588	No	NA	Metal	Iron			Plate	1		Inventoried - Ready to Process	YB101							8in		4.5in		2in					FALSE						NA	NA	NA	NA	NA	14E	
520	2018-051-		0589	No	NA	Metal	Iron			Fastener	1		Reburial	R							9.5in		3in		2.5in					FALSE	8/10/2016		3/27/2015				NA	NA	NA	NA	NA	14E
521	2018-051-		0590	No	NA	Metal	Iron			Chain	1		Inventoried - Ready to Process	YB26							25in		4.5in		4.5in					FALSE						NA	NA	NA	NA	NA	14E	
522	2018-051-		0591	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101							6.5in		3.5in		1.5in					FALSE						NA	NA	NA	NA	NA	14E	
523	2018-051-		0592	No	NA	Metal	Iron			Fastener, square	1		Complete	NHHC - Pallet 4 Large Divided Tote 1	1						11.5in		3.5in		2.5in																	

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square	
570	2018-051-		0636	No	NA	Organic	Wood			Wood	1		Inventoried - Ready to Process	YB157						7 in	3.5 in	3.5 in	3 in	3 in					FALSE						NA	NA	NA	NA	NA	NA	11D	
571	2018-051-		0637	No	NA	Metal	Iron			Fastener	1		Complete	NHHC - Pallet 4 Large Divided Tote 1	1					11 in	2.5 in	1.5 in							FALSE	2/8/2016	3/27/2015			35	NA	NA	NA	NA	NA	NA	11D	
572	2018-051-		0638	No	NA	Organic	Wood			Wood	1		Complete	C5						3 in	1.5 in	2 in							FALSE	5/3/2018					NA	NA	NA	NA	NA	NA	11D	
573	2018-051-		0639	No	NA	Metal	Iron			Plate and Fasteners	2		Complete	NHHC - Pallet 6 Large Tote 25	1					16 in	8 in	6 in							FALSE	3/9/2016	3/27/2015			35	NA	NA	NA	NA	NA	NA	10D	
574	2018-051-		0640	No	NA	Concretion	Concretion			Concretion/rock	1		Inventoried - Ready to Process	YB101						10 in	4.5 in	2 in							FALSE						NA	NA	NA	NA	NA	NA	10D	
575	2018-051-		0641	No	NA	Concretion	Concretion			Chain fragments	1		Reburial	R						6 in	3 in	2.5 in							FALSE	8/10/2016	3/27/2015				NA	NA	NA	NA	NA	NA	10D	
576	2018-051-		0642	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101						2.5 in	2.5 in	1.5 in							FALSE						NA	NA	NA	NA	NA	NA	10D	
577	2018-051-		0643	No	NA	Concretion	Concretion			Fastener	1		Reburial	R						8 in	2.5 in	2 in							FALSE	8/10/2016	3/27/2015				NA	NA	NA	NA	NA	NA	10D	
578	2018-051-		0644	No	NA	Metal	Iron			Capsquare	1		Complete	NHHC - Pallet 6 Large Tote 25	1					13 in	5 in	4 in							FALSE	2/8/2016	3/27/2015			35	NA	NA	NA	NA	NA	NA	10D	
579	2018-051-		0645	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	DNS BUCKET						2 in	1.5 in	1 in							FALSE						NA	NA	NA	NA	NA	NA	10D	
580	2018-051-		0646	No	NA	Concretion	Concretion			Concretion	1		Did Not Survive	DNS						3.5 in	3 in	2 in							FALSE		3/27/2015				NA	NA	NA	NA	NA	NA	10D	
581	2018-051-		0647	No	NA	Organic	Wood			Wood fragments	2		Complete - Needs Final Images	Photo Shelf				3.3 lb		17.5 in	4.3 in						2.43 in		FALSE						NA	NA	NA	NA	NA	NA	10D	
582	2018-051-		0648	No	NA	Metal	Iron			Fastener	1		Inventoried - Ready to Process	YB158						22 in	3 in	3 in							FALSE						NA	NA	NA	NA	NA	NA	10D	
583	2018-051-		0649	No	NA	Metal	Iron			Fastener	1		Inventoried - Ready to Process	YB158						25 in	3 in	3 in							FALSE						NA	NA	NA	NA	NA	NA	10D	
584	2018-051-		0650	No	NA	Metal	Iron			Pipe?	1		Inventoried - Ready to Process	BARREL 31						14 in	4 in	3 in							FALSE						NA	NA	NA	NA	NA	NA	10D	
585	2018-051-		0651	Yes	NA	Ceramic	Stoneware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 21	1		White			4 in	3.5 in	0.5 in							FALSE	6/25/2015					NA	NA	NA	NA	NA	NA	10D	
586	2018-051-		0652	No	NA	Metal	Iron			Plate	1		Inventoried - Ready to Process	BARREL 31						10 in	8 in	1 in							FALSE						NA	NA	NA	NA	NA	NA	10D	
587	2018-051-		0653	No	NA	Metal	Iron			Thick Strap/Plate with Partial Hole	1		Complete	NHHC - Pallet 6 Medium Divided Tote 4	1					8 in	6 in	2 in							FALSE	3/23/2016	3/27/2015			18	NA	NA	NA	NA	NA	NA	10D	
588	2018-051-		0654	No	NA	Concretion	Concretion			Plate/Washer	1		Inventoried - Ready to Process	YB44						5.5 in	5.5 in	1.5 in							FALSE						NA	NA	NA	NA	NA	NA	10D	
589	2018-051-		0655	No	NA	Composite	Iron	Wood		Fastener through wood	1		Inventoried - Ready to Process	YB154						7.75 in	3 in	5.5 in							FALSE						NA	NA	NA	NA	NA	NA	10D	
590	2018-051-		0656	No	NA	Metal	Iron			Plate	1		Inventoried - Ready to Process	BARREL 31						5 in	5 in	1 in							FALSE						NA	NA	NA	NA	NA	NA	10D	
591	2018-051-		0657	No	NA	Recent/Synthetic	Epoxy			Fastener, square	1		Complete - Cast	BOX 8	2					9 in	3 in	3.5 in							FALSE	7/31/2015	10/24/2018				NA	NA	NA	NA	NA	NA	10D	
592	2018-051-		0658	No	NA	Metal	Iron			Fastener	2		Reburial	R						9.5 in	2.5 in	2 in							FALSE	8/10/2016	3/27/2015				NA	NA	NA	NA	NA	NA	10D	
593	2018-051-		0659	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101						6.25 in	2 in	1.5 in							FALSE						NA	NA	NA	NA	NA	NA	10D	
594	2018-051-		0660	No	NA	Composite	Iron	Epoxy		Plate Impression?	1		Complete - Cast	PROBLEM BOX						5 in	2 in	1 in							FALSE	9/10/2015	10/19/2019				NA	NA	NA	NA	NA	NA	10D	
595	2018-051-		0661	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101																FALSE						NA	NA	NA	NA	NA	NA	NA
596	2018-051-		0662	No	NA	Composite	Iron	Wood		Wood/Concretion with fastener	1		Inventoried - Ready to Process	YB48						15.5 in	6 in	4.5 in							FALSE						NA	NA	NA	NA	NA	NA	10D	
597	2018-051-		0663	No	NA	Metal	Iron			Plate	1		Inventoried - Ready to Process	YB36						9 in	5.5 in	2 in							FALSE						NA	NA	NA	NA	NA	NA	10D	
598	2018-051-		0664	No	NA	Metal	Iron			Fastener	1		Reburial	R						10.5 in	2.5 in	3 in							FALSE	8/10/2016	3/27/2015				NA	NA	NA	NA	NA	NA	10D	
599	2018-051-		0665	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101						2.25 in	2.25 in	1.5 in							FALSE						NA	NA	NA	NA	NA	NA	10D	
600	2018-051-		0666	No	NA	Metal	Iron			Fastener	1		Reburial	R						11 in	4 in	3.5 in							FALSE	8/10/2016	3/27/2015				NA	NA	NA	NA	NA	NA	10D	
601	2018-051-		0667	No	NA	Composite	Iron	Epoxy		Fastener	1		Complete - Cast	PROBLEM BOX						5 in	2 in	1.5 in							FALSE	7/31/2015	10/19/2018				NA	NA	NA	NA	NA	NA	10D	
602	2018-051-		0668	No	NA	Metal	Iron			Fastener	1		Inventoried - Ready to Process	YB101						4.5 in	1 in	1 in							FALSE						NA	NA	NA	NA	NA	NA	10D	
603	2018-051-		0669	No	NA	Organic	Wood			Wood Fragment	1		Inventoried - Ready to Process	YB157						14.5 in	3 in	3 in							FALSE						NA	NA	NA	NA	NA	NA	NA	
604	2018-051-		0670	No	NA	Organic	Wood			Wood Fragment	1		Inventoried - Ready to Process	YB101						4 in	3 in	1.5 in							FALSE						NA	NA	NA	NA	NA	NA	10D	
605	2018-051-		0671	No	NA	Organic	Wood			Wood Fragment	1		Inventoried - Ready to Process	YB157						21 in	3.5 in	3.5 in							FALSE						NA	NA	NA	NA	NA	NA	10D	
606	2018-051-		0672	No	NA	Organic	Wood			Wood Fragment	1		Inventoried - Ready to Process	YB157						14 in	2 in	2 in							FALSE						NA	NA	NA	NA	NA	NA	10D	
607	2018-051-		0673	No	NA	Organic	Wood			Wood Fragment	8		Did Not Survive	DNS																FALSE						NA	NA	NA	NA	NA	NA	10D
608	2018-051-		0674	No	NA	Metal	Iron			Gun Wrench	3		Reburial	PROBLEM BOX						24 in	4.5 in	4 in							FALSE	8/15/2016	3/27/2015				NA	NA	NA	NA	NA	NA	13D	
609	2018-051-		0675	No	NA	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 6	PX1	Simple stamped pattern	Black			4.75 in	3.75 in	0.5 in							FALSE	6/25/2015					NA	NA	NA	NA	NA	NA	15D	
610	2018-051-		0676	No	NA	Recent/Synthetic	Epoxy			Cast Impression	1		Complete - Cast	BOX 8	2					6.3 in	2.25 in								FALSE	7/31/2015	10/24/2018				NA	NA	NA	NA	NA	NA	15D	
611	2018-051-		0677	No	NA	Metal	Iron			Fastener	1		Complete	NHHC - Pallet 4 Large Divided Tote 1	1					11.75 in	2 in	1.75 in							FALSE	2/1/2016	3/27/2015			18	NA	NA	NA	NA	NA	NA	15D	
612	2018-051-		0678	No	NA	Metal	Iron			Plate	1		Inventoried - Ready to Process	YB101						3.5 in	3 in	0.5 in							FALSE						NA	NA	NA	NA	NA	NA	16D	
613	2018-051-		0679	No	NA	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 10	PX1	Simple stamped pattern?	Black			2.5 in	1.75 in	0.25 in							FALSE	6/25/2015					NA	NA	NA	NA	NA	NA	16D	
614	2018-051-		0680	No	NA	Organic	Bone			Cow Rib	1		Complete	C5		Cut marks				5.5 in									FALSE	5/3/2018					NA	NA	NA	NA	NA	NA	17D	
615	2018-051-		0681	No	NA	Metal	Iron			Spike?	1		Did Not Survive	DNS						5.5 in									FALSE			4/24/2015			NA	NA	NA	NA	NA	NA	17D	
616	2018-051-		0682	No	NA	Composite	Iron	Wood		Wood with fastener hole.	1		Inventoried - Ready to Process	YB157						3.5 in	2.5 in	1.25 in							FALSE						NA	NA	NA	NA	NA	NA	17D	
617	2018-051-		0683	No	NA	Concretion	Concretion			Concretion	1																															

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square		
662	2018-051-		0728	No	NA	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	YB101							4 in		2 in		2 in					FALSE						NA	NA	NA	NA	NA	NA	16-C2	
663	2018-051-		0729	No	NA	Concretion	Concretion			Mold	1		Inventoryied - Ready to Process	YB101							3.5 in		2.25 in							FALSE						NA	NA	NA	NA	NA	NA	16-C2	
664	2018-051-		0730	No	NA	Metal	Iron			Fastener fragment	1		Reburial	DNS BUCKET							5.25 in		3 in		1.25 in					FALSE			4/23/2015			NA	NA	NA	NA	NA	NA	16-C2	
665	2018-051-		0731	No	NA	Metal	Iron			Plate	8		Inventoryied - Ready to Process	DNS BUCKET																FALSE						NA	NA	NA	NA	NA	NA	16-C2	
666	2018-051-		0732	No	NA	Metal	Iron			Spike	1		Reburial	R							9 in									FALSE	8/10/2016		4/23/2015			NA	NA	NA	NA	NA	NA	16-C2	
667	2018-051-		0733	No	NA	Concretion	Concretion			Spike Molds	4		Inventoryied - Ready to Process	YB157																FALSE						NA	NA	NA	NA	NA	NA	16-C2	
668	2018-051-		0734	No	NA	Metal	Iron			Bolt	1		Inventoryied - Ready to Process	KP							19 in									FALSE						NA	NA	NA	NA	NA	NA	16-C2	
669	2018-051-		0735	No	NA	Metal	Iron			Bolt	1		Inventoryied - Ready to Process	YB158							15 in									FALSE						NA	NA	NA	NA	NA	NA	16-C2	
670	2018-051-		0736	No	NA	Metal	Iron			Bolt	3		Inventoryied - Ready to Process	WB44							12.5 in									FALSE						NA	NA	NA	NA	NA	NA	16-C2	
671	2018-051-		0737	No	NA	Organic	Wood			Wood fragment (modern?)	1		Inventoryied - Ready to Process	YB157							14 in									FALSE						NA	NA	NA	NA	NA	NA	16-C2	
672	2018-051-		0738	No	NA	Organic	Wood			Wood fragment	1		Inventoryied - Ready to Process	YB48							2.25 in									FALSE						NA	NA	NA	NA	NA	NA	16-C2	
673	2018-051-		0739	No	NA	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 6	PX1	Cord marked decoration	Black														FALSE	11/4/2015					NA	NA	NA	NA	NA	NA	18D
674	2018-051-		0740	No	NA	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	YB101							3.2 in									FALSE						NA	NA	NA	NA	NA	NA	18D	
675	2018-051-		0741	No	NA	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	YB101							3 in		2.5 in								FALSE						NA	NA	NA	NA	NA	NA	18D
676	2018-051-		0742	No	NA	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	YB101							5 in		2.5 in								FALSE						NA	NA	NA	NA	NA	NA	18D
677	2018-051-		0743	No	NA	Metal	Iron			Spike	1		Did Not Survive	DNS							10 in									FALSE	12/17/2015		4/23/2015			NA	NA	NA	NA	NA	NA	18D	
678	2018-051-		0744	No	NA	Metal	Iron			Spike	1		Did Not Survive	DNS							7.75 in									FALSE	12/17/2015		4/24/2015			NA	NA	NA	NA	NA	NA	18D	
679	2018-051-		0745	No	NA	Metal	Iron			Spike	1		Reburial	R							10 in									FALSE	8/17/2018		6/16/2015			NA	NA	NA	NA	NA	NA	18D	
680	2018-051-		0746	No	NA	Metal	Iron			Strap (?) Fragment	3		Complete	NHHC - Pallet 6 Medium Divided Tote 4	1						8 in		3 in							FALSE	1/10/2019		10/24/2018		18	NA	NA	NA	NA	NA	NA	NA	18D
681	2018-051-		0747	No	NA	Metal	Iron			Plate Mold	1		Artifact card only, artifact not at CRL								7 in		7 in							FALSE						NA	NA	NA	NA	NA	NA	18D	
682	2018-051-		0748	No	NA	Metal	Iron			Plate	1		Inventoryied - Ready to Process	YB101							6 in		4.5 in							FALSE						NA	NA	NA	NA	NA	NA	18D	
683	2018-051-		0749	No	NA	Metal	Iron			Plate Mold	1		Inventoryied - Ready to Process	YB101							8.75 in		6 in							FALSE						NA	NA	NA	NA	NA	NA	18D	
684	2018-051-		0750	No	NA	Metal	Iron			Thin plate	1		Inventoryied - Ready to Process	YB101							6.75 in		4 in							FALSE						NA	NA	NA	NA	NA	NA	18D	
685	2018-051-		0751	No	NA	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	YB101							4 in		2 in							FALSE						NA	NA	NA	NA	NA	NA	18D	
686	2018-051-		0752	No	NA	Concretion	Concretion			Concretions	8		Inventoryied - Ready to Process	DNS BUCKET																FALSE						NA	NA	NA	NA	NA	NA	18D	
687	2018-051-		0753	No	NA	Glass	Liquor Bottle			Glass Bottle Base	1		Complete	NHHC - Pallet 6 Large Tote 28	1		Green/Olive				4.25 in									FALSE	10/5/2017					NA	NA	NA	NA	NA	NA	19D	
688	2018-051-		0754	No	NA	Metal	Iron			Spike	1		Did Not Survive	DNS							7.75 in									FALSE	12/17/2015		4/23/2015			NA	NA	NA	NA	NA	NA	19D	
689	2018-051-		0755	No	NA	Concretion	Concretion			Concretion (plate?)	3		Inventoryied - Ready to Process	DNS BUCKET																FALSE						NA	NA	NA	NA	NA	NA	19D	
690	2018-051-		0756	No	NA	Metal	Iron			Plate	1		Inventoryied - Ready to Process	BARREL 30							15 in		11 in							FALSE						NA	NA	NA	NA	NA	NA	19D	
691	2018-051-		0757	No	NA	Metal	Iron			Lifting Hook And Eye	1		Complete	NHHC - Pallet 6 Large Tote 26	1						11 in		7.5 in							FALSE	2/1/2016		3/27/2015		10.6	NA	NA	NA	NA	NA	NA	19D	
692	2018-051-		0758	No	NA	Metal	Iron			Chain	3		Complete	NHHC - Pallet 5 Large Tote 23	1						28 in									FALSE	2/8/2016		3/27/2015		35	NA	NA	NA	NA	NA	NA	19D	
693	2018-051-		0759	No	NA	Metal	Iron			Spike	1		Reburial	R							7 in									FALSE	8/10/2016		4/24/2015			NA	NA	NA	NA	NA	NA	10D	
694	2018-051-		0760	No	NA	Metal	Iron			Hook	1		Complete	NHHC - Pallet 5 Large Tote 23	1						6.5 in		4 in							FALSE	10/18/2018		6/16/2015		14	NA	NA	NA	NA	NA	NA	10D	
695	2018-051-		0760.01	No	NA	Organic	Textile			Yarn/Rope	1		Complete	C5																FALSE	6/20/2018					NA	NA	NA	NA	NA	NA	10D	
696	2018-051-		0760.02	No	NA	Recent/Synthetic	Epoxy			Rope Thimble	1		Complete - Cast	BOX 8	2															FALSE	8/25/2015		10/24/2018			NA	NA	NA	NA	NA	NA	NA	
697	2018-051-		0761	No	NA	Organic	Wood			Wood fragment	7		Inventoryied - Ready to Process	YB157																FALSE						NA	NA	NA	NA	NA	NA	10D	
698	2018-051-		0762	No	NA	Metal	Iron			Gun carriage Compressor	1		Complete	NHHC - Pallet 1 Large Tote 7	1						22 in		16 in		5.5 in					FALSE	1/30/2019		5/28/2015		18	NA	NA	NA	NA	NA	NA	10D	
699	2018-051-		0763	No	NA	Metal	Iron			Gun carriage Fastener	1		Inventoryied - Ready to Process	KP29							31 in		5 in		5 in					FALSE						NA	NA	NA	NA	NA	NA	10D	
700	2018-051-		0764	No	NA	Metal	Iron			Eyes For Tackle	1		Complete	NHHC - Pallet 5 Large Tote 21	1						17 in		14.5 in		4 in					FALSE	1/30/2019		4/24/2015		18	NA	NA	NA	NA	NA	NA	10D	
701	2018-051-		0765	No	NA	Concretion	Concretion			Concretion from 764	1		Inventoryied - Ready to Process	YB101							3.5 in		3 in		1 in					FALSE						NA	NA	NA	NA	NA	NA	10D	
702	2018-051-		0766	No	NA	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	YB153							4 in		4 in		3 in					FALSE						NA	NA	NA	NA	NA	NA	10D	
703	2018-051-		0767	No	NA	Organic	Wood			Wood Fragment	1		Inventoryied - Ready to Process	YB157							8 in		1.5 in		1 in					FALSE						NA	NA	NA	NA	NA	NA	10D	
704	2018-051-		0768	No	NA	Organic	Wood			Wood Fragment	1		Inventoryied - Ready to Process	YB157							8.5 in		3.25 in		1 in					FALSE						NA	NA	NA	NA	NA	NA	10D	
705	2018-051-		0769	No	NA	Organic	Wood			Wood Fragment	1		Inventoryied - Ready to Process	YB157							13.5 in		2 in		1 in					FALSE						NA	NA	NA	NA	NA	NA	10D	
706	2018-051-		0770	No	NA	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	YB101							4 in		2.5 in		3 in					FALSE						NA	NA	NA	NA	NA	NA	10D	
707	2018-051-		0771	No	NA	Metal	Iron			Water Pipe	1		Inventoryied - Ready to Process	ROLLOFF							35.5 in		3 in		2 in					FALSE						NA	NA	NA	NA	NA	NA	4K	
708	2018-051-		0772	No	NA	Metal	Iron			Fastener with attachment on side	1		Inventoryied - Ready to Process	YB139							37 in		4 in		3 in					FALSE						NA	NA	NA	NA	NA	NA	3K	
709	2018-051-		0773	No	NA	Metal	Iron			Fastener	1		Inventoryied - Ready to Process	YB158							27.25 in		3 in		3 in					FALSE				</									

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square		
757	2018-051-		0821	No	NA	Organic	Bone			Bone	1		Inventoried - Ready to Process	HeLen's nise tank						4 in	2.5 in	2.5 in	1 in						FALSE						NA	NA	NA	NA	NA	NA	4K		
758	2018-051-		0822	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	DNS BUCKET						2.5 in	2.5 in	1.5 in							FALSE						NA	NA	NA	NA	NA	NA	4K		
759	2018-051-		0823	No	NA	Architecture	Concrete			Concrete	1		Complete	NHHC - Pallet 4 Small Tote 1	1					5.5 in	4.25 in	2.75 in							FALSE	9/9/2015					NA	NA	NA	NA	NA	NA	4K		
760	2018-051-		0824	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101						4 in	2.5 in	0.5 in							FALSE						NA	NA	NA	NA	NA	NA	4K		
761	2018-051-		0825	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101						2 in	2 in	1 in							FALSE						NA	NA	NA	NA	NA	NA	4K		
762	2018-051-		0826	No	NA	Stone	Natural Stone			Stone	1		Inventoried - Ready to Process	STONE2						2.5 in	2 in	1 in							FALSE						NA	NA	NA	NA	NA	NA	4K		
763	2018-051-		0827	No	NA	Stone	Natural Stone			Stone	1		Inventoried - Ready to Process	STONE2						2.75 in	1.5 in	0.5 in							FALSE						NA	NA	NA	NA	NA	NA	4K		
764	2018-051-		0828	No	NA	Metal	Iron			Fastener fragment	1		Did Not Survive	DNS						10 in	5.5 in	4 in							FALSE	12/17/2015	4/24/2015				NA	NA	NA	NA	NA	NA	18B		
765	2018-051-		0829	No	NA	Metal	Iron			Fastener fragment	1		Reburial	R						11 in	3 in	3 in							FALSE	8/10/2016	4/24/2015				NA	NA	NA	NA	NA	NA	18B		
766	2018-051-		0830	No	NA	Metal	Iron			Strap And Fastener	2		Complete	NHHC - Pallet 1 Large Tote 4	1					25 in	11 in	5 in							FALSE	11/22/2016				18	NA	NA	NA	NA	NA	NA	18B		
767	2018-051-		0831	No	NA	Metal	Iron			Stanchion Socket?	1		Complete	NHHC - Pallet 6 Large Divided Tote 2	1					8.5 in	8 in	5 in							FALSE	3/8/2016	4/23/2015			21	NA	NA	NA	NA	NA	NA	18B		
768	2018-051-		0832	No	NA	Metal	Iron			Fastener shaft (spike)	1		Reburial	R						11.5 in	2.5 in	3 in							FALSE	8/10/2016	4/23/2015			14	NA	NA	NA	NA	NA	NA	18B		
769	2018-051-		0833	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101						2.75 in	2.5 in	2 in							FALSE						NA	NA	NA	NA	NA	NA	18B		
770	2018-051-		0834	No	NA	Metal	Iron			Grapeshot	1		Complete	NHHC - Pallet 6 Medium Divided Tote 8	1	Faint mold seam visible										2.4 in			FALSE	7/27/2017					18	NA	NA	NA	NA	NA	NA	18B	
771	2018-051-		0835	No	NA	Metal	Iron			Plate And Fastener	1		Inventoried - Ready to Process							7 in	6 in	3.5 in							FALSE						NA	NA	NA	NA	NA	NA	18B		
772	2018-051-		0836	No	NA	Stone	Natural Stone			Stone	1		Inventoried - Ready to Process	STONE2						9 in	3.25 in	3 in							FALSE						NA	NA	NA	NA	NA	NA	18B		
773	2018-051-		0837	No	NA	Metal	Iron			Grapeshot	1		Complete	NHHC - Pallet 6 Medium Divided Tote 6	1										2.4 in				FALSE	9/8/2017					35	NA	NA	NA	NA	NA	NA	18B	
774	2018-051-		0838	No	NA	Metal	Iron			Grapeshot	1		Complete	DISPLAY, HELEN'S OFFICE		Mold seam visible									2.4 in					FALSE	7/3/2017					28	NA	NA	NA	NA	NA	NA	18B
775	2018-051-		0839	No	NA	Metal	Iron			Fastener	1		Reburial	R						17 in	2 in	2 in							FALSE	8/10/2016	4/23/2015				NA	NA	NA	NA	NA	NA	18B		
776	2018-051-		0840	Yes	NA	Ceramic	Stoneware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 21	1		White, Blue			8.5 in	8.5 in	2 in							FALSE	11/2/2015					NA	NA	NA	NA	NA	NA	18B		
777	2018-051-		0841	No	NA	Metal	Iron			Plate	1		Inventoried - Ready to Process	BARREL 30															FALSE						NA	NA	NA	NA	NA	NA	18B		
778	2018-051-		0842	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101						5.5 in	4.5 in	2 in							FALSE						NA	NA	NA	NA	NA	NA	18B		
779	2018-051-		0843	No	NA	Concretion	Concretion			Fastener?	1		Reburial	R						14 in	6 in	4.5 in							FALSE	8/10/2016	4/24/2015				NA	NA	NA	NA	NA	NA	18B		
780	2018-051-		0844	No	NA	Metal	Iron			Fastener shaft (spike)	1		Complete	NHHC - Pallet 4 Medium Divided Tote 2	1					7 in	2.5 in	2.5 in							FALSE	2/8/2016	4/23/2015				35	NA	NA	NA	NA	NA	NA	18B	
781	2018-051-		0845	No	NA	Metal	Iron			Plate	1		Inventoried - Ready to Process	YB101						8.25 in	4 in	1.5 in							FALSE						NA	NA	NA	NA	NA	NA	18B		
782	2018-051-		0846	No	NA	Metal	Iron			Iron Disc	1		Complete	NHHC - Pallet 6 Medium Divided Tote 5	1					7 in	1 in								FALSE	4/19/2017	1/25/2016				28	NA	NA	NA	NA	NA	NA	18B	
783	2018-051-		0847	No	NA	Metal	Iron			Plate	1		Inventoried - Ready to Process	BARREL 30						16 in	11 in	2.5 in							FALSE						NA	NA	NA	NA	NA	NA	18B		
784	2018-051-		0848	No	NA	Concretion	Concretion			Concretion Fragment	1		Artifact card only, artifact not at CRL	DNS BUCKET						3.5 in	2 in	0.25 in							FALSE						NA	NA	NA	NA	NA	NA	18B		
785	2018-051-		0849	No	NA	Architecture	Mortar			Mortar	1		Complete	NHHC - Pallet 4 Small Tote 9	1					6 in	2.5 in	3 in							FALSE	9/10/2015					NA	NA	NA	NA	NA	NA	18B		
786	2018-051-		0850	No	NA	Composite	Iron		Epoxy	Fastener	1		Complete - Cast	PROBLEM BOX						7.5 in	4 in	2.5 in							FALSE	6/2/2015	10/19/2018				NA	NA	NA	NA	NA	NA	18B		
787	2018-051-		0851	No	NA	Metal	Iron			Rail	1		Complete	NHHC - Pallet 1 Large Tote 7	1					23.5 in	6.5 in	3.25 in							FALSE	11/28/2017					35	NA	NA	NA	NA	NA	NA	18B	
788	2018-051-		0852	No	NA	Metal	Iron			Plate	1		Did Not Survive	DNS						12 in	7.5 in	1.5 in							FALSE		4/23/2015				NA	NA	NA	NA	NA	NA	18B		
789	2018-051-		0853	No	NA	Metal	Iron			Cannister Shot Stand	1		Complete	NHHC - Pallet 6 Large Divided Tote 2	1					6.75 in	6.5 in	10.5 in							FALSE	1/30/2019	1/25/2016				32	NA	NA	NA	NA	NA	NA	18B	
790	2018-051-		0853.02	No	NA	Organic	Textile			Textile	1		Complete	CS				4.6 g		8.066 in	5.538 in	0.027 in							FALSE	10/31/2018					NA	NA	NA	NA	NA	NA	18B		
791	2018-051-		0854	No	NA	Concretion	Concretion			Concretion	1		Artifact card only, artifact not at CRL							3 in	3 in	3 in							FALSE						NA	NA	NA	NA	NA	NA	18B		
792	2018-051-		0855	No	NA	Metal	Iron			Fastener, round	1		Complete	NHHC - Pallet 5 Medium Divided Tote 1	1					11.5 in	2.5 in	2 in							FALSE	6/29/2016	6/16/2015				18	NA	NA	NA	NA	NA	NA	18B	
793	2018-051-		0855.01	No	NA	Organic	Textile			Yarn	1		Complete	CS															FALSE	7/11/2018						NA	NA	NA	NA	NA	NA	18B	
794	2018-051-		0856	No	NA	Composite	Iron		Epoxy	Fastener	1		Complete - Cast	BOX 8	2					9 in	3 in	3 in							FALSE	7/31/2015	10/24/2018				NA	NA	NA	NA	NA	NA	18B		
795	2018-051-		0857	No	NA	Metal	Iron			Fastener and 2 Square Washers	3		Complete	NHHC - Pallet 4 Medium Divided Tote 2	1					7 in	3.5 in	3.5 in							FALSE	2/8/2016	6/16/2015				35	NA	NA	NA	NA	NA	NA	18B	
796	2018-051-		0858	No	NA	Metal	Iron			Fastener	1		Inventoried - Ready to Process							13 in	2 in	2.5 in							FALSE						NA	NA	NA	NA	NA	NA	18C		
797	2018-051-		0859	No	NA	Metal	Iron			Grapeshot	1		Complete	NHHC - Pallet 6 Medium Divided Tote 6	1										2.4 in				FALSE	9/8/2017						35	NA	NA	NA	NA	NA	NA	18C
798	2018-051-		0860	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101						3.5 in	3.5 in	1.5 in							FALSE						NA	NA	NA	NA	NA	NA	18C		
799	2018-051-		0861	No	NA	Metal	Iron			Side Lever Beam Engine	1		Complete	NHHC - Pallet 1 Large Tote 4	1					10.5 in	9 in	5 in							FALSE	11/14/2017	4/23/2015				18	NA	NA	NA	NA	NA	NA	18C	
800	2018-051-		0862	Yes	NA	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 21	1		Varied			1 in	1.5 in	2.5 in							FALSE	11/2/2015					NA	NA	NA	NA	NA	NA	18C		
801	2018-051-		0863	No	NA	Metal	Iron			Plate	1		Inventoried - Ready to Process	BARREL 31						23 in	12 in	1 in							FALSE						NA	NA	NA	NA	NA	NA	19B		
802	2018-051-		0864	No	NA	Metal	Iron			Fastener	1		Complete	NHHC - Pallet 4 Large Divided Tote 1	1					14 in	3 in	2.5 in							FALSE	2/8/2016	4/23/2015				35	NA	NA	NA	NA	NA	NA	19B	
803	2018-051-		0865	No	NA	Composite	Iron		Epoxy	Fastener	1		Complete - Cast	BOX 8	2					4.5 in	2 in	2.																					

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square			
847	2018-051-		0909	No	NA	Metal	Iron			Disc Fragment	1		Complete	NHHC - Medium Tote 2	1					18.5	in			4.5						FALSE	2/5/2015		4/24/2015			18	NA	NA	NA	NA	NA	NA	10F	
848	2018-051-		0910	No	NA	Metal	Iron			Fastener	1		Inventoryied - Ready to Process	YB158						22.75	in		5.5	in	2.5	in				FALSE							NA	NA	NA	NA	NA	NA	10F	
849	2018-051-		0911	No	NA	Metal	Iron			Fastener	1		Reburial	R						12.5	in		2	in	2	in				FALSE	8/10/2016		7/31/2015				NA	NA	NA	NA	NA	NA	10F	
850	2018-051-		0912	No	NA	Architecture	Concrete			Concrete	1		Complete	NHHC - Pallet 4 Small Tote 1	1					6	in		6.5	in	2	in				FALSE	11/2/2015						NA	NA	NA	NA	NA	NA	10F	
851	2018-051-		0913	No	NA	Composite	Iron	Wood		Fastener Through Wood	1		Inventoryied - Ready to Process	YB153						5.5	in		4.5	in	1.5	in				FALSE							NA	NA	NA	NA	NA	NA	10F	
852	2018-051-		0914	No	NA	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	YB101						9	in		5	in	2.5	in				FALSE							NA	NA	NA	NA	NA	NA	10F	
853	2018-051-		0915	No	NA	Composite	Iron	Wood		Fastener through wood	1		Inventoryied - Ready to Process	YB48						9	in		3.5	in	4.5	in				FALSE							NA	NA	NA	NA	NA	NA	10F	
854	2018-051-		0916	No	NA	Metal	Iron			Fastener	1		Reburial	R						8.5	in		3	in	2.5	in				FALSE	8/10/2016		4/23/2015					NA	NA	NA	NA	NA	NA	10F
855	2018-051-		0917	No	NA	Metal	Iron			Fastener	1		Reburial	R						13	in		3	in	2	in				FALSE	8/10/2016		4/23/2015					NA	NA	NA	NA	NA	NA	10F
856	2018-051-		0918	No	NA	Composite	Iron	Epoxy		Fastener	1		Complete - Cast	PROBLEM BOX						5	in		2	in	2	in				FALSE	8/13/2015		4/23/2015					NA	NA	NA	NA	NA	NA	10F
857	2018-051-		0919	No	NA	Recent/Synthetic	Epoxy			Fastener	1		Complete - Cast	BOX 8	2					8	in		2.5	in	2	in				FALSE	6/25/2015		4/24/2015					NA	NA	NA	NA	NA	NA	10F
858	2018-051-		0920	No	NA	Metal	Iron			Fastener	1		Reburial	R						9.5	in		3	in	2	in				FALSE	8/10/2016		4/24/2015					NA	NA	NA	NA	NA	NA	10F
859	2018-051-		0921	No	NA	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	YB101						5	in		2.25	in	1	in				FALSE								NA	NA	NA	NA	NA	NA	10F
860	2018-051-		0922	No	NA	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	YB101						3.5	in		2	in	2.25	in				FALSE								NA	NA	NA	NA	NA	NA	10F
861	2018-051-		0923	No	NA	Metal	Iron			Fastener shaft, square	1		Complete	NHHC - Pallet 5 Large Tote 23	1					13	in		4	in	2	in				FALSE	2/8/2016		4/23/2015			35	NA	NA	NA	NA	NA	NA	10F	
862	2018-051-		0924	No	NA	Composite	Iron	Wood		Concretion	1		Inventoryied - Ready to Process	YB101						2.5	in		2	in	1.25	in				FALSE								NA	NA	NA	NA	NA	NA	10F
863	2018-051-		0925	No	NA	Composite	Iron	Wood		Fastener Through Wood	1		Inventoryied - Ready to Process	YB153						12.5	in		7.5	in	2.5	in				FALSE								NA	NA	NA	NA	NA	NA	10F
864	2018-051-		0926	No	NA	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	YB101						3.5	in		2	in	2	in				FALSE								NA	NA	NA	NA	NA	NA	10F
865	2018-051-		0927	No	NA	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	YB101						9.5	in		2	in	1.5	in				FALSE								NA	NA	NA	NA	NA	NA	10F
866	2018-051-		0928	No	NA	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	YB101						3.5	in		3	in	2	in				FALSE								NA	NA	NA	NA	NA	NA	10F
867	2018-051-		0929	No	NA	Organic	Wood			Concretion	1		Inventoryied - Ready to Process	YB157						9.5	in		4	in	2.5	in				FALSE								NA	NA	NA	NA	NA	NA	10F
868	2018-051-		0930	No	NA	Metal	Iron			Fastener	1		Reburial	R						8	in		2.5	in	2.5	in				FALSE	8/10/2016		4/23/2015					NA	NA	NA	NA	NA	NA	10F
869	2018-051-		0931	No	NA	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	YB101						6	in		2.5	in	2	in				FALSE								NA	NA	NA	NA	NA	NA	10F
870	2018-051-		0932	No	NA	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	YB101						4	in		2.5	in	1	in				FALSE								NA	NA	NA	NA	NA	NA	10F
871	2018-051-		0933	No	NA	Recent/Synthetic	Epoxy			Fastener	1		Complete - Cast	BOX 8	2					7.5	in		2	in	2	in				FALSE	8/13/2015		4/24/2015					NA	NA	NA	NA	NA	NA	3J
872	2018-051-		0934	No	NA	Organic	Wood			Wood fragments	2		Inventoryied - Ready to Process	YB157						9	in		7	in	3	in				FALSE								NA	NA	NA	NA	NA	NA	3J
873	2018-051-		0935	No	NA	Composite	Iron	Wood		Fastener through wood	1		Inventoryied - Ready to Process	YB153						8	in		5.5	in	2	in				FALSE								NA	NA	NA	NA	NA	NA	3J
874	2018-051-		0936	No	NA	Metal	Iron			Fastener	1		Reburial	R						6	in		2.5	in	2.5	in				FALSE	8/10/2016		4/24/2015					NA	NA	NA	NA	NA	NA	3J
875	2018-051-		0937	No	NA	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	YB101						4	in		3.5	in	2	in				FALSE								NA	NA	NA	NA	NA	NA	3J
876	2018-051-		0938	No	NA	Metal	Iron			Fastener	1		Did Not Survive	DNS						10	in		2.5	in	2	in				FALSE			4/24/2015					NA	NA	NA	NA	NA	NA	4I
877	2018-051-		0939	No	NA	Metal	Iron			Fastener	2		Complete	NHHC - Pallet 4 Large Divided Tote 1	1					22.5	in		3.5	in	3	in				FALSE	7/6/2016		4/24/2015			18	NA	NA	NA	NA	NA	NA	4I	
878	2018-051-		0940	No	NA	Metal	Iron			Fastener	1		Reburial	R						21.5	in		3	in	3	in				FALSE	8/10/2016		4/24/2015					NA	NA	NA	NA	NA	NA	4I
879	2018-051-		0941	No	NA	Metal	Iron			Fastener shaft, square	1		Complete	NHHC - Pallet 4 Medium Divided Tote 2	1					11	in		4	in	2	in				FALSE	2/8/2016		4/24/2015			35	NA	NA	NA	NA	NA	NA	4I	
880	2018-051-		0942	No	NA	Metal	Iron			Fastener	1		Reburial	R						12.5	in		3	in	2.5	in				FALSE	8/10/2016		4/23/2015					NA	NA	NA	NA	NA	NA	4I
881	2018-051-		0943	No	NA	Metal	Iron			Fastener	1		Reburial	R						12.5	in		1.75	in	1.75	in				FALSE	8/10/2016		6/16/2015					NA	NA	NA	NA	NA	NA	4I
882	2018-051-		0944	No	NA	Metal	Iron			Fastener	1		Inventoryied - Ready to Process	YB101						4	in		2.5	in	2	in				FALSE								NA	NA	NA	NA	NA	NA	4I
883	2018-051-		0945	No	NA	Concretion	Concretion			Concretion (plate?)	1		Did Not Survive	DNS						11	in		10	in	4	in				FALSE								NA	NA	NA	NA	NA	NA	21F
884	2018-051-		0946	No	NA	Composite	Iron	Copper or Copper Alloy		Wheel, Bracket, Screws	6		Complete	NHHC - Pallet 6 Large Tote 27	1		Screws have diamond pattern on one facet													FALSE	7/27/2017					18	NA	NA	NA	NA	NA	NA	21F	
885	2018-051-		0947	No	NA	Stone	Natural Stone			Stone	1		Inventoryied - Ready to Process	STONE3						4.5	in		3	in	3	in				FALSE								NA	NA	NA	NA	NA	NA	21F
886	2018-051-		0948	No	NA	Stone	Unidentified			Stone	1		Inventoryied - Ready to Process	STONE3						5	in		2.75	in	3.25	in				FALSE								NA	NA	NA	NA	NA	NA	21F
887	2018-051-		0949	No	NA	Organic	Wood			Wood fragment	1		Inventoryied - Ready to Process	YB157						5.25	in		2	in	1.25	in				FALSE								NA	NA	NA	NA	NA	NA	21F
888	2018-051-		0950	No	NA	Metal	Iron			Strap	1		Inventoryied - Ready to Process	P1						22.25	in		3.75	in	5	in				FALSE								NA	NA	NA	NA	NA	NA	20D
889	2018-051-		0951	No	NA	Composite	Iron	Epoxy		Fastener	1		Complete - Cast	PROBLEM BOX						11	in		2	in	1.5	in				FALSE	8/7/2015		4/23/2015					NA	NA	NA	NA	NA	NA	20D
890	2018-051-		0952	No	NA	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	YB101						5.75	in		3	in	2	in				FALSE								NA	NA	NA	NA	NA	NA	20D
891	2018-051-		0953	No	NA	Metal	Iron			Fastener	1		Reburial	R						7	in		3.25	in	2	in				FALSE	8/10/2016		4/24/2015					NA	NA	NA	NA	NA	NA	2

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square			
938	2018-051-		0999	No	NA	Metal	Iron			Plate	1		Inventoried - Ready to Process	YB101		TEST				7in		5in		2in						FALSE						NA	NA	NA	NA	NA	8D			
939	2018-051-		1000	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101						2.5in		2.75in		2.75in						FALSE						NA	NA	NA	NA	NA	8D			
940	2018-051-		1001	No	NA	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 6	PX1		Black			5in		4in		0.5in						FALSE	11/4/2015					NA	NA	NA	NA	NA	12L			
941	2018-051-		1002	No	NA	Metal	Iron			Spike	1		Reburial	R						15.5in		3in		2.5in						FALSE	8/10/2016		7/30/2015				NA	NA	NA	NA	NA	3J		
942	2018-051-		1003	No	NA	Concretion	Concretion			Concretion (mortar?)	1		Inventoried - Ready to Process							4in		2in		1.75in						FALSE						NA	NA	NA	NA	NA	3J			
943	2018-051-		1004	No	NA	Metal	Iron			Spike	1		Reburial	R						10.25in		4in		2.25in						FALSE	8/10/2016		6/16/2015				NA	NA	NA	NA	NA	3J		
944	2018-051-		1005	No	NA	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 11	PX1		Black			3in		2in		0.25in						FALSE	10/30/2015						NA	NA	NA	NA	NA	3J		
945	2018-051-		1006	No	NA	Metal	Copper or Copper Alloy			Cylinder	1		Did Not Survive	DNS						3.5in		1.25in								FALSE							NA	NA	NA	NA	NA	3J		
946	2018-051-		1007	No	NA	Concretion	Concretion			Concretion	1		Artifact card only, artifact not at CRL							4.5in		4.5in		4in						FALSE							NA	NA	NA	NA	NA	3J		
947	2018-051-		1008	No	NA	Organic	Wood			Wood fragment	1		Inventoried - Ready to Process	YB157						22in		2in		2.5in						FALSE							NA	NA	NA	NA	NA	20E		
948	2018-051-		1009	No	NA	Metal	Iron			Spike	1		Inventoried - Ready to Process	YB101						21.5in		4in		2.5in						FALSE							NA	NA	NA	NA	NA	20E		
949	2018-051-		1010	No	NA	Recent/Synthetic	Epoxy			Fastener	1		Complete - Cast	BOX 8	2					6.5in		3.5in		3in						FALSE	8/13/2015		7/31/2015				NA	NA	NA	NA	NA	20E		
950	2018-051-		1011	No	NA	Composite	Iron	Epoxy		Fastener	1		Complete - Cast	PROBLEM BOX						7.5in		2in		2in						FALSE	8/25/2015		7/31/2015				NA	NA	NA	NA	NA	20E		
951	2018-051-		1012	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101						4in		3in		2in						FALSE							NA	NA	NA	NA	NA	20E		
952	2018-051-		1013	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101						4in		3in		0.75in						FALSE							NA	NA	NA	NA	NA	20E		
953	2018-051-		1014	No	NA	Stone	Natural Stone			Stone	2		Inventoried - Ready to Process	STONE3						3.5in		2.5in		1.5in						FALSE							NA	NA	NA	NA	NA	20E		
954	2018-051-		1015	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101						3.5in		2.5in		1.5in						FALSE							NA	NA	NA	NA	NA	20E		
955	2018-051-		1016	No	NA	Metal	Iron			Gun carriage Track	1	Intact	Complete	NHHC - Pallet 1	1					25in		6in		3in						FALSE	1/30/2019				18		NA	NA	NA	NA	NA	3C		
956	2018-051-		1017	No	NA	Metal	Iron			Spike	1		Reburial	Reburial Drum						26in		5in		4in						FALSE	5/31/2019						NA	NA	NA	NA	NA	3C		
957	2018-051-		1018	No	NA	Metal	Iron			Iron fragment - wedge shape	1		Inventoried - Ready to Process							10.5in		5.5in		5in						FALSE							NA	NA	NA	NA	NA	3C		
958	2018-051-		1019	No	NA	Architecture	Concrete			Concrete Fragment	1		Complete	NHHC - Pallet 4 Small Tote 18	1					5.25in		4in		1in						FALSE	11/2/2015							NA	NA	NA	NA	NA	3C	
959	2018-051-		1020	No	NA	Architecture	Concrete			Concrete Fragment	1		Complete	NHHC - Pallet 4 Small Tote 8	1					6in		3in		3.5in						FALSE	11/2/2015							NA	NA	NA	NA	NA	3C	
960	2018-051-		1021	No	NA	Architecture	Brick			Brick	1		Complete	NHHC - Pallet 4 Small Tote 2	1	Line 1: LYN Line 2: WORKS	White, Red			4.25in		4.25in		5in						FALSE	8/25/2015							NA	NA	NA	NA	NA	3C	
961	2018-051-		1022	No	NA	Metal	Copper or Copper Alloy			Powder Canister Lid	2		Complete	X-RAY COMPUTER ROOM SHELVES						9.75in		11in		2in						FALSE	5/15/2018				21		NA	NA	NA	NA	NA	3C		
962	2018-051-		1022.01	No	NA	Recent/Synthetic	Rubber			Gasket	6		Complete	C5																FALSE							NA	NA	NA	NA	NA	3C		
963	2018-051-		1023	No	NA	Organic	Wood			Wood fragment with fastener hole	1		Artifact card only, artifact not at CRL	YB157						9.5in		4.5in		3in						FALSE							NA	NA	NA	NA	NA	3C		
964	2018-051-		1024	No	NA	Metal	Iron			Firegrate/Rail	1		Inventoried - Ready to Process	YB101						13.5in		5.5in		2in						FALSE							NA	NA	NA	NA	NA	3C		
965	2018-051-		1025	No	NA	Architecture	Concrete			Concrete	1		Complete	NHHC - Pallet 4 Small Tote 13	1				6in		3.75in		2.5in							FALSE	11/2/2015							NA	NA	NA	NA	NA	3C	
966	2018-051-		1026	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101						4.5in		3.5in		2in						FALSE							NA	NA	NA	NA	NA	3C		
967	2018-051-		1027	No	NA	Architecture	Concrete			Concrete Fragment	1		Complete	NHHC - Pallet 4 Small Tote 15	1				6in		3in		1.5in							FALSE	9/9/2015							NA	NA	NA	NA	NA	3C	
968	2018-051-		1028	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101						3in		2in		1in						FALSE							NA	NA	NA	NA	NA	3C		
969	2018-051-		1029	No	NA	Architecture	Brick			Brick	1		Complete	NHHC - Pallet 4 Small Tote 13	1		Brown			3.5in		3in		2in						FALSE	9/9/2015							NA	NA	NA	NA	NA	3C	
970	2018-051-		1030	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101						4in		2.5in		1in						FALSE								NA	NA	NA	NA	NA	3C	
971	2018-051-		1031	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101						5.5in		4in		2.5in						FALSE								NA	NA	NA	NA	NA	3C	
972	2018-051-		1032	No	NA	Architecture	Brick			Brick	1		Complete	NHHC - Pallet 4 Small Tote 16	1		Red			4in		3in		2.5in						FALSE	9/10/2015								NA	NA	NA	NA	NA	3C
973	2018-051-		1033	No	NA	Metal	Iron			Small Chain	3		Complete	NHHC - Pallet 5 Large Tote 23	1				4.5in		2in		2in							FALSE	10/10/2017		7/31/2015		35			NA	NA	NA	NA	NA	NA	
974	2018-051-		1034	No	NA	Concretion	Concretion			Concretion (plate fragment?)	1		Reburial	R						2.25in		1.25in		0.5in						FALSE	8/10/2016		7/31/2015					NA	NA	NA	NA	NA	3C	
975	2018-051-		1035	No	NA	Architecture	Brick			Brick Fragment	1		Complete	NHHC - Pallet 4 Small Tote 18	1				3.5in		3in		1.5in							FALSE	9/9/2015							NA	NA	NA	NA	NA	3C	
976	2018-051-		1036	No	NA	Architecture	Brick			Brick Fragment	1		Complete	NHHC - Pallet 4 Small Tote 13	1				5.75in		1.75in		1.5in							FALSE	9/9/2015							NA	NA	NA	NA	NA	3C	
977	2018-051-		1037	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101						6.5in		4in		3.5in						FALSE								NA	NA	NA	NA	NA	3C	
978	2018-051-		1038	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101						4.75in		2.5in		1.5in						FALSE								NA	NA	NA	NA	NA	3C	
979	2018-051-		1039	No	NA	Composite	Iron	Epoxy		Fastener	1		Complete - Cast	PROBLEM BOX						4.25in		3in		1.25in						FALSE	8/7/2015		7/31/2015					NA	NA	NA	NA	NA	3C	
980	2018-051-		1040	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	KP						4.5in		3in		2in						FALSE								NA	NA	NA	NA	NA	3C	
981	2018-051-		1041	Yes	NA	Ceramic	Stoneware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 21	1	"N" or "Z" stamped on base, filled with glaze			4.75in		3.25in		0.5in							FALSE	11/2/2015							NA	NA	NA	NA	NA	3C	
982	2018-051-		1042	No	NA	Organic	Wood			Wood fragment	1		Inventoried - Ready to Process	YB157						22in		4in		2.5in						FALSE								NA	NA	NA	NA	NA	17C	
983	2018-051-		1043	No	NA	Metal	Iron			Fastener shaft (spike)	1		Complete	NHHC - Pallet 4 Large Divided Tote 1	1				13in		3in		2in							FALSE	10/18/2018		7/31/2015		14			NA	NA	NA	NA	NA	17C	
984	2018-051-		1044	No	NA	Architecture	Concrete			Concrete	1		Complete	NHHC - Pallet 4 Small Tote 2	1				9.5in		5.5in		2in	</																				

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square		
1030	2018-051-		1090	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101						5.5 in		4.5 in		2.5 in						FALSE						NA	NA	NA	NA	NA	24C		
1031	2018-051-		1091	No	NA	Glass	Liquor Bottle			Glass Bottle Base	1		Complete	NHHC - Pallet 6 Large Tote 28	1		Green/Olive			4.25 in		2.75 in								FALSE	12/5/2016					NA	NA	NA	NA	NA	24C		
1032	2018-051-		1092	No	NA	Glass	Case Bottle			Glass Bottle Base	1		Complete	NHHC - Pallet 6 Large Tote 28	1		Green/Olive			3.75 in		2.25 in								FALSE	12/1/2016					NA	NA	NA	NA	NA	24C		
1033	2018-051-		1093	No	NA	Glass	Liquor Bottle			Whole Bottle	1	Intact	Complete	DISPLAY, HELEN'S OFFICE			Green/Olive			9 in		2.75 in								FALSE	1/18/2018					NA	NA	NA	NA	NA	24C		
1034	2018-051-		1094	No	NA	Metal				Fastener	1		Inventoried - Ready to Process	YB153						39 in		3.5 in		3 in						FALSE						NA	NA	NA	NA	NA	17B		
1035	2018-051-		1095	No	NA	Architecture	Concrete			Concrete Fragment	1		Complete	NHHC - Pallet 4 Small Tote 4	1					10 in		7.5 in		3.5 in						FALSE	10/30/2015						NA	NA	NA	NA	NA	17B	
1036	2018-051-		1096	No	NA	Metal				Fastener	1		Complete	NHHC - Pallet 4 Large Divided Tote 1	1					10 in		2.5 in		2 in						FALSE	3/23/2016	7/31/2015			18	NA	NA	NA	NA	NA	17B		
1037	2018-051-		1097	No	NA	Metal				Fastener	1		Reburial	R						14 in		3 in		3 in						FALSE	8/10/2016	7/30/2015				NA	NA	NA	NA	NA	17B		
1038	2018-051-		1098	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101						4 in		3 in		2 in						FALSE						NA	NA	NA	NA	NA	17B		
1039	2018-051-		1099	No	NA	Metal				Fastener	1		Did Not Survive	DNS						12 in		4 in		2.5 in						FALSE			7/30/2015				NA	NA	NA	NA	NA	16B	
1040	2018-051-		1100	No	NA	Metal				Fastener	1		Reburial	R						10 in		2.5 in		2 in						FALSE	8/10/2016	7/30/2015					NA	NA	NA	NA	NA	16B	
1041	2018-051-		1101	No	NA	Metal				Fastener	1		Complete	NHHC - Pallet 4 Large Divided Tote 1	1					10 in		3 in		3 in						FALSE	4/22/2016	7/31/2015			35	NA	NA	NA	NA	NA	16B		
1042	2018-051-		1102	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101						4.5 in		2.5 in		2 in						FALSE						NA	NA	NA	NA	NA	16B		
1043	2018-051-		1103	No	NA	Concretion	Concretion/brick			Concretion/brick	1		Inventoried - Ready to Process	YB101						4.75 in		2 in		2 in						FALSE							NA	NA	NA	NA	NA	16B	
1044	2018-051-		1104	No	NA	Architecture	Brick			Brick	1		Inventoried - Ready to Process	YB101			Brown			3 in		2.5 in		2 in						FALSE							NA	NA	NA	NA	NA	16B	
1045	2018-051-		1105	No	NA	Composite		Epoxy		Fastener	1		Complete - Cast	PROBLEM BOX						2.5 in		2 in		1.5 in						FALSE	8/25/2015	7/31/2015					NA	NA	NA	NA	NA	16B	
1046	2018-051-		1106	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101						3.5 in		3 in		2 in						FALSE							NA	NA	NA	NA	NA	16B	
1047	2018-051-		1107	No	NA	Metal				Sabot?	1		Inventoried - Ready to Process							11 in		6.25 in								FALSE							NA	NA	NA	NA	NA	CANNO N4	
1048	2018-051-		1108	No	NA	Metal				Grapeshot	1		Complete	NHHC - Pallet 6 Medium Tote 8	1	Mold seam										2.4 in					FALSE	7/25/2017	7/31/2015			14	NA	NA	NA	NA	NA	NA	CANNO N4
1049	2018-051-		1109	No	NA	Metal				Grapeshot	1		Complete	NHHC - Pallet 6 Medium Divided Tote 9	1											2.8 in					FALSE	9/8/2017	7/31/2015			35	NA	NA	NA	NA	NA	NA	CANNO N4
1050	2018-051-		1110	No	NA	Metal				Grapeshot	1		Complete	NHHC - Pallet 2 Large Tote 12	1					4 in		3.5 in		3 in						FALSE	6/29/2016	6/17/2015			18	NA	NA	NA	NA	NA	NA	CANNO N4	
1051	2018-051-		1111	No	NA	Metal				Rod	1		Complete	NHHC - Pallet 4 Medium Divided Tote 2	1					8 in		4.25 in		3 in						FALSE	4/19/2017	7/31/2015			28	NA	NA	NA	NA	NA	NA	CANNO N4	
1052	2018-051-		1111.01	Yes	NA	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 21	1															FALSE	11/2/2015							NA	NA	NA	NA	NA	CANNO N4
1053	2018-051-		1112	No	NA	Metal				Plate	1		Inventoried - Ready to Process	YB153						8 in		6.5 in		2 in						FALSE							NA	NA	NA	NA	NA	20F	
1054	2018-051-		1113	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	18WB12						5.5 in		2.5 in		2 in						FALSE							NA	NA	NA	NA	NA	20F	
1055	2018-051-		1114	No	NA	Organic	Wood			Concretion	1		Inventoried - Ready to Process	YB157						7 in		2.5 in		2 in						FALSE							NA	NA	NA	NA	NA	20F	
1056	2018-051-		1115	No	NA	Stone	Natural Stone			Stone	1		Inventoried - Ready to Process	STONE3						3 in		2.5 in		2 in						FALSE							NA	NA	NA	NA	NA	20F	
1057	2018-051-		1116	No	NA	Stone	Natural Stone			Stone	1		Inventoried - Ready to Process	STONE3						4.25 in		3.5 in		1.5 in						FALSE							NA	NA	NA	NA	NA	20F	
1058	2018-051-		1117	No	NA	Metal				Plate	1		Inventoried - Ready to Process	BARREL 30						10 in		8 in		2.5 in						FALSE								NA	NA	NA	NA	NA	22E
1059	2018-051-		1118	No	NA	Metal				Chain	1		Inventoried - Ready to Process	YB40						18 in		16 in		4.25 in						FALSE								NA	NA	NA	NA	NA	22E
1060	2018-051-		1119	No	NA	Stone	Natural Stone			Stone	1		Inventoried - Ready to Process	STONE3						4 in		2 in		1.5 in						FALSE								NA	NA	NA	NA	NA	22F
1061	2018-051-		1120	No	NA	Composite		Epoxy		Fastener	1		Complete - Cast	NHHC - Pallet 4 Medium Divided Tote 2						5 in		2 in		1.5 in						FALSE	6/19/2018	3/27/2015					NA	NA	NA	NA	NA	22F	
1062	2018-051-		1121	No	NA	Metal				Plate	1		Inventoried - Ready to Process	YB101						7 in		3.5 in		1 in						FALSE								NA	NA	NA	NA	NA	22F
1063	2018-051-		1122	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101						4 in		3.5 in		1.5 in						FALSE								NA	NA	NA	NA	NA	22F
1064	2018-051-		1123	No	NA	Metal				Strap	1		Inventoried - Ready to Process	BARREL 23						10 in		5 in		2 in						FALSE								NA	NA	NA	NA	NA	22F
1065	2018-051-		1124	No	NA	Metal				Hook and Chain Link	1		Inventoried - Ready to Process	KP						6 in		4 in		3 in						FALSE								NA	NA	NA	NA	NA	22F
1066	2018-051-		1125	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101						6.5 in		5 in		3 in						FALSE								NA	NA	NA	NA	NA	22F
1067	2018-051-		1126	No	NA	Metal				Rail	1		Inventoried - Ready to Process	KP						22.5 in		7 in		5 in						FALSE								NA	NA	NA	NA	NA	22F
1068	2018-051-		1127	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	KP						12 in		8 in		3 in						FALSE								NA	NA	NA	NA	NA	22D
1069	2018-051-		1128	No	NA	Stone	Natural Stone			Stone	1		Inventoried - Ready to Process	STONE3						4.5 in		3.75 in		3 in						FALSE								NA	NA	NA	NA	NA	22D (?)
1070	2018-051-		1129	No	NA	Metal				Strap	1		Did Not Survive	DNS						8.5 in		3 in		2 in						FALSE								NA	NA	NA	NA	NA	20C
1071	2018-051-		1130	No	NA	Metal				Plate	1		Artifact card only, artifact not at CRL							6.5 in		4.5 in		0.75 in						FALSE								NA	NA	NA	NA	NA	20C
1072	2018-051-		1131	No	NA	Metal				Plate	1		Inventoried - Ready to Process	KP						6 in		5.5 in		1 in						FALSE								NA	NA	NA	NA	NA	20C
1073	2018-051-		1132	No	NA	Metal				Fastener	1		Reburial	R						7 in		2.5 in		2 in						FALSE	8/10/2016	7/31/2015					NA	NA	NA	NA	NA	20C	
1074	2018-051-		1133	No	NA	Metal				Plate, folded	1		Inventoried - Ready to Process	KP						10 in		8 in		2 in						FALSE								NA	NA	NA	NA	NA	207
1075	2018-051-		1134	No	NA	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 10	PX1		Black				3 in		2 in		1 in					FALSE	10/30/2015							NA	NA	NA	NA	NA	20C
1076	2018-051-		1135	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	DNS BUCKET						3 in		2 in		1 in						FALSE								NA	NA	NA	NA	NA	21C
1077	2018-051-																																										

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square				
1120	2018-051-		1178	No	NA	Metal	Iron			Fastener	1		Complete	NHHC - Pallet 4 Large Divided Tote 1	1					11 in	2.5 in			3 in						FALSE	3/23/2016		7/31/2015			18	NA	NA	NA	NA	NA	NA	14B		
1121	2018-051-		1179	No	NA	Metal	Iron			Hook and Ring	1		Complete	NHHC - Pallet 6 Large Tote 26	1					7.5 in	3.5 in			3.5 in						FALSE	6/29/2016					21	NA	NA	NA	NA	NA	NA	14B		
1122	2018-051-		1180	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101						6 in	3 in			2 in						FALSE							NA	NA	NA	NA	NA	NA	14B		
1123	2018-051-		1181	No	NA	Metal	Copper or Copper Alloy			Triangular Brass Fragment	2		Complete	C2																FALSE	5/9/2018					35	NA	NA	NA	NA	NA	NA	14B		
1124	2018-051-		1182	No	NA	Architecture	Concrete			Concrete	1		Complete	NHHC - Pallet 4 Small Tote 8	1					4 in	3 in			1.5 in						FALSE	9/9/2015							NA	NA	NA	NA	NA	NA	14B	
1125	2018-051-		1183	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101						4 in	3.5 in			2 in						FALSE							NA	NA	NA	NA	NA	NA	14B		
1126	2018-051-		1184	No	NA	Organic	Wood			Thin wood fragment	1		Inventoried - Ready to Process	YB157						15 in	3.25 in			1.25 in						FALSE								NA	NA	NA	NA	NA	NA	14B	
1127	2018-051-		1185	No	NA	Architecture	Concrete			Concrete	1		Complete	NHHC - Pallet 4 Small Tote 9	1					9 in	7 in			4 in						FALSE	10/30/2015							NA	NA	NA	NA	NA	NA	14B	
1128	2018-051-		1186	No	NA	Architecture	Concrete			Concrete	1		Complete	NHHC - Pallet 4 Small Tote 14	1					9 in	6 in			2 in						FALSE	11/4/2015							NA	NA	NA	NA	NA	NA	14B	
1129	2018-051-		1187	No	NA	Architecture	Concrete			Concrete	1		Complete	NHHC - Pallet 4 Small Tote 8	1					6 in	3.5 in			2 in						FALSE	11/2/2015							NA	NA	NA	NA	NA	NA	14B	
1130	2018-051-		1188	No	NA	Architecture	Concrete			Concrete	1		Complete	NHHC - Pallet 4 Small Tote 11	1					6 in	4.5 in			3 in						FALSE	11/4/2015							NA	NA	NA	NA	NA	NA	14B	
1131	2018-051-		1189	No	NA	Architecture	Concrete			Concrete	1		Complete	NHHC - Pallet 4 Small Tote 18						9.5 in	6 in			2 in						FALSE	10/30/2015							NA	NA	NA	NA	NA	NA	14B	
1132	2018-051-		1190	No	NA	Architecture	Concrete			Concrete	1		Complete	NHHC - Pallet 4 Small Tote 3	1					8.5 in	7.5 in			2 in						FALSE	11/2/2015							NA	NA	NA	NA	NA	NA	14B	
1133	2018-051-		1191	No	NA	Composite	Wood	Concretion		Wood with Concretion	1		Inventoried - Ready to Process	YB						17 in	5 in			2 in						FALSE								NA	NA	NA	NA	NA	NA	NA	
1134	2018-051-		1192	No	NA	Metal	Copper or Copper Alloy			Brass roller handspike	1		Inventoried - Ready to Process	BAY3						23 in	10 in			6 in						FALSE								NA	NA	NA	NA	NA	NA	13B	
1135	2018-051-		1193	No	NA	Architecture	Concrete			Concrete	1		Complete	NHHC - Pallet 4 Small Tote 14	1					7 in	7 in			2 in						FALSE	11/2/2015							NA	NA	NA	NA	NA	NA	13B	
1136	2018-051-		1194	No	NA	Architecture	Concrete			Concrete	1		Complete	NHHC - Pallet 4 Small Tote 13	1		Red			4.5 in	3.5 in			2.25 in						FALSE	11/2/2015							NA	NA	NA	NA	NA	NA	13B	
1137	2018-051-		1195	No	NA	Architecture	Concrete			Concrete	1		Complete	NHHC - Pallet 4 Small Tote 15	1					7.5 in	4 in			2 in						FALSE	11/2/2015							NA	NA	NA	NA	NA	NA	13B	
1138	2018-051-		1196	No	NA	Architecture	Concrete			Concrete	1		Complete	NHHC - Pallet 4 Small Tote 13	1					4.25 in	2.25 in			2 in						FALSE	9/9/2015							NA	NA	NA	NA	NA	NA	13B	
1139	2018-051-		1197	No	NA	Architecture	Concrete			Concrete	1		Complete	NHHC - Pallet 4 Small Tote 18	1					2.5 in	2 in			2 in						FALSE	9/9/2015							NA	NA	NA	NA	NA	NA	13B	
1140	2018-051-		1198	No	NA	Architecture	Concrete			Concrete	1		Complete	NHHC - Pallet 4 Small Tote 13	1					3.5 in	1.5 in			3.5 in						FALSE	11/2/2015							NA	NA	NA	NA	NA	NA	13B	
1141	2018-051-		1199	No	NA	Architecture	Concrete			Concrete	1		Complete	NHHC - Pallet 4 Small Tote 18	1					3 in	2 in			1.5 in						FALSE	9/9/2015							NA	NA	NA	NA	NA	NA	13B	
1142	2018-051-		1200	No	NA	Architecture	Concrete			Concrete	1		Complete	NHHC - Pallet 4 Small Tote 2	1					6.75 in	3 in			1.75 in						FALSE	11/4/2015							NA	NA	NA	NA	NA	NA	13B	
1143	2018-051-		1201	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB153						5.5 in	3 in			2.5 in						FALSE								NA	NA	NA	NA	NA	NA	13B	
1144	2018-051-		1202	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101						3.5 in	2.5 in			2 in						FALSE								NA	NA	NA	NA	NA	NA	13B	
1145	2018-051-		1203	No	NA	Metal	Iron			Fastener	1		Inventoried - Ready to Process							10.5 in	2 in			2 in						FALSE								NA	NA	NA	NA	NA	NA	13B	
1146	2018-051-		1204	No	NA	Metal	Iron			Fastener	1		Reburial	R						7 in	2 in			2 in						FALSE								NA	NA	NA	NA	NA	NA	13B	
1147	2018-051-		1205	No	NA	Metal	Iron			Spike	1		Reburial	R						7 in	2.5 in			2 in						FALSE	8/10/2016		7/31/2015					NA	NA	NA	NA	NA	NA	13B	
1148	2018-051-		1206	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101						3.5 in	1.5 in			1.5 in						FALSE								NA	NA	NA	NA	NA	NA	13B	
1149	2018-051-		1207	No	NA	Architecture	Concrete			Concrete	1		Complete	NHHC - Pallet 4 Small Tote 1	1					4 in	2.5 in			1.25 in						FALSE	11/2/2015							NA	NA	NA	NA	NA	NA	13B	
1150	2018-051-		1208	No	NA	Organic	Wood			Wood fragment	1		Inventoried - Ready to Process	YB48						6.5 in	3.25 in			1.25 in						FALSE								NA	NA	NA	NA	NA	NA	13B	
1151	2018-051-		1209	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101						4 in	2.5 in			1.5 in						FALSE								NA	NA	NA	NA	NA	NA	13B	
1152	2018-051-		1210	No	NA	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 11	PX1		Black			4 in	3.5 in			0.5 in						FALSE	11/4/2015							NA	NA	NA	NA	NA	NA	13B	
1153	2018-051-		1211	Yes	NA	Ceramic	Stoneware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 21	1		Brown			2.5 in	2.25 in			0.25 in						FALSE	10/30/2015							NA	NA	NA	NA	NA	NA	13B	
1154	2018-051-		1212	No	NA	Metal	Iron			Fastener	1		Inventoried - Ready to Process	YB39						35 in	3 in			2 in						FALSE								NA	NA	NA	NA	NA	NA	9D	
1155	2018-051-		1213	No	NA	Metal	Iron			Fastener	1		Reburial	Reburial Drum						22 in	2 in			1.5 in						FALSE	5/31/2019							NA	NA	NA	NA	NA	NA	9D	
1156	2018-051-		1214	No	NA	Metal	Iron			Fastener	1		Complete	NHHC - Pallet 1 Large Tote 5	1					24 in	2 in			2.5 in						FALSE	11/21/2017					35	NA	NA	NA	NA	NA	NA	9D		
1157	2018-051-		1215	No	NA	Metal	Iron			Fastener	1		Inventoried - Ready to Process	KP						13 in	3.5 in			6 in						FALSE								NA	NA	NA	NA	NA	NA	9D	
1158	2018-051-		1216	No	NA	Metal	Iron			Plate	1		Complete	NHHC - Pallet 1 Medium Divided Tote 3	1					3.3 in	3 in			0.3 in						FALSE	7/3/2017					28	NA	NA	NA	NA	NA	NA	9D		
1159	2018-051-		1217	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	KP						8.5 in	2.5 in			2 in						FALSE								NA	NA	NA	NA	NA	NA	9D	
1160	2018-051-		1218	No	NA	Architecture	Concrete			Concrete	1		Complete	NHHC - Pallet 4 Small Tote 2	1					6 in	6 in			2 in						FALSE	11/2/2015								NA	NA	NA	NA	NA	NA	9D
1161	2018-051-		1219	No	NA	Composite	Iron	Wood		Fastener through wood?	1		Inventoried - Ready to Process	YB48						8.75 in	8.75 in			2 in						FALSE								NA	NA	NA	NA	NA	NA	9D	
1162	2018-051-		1220	No	NA	Metal	Iron			Partial Leg Iron	1		Complete	NHHC - Pallet 5 Large Tote 23	1					8 in	5 in			1.5 in						FALSE	3/20/2018		6/17/2015			32	NA	NA	NA	NA	NA	NA	9D		
1163	2018-051-		1221	No	NA	Metal	Iron			Fastener	1		Reburial	R						11.5 in	2 in			2 in						FALSE	8/10/2016		6/16/2015					NA	NA	NA	NA	NA	NA	9D	
1164	2018-051-		1222	No	NA	Metal	Iron			Fastener	1		Complete	NHHC - Pallet 4 Large Divided Tote 1	1					10 in	3 in			2 in						FALSE	7/6/2016		6/16/2015				18	NA	NA	NA	NA	NA	NA	9D	

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square		
1216	2018-051-		1272	No	NA	Architecture	Concrete			Concrete	1		Complete	NHHC - Pallet 4 Small Tote 13	1					3in	2.5in	2in	1.5in	1.5in					FALSE	9/9/2015					NA	NA	NA	NA	NA	NA	16L		
1217	2018-051-		1273	No	NA	Metal	Iron			Fastener	1		Artifact card only, artifact not at CRL							19.5in	2in		1.5in						FALSE						NA	NA	NA	NA	NA	NA	14M		
1218	2018-051-		1274	No	NA	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 10	PX1					5in	2.5in	0.5in	0.5in						FALSE	10/30/2015					NA	NA	NA	NA	NA	NA	14M		
1219	2018-051-		1275	No	NA	Metal	Iron			Fastener	1		Inventoryied - Ready to Process	YB153						38in	3in	2in	2in						FALSE						NA	NA	NA	NA	NA	NA	15K		
1220	2018-051-		1276	No	NA	Metal	Iron			Chain	1		Inventoryied - Ready to Process	YB36						25.5in	10in	5in	5in						FALSE						NA	NA	NA	NA	NA	NA	15K		
1221	2018-051-		1277	No	NA	Metal	Iron			Chain	1		Did Not Survive	DNS						14.5in	5.5in	4in	4in						FALSE	3/9/2016					NA	NA	NA	NA	NA	NA	15K		
1222	2018-051-		1278	No	NA	Metal	Iron			Chain	1		Inventoryied - Ready to Process	T1						10in	5in	4in	4in						FALSE						NA	NA	NA	NA	NA	NA	15K		
1223	2018-051-		1279	No	NA	Architecture	Brick			Brick	1		Complete	NHHC - Pallet 4 Small Tote 16	1		Red			9in	4in	3in	3in						FALSE	9/10/2015					NA	NA	NA	NA	NA	NA	15K		
1224	2018-051-		1280	No	NA	Metal	Iron			Fastener with nut and threading	1		Complete	NHHC - Pallet 5 Large Tote 23	1					14in	3.5in	2.5in	2.5in						FALSE	6/29/2016	7/31/2015		18	NA	NA	NA	NA	NA	NA	NA	NA	NA	15K
1225	2018-051-		1281	No	NA	Metal	Iron			Fastener	1		Complete	NHHC - Pallet 4 Large Divided Tote 1	1					11.5in	2in	2in	2in						FALSE	7/6/2016	7/31/2015		18	NA	NA	NA	NA	NA	NA	NA	NA	NA	15K
1226	2018-051-		1282	No	NA	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	YB101						5.5in	4in	2in	2in						FALSE						NA	NA	NA	NA	NA	NA	15K		
1227	2018-051-		1283	No	NA	Architecture	Brick			Brick	1		Complete	NHHC - Pallet 4 Small Tote 4	1					3in	2in	2in	2in						FALSE	8/25/2015					NA	NA	NA	NA	NA	NA	15K		
1228	2018-051-		1284	No	NA	Concretion	Concretion			Concretion Mold/Impression	1		Inventoryied - Ready to Process	DNS BUCKET						6.5in	3.5in	3in	3in						FALSE						NA	NA	NA	NA	NA	NA	15K		
1229	2018-051-		1285	No	NA	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 10	PX1		Black			3in	2.5in	0.5in	0.5in						FALSE	10/30/2015					NA	NA	NA	NA	NA	NA	15L		
1230	2018-051-		1286	No	NA	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	BARREL 31						3in	4.5in	2.5in	2.5in						FALSE						NA	NA	NA	NA	NA	NA	15L		
1231	2018-051-		1287	No	NA	Organic	Coal/Charcoal			Coal	1		Complete	C7						2.5in	2.5in	1.5in	1.5in						FALSE	4/24/2018					NA	NA	NA	NA	NA	NA	15L		
1232	2018-051-		1288	No	NA	Metal	Iron			Iron bar, ends bent	1		Inventoryied - Ready to Process	ST						35in	4in	1.5in	1.5in						FALSE						NA	NA	NA	NA	NA	NA	8C		
1233	2018-051-		1289	No	NA	Metal	Iron			Hook And Partial Strap For Double Sheave	1		Complete	NHHC - Pallet 2 Large Tote 11	1					17in	11.5in	4.5in	4.5in						FALSE	11/28/2016				18	NA	NA	NA	NA	NA	NA	8C		
1234	2018-051-		1290	No	NA	Metal	Iron			Fastener	1		Reburial	R						14.5in	4in	2in	2in						FALSE	8/10/2016	7/31/2015				NA	NA	NA	NA	NA	NA	8C		
1235	2018-051-		1291	No	NA	Metal	Copper or Copper Alloy			Powder Lid	1		Complete	NHHC - Pallet 2 Large Tote 8	1					10in	1in	1in	1in						FALSE	11/21/2016				28	NA	NA	NA	NA	NA	NA	8C		
1236	2018-051-		1292	No	NA	Metal	Iron			Strap/plate	1		Inventoryied - Ready to Process	YB101						6.5in	2in	0.5in	0.5in						FALSE						NA	NA	NA	NA	NA	NA	8C		
1237	2018-051-		1293	No	NA	Metal	Iron			Fastener	1		Reburial	R						7.5in	5.5in	1in	1in						FALSE	8/10/2016	7/31/2015				NA	NA	NA	NA	NA	NA	8C		
1238	2018-051-		1294	No	NA	Metal	Iron			Strap	1		Inventoryied - Ready to Process	KP						11.75in	2in	1in	1in						FALSE						NA	NA	NA	NA	NA	NA	8C		
1239	2018-051-		1295	No	NA	Metal	Iron			Fastener	1		Did Not Survive	DNS						8in	2in	1.5in	1.5in						FALSE	12/17/2015	7/31/2015				NA	NA	NA	NA	NA	NA	8C		
1240	2018-051-		1296	No	NA	Metal	Iron			Fastener	1		Reburial	R						6.5in	1in	0.5in	0.5in						FALSE	8/10/2016	7/31/2015				NA	NA	NA	NA	NA	NA	8C		
1241	2018-051-		1297	No	NA	Metal	Iron			Partial hook	1		Complete	NHHC - Pallet 5 Large Tote 23	1					5in	1.25in	4in	4in						FALSE	3/23/2016	7/31/2015		18	NA	NA	NA	NA	NA	NA	NA	NA	NA	8C
1242	2018-051-		1298	No	NA	Stone	Natural Stone			Stone	1		Inventoryied - Ready to Process	STONE3						3in	2.5in	1.5in	1.5in						FALSE						NA	NA	NA	NA	NA	NA	8C		
1243	2018-051-		1299	No	NA	Organic	Wood			Tool Handle	1	Fragments of a single artifact	Complete	C3 - Photo				77.8g		4.24in	1.642in	1.497in	1.497in						FALSE						NA	NA	NA	NA	NA	NA	8C		
1244	2018-051-		1300	No	NA	Metal	Iron			Fastener	1		Reburial	R						11in	1.25in	1.25in	1.25in						FALSE	8/10/2016	7/31/2015				NA	NA	NA	NA	NA	NA	8C		
1245	2018-051-		1301	No	NA	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	KP						7in	5in	3in	3in						FALSE						NA	NA	NA	NA	NA	NA	8C		
1246	2018-051-		1302	No	NA	Metal	Iron			Fastener shaft (spike)	1		Complete	NHHC - Pallet 4 Large Divided Tote 1	1					11in	1.25in	2in	2in						FALSE	10/18/2018	7/31/2015		14	NA	NA	NA	NA	NA	NA	NA	NA	NA	8C
1247	2018-051-		1303	No	NA	Metal	Iron			Strap with fastener hole	1		Inventoryied - Ready to Process	KP						9.75in	2in	1in	1in						FALSE						NA	NA	NA	NA	NA	NA	8C		
1248	2018-051-		1304	No	NA	Metal	Iron			Leg Shackle, no bar	1		Inventoryied - Ready to Process	YB101						4in	4.5in	1in	1in						FALSE						NA	NA	NA	NA	NA	NA	8C		
1249	2018-051-		1305	No	NA	Organic	Wood			Wedge	1		Inventoryied - Ready to Process	YB157						2.5in	3in	1in	1in						FALSE						NA	NA	NA	NA	NA	NA	8C		
1250	2018-051-		1306	No	NA	Metal	Iron			Fastener, round	1		Complete	NHHC - Pallet 4 Medium Divided Tote 2	1					5.5in	2.25in	2.5in	2.5in						FALSE	3/23/2016	7/31/2015		18	NA	NA	NA	NA	NA	NA	NA	NA	NA	8C
1251	2018-051-		1307	No	NA	Metal	Iron			Fastener	1		Reburial	R						8in	3in	2in	2in						FALSE	8/10/2016	7/31/2015				NA	NA	NA	NA	NA	NA	8C		
1252	2018-051-		1308	No	NA	Metal	Iron			Fastener	1		Did Not Survive	DNS						7in	1in	1in	1in						FALSE						NA	NA	NA	NA	NA	NA	8C		
1253	2018-051-		1309	No	NA	Metal	Iron			Plate	1		Inventoryied - Ready to Process	YB101						6in	4in	1in	1in						FALSE						NA	NA	NA	NA	NA	NA	8C		
1254	2018-051-		1310	No	NA	Composite	Iron	Wood		Concretion	1		Inventoryied - Ready to Process	YB101						4.5in	2.5in	1.5in	1.5in						FALSE						NA	NA	NA	NA	NA	NA	8C		
1255	2018-051-		1311	No	NA	Metal	Iron			Strap with protrusions	1		Inventoryied - Ready to Process	YB101						11.5in	5in	2in	2in						FALSE						NA	NA	NA	NA	NA	NA	8C		
1256	2018-051-		1312	No	NA	Metal	Iron			Strap	1		Did Not Survive	DNS						8.25in	1in	0.5in	0.5in						FALSE	12/17/2015	7/30/2015				NA	NA	NA	NA	NA	NA	8C		
1257	2018-051-		1313	No	NA	Metal	Iron			Fastener with threading and square nut	1		Complete	NHHC - Pallet 4 Large Divided Tote 1	1					9in	2.5in	2in	2in						FALSE	4/22/2016	7/30/2015		35	NA	NA	NA	NA	NA	NA	NA	NA	NA	8C
1258	2018-051-		1314	No	NA	Metal	Iron			Spike	1		Complete	NHHC - Pallet 4 Medium Divided Tote 2	1					6.5in	1.5in	1in	1in						FALSE	6/29/2016	7/30/2015		18	NA	NA	NA	NA	NA	NA	NA	NA	NA	8C
1259	2018-051-		1315	No	NA	Metal	Iron			Fastener	1		Reburial	R						11.5in	1in	1.25in	1.25in						FALSE	8/10/2016	7/31/2015				NA	NA	NA	NA	NA	NA	8C		
1260	2018-051-		1316	No	NA	Metal	Iron			Fastener	1		Reburial	R						8in	2in	1.75in	1.75in						FALSE	8/10/2016	7/31/2015				NA	NA	NA	NA	NA	NA	8C		
1261	2018-051-		1317	No	NA	Metal	Iron			Fastener	1		Inventoryied - Ready to Process	KP						16.5in	1.5in	1.25in	1.25in						FALSE						NA	NA	NA	NA					

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square
1310	2018-051-		1364	No	NA	Metal	Iron			Spike	1		Inventoried - Ready to Process							8.5in	1.25in	1.25in	1.25in	1.25in					FALSE						NA	NA	NA	NA	NA	NA	9L
1311	2018-051-		1365	No	NA	Metal	Iron			Fastener	1		Reburial	R						5.5in	1.5in	1.5in	1.5in						FALSE	8/10/2016	7/30/2015				NA	NA	NA	NA	NA	NA	9L
1312	2018-051-		1366	No	NA	Metal	Pewter			Pewter Handle?	1		Complete	C4						3.5in	5.5in	0.75in	0.75in						FALSE	5/2/2018	6/16/2015		35	NA	NA	NA	NA	NA	NA	NA	9L
1313	2018-051-		1367	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101						4in	3.5in	2in	2in						FALSE						NA	NA	NA	NA	NA	NA	9L
1314	2018-051-		1368	No	NA	Composite	Brass	Iron		Powder canister base and iron plate	2		Inventoried - Ready to Process	YB101						16.25in	16.25in	0.75in	0.75in						FALSE						NA	NA	NA	NA	NA	NA	9L
1315	2018-051-		1369	No	NA	Metal	Iron			Fastener (Spike)	1		Did Not Survive	DNS						6.5in	1in	1in	1in						FALSE	7/30/2015					NA	NA	NA	NA	NA	NA	9L
1316	2018-051-		1370	No	NA	Metal	Iron			Fastener	1		Inventoried - Ready to Process	STEEL VAT						17in	3.5in	1in	1in						FALSE						NA	NA	NA	NA	NA	NA	9L
1317	2018-051-		1371	No	NA	Metal	Iron			Pipe	1		Inventoried - Ready to Process	YB141						17in	5in	3in	3in						FALSE						NA	NA	NA	NA	NA	NA	15A
1318	2018-051-		1372	No	NA	Metal	Iron			Fastener	1		Inventoried - Ready to Process	YB101						21in	6in	4in	4in						FALSE						NA	NA	NA	NA	NA	NA	15A
1319	2018-051-		1373	No	NA	Metal	Iron			Plate	1		Inventoried - Ready to Process	YB42						15in	7in	3.5in	3.5in						FALSE						NA	NA	NA	NA	NA	NA	15A
1320	2018-051-		1374	No	NA	Organic	Wood			Wood Fragment	1		Complete - Needs Final Images	Photo Shelf				162.2g		161.525in	2.16in	0.97in	0.97in						FALSE						NA	NA	NA	NA	NA	NA	15A
1321	2018-051-		1375	No	NA	Organic	Wood			Wood fragment	1		Inventoried - Ready to Process	YB157						9.75in	2in	1.5in	1.5in						FALSE						NA	NA	NA	NA	NA	NA	15A
1322	2018-051-		1376	No	NA	Metal	Iron			Curved iron bar (I-beam?)	1		Inventoried - Ready to Process	P1						26.5in	3in	2.25in	2.25in						FALSE						NA	NA	NA	NA	NA	NA	11B
1323	2018-051-		1377	No	NA	Metal	Iron			Fastener	1		Inventoried - Ready to Process	YB158						15in	5in	3in	3in						FALSE						NA	NA	NA	NA	NA	NA	11B
1324	2018-051-		1378	No	NA	Organic	Wood			Wood fragment	1		Inventoried - Ready to Process	YB157						12in	2.25in	1in	1in						FALSE						NA	NA	NA	NA	NA	NA	11B
1325	2018-051-		1379	No	NA	Metal	Iron			Hook	1		Complete	NIHC - Pallet 5 Large Tote 23	1					6.5in	8in	2in	2in						FALSE	5/12/2016	6/16/2015		14	NA	NA	NA	NA	NA	NA	NA	11B
1326	2018-051-		1380	No	NA	Metal	Copper or Copper Alloy			Powder canister lid/base corner	1		Complete	BOX 5	2					4.75in	2in	0.5in	0.5in						FALSE	5/9/2018			35	NA	NA	NA	NA	NA	NA	NA	11B
1327	2018-051-		1381	No	NA	Organic	Wood			Wood fragment	1		Inventoried - Ready to Process	YB157						7in	3.5in	1.5in	1.5in						FALSE						NA	NA	NA	NA	NA	NA	11B
1328	2018-051-		1382	No	NA	Stone	Unidentified			Stone	1		Inventoried - Ready to Process	STONE3						3in	3.5in								FALSE						NA	NA	NA	NA	NA	NA	11B
1329	2018-051-		1383	No	NA	Glass	Unidentified			Knob or Decanter Top?	1		Complete	NIHC - Pallet 6 Medium Divided Tote 15	1		Clear			2in	1in								FALSE	1/3/2019					NA	NA	NA	NA	NA	NA	11B
1330	2018-051-		1384	No	NA	Metal	Iron			Hub	1		Complete	NIHC	1					14.5in	2.5in								FALSE	3/6/2018				18	NA	NA	NA	NA	NA	NA	8E
1331	2018-051-		1385	No	NA	Metal	Iron			Capsquare?	1		Inventoried - Ready to Process	ST						20.5in	6in	1.5in	1.5in						FALSE						NA	NA	NA	NA	NA	NA	8E
1332	2018-051-		1386	No	NA	Metal	Iron			Fastener with washer	1		Inventoried - Ready to Process	YB158						20.5in	4in	4.5in	4.5in						FALSE						NA	NA	NA	NA	NA	NA	8E
1333	2018-051-		1387	No	NA	Concretion	Concretion			Broken Plate	1		Inventoried - Ready to Process	YB153						11in	4in	3.5in	3.5in						FALSE						NA	NA	NA	NA	NA	NA	8E
1334	2018-051-		1388	No	NA	Metal	Iron			Fastener	1		Reburial	R						9in	3in	2in	2in						FALSE	8/10/2016	7/30/2015				NA	NA	NA	NA	NA	NA	8E
1335	2018-051-		1389	No	NA	Composite	Iron	Wood		2 fasteners through wood	1		Inventoried - Ready to Process	YB101						9in	5in	5in	5in						FALSE						NA	NA	NA	NA	NA	NA	8E
1336	2018-051-		1390	No	NA	Metal	Iron			Fastener Or Staple	1		Complete	NIHC - Pallet 5 Large Tote 23	1					10.5in	5in	1.5in	1.5in						FALSE	4/22/2016	7/30/2015		35	NA	NA	NA	NA	NA	NA	NA	8E
1337	2018-051-		1391	No	NA	Metal	Iron			Fastener With Eye	1		Complete	NIHC - Pallet 4 Large Divided Tote 1	1					9in	3in	2in	2in						FALSE	4/22/2016	7/30/2015		35	NA	NA	NA	NA	NA	NA	NA	8E
1338	2018-051-		1392	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101						5in	3.5in	2in	2in						FALSE						NA	NA	NA	NA	NA	NA	8E
1339	2018-051-		1393	No	NA	Metal	Iron			Fastener (2 halves)	2		Inventoried - Ready to Process	YB158						9in	7in	2.5in	2.5in						FALSE						NA	NA	NA	NA	NA	NA	8E
1340	2018-051-		1394	No	NA	Concretion	Concretion			Fastener	2		Inventoried - Ready to Process	?						9in	1.5in	2in	2in						FALSE						NA	NA	NA	NA	NA	NA	8E
1341	2018-051-		1395	No	NA	Organic	Wood			Wood fragment	1		Inventoried - Ready to Process	YB157						7.5in	5in	2in	2in						FALSE						NA	NA	NA	NA	NA	NA	8E
1342	2018-051-		1396	No	NA	Metal	Iron			Bar/Fastener	1		Inventoried - Ready to Process	KP29						50in	4.5in	4in	4in						FALSE						NA	NA	NA	NA	NA	NA	7D
1343	2018-051-		1397	No	NA	Metal	Iron			Pipe	1		Complete	NIHC - Pallet 6 Large Tote 27	1					8.25in	4in								FALSE	7/27/2017	6/17/2015		25	NA	NA	NA	NA	NA	NA	NA	7D
1344	2018-051-		1398	No	NA	Metal	Iron			Fastener	1		Complete	NIHC - Pallet 5 Medium Tote 4	1					21.5in	2.5in	2.5in	2.5in						FALSE	11/28/2017			25	NA	NA	NA	NA	NA	NA	NA	7D
1345	2018-051-		1399	No	NA	Metal	Iron			Fastener	1		Inventoried - Ready to Process	YB158						14in	5in	5in	5in						FALSE						NA	NA	NA	NA	NA	NA	7D
1346	2018-051-		1400	No	NA	Metal	Iron			Damper Valve Fragment	1		Complete	C1				0.79kg		8.25in	2.53in	3.65in	3.65in						FALSE	2/28/2019			32	NA	NA	NA	NA	NA	NA	NA	7D
1347	2018-051-		1401	No	NA	Metal	Iron			Fastener	1		Inventoried - Ready to Process	KP						12.5in	1.5in	1.5in	1.5in						FALSE						NA	NA	NA	NA	NA	NA	7D
1348	2018-051-		1402	No	NA	Metal	Iron			Fastener	1		Inventoried - Ready to Process	STEEL VAT						15.5in	4.5in	4in	4in						FALSE						NA	NA	NA	NA	NA	NA	7D
1349	2018-051-		1403	No	NA	Concretion	Concretion			Concreted Chain	1		Inventoried - Ready to Process	KP						6in	6.5in	4in	4in						FALSE						NA	NA	NA	NA	NA	NA	7D
1350	2018-051-		1404	No	NA	Metal	Iron			Strap	2		Complete	NIHC - Pallet 2 Large Tote 17	1					12in	2.25in	0.5in	0.5in						FALSE	11/15/2017			21	NA	NA	NA	NA	NA	NA	NA	7D
1351	2018-051-		1405	No	NA	Metal	Iron			Fastener	1		Inventoried - Ready to Process	STEEL VAT						8in	3.5in	2.5in	2.5in						FALSE						NA	NA	NA	NA	NA	NA	7D
1352	2018-051-		1406	No	NA	Metal	Iron			Fastener	1		Reburial	R						10in	2in	2in	2in						FALSE	8/10/2016	6/16/2015				NA	NA	NA	NA	NA	NA	7D
1353	2018-051-		1407	No	NA	Concretion	Concretion			Degraded Metal Chunk	1		Inventoried - Ready to Process	DNS BUCKET						5in	2.5in	1.5in	1.5in						FALSE						NA	NA	NA	NA	NA	NA	7D
1354	2018-051-		1408	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	DNS BUCKET						7in	4in	1.5in	1.5in						FALSE						NA	NA	NA	NA	NA	NA	7D
1355	2018-051-		1409	No	NA	Metal	Iron			Plate	1		Inventoried - Ready to Process	YB101						6.5in	1.5in	0.25in	0.25in						FALSE						NA	NA	NA	NA	NA	NA	7D
1356	2018-051-		1410	No	NA	Metal	Iron			Fastener	1		Did Not Survive	DNS						5in	2.5in	2in	2in						FALSE	12/17/2015	6/16/2015										

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square
1402	2018-051-		1456	No	NA	Composite	Iron	Epoxy		Fastener	1		Complete - Cast	PROBLEM BOX							7 in		4 in		3 in					FALSE	8/13/2015		7/29/2015			NA	NA	NA	NA	NA	21B
1403	2018-051-		1457	No	NA	Metal	Iron			Fastener	1		Did Not Survive	DNS							8 in		2 in		2.5 in				FALSE	12/17/2015		7/31/2015			NA	NA	NA	NA	NA	21B	
1404	2018-051-		1458	No	NA	Metal	Iron			Plate	1		Inventoried - Ready to Process	YB101															FALSE					NA	NA	NA	NA	NA	22B		
1405	2018-051-		1459	No	NA	Metal	Iron			Chain	1		Inventoried - Ready to Process	KP							17 in		4.5 in		4.5 in				FALSE					NA	NA	NA	NA	NA	22B		
1406	2018-051-		1460	No	NA	Composite	Iron	Epoxy		Fastener	1		Complete - Cast	PROBLEM BOX							2 in		3 in		2 in				FALSE	10/19/2018					NA	NA	NA	NA	NA	22B	
1407	2018-051-		1461	No	NA	Metal	Iron			Plate	1		Inventoried - Ready to Process	YB101							4.5 in		6 in		1 in				FALSE					NA	NA	NA	NA	NA	22B		
1408	2018-051-		1462	No	NA	Metal	Iron			Plate	1		Inventoried - Ready to Process	KP							18 in		9 in		2 in				FALSE					NA	NA	NA	NA	NA	22B		
1409	2018-051-		1463	No	NA	Metal	Iron			Plate	1		Inventoried - Ready to Process	KP							16 in		10 in		3 in				FALSE					NA	NA	NA	NA	NA	22B		
1410	2018-051-		1464	No	NA	Organic	Wood			Wood	1		Inventoried - Ready to Process	YB157							7.5 in		3.5 in		2.5 in				FALSE					NA	NA	NA	NA	NA	12A		
1411	2018-051-		1465	No	NA	Metal	Iron			Spike	1		Complete	NHHC - Pallet 4 Medium Divided Tote 2	1						7.5 in								FALSE	3/23/2016		7/31/2015			18	NA	NA	NA	NA	NA	12A
1412	2018-051-		1466	No	NA	Composite	Iron	Other		Strap	1		Reburial	R							6 in		2.5 in		0.5 in				FALSE	8/10/2016		7/31/2015			NA	NA	NA	NA	NA	12A	
1413	2018-051-		1467	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101							7 in		4 in		3 in				FALSE					NA	NA	NA	NA	NA	12A		
1414	2018-051-		1468	No	NA	Metal	Iron			Block And Hook	1		Inventoried - Ready to Process								9.5 in		4 in						FALSE					NA	NA	NA	NA	NA	12A		
1415	2018-051-		1469	No	NA	Metal	Iron			Strap	1		Inventoried - Ready to Process	BARREL 23							12 in		2.5 in		0.75 in				FALSE					NA	NA	NA	NA	NA	12A		
1416	2018-051-		1470	No	NA	Concretion	Concretion			2 Concreted Fasteners	1		Inventoried - Ready to Process	YB101							17 in		11 in						FALSE					NA	NA	NA	NA	NA	12A		
1417	2018-051-		1471	No	NA	Composite	Iron	Wood		Wood fragment with iron spikes	1		Inventoried - Ready to Process	YB44							17 in		7 in		7 in				FALSE					NA	NA	NA	NA	NA	12A		
1418	2018-051-		1472	No	NA	Organic	Bone			Vertebra	1		Complete	C5							3.25 in		3.5 in		3.5 in				FALSE	6/20/2018					NA	NA	NA	NA	NA	14K	
1419	2018-051-		1473	No	NA	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 11	PX1		Black				3 in		2.5 in						FALSE	10/30/2015					NA	NA	NA	NA	NA	14K	
1420	2018-051-		1474	No	NA	Composite	Iron	Epoxy		Spike	1		Complete - Cast	PROBLEM BOX							6.5 in								FALSE					NA	NA	NA	NA	NA	14K		
1421	2018-051-		1475	No	NA	Architecture	Concrete			Concrete	2		Complete	NHHC - Pallet 4 Small Tote 18	1													FALSE	11/2/2015					NA	NA	NA	NA	NA	14K		
1422	2018-051-		1476	No	NA	Stone	Unidentified			Stone	3		Inventoried - Ready to Process	STONE3															FALSE					NA	NA	NA	NA	NA	14K		
1423	2018-051-		1477	No	NA	Metal	Iron			Shackle (rigging)	3		Complete	NHHC - Pallet 6 Large Tote 27	1						8.5 in		6 in		4 in				FALSE	4/22/2016		7/31/2015			35	NA	NA	NA	NA	NA	14K
1424	2018-051-		1478	No	NA	Metal	Iron			Chain	1		Reburial	R							8 in		7 in		5 in				FALSE	8/10/2016		7/31/2015			NA	NA	NA	NA	NA	14K	
1425	2018-051-		1479	No	NA	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 6	PX1		Black				5 in		4.5 in						FALSE	11/4/2015					NA	NA	NA	NA	NA	14K	
1426	2018-051-		1480	No	NA	Metal	Iron			Fragment of a Grapeshot Stand	1		Complete	NHHC - Pallet 1 Medium Divided Tote 3	1						5 in		4 in						FALSE	5/12/2016					14	NA	NA	NA	NA	NA	14L
1427	2018-051-		1480.01	No	NA	Recent/Synthetic	Epoxy	SILICONE RUBBER		Mold And Cast Of 1480	1		Complete - Cast	NHHC - Pallet 1 Medium Divided Tote 3	1													FALSE	9/10/2015		10/24/2018			NA	NA	NA	NA	NA	NA		
1428	2018-051-		1481	No	NA	Composite	Iron	Epoxy		Square Washer	1		Complete - Cast	PROBLEM BOX							6 in		5 in		2.5 in				FALSE	8/7/2015		10/14/2018			NA	NA	NA	NA	NA	14L	
1429	2018-051-		1482	No	NA	Metal	Iron			Shackle	1		Inventoried - Ready to Process	ST							8 in		6 in		4.5 in				FALSE					NA	NA	NA	NA	NA	14L		
1430	2018-051-		1483	No	NA	Metal	Iron			Spike	2		Reburial	R							10 in								FALSE	8/10/2016		7/31/2015			NA	NA	NA	NA	NA	15J	
1431	2018-051-		1484	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	KP							8.5 in		4 in		3 in				FALSE					NA	NA	NA	NA	NA	15J		
1432	2018-051-		1485	No	NA	Concretion	Concretion			Concretion (fastener through wood?)	1		Inventoried - Ready to Process	YB101							13 in		9 in		4 in				FALSE					NA	NA	NA	NA	NA	15J		
1433	2018-051-		1486	No	NA	Metal	Iron			Spike	1		Reburial	R							5 in								FALSE	8/10/2016		6/16/2015			NA	NA	NA	NA	NA	13A	
1434	2018-051-		1487	No	NA	Concretion	Concretion			Concretion	1		Did Not Survive	DNS							3.5 in		1.5 in		1.5 in				FALSE	8/26/2015		7/31/2015			NA	NA	NA	NA	NA	13A	
1435	2018-051-		1488	No	NA	Architecture	Concrete			Concrete	1		Complete	NHHC - Pallet 4 Small Tote 1	1						4.5 in		3.5 in		2 in				FALSE	11/2/2015		7/31/2015			NA	NA	NA	NA	NA	13A	
1436	2018-051-		1489	No	NA	Metal	Copper or Copper Alloy			Cap Square	1		Complete	NHHC - Pallet 5 Medium Tote 4	1						13 in		9 in						FALSE	5/15/2018					21	NA	NA	NA	NA	NA	13A
1437	2018-051-		1490	No	NA	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB101							6.5 in		3 in		3.5 in				FALSE					NA	NA	NA	NA	NA	16A		
1438	2018-051-		1491	No	NA	Metal	Iron			Spike	1		Inventoried - Ready to Process	YB101							13 in								FALSE					NA	NA	NA	NA	NA	16A		
1439	2018-051-		1492	No	NA	Metal	Iron			Curved strap?	1		Inventoried - Ready to Process	KP							10 in		4 in						FALSE					NA	NA	NA	NA	NA	16A		
1440	2018-051-		1493	No	NA	Metal	Iron			Strap/Track	1		Inventoried - Ready to Process	YB139							17.5 in		2.5 in		1 in				FALSE					NA	NA	NA	NA	NA	16A		
1441	2018-051-		1494	No	NA	Metal	Iron			Gun carriage track	1		Complete	NHHC - Pallet 1 Large Tote 7	1						19 in		4.5 in		1 in				FALSE	4/17/2017					18	NA	NA	NA	NA	NA	16A
1442	2018-051-		1495	No	NA	Metal	Iron			Strap	1		Reburial	R							5 in		3.5 in						FALSE	8/10/2016		7/31/2015			NA	NA	NA	NA	NA	5D	
1443	2018-051-		1496	No	NA	Concretion	Concretion			Concretion	1		Did Not Survive	DNS							6.5 in					3.5 in			FALSE					NA	NA	NA	NA	NA	5D		
1444	2018-051-		1497	No	NA	Metal	Iron			Pipe?	1		Inventoried - Ready to Process	STEEL VAT							11 in					2 in			FALSE					NA	NA	NA	NA	NA	5D		
1445	2018-051-		1498	No	NA	Composite	Iron	Wood		Block, Hook and Sheeve	1		Complete	NHHC - Pallet 2 Large Tote 17	1						12 in		5 in		5 in				FALSE	3/5/2018		6/17/2015			NA	NA	NA	NA	NA	5D	
1446	2018-051-		1498.01	No	NA	Organic	Wood			Sheave	1		Inventoried - Ready to Process																FALSE					NA	NA	NA	NA	NA	5D		
1447	2018-051-		1499	No	NA	Concretion	Concretion			Concretion - need to xray	1		Inventoried - Ready to Process	YB140							11 in		6.5 in		4 in				FALSE					NA	NA	NA	NA	NA	5D		
1448	2018-051-		1500	No	NA	Metal	Iron			Plate (base?)	1		Inventoried - Ready to Process	KP							8 in		6.5 in						FALSE					NA	NA	NA	NA	NA	5D		
1449	2018-051-		1501	No	NA	Metal	Iron			Fastener	1		Inventoried - Ready to Process	YB158							25 in								FALSE					NA	NA	NA	NA	NA	5D		
1450	2018-051-		1502.01	No	NA	Metal	Iron			Shackle	1		Inventoried - Ready to Process	KP							10 in		9 in						FALSE					NA	NA	NA	NA	NA	5D		
1451	2018-051-		1502.02	No	NA	Metal	Iron			Shackle	1		Inventoried - Ready to Process	KP																											

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square		
1493	2018-051-		1541	No	NA	Metal	Iron			Fasteners	2		Complete	NHHC - Pallet 4 Large Divided Tote 1	1						9.5 in		2 in		1.5 in					FALSE	2/8/2016		7/31/2015			35	NA	NA	NA	NA	NA	NA	18BB
1494	2018-051-		1542	No	NA	Metal	Iron			Spike	1		Inventoryied - Ready to Process	Blue 24							14 in									FALSE							NA	NA	NA	NA	NA	NA	18BB
1495	2018-051-		1543	No	NA	Metal	Iron			Fastener	1		Inventoryied - Ready to Process	Blue 24							14.5 in									FALSE							NA	NA	NA	NA	NA	NA	18BB
1496	2018-051-		1544	No	NA	Metal	Iron			Eyes of Tackle	2		Complete	NHHC - Medium Tote 2	1						15.5 in		14.5 in							FALSE	11/15/2017					28	NA	NA	NA	NA	NA	NA	18BB
1497	2018-051-		1545	Yes	NA	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 21							4.5 in		4 in							FALSE	11/2/2015						NA	NA	NA	NA	NA	NA	17AA
1498	2018-051-		1546	No	NA	Glass	Unidentified			Bottle	1		Complete	NHHC - Pallet 6 Large Tote 28	1		Clear				6 in					1.75 in				FALSE	1/10/2019						NA	NA	NA	NA	NA	NA	17AA
1499	2018-051-		1547	No	NA	Metal	Iron			Spike	1		Inventoryied - Ready to Process								5.25 in									FALSE							NA	NA	NA	NA	NA	NA	17AA
1500	2018-051-		1548	No	NA	Architecture	Concrete			Concrete fragment	1		Complete	NHHC - Pallet 4 Small Tote 4	1						4.5 in		3 in		3.5 in					FALSE	11/2/2015						NA	NA	NA	NA	NA	NA	17AA
1501	2018-051-		1549	No	NA	Concretion	Concretion			Concreted plate	2		Reburial	R																FALSE	8/10/2016	7/30/2015				NA	NA	NA	NA	NA	NA	17AA	
1502	2018-051-		1550	No	NA	Metal	Iron			Strap and Bolt	2		Complete	NHHC - Pallet 1 Large Tote 1	1						21 in		3.5 in							FALSE	11/21/2017					18	NA	NA	NA	NA	NA	NA	17AA
1503	2018-051-		1551	No	NA	Metal	Iron			Grapeshot	1		Complete	NHHC - Pallet 6 Medium Divided Tote 8	1											2.5 in				FALSE	7/27/2017	6/17/2015				35	NA	NA	NA	NA	NA	NA	18CC
1504	2018-051-		1552	No	NA	Metal	Iron			Rail	1		Complete	NHHC - Pallet 2	1						32 in									FALSE	12/6/2017					18	NA	NA	NA	NA	NA	NA	18CC
1505	2018-051-		1553	No	NA	Architecture	Concrete			Concrete	1		Complete	NHHC - Pallet 4 Small Tote 3	1		Brown				12 in		6 in		2.5 in					FALSE	10/30/2015						NA	NA	NA	NA	NA	NA	16BB
1506	2018-051-		1554	No	NA	Metal	Iron			Wrench	1		Complete	NHHC - Pallet 5 Large Tote 23	1						12 in		3 in		3 in					FALSE	4/22/2016	7/31/2015				35	NA	NA	NA	NA	NA	NA	16BB
1507	2018-051-		1555	No	NA	Architecture	Concrete			Concrete	1		Complete	NHHC - Pallet 4 Small Tote 16	1						5 in		3.5 in		3 in					FALSE	11/2/2015						NA	NA	NA	NA	NA	NA	16BB
1508	2018-051-		1556	No	NA	Concretion	Concretion			Mold	1		Inventoryied - Ready to Process	YB101							4 in		3.5 in		2.25 in					FALSE							NA	NA	NA	NA	NA	NA	16BB
1509	2018-051-		1557	No	NA	Organic	Wood			Plank	1		Inventoryied - Ready to Process	YB154		Slant saw cut					20.5 in		12 in		1 in					FALSE							NA	NA	NA	NA	NA	NA	5E
1510	2018-051-		1558	No	NA	Metal	Iron			Plate with holes	1		Inventoryied - Ready to Process	ST							15 in		14 in		2 in					FALSE							NA	NA	NA	NA	NA	NA	5E
1511	2018-051-		1559	No	NA	Metal	Iron			Fastener	1		Inventoryied - Ready to Process	YB158							12.5 in		7 in		5 in					FALSE							NA	NA	NA	NA	NA	NA	5E
1512	2018-051-		1560	No	NA	Metal	Iron			Fastener, curved	1		Reburial	R							12 in		6 in		3 in					FALSE	8/10/2016	12/17/2015					NA	NA	NA	NA	NA	NA	5E
1513	2018-051-		1561	No	NA	Composite	Iron	Epoxy		Fastener Through Wood	1		Complete - Cast	PROBLEM BOX							11 in		5 in		3 in					FALSE	8/13/2015	12/14/2018					NA	NA	NA	NA	NA	NA	5E
1514	2018-051-		1562	No	NA	Composite	Iron	Epoxy		Fastener Through Wood	1		Complete - Cast	PROBLEM BOX							9 in		6.5 in		2 in					FALSE	8/7/2015	10/19/2018					NA	NA	NA	NA	NA	NA	5E
1515	2018-051-		1563	No	NA	Metal	Iron			Boat Hook	1		Complete	NHHC - Pallet 5 Large Tote 23	1						10 in		3.5 in		2 in					FALSE	3/23/2016	7/30/2015				18	NA	NA	NA	NA	NA	NA	5E
1516	2018-051-		1564	No	NA	Composite	Iron	Wood		Fastener Through Wood	1		Did Not Survive	DNS							9 in		7 in		2 in					FALSE							NA	NA	NA	NA	NA	NA	5E
1517	2018-051-		1563.01	No	NA	Recent/Synthetic	Silicone Rubber	EPOXY		Mold And Cast Of 1563- boat hook	3		Complete - Cast	NHHC - Pallet 6 Large Divided Tote 2	1															FALSE	8/13/2015	10/24/2018					NA	NA	NA	NA	NA	NA	NA
1518	2018-051-		1565	No	NA	Metal	Iron			Plate	1		Inventoryied - Ready to Process	KP							4.5 in		4.5 in		1.5 in					FALSE							NA	NA	NA	NA	NA	NA	5E
1519	2018-051-		1566	No	NA	Organic	Wood			Wood	1		Inventoryied - Ready to Process	YB48							7 in		5 in		2 in					FALSE							NA	NA	NA	NA	NA	NA	5E
1520	2018-051-		1567	No	NA	Concretion	Concretion			Small Concretion	1		Did Not Survive	DNS							2.5 in		2 in		1.5 in					FALSE	6/2/2016						NA	NA	NA	NA	NA	NA	5E
1521	2018-051-		1568	No	NA	Architecture	Mortar			Mortar	3		Complete	NHHC - Pallet 4 Small Tote 7	1						3 in		2 in		1.5 in					FALSE	11/7/2017	9/10/2015					NA	NA	NA	NA	NA	NA	5E
1522	2018-051-		1569	No	NA	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 6	PX1						2.5 in		2 in		0.5 in					FALSE	10/30/2015						NA	NA	NA	NA	NA	NA	9L
1523	2018-051-		1570	No	NA	Concretion	Concretion			Cylindrical Concretion	1		Inventoryied - Ready to Process	KP							10 in		7.5 in		8 in					FALSE							NA	NA	NA	NA	NA	NA	9L
1524	2018-051-		1571	No	NA	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 9	PX1						6 in		3 in		0.5 in					FALSE	10/30/2015						NA	NA	NA	NA	NA	NA	9L
1525	2018-051-		1572	No	NA	Composite	Iron	Wood		Wood with fastener concretion	1		Inventoryied - Ready to Process	DONNYBUCKET																FALSE		2/25/2016					NA	NA	NA	NA	NA	NA	12L
1526	2018-051-		1573	No	NA	Organic	Wood			Wood Fragment	1		Complete	C5							8 in		3 in		1 in					FALSE	7/11/2018						NA	NA	NA	NA	NA	NA	12L
1527	2018-051-		1574	No	NA	Composite	Iron	Epoxy		Fastener	1		Complete - Cast	PROBLEM BOX							5.5 in		3 in		2.5 in					FALSE	8/7/2015	10/19/2018					NA	NA	NA	NA	NA	NA	12L
1528	2018-051-		1575	No	NA	Composite	Iron	Wood		Fastener	1		Complete - Needs Final Images	To be photographed				111.5 g			6.704 in		2.5 in		1.076 in					FALSE							NA	NA	NA	NA	NA	NA	12L
1529	2018-051-		1576	No	NA	Metal	Iron			Iron bar	1		Inventoryied - Ready to Process	A1							21 in		4 in		4 in					FALSE							NA	NA	NA	NA	NA	NA	13K
1530	2018-051-		1577	No	NA	Metal	Iron			Fastener/Chain?	1		Inventoryied - Ready to Process	YB101							7.5 in		3.5 in		2.5 in					FALSE							NA	NA	NA	NA	NA	NA	13K
1531	2018-051-		1578	No	NA	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	YB101							4 in		2.5 in		2 in					FALSE							NA	NA	NA	NA	NA	NA	13K
1532	2018-051-		1579	No	NA	Organic	Wood			Wood Fragment	1		Complete	C5							15 in		6 in		2 in					FALSE	7/12/2018						NA	NA	NA	NA	NA	NA	25D
1533	2018-051-		1580	No	NA	Metal	Copper or Copper Alloy			Elevation Screw	1		Complete	PR-S12							10 in		8 in		8 in		4.4 in			FALSE	5/7/2019					21	NA	NA	NA	NA	NA	NA	8D
1534	2018-051-		1581	No	NA	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 6	PX1						4.5 in		4.25 in		0.5 in					FALSE	11/4/2015						NA	NA	NA	NA	NA	NA	11K
1535	2018-051-		1582	No	NA	Concretion	Concretion			Concretion	1		Reburial	R							5.5 in		3.5 in		2.5 in					FALSE	8/10/2016	7/30/2015					NA	NA	NA	NA	NA	NA	11K
1536	2018-051-		1583	No	NA	Concretion	Concretion			Concretion	1		Reburial	R							3 in		2 in		1.5 in					FALSE	7/31/2015						NA	NA	NA	NA	NA	NA	11K
1537	2018-051-		1583.01	No	NA	Concretion	Concretion			Bleed	1		Unknown	?							3 in		2 in		1.5 in					FALSE		9/10/2015					NA	NA	NA	NA	NA	NA	11K
1538	2018-051-		1584	No	NA	Metal	Iron			Gun carriage Wheel and Axle	1		Complete	NHHC - Pallet 1	1						11 in		9.5 in		9 in					FALSE	11/28/2016												

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square	
1583	2018-051-		1626	No	NA	Metal	Iron			Fastener	1		Reburial	Reburial Drum						53 in	23 in								FALSE	5/31/2019					NA	NA	NA	NA	NA	NA	NA	
1584	2018-051-		1627	No	NA	Metal	Iron			Fastener, square	1		Complete	NHHC - Pallet 1 Large Tote 3	1					60 cm	3.5 cm			3 cm					FALSE	11/21/2017					35	NA	NA	NA	NA	NA	NA	
1585	2018-051-		1628	No	NA	Metal	Iron			Damper Valve	1		Complete	NHCH - Pallet 5 Large Tote 22	1					12 in									FALSE	6/29/2016					21	NA	NA	NA	NA	NA	7B	
1586	2018-051-		1629	No	NA	Metal	Iron			Strap and Plate	1		Inventoried - Ready to Process	Blue 24						11.5 in	8 in								FALSE						NA	NA	NA	NA	NA	NA	NA	
1587	2018-051-		1630	No	NA	Metal	Iron			Railroad Iron	1		Inventoried - Ready to Process	KP						31 in	3 in								FALSE						NA	NA	NA	NA	NA	NA	NA	
1588	2018-051-		1631	No	NA	Metal	Iron			Half Round Cast Pipe with Flange	1		Inventoried - Ready to Process	ST						26 in	7 in			5 in					FALSE						NA	NA	NA	NA	NA	NA	5D	
1589	2018-051-		1632	No	NA	Metal	Iron			Cast iron plate with half pipe and fasteners	5	Fragment(s) of a single artifact	Complete	7064						23.8 in	18.4 in						5 in		FALSE	9/17/2019	Yes		6	35	NA	NA	NA	NA	NA	NA	NA	NA
1590	2018-051-		1633	No	NA	Metal	Iron			Pivot Carriage Wheel	1		Artifact Recorded and Left in Field	Jon's ready bin "that one over there"															FALSE						NA	NA	NA	NA	NA	NA	6B	
1591	2018-051-		1634	No	NA	Metal	Iron			Slide Axle Assy?	1		Inventoried - Ready to Process	Jon's ready bin "that one over there"															FALSE						NA	NA	NA	NA	NA	NA	10E	
1592	2018-051-		1635	No	NA	Composite	Iron	Copper or Copper Alloy		Connecting rod with brass bushing	1		Complete	PR-S6				16.25 lb		30 in	5.25 in					2.5 in			FALSE	11/18/2016					18	NA	NA	NA	NA	NA	NA	7A
1593	2018-051-		1636	No	NA	Metal	Iron			Fastener	1		Complete	NHHC - Pallet 1 Large Tote 3	1														FALSE	2/7/2018					18	NA	NA	NA	NA	NA	NA	NA
1594	2018-051-		1637	No	NA	Metal	Iron			Steam Pipe	1		Artifact Recorded and Left in Field		1														FALSE						NA	NA	NA	NA	NA	NA	7B	
1595	2018-051-		1637.01	No	NA	Metal	Iron			Flange	1		Complete	NHHC - Pallet 2 Large Tote 8	1														FALSE	4/17/2017					18	NA	NA	NA	NA	NA	NA	7B
1596	2018-051-		1637.02	No	NA	Metal	Iron			Nuts, Bolts, and Washers	13		Complete	NHHC - Pallet 2 Large Tote 17	1														FALSE	4/17/2017					18	NA	NA	NA	NA	NA	NA	7B
1597	2018-051-		1637.03	No	NA	Recent/Synthetic	Rubber			Gasket	2		Complete	NHHC - Pallet 6 Large Tote 24	1														FALSE	6/18/2018						NA	NA	NA	NA	NA	NA	7B
1598	2018-051-		1637.04	No	NA	Metal	Iron			Flange	1		Complete	Pallet 2 Large Tote 8	1														FALSE	4/17/2017					18	NA	NA	NA	NA	NA	NA	7B
1599	2018-051-		1637.05	No	NA	Metal	Iron			Nuts and Bolts	9		Complete	NHHC - Pallet 2 Large Tote 8															FALSE	4/17/2017					18	NA	NA	NA	NA	NA	NA	7B
1600	2018-051-		1637.06	No	NA	Recent/Synthetic	Rubber			Gasket	2		Complete	NHHC - Pallet 6 Large Tote 24	1														FALSE	6/18/2018						NA	NA	NA	NA	NA	NA	7B
1601	2018-051-		1638	No	NA	Metal	Iron			Fastener	1		Complete	NHHC - Pallet 1 Large Tote 5	1					73.3 cm	1 cm			3 cm					FALSE	11/21/2017					35	NA	NA	NA	NA	NA	NA	NA
1602	2018-051-		1639	No	NA	Metal	Iron			Round Bar - pivot pin?	1		Inventoried - Ready to Process	KP															FALSE						NA	NA	NA	NA	NA	NA	NA	NA
1603	2018-051-		1640	No	NA	Metal	Copper or Copper Alloy			Powder Canister Lid	1		In treatment	In treatment						10.5 in	1.5 in								FALSE						NA	NA	NA	NA	NA	NA	6A	
1604	2018-051-		1641	No	NA	Metal	Copper or Copper Alloy			Powder Canister Lid	1		Complete	PR-S5		"3" on lid hinge				17.75 in	17.75 in			1 in					FALSE	5/21/2018					35	NA	NA	NA	NA	NA	NA	7A
1605	2018-051-		1642	No	NA	Metal	Copper or Copper Alloy			Brass Powder Lid	1		Complete	NHHC - Pallet 2 Large Tote 13	1					11 in	9.5 in			1 in					FALSE	1/30/2019					35	NA	NA	NA	NA	NA	NA	6A
1606	2018-051-		1643	No	NA	Metal	Iron			Cross Shaped Manifold, 3 Flanges, 12 Bolts, and 2 Nuts	18		Complete	7046				43091 g		23 in	12.5 in			8.5 in					FALSE	7/3/2019			7.0	35	NA	NA	NA	NA	NA	NA	NA	NA
1607	2018-051-		1644	No	NA	Composite	Brass	Rubber		Water Pump	3		Complete	NHHC - Pallet 5 Large Tote 22, Pallet 4	1														FALSE	4/26/2018						NA	NA	NA	NA	NA	NA	10B
1608	2018-051-		1645	No	NA	Metal	Iron			Air Reservoir	1		Inventoried - Ready to Process	L.G BAGGED SEPARATELY															FALSE						NA	NA	NA	NA	NA	NA	7AA	
1609	2018-051-		1646	No	NA	Metal	Iron			Slide Axle Assy	2		Complete	PR-S8						43.6 in	10.25 in			8.45 in					FALSE	2/26/2019					35	NA	NA	NA	NA	NA	NA	8C
1610	2018-051-		1646.01	No	NA	Metal	Lead			Maynard Bullet	1		Complete	NHHC - Pallet 5 Small Divided Tote 15	1														FALSE	5/24/2017						NA	NA	NA	NA	NA	NA	8C
1611	2018-051-		1647	No	NA	Metal	Iron			Fire Tube	1		Inventoried - Ready to Process	BP2						82 in	4 in								FALSE						NA	NA	NA	NA	NA	NA	7D	
1612	2018-051-		1648	No	NA	Metal	Iron			Fire Tube	1		Inventoried - Ready to Process	BP2						122 in	4 in								FALSE						NA	NA	NA	NA	NA	NA	7D	
1613	2018-051-		1649	No	NA	Metal	Iron			Fire Tube	1		Inventoried - Ready to Process	BP2						123 in	4 in								FALSE						NA	NA	NA	NA	NA	NA	7D	
1614	2018-051-		1650	No	NA	Metal	Iron			Fire Tube	1		Inventoried - Ready to Process	BP2						123 in	4 in								FALSE						NA	NA	NA	NA	NA	NA	7D	
1615	2018-051-		1651	No	NA	Metal	Iron			Fire Tube	1		Inventoried - Ready to Process	BP2						95 in	28 in			4 in					FALSE						NA	NA	NA	NA	NA	NA	7D	
1616	2018-051-		1652	No	NA	Metal	Iron			Fire Tube	1		Inventoried - Ready to Process	P1						17 in	4 in								FALSE						NA	NA	NA	NA	NA	NA	7D	
1617	2018-051-		1653	No	NA	Metal	Iron			Boiler Plate	1		Inventoried - Ready to Process							38 in	29 in								FALSE						NA	NA	NA	NA	NA	NA	8D	
1618	2018-051-		1654	No	NA	Metal	Iron			Hawse Pipe	1		Inventoried - Ready to Process	Blue 31						43 in	11 in								FALSE						NA	NA	NA	NA	NA	NA	26D	
1619	2018-051-		1655	No	NA	Architecture	Concrete			Chump Weight	1		Inventoried - Ready to Process	P1															FALSE						NA	NA	NA	NA	NA	NA	NA	NA
1620	2018-051-		1656	No	NA	Metal	Iron			Chain	1		Inventoried - Ready to Process							43 in									FALSE						NA	NA	NA	NA	NA	NA	26D	
1621	2018-051-		1657	No	NA	Metal	Iron			Railroad iron (SE casemate)	1		Inventoried - Ready to Process	Blue 24						38 in									FALSE						NA	NA	NA	NA	NA	NA	25D	
1622	2018-051-		1658	No	NA	Metal	Iron			Railroad iron (SE casemate)	1		Inventoried - Ready to Process	Blue 24						42 in									FALSE						NA	NA	NA	NA	NA	NA	25E	
1623	2018-051-		1659	No	NA	Metal	Iron			Railroad iron (SE casemate)	3		Complete - Needs Final Images	Shelf 11				10.2 g		14.6 in	3.38 in			2.59 in					FALSE	3/20/19					25	NA	NA	NA	NA	NA	NA	25E
1624	2018-051-		1660	No	NA	Metal	Iron			Railroad iron (SE casemate)	1		Inventoried - Ready to Process	KP						33 in									FALSE						NA	NA	NA	NA	NA	NA	25E	
1625	2018-051-		1661	No	NA	Metal	Iron			Railroad Iron (SE Casemate)	1		Inventoried - Ready to Process	KP						28 in									FALSE						NA	NA	NA	NA	NA	NA	25E	
1626	2018-051-		1662	No	NA	Metal	Iron			Railroad iron (SE casemate)	1		Inventoried - Ready to Process	A1						13 in									FALSE						NA	NA	NA	NA	NA	NA	25E	
1627	2018-051-		1663	No	NA	Metal	Iron			Casemate 1	1		Artifact Recorded and Left in Field							14.25 ft									FALSE						NA	NA	NA	NA	NA	NA	22L	
1628	2018-051-		1664	No	NA	Metal	Iron			Casemate 2	1		Artifact Recorded and Left in Field							12.25 ft		4.5 ft							FALSE						NA	NA	NA	NA	NA	NA	22L	
1629	2018-051-		1665	No	NA	Organic	Wood			Sample A - Wood analysis sample from 1665	1		Inventoried - Ready to Process	WB19															FALSE						NA	NA	NA	NA	NA	NA	22L	
1630	2018-051-		1666	No	NA	Organic	Wood			Sample B - Wood analysis sample from 1665	1		Inventoried - Ready to Process	WB19															FALSE						NA	NA	NA	NA	NA	NA	22L	
1631	2018-051-		1667	No</																																						

C-19

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square					
1771	2018-051-		1801.05	No	G2	Metal	Iron			Fastener	1		Complete	BOX 10	2			1.065	kg	12.5	in	1.05	in	1.03	in		1 in			FALSE	5/16/2019					35				1005701.8304	759757.50427	8/12/2015	7G			
1772	2018-051-		1801.06	No	G2	Metal	Iron			Pin	1		Unknown							28	in									FALSE									1005701.8304	759757.50427	8/12/2015	7G				
1773	2018-051-		1801.07	No	G2	Organic	Wood			Wood fragments (3 treenails)	6	Mix of fragments and intact artifacts	Complete	C3 - Photo				247.2	g	6.765	in	1.438	in	1.34	in					FALSE									1005701.8304	759757.50427	8/12/2015	7G				
1774	2018-051-		1801.08	No	G2	Metal	Iron			Concretion with ring	1		Inventoryied - Ready to Process	Blue 24						4.5	in	8	in			13 in				FALSE									1005701.8304	759757.50427	8/12/2015	7G				
1775	2018-051-		1801.09	No	G2	Metal	Iron			Machinery with eye	1		Complete	PR-S4				4.7	kg	14	in	5.75	in	2	in					FALSE	5/7/2019					35				1005701.8304	759757.50427	8/12/2015	7G			
1776	2018-051-		1801.14	No	G2	Metal	Iron			Rail/Track	1		Inventoryied - Ready to Process																	FALSE									1005701.8304	759757.50427	8/12/2015	7G				
1777	2018-051-		1801.10	No	G2	Metal	Iron			Concreted Chain?	1		Inventoryied - Ready to Process	KP																FALSE									1005701.8304	759757.50427	8/12/2015	7G				
1778	2018-051-		1801.11	No	G2	Organic	Wood			Long Wood Fragment	1		Inventoryied - Ready to Process	Blue 22																FALSE									1005701.8304	759757.50427	8/12/2015	7G				
1779	2018-051-		1801.12	No	G2	Metal	Iron			Fastener, small, concreted	1		Inventoryied - Ready to Process	YB158																FALSE									1005701.8304	759757.50427	8/12/2015	7G				
1780	2018-051-		1801.13	No	G2	Metal	Iron			Fastener	1		Inventoryied - Ready to Process	YB102?																FALSE									1005701.8304	759757.50427	8/12/2015	7G				
1781	2018-051-		1802.01	No	G3	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1	Cord marked														FALSE	11/14/2018									1005689.2459	759752.60856	8/12/2015	6G			
1782	2018-051-		1802.02	No	G3	Metal	Iron			Fastener	1		Unknown							35	in	2.5	in	2.5	in					FALSE									1005689.2459	759752.60856	8/12/2015	6G				
1783	2018-051-		1802.03	No	G3	Metal	Iron			Fasteners	2		Inventoryied - Ready to Process	YB102						5	in	0.75	in	0.75	in					FALSE									1005689.2459	759752.60856	8/12/2015	6G				
1784	2018-051-		1802.04	No	G3	Metal	Iron			Ash Rake?	1		Inventoryied - Ready to Process	Blue 24						44	in					0.75 in				FALSE										1005689.2459	759752.60856	8/12/2015	6G			
1785	2018-051-		1802.05	No	G3	Organic	Wood			Barrel Stave	2		Inventoryied - Ready to Process	YB71						17	in	4	in	0.5	in					FALSE									1005689.2459	759752.60856	8/12/2015	6G				
1786	2018-051-		1802.06	No	G3	Metal	Iron			Gun Carriage Section?	1		Inventoryied - Ready to Process	A1						39	in	9	in	7	in					FALSE									1005689.2459	759752.60856	8/12/2015	6G				
1787	2018-051-		1802.07	No	G3	Organic	Wood			Treenail	1	Intact	Complete	C3 - Photo				135.9	g	10.778	in	1.338	in	1.334	in					FALSE									1005689.2459	759752.60856	8/12/2015	6G				
1788	2018-051-		1802.08	No	G3	Composite	Wood	Iron		Guncarriage Piece?	1		Inventoryied - Ready to Process	YB																FALSE									1005689.2459	759752.60856	8/12/2015	6G				
1789	2018-051-		1803.01	Yes	G5	Ceramic	Stoneware			Historic Ceramic	1		Inventoryied - Ready to Process																	FALSE										1005682.4172	759755.75152	8/13/2015	6H			
1790	2018-051-		1803.02	No	G5	Glass	Unidentified			Glass	1		Unknown																	FALSE										1005682.4172	759755.75152	8/13/2015	6H			
1791	2018-051-		1803.03	No	G5	Organic	Coal/Charcoal			Coal	2		Complete	NHHC - Pallet 6 Small Tote 23	1															FALSE	10/24/2017										1005682.4172	759755.75152	8/13/2015	6H		
1792	2018-051-		1803.04	No	G5	Metal	Iron			Pipe	2		Inventoryied - Ready to Process	YB140 (2/2)												3 in				FALSE											1005682.4172	759755.75152	8/13/2015	6H		
1793	2018-051-		1803.05	No	G5	Organic	Wood			Treenail	1		In treatment	7064																FALSE											1005682.4172	759755.75152	8/13/2015	6H		
1794	2018-051-		1803.06	No	G5	Organic	Wood			Wedges	4		Complete	C5				266.1	g	5	in	2.7	in	1.5	in					FALSE	5/30/19										1005682.4172	759755.75152	8/13/2015	6H		
1795	2018-051-		1803.07	No	G5	Metal	Iron			Eye-Bolt with Ring	1		Inventoryied - Ready to Process	YB134						23	in					2 in				FALSE											1005682.4172	759755.75152	8/13/2015	6H		
1796	2018-051-		1803.08	No	G5	Metal	Iron			Plate with 2 fasteners	1		Inventoryied - Ready to Process	YB?						19	in	10	in							FALSE											1005682.4172	759755.75152	8/13/2015	6H		
1797	2018-051-		1803.09	No	G5	Metal	Iron			Fastener	1		Unknown							10	in					1 in				FALSE											1005682.4172	759755.75152	8/13/2015	6H		
1798	2018-051-		1803.10	No	G5	Metal	Iron			Axe Head	1		Inventoryied - Ready to Process	YB						7.5	in	5	in							FALSE											1005682.4172	759755.75152	8/13/2015	6H		
1799	2018-051-		1803.11	Yes	G5	Ceramic	Stoneware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1															FALSE	11/7/2017										1005682.4172	759755.75152	8/13/2015	6H		
1800	2018-051-		1804.01	No	G6	Metal	Iron			Firegrate	1		Unknown							60	in		7	in						FALSE											1005722.36	759762.09	8/14/2015	9F		
1801	2018-051-		1804.02	No	G6	Metal	Iron			Guncarriage Fastener	5		Inventoryied - Ready to Process	Blue 24/BARREL 151/YB44						44	in					1.25 in				FALSE											1005722.36	759762.09	8/15/2015	9F		
1802	2018-051-		1804.03	No	G6	Organic	Wood			Marsilly Carriage with Cap Square	1		Inventoryied - Ready to Process	R3																FALSE											1005722.36	759762.09	8/16/2015	9F		
1803	2018-051-		1804.04	No	G6	Composite	Wood	Iron		Wood With Fastener	1		Inventoryied - Ready to Process	YB?						36	in	7	in	8	in					FALSE											1005722.36	759762.09	8/17/2015	9F		
1804	2018-051-		1804.05	No	G6	Organic	Wood			Wedge	1		Complete	C5				48.5	g	3.5	in	2.5	in	1	in					FALSE	5/30/19										1005722.36	759762.09	8/18/2015	9F		
1805	2018-051-		1804.06	No	G6	Organic	Textile			Fabric Sample	1		Complete	C5																FALSE											1005722.36	759762.09	8/19/2015	9F		
1806	2018-051-		1805.01	No	S1	Glass	Unidentified			Glass	5		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1															FALSE	11/21/2018											1005720.889	759764.73491	8/14/2015	9G	
1807	2018-051-		1805.02	Yes	S1	Ceramic	Whiteware	Refined Earthenware		Historic Ceramic	2		Complete	BOX 3	2																FALSE	9/5/2018											1005720.889	759764.73491	8/14/2015	9G
1808	2018-051-		1805.03	No	S1	Metal	Copper or Copper Alloy			Possible Lamp Structure	1		Complete	NHHC - Pallet 5 Small Divided Tote 9	1															FALSE	10/5/2017											1005720.889	759764.73491	8/14/2015	9G	
1809	2018-051-		1805.04	No	S1	Metal	Iron			Firegrate	1		Inventoryied - Ready to Process	YB102						37	in	41.5	in							FALSE											1005720.889	759764.73491	8/14/2015	9G		
1810	2018-051-		1805.05	No	S1	Metal	Iron			Chain	1		Complete	NHHC - Pallet 3	1					10	in	8	in							FALSE	6/22/2018											1005720.889	759764.73491	8/14/2015	9G	
1811	2018-051-		1805.06	No	S1	Metal	Iron			Conc	1		Inventoryied - Ready to Process	ST																FALSE											1005720.889	759764.73491	8/14/2015	9G		
1812	2018-051-		1805.07	No	S1	Metal	Iron			Fastener	1		Complete	BOX 10	2			172.2	g	3.87	in	1.03	in	0.9	in					FALSE											1005720.889	759764.73491	8/14/2015	9G		
1813	2018-051-		1805.08	No	S1	Metal	Iron			Fastener Concretion, broken	1		Inventoryied - Ready to Process	YB102						9	in	3	in							FALSE											1005720.889	759764.73491	8/14/2015	9G		
1814	2																																													

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square	
1861	2018-051-		1812.16	No	G11	Metal	Iron			Clamp with Double Hooks	2		Complete	NHHC - Pallet 5 Large Tote 22	1	"I. C. H. B. E. S." (tentatively) inscribed on bolt														FALSE	1/30/2019					32			1005708.1051	759747.92169	9/14/2015	8F
1862	2018-051-		1812.17	No	G11	Metal	Iron			Hook with Eye	1		Inventoried - Ready to Process	Tag131 (small white bucket)																FALSE							1005708.1051	759747.92169	9/14/2015	8F		
1863	2018-051-		1812.18	No	G11	Composite	Iron	Brass		Fastener with brass washer and nuts	1		Inventoried - Ready to Process	Jon's ready bin "that one over there"															FALSE							1005708.1051	759747.92169	9/14/2015	8F			
1864	2018-051-		1812.19	No	G11	Metal	Iron			Plate, square	1		Unknown																FALSE							1005708.1051	759747.92169	9/14/2015	8F			
1865	2018-051-		1812.20	No	G11	Metal	Iron			Clamp (guncarriage)	1		Inventoried - Ready to Process	YB139															FALSE							1005708.1051	759747.92169	9/14/2015	8F			
1866	2018-051-		1812.21	No	G11	Metal	Iron			Lever	1		Inventoried - Ready to Process	YB156															FALSE							1005708.1051	759747.92169	9/14/2015	8F			
1867	2018-051-		1812.22	No	G11	Architecture	Firebrick			Firebrick, marked	1		Unknown																FALSE							1005708.1051	759747.92169	9/14/2015	8F			
1868	2018-051-		1812.23	No	G11	Metal	Iron			Fasteners	3		Inventoried - Ready to Process	WB50 (CT=2)YB47 (nope), YB158 (1/3)															FALSE							1005708.1051	759747.92169	9/14/2015	8F			
1869	2018-051-		1812.24	No	G11	Metal	Iron			Chain, small	1		Inventoried - Ready to Process	YB158															FALSE							1005708.1051	759747.92169	9/14/2015	8F			
1870	2018-051-		1812.25	No	G11	Metal	Iron			Pulley	1		Inventoried - Ready to Process	YB142															FALSE							1005708.1051	759747.92169	9/14/2015	8F			
1871	2018-051-		1812.26	No	G11	Metal	Iron			Grapeshot Stand Base	1		Inventoried - Ready to Process	YB141															FALSE							1005708.1051	759747.92169	9/14/2015	8F			
1872	2018-051-		1812.27	No	G11	Metal	Copper or Copper Alloy			Sheathing, folded	1		Complete	BOX 5	2														FALSE	5/2/2018							1005708.1051	759747.92169	9/14/2015	8F		
1873	2018-051-		1812.28	No	G11	Metal	Iron			Small Fasteners	2		Inventoried - Ready to Process	YB158															FALSE							1005708.1051	759747.92169	9/14/2015	8F			
1874	2018-051-		1812.29	No	G11	Metal	Iron			Small Lever or Wrench?	1		Complete	C1				304.3 g		5.19 in		3.38 in		1.06 in					FALSE	09/11/2019			6.4	35			1005708.1051	759747.92169	9/14/2015	8F		
1875	2018-051-		1812.30	No	G11	Metal	Iron			Fasteners	2		Inventoried - Ready to Process	YB158															FALSE							1005708.1051	759747.92169	9/14/2015	8F			
1876	2018-051-		1812.31	No	G11	Organic	Pitch			Pitch/Tar	2		Complete	NHHC - Pallet 4 Small Tote 17	1														FALSE	2/1/2016							1005708.1051	759747.92169	9/14/2015	8F		
1877	2018-051-		1813.01	No	G12	Organic	Wood			Treenail, concreted	1		Inventoried - Ready to Process	YB7						13 in		1.5 in							FALSE							1005712.2242	759749.47618	9/14/2015	8F			
1878	2018-051-		1813.02	No	G12	Metal	Iron			Concretion	1		Inventoried - Ready to Process	YB7						5 in		3 in							FALSE							1005712.2242	759749.47618	9/14/2015	8F			
1879	2018-051-		1813.03	No	G12	Metal	Iron			Fast/Conc	1		Unknown																FALSE							1005712.2242	759749.47618	9/14/2015	8F			
1880	2018-051-		1813.04	No	G12	Metal	Iron			Firegrate/track with fastener?	1		Inventoried - Ready to Process	YB23						12 in		4.5 in							FALSE							1005712.2242	759749.47618	9/14/2015	8F			
1881	2018-051-		1813.05	No	G12	Metal	Iron			Concreted hook/fastener	1		Inventoried - Ready to Process	YB44						9.5 in		5.75 in							FALSE							1005712.2242	759749.47618	9/14/2015	8F			
1882	2018-051-	y	1813.06	No	G12	Glass	Unidentified			Glass	1		Complete	7064			Mirror, Clear	20.4 g		1.485 in		1.225 in		0.345 in					FALSE	9/20/2019							1005712.2242	759749.47618	9/14/2015	8F		
1883	2018-051-		1813.07	No	G12	Metal	Iron			Firegrate	1		Complete	PR-S15				11.3 lb		14.5 in		2 in							FALSE	5/7/2019					21		1005712.2242	759749.47618	9/14/2015	8F		
1884	2018-051-		1814.01	No	G14	Organic	Wood			Wood Handle?	1		Complete	NHHC - Pallet 6 Medium Tote 5	1														FALSE	1/9/2018							1005704.2709	759750.37489	9/14/2015	7F		
1885	2018-051-		1814.02	No	G14	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1	"NAVY"	Clear												TRUE	10/5/2017							1005704.2709	759750.37489	9/14/2015	7F		
1886	2018-051-		1814.03	No	G14	Composite	Wood	Epoxy		Cleat	2		Complete	NHHC - Pallet 6 Medium Tote 5	1														FALSE	1/10/2018							1005704.2709	759750.37489	9/14/2015	7F		
1887	2018-051-		1814.04	No	G14	Organic	Wood			Tool Handle	2		Complete	NHHC - Pallet 6 Medium Tote 5	1						11.4 cm					4.2 cm			FALSE	6/12/2017							1005704.2709	759750.37489	9/14/2015	7F		
1888	2018-051-		1814.05	No	G14	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 10	1		Clear												FALSE	4/15/2016							1005704.2709	759750.37489	9/14/2015	7F		
1889	2018-051-		1814.06	No	G14	Metal	Iron			Rr Iron Or Firegrate?	1		Inventoried - Ready to Process	KP29															FALSE							1005704.2709	759750.37489	9/14/2015	7F			
1890	2018-051-		1814.07	No	G14	Metal	Iron			Caulking Tool Head	1		Complete	Cart 3				278.3 g		4.8 in				0.23 in		0.55 in			FALSE	7/24/2019					21		1005704.2709	759750.37489	9/14/2015	7F		
1891	2018-051-		1814.08	No	G14	Metal	Iron			Fasteners	1		Inventoried - Ready to Process	YB23															FALSE							1005704.2709	759750.37489	9/14/2015	7F			
1892	2018-051-		1814.09	No	G14	Metal	Iron			Concretion	2		Inventoried - Ready to Process	YB23															FALSE							1005704.2709	759750.37489	9/14/2015	7F			
1893	2018-051-		1814.10	No	G14	Composite	Iron	Wood		Rr Iron/Firebox Material/Gudgeon?	1		Inventoried - Ready to Process	Concrete tank by 7063						62 in		7.75 in		5 in					FALSE							1005704.2709	759750.37489	9/14/2015	7F			
1894	2018-051-		1815	No	G15	Metal	Copper or Copper Alloy			Clamp	1		Inventoried - Ready to Process			"BROOKLYN FIREBRICK WORKS EXTRA" and "LYN WORKS A"				15 in		13.5 in							FALSE							1005702.5673	759747.04117	9/14/2015	7F			
1895	2018-051-		1816.01	No	G16	Architecture	Brick			Brick	3		Complete	C4															FALSE	5/10/2018							1005705.67	759748.48619	9/14/2015	8F		
1896	2018-051-		1816.02	No	G16	Organic	Bone			Bone	1		Complete	C5				30.2 g		2.148 in		1.788 in		1.087 in					FALSE	10/25/2018							1005705.67	759748.48619	9/14/2015	8F		
1897	2018-051-		1816.03	No	G16	Metal	Copper or Copper Alloy			Purse Clasp?	1		Complete	NHHC - Pallet 5 Small Divided Tote 7	1														FALSE	1/11/2018						35		1005705.67	759748.48619	9/14/2015	8F	
1898	2018-051-		1816.04	No	G16	Metal	Iron			Guncarriage Bolt	1		In Treatment	YB133															FALSE							1005705.67	759748.48619	9/14/2015	8F			
1899	2018-051-		1816.05	No	G16	Metal	Iron			Lg Shaft with Turn Lever	1		Inventoried - Ready to Process	Jon's ready vat "that one over there"															FALSE							1005705.67	759748.48619	9/14/2015	8F			
1900	2018-051-		1816.06	No	G16	Metal	Iron			Hook With Rope Thimble	1		In Treatment	YB133															FALSE							1005705.67	759748.48619	9/14/2015	8F			
1901	2018-051-		1816.07	Yes	G16	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1														FALSE	3/25/2016						0080	KAREN	1005705.67	759748.48619	9/14/2015	8F	
1902	2018-051-		1817.01	No	G17	Glass	Pane Glass			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Clear												FALSE	1/11/2018							1005706.7211	759751.45178	9/14/2015	8F		
1903	2018-051-		1817.02	No	G17	Organic	Wood			Treenail	1	Fragments of a single artifact	Complete	C5				29.9 g		1.806 in		1.35 in		1.268 in					FALSE	3/20/2019							1005706.7211	759751.45178	9/14/2015	8F		
1904	2018-051-		1817.03	No	G17	Metal	Iron			Small Concreted Fastener	1		Inventoried - Ready to Process	YB137															FALSE							1005706.7211	759751.45178	9/14/2015	8F			
1905	2018-051-		1818.01	No	G18	Metal	Iron			Gudgeon	2		Inventoried - Ready to Process	YB126, YB44 (shackle)															FALSE							1005704.4886	759751.49328	9/14/2015				

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square		
1947	2018-051-		1821.04	No	G21	Metal	Iron			Bottom Of Fire Box	1		Inventoried - Ready to Process	KP29																FALSE							1005698.1813	759751.95025	9/15/2015	7G			
1948	2018-051-		1821.05	No	G21	Concretion	Concretion			Concretion With 3 Fasteners	1		Inventoried - Ready to Process	WB129																FALSE							1005698.1813	759751.95025	9/15/2015	7G			
1949	2018-051-		1821.06	No	G21	Organic	Ethnobotany			Pit/Seed	1		Complete	C5																FALSE	7/6/2018							1005698.1813	759751.95025	9/15/2015	7G		
1950	2018-051-		1821.07	No	G21	Metal	Iron			Boiler Plating?	1		In Treatment	YB133																FALSE								1005698.1813	759751.95025	9/15/2015	7G		
1951	2018-051-		1821.08	No	G21	Metal	Copper or Copper Alloy			Brass (?) Rods	2		Inventoried - Ready to Process	BARREL 83																FALSE								1005698.1813	759751.95025	9/15/2015	7G		
1952	2018-051-		1821.09	No	G21	Concretion	Concretion			Concretion with Thread (?) - concretion fragment with possible treenail	1		Inventoried - Ready to Process	YB129																FALSE								1005698.1813	759751.95025	9/15/2015	7G		
1953	2018-051-		1821.10	No	G21	Metal	Iron			Concretion	1		Inventoried - Ready to Process	BARREL 83																FALSE								1005698.1813	759751.95025	9/15/2015	7G		
1954	2018-051-		1821.11	No	G21	Metal	Iron			Small Square (Strap?)	1		Inventoried - Ready to Process	WB50																FALSE								1005698.1813	759751.95025	9/15/2015	7G		
1955	2018-051-		1822.01	No	G22	Architecture	Brick			Red Brick	1		Reburial	R																FALSE	2/1/2016								1005703.4286	759749.34821	9/15/2015	7F	
1956	2018-051-		1822.02	No	G22	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Green/Olive													FALSE	1/17/2018								1005703.4286	759749.34821	9/15/2015	7F	
1957	2018-051-		1822.03	Yes	G22	Ceramic	Stoneware			Historic Ceramic	1		Complete	BOX 1	2															FALSE	6/13/2018				0165		KAREN		1005703.4286	759749.34821	9/15/2015	7F	
1958	2018-051-		1822.04	No	G22	Organic	Wood			Wedge	1	Intact	Complete	C3 - Photo				32.1 g		3.204 in		1.415 in		0.976 in						FALSE								1005703.4286	759749.34821	9/15/2015	7F		
1959	2018-051-		1822.05	No	G22	Metal	Iron			Iron Strap	1		Inventoried - Ready to Process	YB55																FALSE								1005703.4286	759749.34821	9/15/2015	7F		
1960	2018-051-		1823.01	No	G23	Metal	Iron			Large Flat Ring	1		Complete	Cart 3				280.1 g						0.18 in			8 in				FALSE	7/24/2019				21				1005693.5515	759746.02455	9/15/2015	6F
1961	2018-051-		1823.02	No	G23	Metal	Iron			Large Molded Metal (firebox?)	4		Inventoried - Ready to Process	YB21, YB46 (4/4? Fourth very very small in comparison)																FALSE								1005693.5515	759746.02455	9/15/2015	6F		
1962	2018-051-		1823.02.01	No	G23	Metal	Iron			Lg Molded Metal	1		Inventoried - Ready to Process	R2/complete?																FALSE								1005693.5515	759746.02455	9/15/2015	6F		
1963	2018-051-		1823.03	No	G23	Metal	Copper or Copper Alloy			Broken Square with Hole	1		Complete	BOX 5	2																FALSE	1/11/2018				35				1005693.5515	759746.02455	9/15/2015	6F
1964	2018-051-		1823.04	No	G23	Metal	Iron			Small Straps (For Staves?)	3		Inventoried - Ready to Process	18WB05																FALSE								1005693.5515	759746.02455	9/15/2015	6F		
1965	2018-051-		1823.05	No	G23	Metal	Iron			Small Flat Ring	1		Complete	C3				154.7 g												FALSE	6/27/2019				35				1005693.5515	759746.02455	9/15/2015	6F	
1966	2018-051-		1823.06	No	G23	Metal	Iron			Double Ended Fastener	1		Inventoried - Ready to Process	YB134																FALSE								1005693.5515	759746.02455	9/15/2015	6F		
1967	2018-051-		1823.07	No	G23	Metal	Iron			Square Washer	1		Inventoried - Ready to Process	WB110																FALSE								1005693.5515	759746.02455	9/15/2015	6F		
1968	2018-051-		1823.08	No	G23	Metal	Iron			Small Fastener	1		Inventoried - Ready to Process	Needs X-ray																FALSE								1005693.5515	759746.02455	9/15/2015	6F		
1969	2018-051-		1823.09	No	G23	Metal	Iron			Trunnion cap fastener	1		In treatment	YB134																FALSE								1005693.5515	759746.02455	9/15/2015	6F		
1970	2018-051-		1823.10	No	G23	Concretion	Concretion			Small Molded Concretion	1		Unknown																	FALSE								1005693.5515	759746.02455	9/15/2015	6F		
1971	2018-051-		1823.11	No	G23	Metal	Iron			9-inch Dahlgren Cannon	1		Inventoried - Ready to Process																	FALSE								1005693.5515	759746.02455	9/15/2015	6F		
1972	2018-051-		1823.12	No	G23	Architecture	Brick			Red Brick	1		Complete	C7		"BROOKLYN..." / "FIREBRICK CO..." / "N..." and red glazing/paint on 2 sides		4.6 lb		6.3 in		4.328 in		2.684 in							FALSE	3/26/19				172		KAREN		1005693.5515	759746.02455	9/15/2015	6F
1973	2018-051-		1823.12.01	No	G23	Architecture	Brick			Red Brick	1		Reburial	R																	FALSE								1005693.5515	759746.02455	9/15/2015	6F	
1974	2018-051-		1823.13	No	G23	Metal	Iron			Pipe With Flange	1		Inventoried - Ready to Process	Jon's ready vat "that one over there"																FALSE								1005693.5515	759746.02455	9/15/2015	6F		
1975	2018-051-		1823.14	No	G23	Metal	Iron			Guncarriage Rods	2		In Treatment, Inventoried - Ready to Process	YB55, YB133 (1/2)																FALSE								1005693.5515	759746.02455	9/15/2015	6F		
1976	2018-051-		1823.15	No	G23	Metal	Iron			Straps - Guncarriage?	3		Inventoried - Ready to Process	YB55																FALSE								1005693.5515	759746.02455	9/15/2015	6F		
1977	2018-051-		1823.16	No	G23	Organic	Wood			Wedges	7		Complete	C6				175.1 g		3.5 in		2.47 in		1.1 in						FALSE	7/12/2019								1005693.5515	759746.02455	9/15/2015	6F	
1978	2018-051-		1823.17	No	G23	Composite	Iron		Wood	Guncarriage Pivot Socket	1		Inventoried - Ready to Process	2018P10																FALSE								1005693.5515	759746.02455	9/15/2015	6F		
1979	2018-051-		1823.18	No	G23	Metal	Iron			Round Rod - Guncarriage?	1		Unknown																	FALSE								1005693.5515	759746.02455	9/15/2015	6F		
1980	2018-051-		1823.19	No	G23	Metal	Iron			Hook/Gear Prying Mechanism	1		Complete	BOX 19	2			466.8 g		4.8 in		2 in		0.38 in						FALSE	7/24/2019				21				1005693.5515	759746.02455	9/15/2015	6F	
1981	2018-051-		1823.20	No	G23	Metal	Iron			Wide Strap	1		Inventoried - Ready to Process	YB44																FALSE								1005693.5515	759746.02455	9/15/2015	6F		
1982	2018-051-		1823.21	No	G23	Organic	Wood			Bucket staves	4		Complete	C5				386.1 g		9.6 in		2.9 in		6 in						FALSE	5/30/19								1005693.5515	759746.02455	9/15/2015	6F	
1983	2018-051-		1823.22	No	G23	Organic	Wood			Treenails - Guncarriage?	3		Complete	C6				67 g		5.5 in		1.5 in		1 in						FALSE	5/31/2019				3/28/2016				1005693.5515	759746.02455	9/15/2015	6F	
1984	2018-051-		1823.22.01	No	G23	Metal	Iron			Nail fragments	4	Fragment(s)	Reburial	R				0.6 g		5.04 mm		2.56 mm								FALSE	3/20/2019								1005693.5515	759746.02455	9/15/2015	6F	
1985	2018-051-		1823.23	No	G23	Metal	Iron			Hook	1		Complete	BOX 10	2			89.4 g		4.760 in		0.653 in		0.515 in						FALSE	4/15/2019				28				1005693.5515	759746.02455	9/15/2015	6F	
1986	2018-051-		1823.24	No	G23	Metal	Iron			Strap, medium thickness	4		Inventoried - Ready to Process	YB55																FALSE								1005693.5515	759746.02455	9/15/2015	6F		
1987	2018-051-		1823.25	No	G23	Architecture	Brick			White Brick	2		Reburial	R																FALSE	2/1/2016								1005693.5515	759746.02455	9/15/2015	6F	
1988	2018-051-		1823.26	No	G23	Metal	Iron			Long Spike	1		Inventoried - Ready to Process	YB44																FALSE								1005693.5515	759746.02455	9/15/2015	6F		
1989	2018-051-		1823.27	No	G23	Organic	Wood			Short Plank	1		Complete	C6				200.8 g		9.56 in		3.17 in		0.79 in						FALSE	7/12/2019								1005693.5515	759746.02455	9/15/2015	6F	
1990	2018-051-		1824.01	No	G24	Organic	Wood			Barrel Pieces	19		Complete - Needs Final Images	Photo Shelf																FALSE								1005690.7519	759749.93323	9/15/2015	6G		
1991</																																											

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square
2036	2018-051-		1828.01	No	G28	Organic	Wood			Beveled Wood/Staves	3		Inventoried - Ready to Process	YB19															FALSE								1005688.0956	759749.70755	9/15/2015	6G	
2037	2018-051-		1828.02	No	G28	Organic	Wood			Large Triangular Piece of Wood	1		Inventoried - Ready to Process	YB11? Blue 25 on 09/2018															FALSE								1005688.0956	759749.70755	9/15/2015	6G	
2038	2018-051-		1828.03	No	G28	Metal	Iron			Strap/Plate	1		Inventoried - Ready to Process	YB141															FALSE								1005688.0956	759749.70755	9/15/2015	6G	
2039	2018-051-		1829.01	No	G29	Glass	Unidentified			Glass Bottle	1		Complete	NHHC - Pallet 6 Large Tote 28	1		Brown												FALSE	12/01/2016								1005687.5946	759741.39748	9/15/2015	6F
2040	2018-051-		1829.02	No	G29	Organic	Wood			Wedge	1		Complete	NHHC - Pallet 6 Medium Tote 5	1														FALSE	01/09/2018								1005687.5946	759741.39748	9/15/2015	6F
2041	2018-051-		1829.03	No	G29	Architecture	Firebrick			Fire Bricks	2		Inventoried - Ready to Process	YB72 OR 18WB02															FALSE								1005687.5946	759741.39748	9/15/2015	6F	
2042	2018-051-		1829.04	No	G29	Glass	Unidentified			Glass	4		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1	"XTRAC...RSAPARI" ON ONE (EXTRACT OF SARSAPARILLA?)	Clear												FALSE	1/30/2019								1005687.5946	759741.39748	9/15/2015	6F
2043	2018-051-		1829.05	No	G29	Organic	Leather			Shoe Toe Insole	1		Complete	C5															FALSE	5/3/2018								1005687.5946	759741.39748	9/15/2015	6F
2044	2018-051-		1829.06	No	G29	Metal	Iron			Pipes	1		Deaccessioned																FALSE								1005687.5946	759741.39748	9/15/2015	6F	
2045	2018-051-		1829.07	No	G29	Metal	Iron			Nails	3		Inventoried - Ready to Process	WB50															FALSE								1005687.5946	759741.39748	9/15/2015	6F	
2046	2018-051-		1829.08	No	G29	Metal	Iron			Square Section of Iron with Holes (?)	1		Inventoried - Ready to Process	YB10															FALSE								1005687.5946	759741.39748	9/15/2015	6F	
2047	2018-051-		1829.09	No	G29	Metal	Iron			Small Flat Ring (Washer)	1		Inventoried - Ready to Process	Needs X-ray															FALSE								1005687.5946	759741.39748	9/15/2015	6F	
2048	2018-051-		1829.10	No	G29	Metal	Iron			Rod With Ring	1		Complete	BOX 10	2														FALSE								1005687.5946	759741.39748	9/15/2015	6F	
2049	2018-051-		1829.11	No	G29	Organic	Bone			Bone	1		Inventoried - Ready to Process	WB20															FALSE								1005687.5946	759741.39748	9/15/2015	6F	
2050	2018-051-		1829.12	No	G29	Metal	Iron			Spike	1		Unknown																FALSE								1005687.5946	759741.39748	9/15/2015	6F	
2051	2018-051-		1829.13	No	G29	Concretion	Concretion			Concretion	2		Inventoried - Ready to Process	YB129															FALSE								1005687.5946	759741.39748	9/15/2015	6F	
2052	2018-051-		1829.14	No	G29	Organic	Wood			Barrel Head Pieces	3		Complete - Needs Final Images	Photo Shelf					18.55	in		7.22	in		1.11	in			FALSE								1005687.5946	759741.39748	9/15/2015	6F	
2053	2018-051-		1829.15	No	G29	Organic	Wood			Box Pieces	4		In treatment	7064															FALSE								1005687.5946	759741.39748	9/15/2015	6F	
2054	2018-051-		1829.15.01	No	G29	Metal	Iron			Nail fragments	5	Fragment(s)	Reburial	R				22.8	g		45.20	mm		25.60	mm				FALSE	3/20/2019								1005687.5946	759741.39748	9/15/2015	6F
2055	2018-051-		1829.16	No	G29	Metal	Copper or Copper Alloy			Copper Nail	1		Complete	NHHC - Pallet 2 Small Divided Tote 5	1														FALSE	03/29/2018					35			1005687.5946	759741.39748	9/15/2015	6F
2056	2018-051-		1829.17	No	G29	Metal	Iron			Fasteners	3		Inventoried - Ready to Process	BARREL. 83/Unknown															FALSE								1005687.5946	759741.39748	9/15/2015	6F	
2057	2018-051-		1829.18	Yes	G29	Ceramic	Pearlware			Historic Ceramic	1		Complete	BOX 1	2	Blue transfer print		5.2	g		1.56	in		1.27	in		0.19	in	FALSE	10/18/2018								1005687.5946	759741.39748	9/15/2015	6F
2058	2018-051-		1829.19	No	G29	Glass	Unidentified			Small Clear Glass	2		Deaccessioned	DA															FALSE								1005687.5946	759741.39748	9/15/2015	6F	
2059	2018-051-		1829.20	No	G29	Metal	Iron			Water Pump	1		Inventoried - Ready to Process	JBV															FALSE								1005687.5946	759741.39748	9/15/2015	6F	
2060	2018-051-		1830.01	No	G30	Metal	Iron			Partial Ring/Handle	1		Complete	NHHC - Pallet 1	1														FALSE	11/14/2017					18			1005689.9342	759749.66179	9/15/2015	6G
2061	2018-051-		1830.01.01	No	G30	Recent/Synthetic	Silicone Rubber		EPOXY	Mold And Cast Of 1830.1	2		Complete - Cast	NHHC - Pallet 2 Large Tote 18	1														FALSE	06/02/2016								1005689.9342	759749.66179	9/15/2015	6G
2062	2018-051-		1830.02	No	G30	Metal	Iron			Large Iron Fastener	1		In Treatment	YB133															FALSE								1005689.9342	759749.66179	9/15/2015	6G	
2063	2018-051-		1830.03	No	G30	Metal	Iron			End Of Firegrate	1		Inventoried - Ready to Process	YB149															FALSE								1005689.9342	759749.66179	9/15/2015	6G	
2064	2018-051-		1831.01	No	G31	Metal	Iron			Plates	3		Complete	C1															FALSE	5/29/2018					35			1005679.8463	759753.68858	9/15/2015	5H
2065	2018-051-		1831.02	No	G31	Metal	Iron			Curved Strap	1		Inventoried - Ready to Process	YB149															FALSE								1005679.8463	759753.68858	9/15/2015	5H	
2066	2018-051-		1831.03	No	G31	Metal	Iron			Bearing block half with 1 large fastener	1		Complete - Needs Final Images	TO BE PHOTOGRAPHED				530	lbs		27	in		10.75	in				FALSE						21	12/1/15	Karen	1005679.8463	759753.68858	9/15/2015	5H
2067	2018-051-		1831.03.01	No	G31	Metal	Iron			Bolts and Nuts	10		Complete	C1				932.4	g		2.8	in		1.2	in		0.6	in	FALSE	2/20/2019					35			1005679.8463	759753.68858	9/15/2015	5H
2068	2018-051-		1831.04	No	G31	Metal	Iron			Thin Plate Concretion	1		Inventoried - Ready to Process	YB55															FALSE								1005679.8463	759753.68858	9/15/2015	5H	
2069	2018-051-		1831.05	No	G31	Metal	Iron			Mach. Rod	1		Inventoried - Ready to Process	KP29															FALSE								1005679.8463	759753.68858	9/15/2015	5H	
2070	2018-051-		1831.06	Yes	G31	Ceramic	Whiteware			Historic Ceramic	2		Complete	BOX 3	2														FALSE	8/21/2018								1005679.8463	759753.68858	9/15/2015	5H
2071	2018-051-		1831.07	No	G31	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 8		PX1	Cord marked												FALSE	5/9/2018								1005679.8463	759753.68858	9/15/2015	5H
2072	2018-051-		1831.08	No	G31	Metal	Copper or Copper Alloy			Pump "Knob"	1		Complete	NHHC - Pallet 5 Small Divided Tote 11	1														FALSE	1/11/2018					35			1005679.8463	759753.68858	9/15/2015	5H
2073	2018-051-		1831.09	No	G31	Architecture	Brick			Brick	1		Complete	C7				5.7	lb		8.875	in		4.375	in		2.375	in	FALSE	2/20/2019								1005679.8463	759753.68858	9/15/2015	5H
2074	2018-051-		1831.10	No	G31	Metal	Iron			Conc. Molds	6		Inventoried - Ready to Process	BARREL. 83, YB44 (4/6)															FALSE								1005679.8463	759753.68858	9/15/2015	5H	
2075	2018-051-		1831.11	No	G31	Metal	Iron			Fastener	2		Inventoried - Ready to Process	YB9, YB44															FALSE								1005679.8463	759753.68858	9/15/2015	5H	
2076	2018-051-		1831.12	No	G31	Metal	Iron			Large Strap	1		In Treatment	YB74 - ER															FALSE								1005679.8463	759753.68858	9/15/2015	5H	
2077	2018-051-		1831.13	No	G31	Metal	Iron			Crushed Pipe/Bent Plate	1		Inventoried - Ready to Process	YB147															FALSE								1005679.8463	759753.68858	9/15/2015	5H	
2078	2018-051-		1832.01	No	G32	Metal	Iron			Bent Strap - Gun Carriage (?)	1		In Treatment	YB152															FALSE								1005684.9095	759743.83029	9/15/2015	5G	
2079	2018-051-		1832.02	No	G32	Metal	Iron			Large/Long Piece Of Metal, Forked End	1		Inventoried - Ready to Process	Rolloff 2															FALSE								1005684.9095	759743.83029	9/15/2015	5G	
2080	2018-051-		1833.01	No	G33	Organic	Wood			Stave	1		Complete	NHHC - Pallet 6 Medium Tote 5	1														FALSE	01/09/2018											

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square			
2128	2018-051-		1843.05	No	G45	Metal	Copper or Copper Alloy			Cu Sheets	2		Inventoried - Ready to Process	Brass chem bucket																FALSE								1005694.6783	759735.92674	9/15/2015	6E			
2129	2018-051-		1843.06	No	G45	Metal	Iron			Partial Firegrate	2		In Treatment	YB159																FALSE								1005694.6783	759735.92674	9/15/2015	6E			
2130	2018-051-		1843.07	No	G45	Organic	Wood			Wedges	3		Complete	C6				86.2	g		3.61	in	2.48	in	1.04	in				FALSE	7/12/2019						3/28/2016			1005694.6783	759735.92674	9/15/2015	6E	
2131	2018-051-		1843.08	No	G45	Metal	Iron			Strap with Fastener Hole	1		Inventoried - Ready to Process	18WB05																FALSE								1005694.6783	759735.92674	9/15/2015	6E			
2132	2018-051-		1843.09	No	G45	Metal	Iron			Fastener	1		Inventoried - Ready to Process	BARREL 83															FALSE									1005694.6783	759735.92674	9/15/2015	6E			
2133	2018-051-		1843.10	No	G45	Metal	Iron			Rod with Ring	1		Complete	PR - S6				2.8	lb		23.18	in	4	in	.7	in		0.7	in	FALSE	3/28/2019					28				1005694.6783	759735.92674	9/15/2015	6E	
2134	2018-051-		1843.11	No	G45	Metal	Iron			Pipe Flange? Large	1		In Treatment	YB159																FALSE									1005694.6783	759735.92674	9/15/2015	6E		
2135	2018-051-		1843.12	No	G45	Metal	Iron			Plate	1		Inventoried - Ready to Process	Rolloff 1																FALSE									1005694.6783	759735.92674	9/15/2015	6E		
2136	2018-051-		1844.01	No	G46	Metal	Iron			Boiler Door Frame? Corner?	1		Complete	PR																FALSE							35			1005697.9531	759733.59878	9/15/2015	6E	
2137	2018-051-		1844.02	No	G46	Metal	Iron			Full Door Section	1		Inventoried - Ready to Process	JBV																FALSE	6/6/2019									1005697.9531	759733.59878	9/15/2015	6E	
2138	2018-051-		1844.02.01	No	G46	Architecture	Brick			Brick fragments	11		Inventoried - Ready to Process	Bucket labeled Brick - DA																FALSE										1005697.9531	759733.59878	9/15/2015	6E	
2139	2018-051-		1844.02.02	No	G46	Architecture	Brick			Intact brick	2		Inventoried - Ready to Process																	FALSE										1005697.9531	759733.59878	9/15/2015	6E	
2140	2018-051-		1844.02.03	No	G46	Metal	Iron			Iron Fragment	1		Inventoried - Ready to Process	E R																FALSE										1005697.9531	759733.59878	9/15/2015	6E	
2141	2018-051-		1844.03	No	G46	Metal	Iron			Strap, Long	1		In Treatment	E R, BAGGED SEPARATELY, YB74 (2019 inventory)																FALSE										1005697.9531	759733.59878	9/15/2015	6E	
2142	2018-051-		1844.04	No	G46	Metal	Iron			Plate with Edge	1		Inventoried - Ready to Process	YB55																FALSE										1005697.9531	759733.59878	9/15/2015	6E	
2143	2018-051-		1844.05	No	G46	Composite	Wood	Iron		Wood Plank With Nails	1		Inventoried - Ready to Process	YB? Blue 25 in 09/2018																FALSE										1005697.9531	759733.59878	9/15/2015	6E	
2144	2018-051-		1844.06	No	G46	Architecture	Brick			Brick-Keep	15		Inventoried - Ready to Process	SOME IN CLEANING; 7 PC PHOTOGRAPHED.		"BROOKLYN FIRE-BRICK WORKS NO. 1". "SOUTHn PORCELAIN MANF CO KAOLIN"														FALSE										1005697.9531	759733.59878	9/15/2015	6E	
2145	2018-051-		1844.07	No	G46	Metal	Iron			Bearing Cover?	1		Unknown																	FALSE										1005697.9531	759733.59878	9/15/2015	6E	
2146	2018-051-		1844.08	No	G46	Metal	Iron			Plate	2		In Treatment	YB149 (1/2), YB74 (1/2)																FALSE										1005697.9531	759733.59878	9/15/2015	6E	
2147	2018-051-		1844.09	No	G46	Organic	Wood			Shoe Last	2		Complete	C5																FALSE	6/28/2018									1005697.9531	759733.59878	9/15/2015	6E	
2148	2018-051-		1844.10	No	G46	Metal	Copper or Copper Alloy			Pipe	2		Complete	NHHC - Pallet 5 Small Divided Tote 10	1															FALSE	9/5/2017							32			1005697.9531	759733.59878	9/15/2015	6E
2149	2018-051-		1844.11	No	G46	Metal	Iron			Plate	15		In Treatment	YB74 (2/15)																FALSE										1005697.9531	759733.59878	9/15/2015	6E	
2150	2018-051-		1844.12	No	G46	Metal	Iron			Door	5		Complete	7064							22.8	in	13.75	in			0.5	in		FALSE	5/16/19							21			1005697.9531	759733.59878	9/15/2015	6E
2151	2018-051-		1844.12.01	No	G46	Metal	Iron			Bolt and Nut	2		Complete	BOX 10	2			299	g		3.86	in	1.163	in	0.374	in				FALSE	02/20/2019							35			1005697.9531	759733.59878	9/15/2015	6E
2152	2018-051-		1844.13	No	G46	Metal	Iron			Circle From Boiler	1		In Treatment	YB133																FALSE										1005697.9531	759733.59878	9/15/2015	6E	
2153	2018-051-		1844.14	No	G46	Metal	Iron			Door with Hinges	1		Complete	PR-S7				37	lb		17.2	in	11	in	1.5	in				FALSE	6/18/2019							35			1005697.9531	759733.59878	9/15/2015	6E
2154	2018-051-		1844.15	No	G46	Metal	Iron			Nail	1		Inventoried - Ready to Process	Needs X-ray																FALSE										1005697.9531	759733.59878	9/15/2015	6E	
2155	2018-051-		1844.16	No	G46	Metal	Iron			Firegrate fragment	1		Inventoried - Ready to Process	YB153																FALSE										1005697.9531	759733.59878	9/15/2015	6E	
2156	2018-051-		1844.17	No	G46	Metal	Iron			Long Strap with 1 Fastener	1		Inventoried - Ready to Process	R2																FALSE										1005697.9531	759733.59878	9/15/2015	6E	
2157	2018-051-		1844.18	No	G46	Metal	Iron			Boiler Door Section?	1		Complete - Needs Final Images	TO BE PHOTOGRAPHED							23.1	in	13.85	in	4.9	in				FALSE										1005697.9531	759733.59878	9/15/2015	6E	
2158	2018-051-		1845.01	No	G47	Organic	Wood			Barrel Head/Slave	2		Complete	C6				953.4	g		23.4	in	3.8	in	1.2	in				FALSE	9/2/2019									1005693.2747	759747.33454	9/15/2015	6G	
2159	2018-051-		1845.02	No	G47	Metal	Iron			Square Washer	1		Inventoried - Ready to Process	YB158																FALSE										1005693.2747	759747.33454	9/15/2015	6G	
2160	2018-051-		1845.03	No	G47	Metal	Iron			Curved Fastener	1		Inventoried - Ready to Process	YB158																FALSE										1005693.2747	759747.33454	9/15/2015	6G	
2161	2018-051-		1845.04	No	G47	Organic	Wood			Curved Wood	1		Complete - Needs Final Images	Photo Shelf				401.3	g		22	in	1.89	in				1.41	in	FALSE										1005693.2747	759747.33454	9/15/2015	6G	
2162	2018-051-		1845.04.01	No	G47	Metal	Iron			Nail fragments	3		Reburial	R				6.3	g		29.30	mm	8.85	mm						FALSE	3/20/2019									1005693.2747	759747.33454	9/15/2015	6G	
2163	2018-051-		1846.01	No	G48	Organic	Wood			Barrel Staves	7		Inventoried - Ready to Process	YB7																FALSE										1005699.3832	759737.94711	9/15/2015	7E	
2164	2018-051-		1846.02	No	G48	Metal	Copper or Copper Alloy			Brass Curved Fragment	1		Complete	C2							4.8	in	4.1	in	0.4	in				FALSE	09/04/2018							35			1005699.3832	759737.94711	9/15/2015	7E
2165	2018-051-		1846.03	No	G48	Metal	Iron			Metal Hoe	1		Inventoried - Ready to Process	YB142																FALSE										1005699.3832	759737.94711	9/15/2015	7E	
2166	2018-051-		1846.04	No	G48	Architecture	Firebrick			Fire Brick	5		Reburial	R																FALSE										1005699.3832	759737.94711	9/15/2015	7E	
2167	2018-051-		1846.05	No	G48	Metal	Iron			Cast Iron Door	1		Unknown																	FALSE										1005699.3832	759737.94711	9/15/2015	7E	
2168	2018-051-		1846.06	No	G48	Metal	Iron			Bottom Of Fire Box	3		Inventoried - Ready to Process	YB28?, YB158 (1/3), YB155 (2/3)																FALSE										1005699.3832	759737.94711	9/15/2015	7E	
2169	2018-051-		1846.07	No	G48	Metal	Iron			Door	1		Complete	PR-S2				24.75	lbs		15.75	in	14.875	in	4.568	in				FALSE	5/16/2019							35			1005699.3832	759737.94711	9/15/2015	7E
2170	2018-051-		1846.08	No	G48	Metal	Iron			Metal Straps	2		Inventoried - Ready to Process	YB28?																FALSE										1005699.3832	759737.94711	9/15/2015	7E	
2171																																												

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square		
2213	2018-051-		1850.05	No	G52	Architecture	Brick			Bricks, Complete	7	Intact	Complete	C7				5.5		9.3	in	4.254	in	2.916	in					FALSE	3/29/2019							1005711.339	759740.27569	9/16/2015	8E		
2214	2018-051-		1850.06	No	G52	Metal	Iron			Fastener	1		Inventoried - Ready to Process	YB153																FALSE							1005711.339	759740.27569	9/16/2015	8E			
2215	2018-051-		1850.07	No	G52	Organic	Wood			Wood, cut	2		Complete	C4				344.4	g		7.0	in	6.25	in	0.53	in				FALSE	10/24/2018							1005711.339	759740.27569	9/16/2015	8E		
2216	2018-051-		1850.08	No	G52	Metal	Iron			Firegrate?	1		Inventoried - Ready to Process	YB28																FALSE							1005711.339	759740.27569	9/16/2015	8E			
2217	2018-051-		1850.09	No	G52	Composite	Iron	Copper or Copper Alloy		Gear Mechanism on Rod	1		Complete	Photo shelf				59.0	lbs		32.0	in				7.0	in			FALSE	9/4/2019				6	35		1005711.339	759740.27569	9/16/2015	8E		
2218	2018-051-		1850.10	No	G52	Metal	Iron			Auger Screw	1		Complete	Cart 3				464.7	g		16	in	1.107	in	1.111	in				FALSE	7/22/2019			6.4	35		1005711.339	759740.27569	9/16/2015	8E			
2219	2018-051-		1850.11	No	G52	Metal	Iron			Concretions	2		Inventoried - Ready to Process	YB141(1/2) (low priority)																FALSE							1005711.339	759740.27569	9/16/2015	8E			
2220	2018-051-		1850.12	No	G52	Metal	Iron			Screw With Eye	1		Deaccessioned	DA																FALSE							1005711.339	759740.27569	9/16/2015	8E			
2221	2018-051-		1850.13	No	G52	Metal	Iron			Iron Straps	3		Inventoried - Ready to Process	YB156 (1/3), YB158 (1/3)																FALSE							1005711.339	759740.27569	9/16/2015	8E			
2222	2018-051-		1850.14	No	G52	Metal	Iron			Track fragment	1		Complete	BOX 17	2			5.25	in		6.25	in	4.085	in	1.044	in				FALSE	4/15/2019				32			1005711.339	759740.27569	9/16/2015	8E		
2223	2018-051-		1850.15	No	G52	Metal	Iron			Iron Box Corner	2		Inventoried - Ready to Process	BARREL 151																FALSE							1005711.339	759740.27569	9/16/2015	8E			
2224	2018-051-		1850.16	No	G52	Metal	Iron			Plate-Rectangle	1		Inventoried - Ready to Process	YB?																FALSE							1005711.339	759740.27569	9/16/2015	8E			
2225	2018-051-		1850.17	No	G52	Metal	Copper or Copper Alloy			Gun Cover, Smashed	1		Complete	NHHC - Pallet 14	1	Stamped along rim edge: "28 OF 27 CWT"															FALSE	7/6/2016				21			1005711.339	759740.27569	9/16/2015	8E	
2226	2018-051-		1850.18	No	G52	Metal	Iron			Fire Grate? Box Piece?	1		Inventoried - Ready to Process	YB142																	FALSE							1005711.339	759740.27569	9/16/2015	8E		
2227	2018-051-		1850.19	No	G52	Metal	Iron			Fasteners	3		Inventoried - Ready to Process	YB153 (2/3), YB155																	FALSE							1005711.339	759740.27569	9/16/2015	8E		
2228	2018-051-		1850.20	No	G52	Metal	Iron			Pipe/Bar	1		Inventoried - Ready to Process	Rolloff 2																	FALSE							1005711.339	759740.27569	9/16/2015	8E		
2229	2018-051-		1850.21	No	G52	Metal	Iron			Firegrate	1		Inventoried - Ready to Process	BARREL 33																	FALSE							1005711.339	759740.27569	9/16/2015	8E		
2230	2018-051-		1850.22	Yes	G52	Ceramic	Whiteware	Stoneware		Historic Ceramic	4		Complete	BOX 1	2																FALSE	5/9/2018				0654	ERICA	1005711.339	759740.27569	9/16/2015	8E		
2231	2018-051-		1851.01	No	G53	Organic	Wood			Beveled Wood	2		Inventoried - Ready to Process	YB?																	FALSE							1005721.4758	759743.86476	9/16/2015	9E		
2232	2018-051-		1851.02	No	G53	Organic	Wood			Stave/Head Fragments	19		In treatment	7064																	FALSE							1005721.4758	759743.86476	9/16/2015	9E		
2233	2018-051-		1851.03	No	G53	Organic	Wood			Wedges	2	Intact	Complete	C5				123.7	g		3.336	in	2.377	in	1.027	in				FALSE	10/30/2018							1005721.4758	759743.86476	9/16/2015	9E		
2234	2018-051-	y	1851.04	No	G53	Glass	Unidentified			Glass	2		Complete	7064			Olive	58.5	g		2.86	in	2.8	in	0.223	in				FALSE	9/20/2019							1005721.4758	759743.86476	9/16/2015	9E		
2235	2018-051-		1851.05	No	G53	Organic	Wood			Worked Wood	4		Complete	C5				208.6			154.23	mm				26.27	mm				FALSE	10/30/2018							1005721.4758	759743.86476	9/16/2015	9E	
2236	2018-051-		1851.06	No	G53	Organic	Leather			Shoe Leather	3		Complete	C5																	FALSE	6/28/2018							1005721.4758	759743.86476	9/16/2015	9E	
2237	2018-051-		1851.07	No	G53	Metal	Iron			Metal Rods With Rings	2		Inventoried - Ready to Process	R2/ST?																	FALSE							1005721.4758	759743.86476	9/16/2015	9E		
2238	2018-051-		1851.08	No	G53	Metal	Iron			Gear/Wheel	1		Inventoried - Ready to Process	YB140																	FALSE							1005721.4758	759743.86476	9/16/2015	9E		
2239	2018-051-		1851.09	No	G53	Organic	Wood			Treenail	3		Inventoried - Ready to Process	WB134																	FALSE							1005721.4758	759743.86476	9/16/2015	9E		
2240	2018-051-		1851.10	No	G53	Metal	Copper or Copper Alloy			Sword Hilt	1		Complete	C1	1	Punch-stamped on side of guard: "7c2 DGRT"																FALSE	6/29/2016							1005721.4758	759743.86476	9/16/2015	9E
2241	2018-051-		1851.11	No	G53	Metal	Iron			Track With Two Fasteners	1		Inventoried - Ready to Process	YB139																	FALSE							1005721.4758	759743.86476	9/16/2015	9E		
2242	2018-051-	y	1851.12	No	G53	Metal	Iron			Fasteners	11		Inventoried - Ready to Process	YB24/WB50(CT+4)																	FALSE							1005721.4758	759743.86476	9/16/2015	9E		
2243	2018-051-	y	1851.13	No	G53	Glass				Clear Glass	1		Complete	7064			Clear	9.1	g		2.155	ft	0.629	in	0.334	in					FALSE	9/20/2019							1005721.4758	759743.86476	9/16/2015	9E	
2244	2018-051-		1851.14	No	G53	Organic	Wood			Bucket Handle	1		Unknown																			FALSE							1005721.4758	759743.86476	9/16/2015	9E	
2245	2018-051-		1851.15	No	G53	Organic	Bone			Bone	1		Unknown																			FALSE							1005721.4758	759743.86476	9/16/2015	9E	
2246	2018-051-		1851.16	No	G53	Metal	Iron			Hinge And Nail Fragment	2		Inventoried - Ready to Process	Needs X-ray																	FALSE							1005721.4758	759743.86476	9/16/2015	9E		
2247	2018-051-		1851.17	Yes	G53	Ceramic	Stoneware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1																FALSE	9/13/2017				0433	KAREN	1005721.4758	759743.86476	9/16/2015	9E		
2248	2018-051-		1851.18	No	G53	Metal	Iron			Plate/Part Of A Wheel? (Air Intake Whel)	2		Inventoried - Ready to Process	18WB04/18WB05																		FALSE							1005721.4758	759743.86476	9/16/2015	9E	
2249	2018-051-		1851.19	No	G53	Organic	Wood			Stave	1		Unknown																			FALSE							1005721.4758	759743.86476	9/16/2015	9E	
2250	2018-051-		1852.01	Yes	G54	Ceramic	Whiteware			Historic Ceramic	2		Complete	NHHC - Pallet 4 Small Tote 12	1																FALSE	09/12/2017				0406	KAREN	1005718.3053	759742.61595	9/16/2015	8E		
2251	2018-051-		1852.02	No	G54	Organic	Leather			Leather	1		Complete	C5																		FALSE	6/28/2018							1005718.3053	759742.61595	9/16/2015	8E
2252	2018-051-		1852.03	No	G54	Metal	Iron			Gear Mechanism	1		Inventoried - Ready to Process	Jon's ready vat																		FALSE							1005718.3053	759742.61595	9/16/2015	8E	
2253	2018-051-		1852.04	No	G54	Metal	Iron			Chain	1		Inventoried - Ready to Process	IN BUCKET WITH 1880.17 AND NP166																		FALSE							1005718.3053	759742.61595	9/16/2015	8E	
2254	2018-051-		1852.05	No	G54	Metal	Iron			Caulking Tool	1		Complete	C1				492.5	g		10	in	4.25	in			2.5	in			FALSE	6/4/2019				32			1005718.3053	759742.61595	9/16/2015	8E	
2255	2018-051-		1852.06	No	G54	Organic	Wood			Staves	3		Complete	C5				116.4	g		9.87	in	1.98	in	27	in					FALSE	5/30/19							1005718.3053	759742.61595	9/16/2015	8E	
2256	2018-051-		1852.07	No	G54	Organic	Leather			Leather - Semicircle	1		Unknown																			FALSE							1005718.3053				

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square		
2305	2018-051-		1856.15	No	G58	Organic	Wood			Worked Wood	4		Complete	C5																FALSE	7/11/2018					448	KAREN	1005724.4732	759736.83987	9/16/2015	9E		
2306	2018-051-		1856.16	No	G58	Metal	Iron			Possible Grape Shot	1		Inventoried - Ready to Process	new white bucket 04/2019																FALSE								1005724.4732	759736.83987	9/16/2015	9E		
2307	2018-051-		1856.17	No	G58	Metal	Iron			Chain	1		Inventoried - Ready to Process	YB155																FALSE								1005724.4732	759736.83987	9/16/2015	9E		
2308	2018-051-		1856.18	No	G58	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	WB125																FALSE								1005724.4732	759736.83987	9/16/2015	9E		
2309	2018-051-		1857.01	No	G59	Organic	Leather			Leather Shoe Sole - Heel	2		Complete	NHHC - Pallet 6 Large Tote 24	1															FALSE	1/26/2018								1005725.8137	759746.43918	9/16/2015	9E	
2310	2018-051-		1857.02	No	G59	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Green/Olive													FALSE	9/26/2016								1005725.8137	759746.43918	9/16/2015	9E	
2311	2018-051-		1857.03	No	G59	Organic	Wood			Worked wood	2	Fragments of multiple artifacts	Complete	C3 - Photo				111.7 g		5.99 in		1.208 in		1.16 in						FALSE									1005725.8137	759746.43918	9/16/2015	9E	
2312	2018-051-		1857.04	No	G59	Concretion	Concretion			Unknown	1		Inventoried - Ready to Process	UKNOWN																FALSE									1005725.8137	759746.43918	9/16/2015	9E	
2313	2018-051-		1857.05	No	G59	Metal	Iron			Hook Fragment	1		Inventoried - Ready to Process	YB158																FALSE									1005725.8137	759746.43918	9/16/2015	9E	
2314	2018-051-		1857.06	No	G59	Metal	Iron			Concretion (hook with rope thimble)	1		Inventoried - Ready to Process	YB44																FALSE									1005725.8137	759746.43918	9/16/2015	9E	
2315	2018-051-		1857.07	No	G59	Organic	Other			Snail Shell	1		Did Not Survive	DNS																FALSE									1005725.8137	759746.43918	9/16/2015	9E	
2316	2018-051-		1858	No	G60	Metal	Iron			Gear	1		Inventoried - Ready to Process	JBV																FALSE									1005723.4347	759750.91043	9/16/2015	9F	
2317	2018-051-		1858.02	No	G60	Organic	Wood			Stave	1		In treatment	7064																FALSE									1005723.4347	759750.91043	9/16/2015	9F	
2318	2018-051-		1859	No	G61	Concretion	Concretion			(Washers?) Concretions	2		Inventoried - Ready to Process	18WB04																FALSE									1005732.2943	759745.13064	9/16/2015	10E	
2319	2018-051-		1860	No	G62	Metal	Iron			Possible Iron Track	1		Inventoried - Ready to Process	YB62																FALSE									1005734.8408	759746.40553	9/16/2015	10E	
2320	2018-051-		1861.01	No	G65	Metal	Iron			Ring	1		Inventoried - Ready to Process	2018P9																FALSE									1005685.8708	759733.86198	9/16/2015	5F	
2321	2018-051-		1861.02	No	G65	Metal	Iron			Small Chain	2		Inventoried - Ready to Process	WB147																FALSE									1005685.8708	759733.86198	9/16/2015	5F	
2322	2018-051-		1861.03	No	G65	Metal	Iron			Spike/Hook	1		Unknown																	FALSE									1005685.8708	759733.86198	9/16/2015	5F	
2323	2018-051-		1861.04	No	G65	Metal	Iron			Square Washer	1		Unknown																	FALSE									1005685.8708	759733.86198	9/16/2015	5F	
2324	2018-051-		1861.05	No	G65	Organic	Wood			Wood Handle	1		Complete	C5				34.4 g		98.84 mm						24.62 mm				FALSE	10/30/2018									1005685.8708	759733.86198	9/16/2015	5F
2325	2018-051-		1861.06	No	G65	Metal	Iron			Water Pump	1		Inventoried - Ready to Process	JBV																FALSE									1005685.8708	759733.86198	9/16/2015	5F	
2326	2018-051-		1861.07	No	G65	Metal	Iron			Strap	1		Inventoried - Ready to Process	WB147																FALSE									1005685.8708	759733.86198	9/16/2015	5F	
2327	2018-051-		1861.08	No	G65	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Green/Olive , Clear													FALSE	1/11/2018									1005685.8708	759733.86198	9/16/2015	5F
2328	2018-051-		1861.09	No	G65	Organic	Coal/Charcoal			Probably Coal	1		Inventoried - Ready to Process	WB20?																FALSE									1005685.8708	759733.86198	9/16/2015	5F	
2329	2018-051-		1861.10	No	G65	Metal	Copper or Copper Alloy			Brass Fragments with Partial Holes	3		Complete	BOX 5	2															FALSE	5/3/2018									1005685.8708	759733.86198	9/16/2015	5F
2330	2018-051-		1861.11	No	G65	Metal	Copper or Copper Alloy			Brass Knobs/Valves	4		Complete	NHHC - Pallet 5 Small Divided Tote 11	1															FALSE	1/30/2018									1005685.8708	759733.86198	9/16/2015	5F
2331	2018-051-		1861.12	No	G65	Architecture	Brick			Brick	1		Inventoried - Ready to Process	YB72 OR 18WB02			3 Lines: "SALA"/"FT"/"N"	Red												FALSE									1005685.8708	759733.86198	9/16/2015	5F	
2332	2018-051-		1861.13	No	G65	Metal	Copper or Copper Alloy			Water Intake Strainer	1		Complete	7064																FALSE	8/6/2019									1005685.8708	759733.86198	9/16/2015	5F
2333	2018-051-		1861.13.01	No	G65	Metal	Iron			Iron Components of Water Intake Pump	16		Complete	PR-S8, BOX 10	2			35 lbs		25.5 in		9 in					9 in			FALSE	5/16/19									1005685.8708	759733.86198	9/16/2015	5F
2334	2018-051-		1861.13.02	No	G65	Metal	Copper or Copper Alloy			Pump Valves with Springs and Screws	12		Complete	X-RAY COMPUTER ROOM SHELVES																FALSE	12/12/2018									1005685.8708	759733.86198	9/16/2015	5F
2335	2018-051-		1861.13.03	No	G65	Recent/Synthetic	Rubber			Rubber Gasket	2		Inventoried - Ready to Process	HELEN/JOHN																FALSE									1005685.8708	759733.86198	9/16/2015	5F	
2336	2018-051-		1861.14	No	G65	Metal	Iron			Door Section with Handle	1		Inventoried - Ready to Process	Jon' ready vat																FALSE									1005685.8708	759733.86198	9/16/2015	5F	
2337	2018-051-		1861.15	No	G65	Organic	Leather			Shoe Sole	2		Complete	C5																FALSE	6/28/2018									1005685.8708	759733.86198	9/16/2015	5F
2338	2018-051-		1861.16	Yes	G65	Ceramic	Unidentified			Historic Ceramic	5		Complete - Needs Final Images	Problem Cart																FALSE										1005685.8708	759733.86198	9/16/2015	5F
2339	2018-051-		1861.17	No	G65	Metal	Iron			Drill bit	1		Complete	C1				247.3 g		7.75 in		0.75 in		0.75 in						FALSE	09/11/2019									1005685.8708	759733.86198	9/16/2015	5F
2340	2018-051-		1861.18	No	G65	Metal	Iron			Nails	2		Inventoried - Ready to Process	[NOT BAGGED TOGETHER], Needs X-ray																FALSE									1005685.8708	759733.86198	9/16/2015	5F	
2341	2018-051-		1861.19	No	G65	Metal	Iron			Iron Tool Handle?	1		Inventoried - Ready to Process	WB2018P1																FALSE									1005685.8708	759733.86198	9/16/2015	5F	
2342	2018-051-		1861.20	No	G65	Metal	Iron			Small Chain	1		Unknown																	FALSE									1005685.8708	759733.86198	9/16/2015	5F	
2343	2018-051-		1861.21	No	G65	Organic	Wood			Wedges	6		Complete	C5				280.3 g		3.615 in		2.3133 in		1.128 in						FALSE	10/30/2018									1005685.8708	759733.86198	9/16/2015	5F
2344	2018-051-		1861.22	No	G65	Composite	Iron		Wood	Concretion With Wood	1		Inventoried - Ready to Process	YB44																FALSE									1005685.8708	759733.86198	9/16/2015	5F	
2345	2018-051-		1861.23	No	G65	Concretion	Concretion			Small Concretion	1		Inventoried - Ready to Process	2018WB05																FALSE									1005685.8708	759733.86198	9/16/2015	5F	
2346	2018-051-		1861.24	No	G65	Metal	Iron			Iron Fragment	2		In Treatment, Inventoried - Ready to Process	2018WB05, YB133																FALSE									1005685.8708	759733.86198	9/16/2015	5F	
2347	2018-051-		1861.25	No	G65	Metal	Iron			Thick Pieces Of Plate	5		Inventoried - Ready to Process	YB44																FALSE									1005685.8708	759733.86198	9/16/2015	5F	
2348	2018-051-		1861.26	No	G65	Metal	Iron			Firegate	1		Inventoried - Ready to Process	YB149																FALSE									1005685.8708	759733.86198	9/16/2015	5F	
23																																											

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square
2395	2018-051-		1863.06	No	G67	Metal	Iron			Large Iron Machinery	1		In treatment	Rolloff 2																FALSE						1005686.9237	759730.5909	9/16/2015	5E		
2396	2018-051-		1863.07	No	G67	Metal	Iron			Iron Pipe	1		Inventoried - Ready to Process	Rolloff 2												6 in				FALSE						1005686.9237	759730.5909	9/16/2015	5E		
2397	2018-051-		1863.08	No	G67	Metal	Iron			Iron Straps	2		Inventoried - Ready to Process	18WB05/YB55, YB158 (1/2)																FALSE						1005686.9237	759730.5909	9/16/2015	5E		
2398	2018-051-		1863.09	No	G67	Metal	Iron			Door Frame? With Fastener	1		Inventoried - Ready to Process	Rolloff 2																FALSE						1005686.9237	759730.5909	9/16/2015	5E		
2399	2018-051-		1863.10	No	G67	Organic	Wood			Slave	1	Intact	Complete	C6				40.3 g		10.193 in		1.38 in		0.317 in					FALSE	3/20/2019						1005686.9237	759730.5909	9/16/2015	5E		
2400	2018-051-		1863.11	No	G67	Metal	Iron			Iron Hatch with Fasteners	1		Complete	7064				16.0 lbs		15.0 in		8.0 in		3.75 in					FALSE	5/16/2019				21		1005686.9237	759730.5909	9/16/2015	5E		
2401	2018-051-		1863.12	No	G67	Metal	Iron			Boiler Plate with flange	1		Unknown																FALSE							1005686.9237	759730.5909	9/16/2015	5E		
2402	2018-051-		1863.13	No	G67	Metal	Iron			Iron corner with fastener	1		Inventoried - Ready to Process	KP29															FALSE								1005686.9237	759730.5909	9/16/2015	5E	
2403	2018-051-		1863.14	No	G67	Metal	Iron			Wheel Fragment	1		Complete	PK-S4															FALSE	6/22/2018				35		1005686.9237	759730.5909	9/16/2015	5E		
2404	2018-051-		1863.15	No	G67	Metal	Copper or Copper Alloy			Brass Tack and Small Square Plate	2		Complete	NHHC - Pallet 2 Small Divided Tote 5	1															FALSE	9/5/2017				32		1005686.9237	759730.5909	9/16/2015	5E	
2405	2018-051-		1863.16	No	G67	Metal	Copper or Copper Alloy			Brass Valve Piece	1		Unknown																	FALSE							1005686.9237	759730.5909	9/16/2015	5E	
2406	2018-051-		1863.17	No	G67	Metal	Copper or Copper Alloy			Brass Bearing	1		Complete	C2																FALSE	6/27/2019						1005686.9237	759730.5909	9/16/2015	5E	
2407	2018-051-		1863.18	No	G67	Organic	Bone			Bone	1		Complete	C5				5.2 g		5.807 in		0.464 in		0.412 in					FALSE	3/6/2019						1005686.9237	759730.5909	9/16/2015	5E		
2408	2018-051-		1863.19	No	G67	Metal	Iron			Concreted Nail	1		Deaccessioned	YB59																FALSE							1005686.9237	759730.5909	9/16/2015	5E	
2409	2018-051-		1863.20	No	G67	Metal	Iron			Bolt With Nut And Washer	1		Inventoried - Ready to Process	18WB13																FALSE							1005686.9237	759730.5909	9/16/2015	5E	
2410	2018-051-		1863.21	No	G67	Composite	Iron		Wood	Wired Brush	1		Complete	NHHC - Pallet 5 Small Divided Tote 16	1														FALSE	1/31/2018						1005686.9237	759730.5909	9/16/2015	5E		
2411	2018-051-		1863.22	No	G67	Metal	Iron			Concretion Frags	7		Inventoried - Ready to Process	YB44 (1/7), YB149 (6/7)																FALSE							1005686.9237	759730.5909	9/16/2015	5E	
2412	2018-051-		1863.23	No	G67	Metal	Copper or Copper Alloy			Pump "Knob"	2		Complete	C2												2.84 in		1.37 in		FALSE	10/23/2018				35	0744, 0775	ERICA	1005686.9237	759730.5909	9/16/2015	5E
2413	2018-051-		1863.24	No	G67	Metal	Iron			Thick Plate With One Fastener	1		Inventoried - Ready to Process	YB153																FALSE							1005686.9237	759730.5909	9/16/2015	5E	
2414	2018-051-		1863.25	No	G67	Organic	Wood			Wood Fragment (natural?)	1		In treatment	7064																FALSE							1005686.9237	759730.5909	9/16/2015	5E	
2415	2018-051-		1863.25.01	No	G67	Metal	Iron			Nail fragments	5		Reburial	R				16.3 g		41.87 mm		15.95 mm							FALSE	3/20/2019							1005686.9237	759730.5909	9/16/2015	5E	
2416	2018-051-		1864.01	No	G69	Metal	Iron			Part Of Pump (?)	1		Inventoried - Ready to Process	KP29																FALSE							1005678.0924	759730.72515	9/16/2015	4F	
2417	2018-051-		1864.02	No	G69	Metal	Iron			Fasteners	3		Inventoried - Ready to Process	YB158 (3/3)															FALSE							1005678.0924	759730.72515	9/16/2015	4F		
2418	2018-051-		1864.03	No	G69	Metal	Iron			Clutch Lever?	1		Inventoried - Ready to Process	JBV															FALSE							1005678.0924	759730.72515	9/16/2015	4F		
2419	2018-051-		1864.04	No	G69	Organic	Wood			Wood Handle	1		Complete - Needs Final Images	7064				68.2 g		7 in		1.69 in					1.54 in		FALSE							1005678.0924	759730.72515	9/16/2015	4F		
2420	2018-051-		1864.05	No	G69	Metal	Lead			Lead Sheet	1		Complete	NHHC - Pallet 1 Medium Divided Tote 3	1															FALSE	9/7/2017						1005678.0924	759730.72515	9/16/2015	4F	
2421	2018-051-		1864.06	No	G69	Metal	Copper or Copper Alloy			Brass Knob	1		Complete	C2																FALSE	7/13/2018						1005678.0924	759730.72515	9/16/2015	4F	
2422	2018-051-		1864.07	No	G69	Glass	Unidentified			Ridged Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Clear													FALSE	1/4/2019						1005678.0924	759730.72515	9/16/2015	4F	
2423	2018-051-		1864.08	No	G69	Composite	Iron	Concrete		Fasteners, Concrete	2		Unknown																	FALSE							1005678.0924	759730.72515	9/16/2015	4F	
2424	2018-051-		1864.09	No	G69	Metal	Iron			Rail	1		Inventoried - Ready to Process	YB137																FALSE							1005678.0924	759730.72515	9/16/2015	4F	
2425	2018-051-		1864.10	No	G69	Metal	Iron			Rounded Cast Iron Fragment	1		Inventoried - Ready to Process	YB149																FALSE							1005678.0924	759730.72515	9/16/2015	4F	
2426	2018-051-		1864.11	No	G69	Metal	Iron			Wheel Handle	1		Inventoried - Ready to Process	YB156																FALSE							1005678.0924	759730.72515	9/16/2015	4F	
2427	2018-051-		1865	No	G70	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	18WB04																FALSE							1005677.2991	759719.09663	9/16/2015	4D	
2428	2018-051-		1866.01	No	G71	Organic	Wood			Barrel Stave	1		In treatment	7064																FALSE							1005677.5476	759723.43218	9/16/2015	4E	
2429	2018-051-		1866.02	No	G71	Metal	Copper or Copper Alloy			Pump Knob (Head Only)	1		Complete	NHHC - Pallet 5 Small Divided Tote 8	1															FALSE	1/20/2017				21		1005677.5476	759723.43218	9/16/2015	4E	
2430	2018-051-		1866.03	No	G71	Metal	Iron			Concretion With Grooves	1		Unknown																	FALSE							1005677.5476	759723.43218	9/16/2015	4E	
2431	2018-051-		1866.04	No	G71	Metal	Copper or Copper Alloy			Brass Bracket	1		Complete	NHHC - Pallet 5 Large Tote 19	1															FALSE	11/28/2016				10.6		1005677.5476	759723.43218	9/16/2015	4E	
2432	2018-051-		1866.05	No	G71	Concretion	Concretion			Small, Hollow Concretion	1		Inventoried - Ready to Process	18WB04																FALSE							1005677.5476	759723.43218	9/16/2015	4E	
2433	2018-051-		1866.06	No	G71	Organic	Wood			Wheel	2		Inventoried - Ready to Process	WB107																FALSE							1005677.5476	759723.43218	9/16/2015	4E	
2434	2018-051-		1866.07	No	G71	Metal	Iron			Iron Strap Or Plate	4		Inventoried - Ready to Process	YB149 (3/4)																FALSE							1005677.5476	759723.43218	9/16/2015	4E	
2435	2018-051-		1866.08	No	G71	Metal	Iron			Chain Chock	1		Unknown																	FALSE							1005677.5476	759723.43218	9/16/2015	4E	
2436	2018-051-		1866.09	No	G71	Metal	Iron			Concretion With Knob	1		Unknown																	FALSE							1005677.5476	759723.43218	9/16/2015	4E	
2437	2018-051-		1866.10	No	G71	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	Needs X-ray																FALSE							1005677.5476	759723.43218	9/16/2015	4E	
2438	2018-051-		1866.11	No	G71	Metal	Iron			Fastener Attached To Curved Brace	1		Inventoried - Ready to Process	YB156																FALSE							1005677.5476	759723.43218	9/16/2015	4E	
2439	2018-051-		1866.12	No	G71	Metal	Iron			Piston	1		Inventoried - Ready to Process	Rolloff 2																FALSE							1005677.5476	759723.43218	9/16/2015	4E	
2440	2018-051-		1866.13	No	G71	Metal	Iron			Iron Block	1		Inventoried - Ready to Process	KP29																FALSE											

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square		
2569	2018-051-		1880.26	No	G87	Composite	Iron	Rubber		Cast Iron Fragment With Rubber	1		Inventoried - Ready to Process	WB50																FALSE								1005692.0672	759728.48011	9/17/2015	6E		
2570	2018-051-		1881.01	No	G89	Composite	Brass	Lead		Fuze	2		Complete	NHHC - Pallet 5 Small Divided Tote 14	1															FALSE	3/8/2016					28			1005705.9884	759719.04589	9/17/2015	7C	
2571	2018-051-		1881.02	No	G89	Organic	Wood			Stave	1		Complete	NHHC - Pallet 6 Medium Tote 5	1															FALSE	9/12/2017							1005705.9884	759719.04589	9/17/2015	7C		
2572	2018-051-		1881.03	No	G89	Organic	Bone			Bone	1		Complete	C5				15.4	g		5.21	in	1.02	in	.26	in				FALSE	6/5/2019					10			1005705.9884	759719.04589	9/17/2015	7C	
2573	2018-051-		1881.04	No	G89	Metal	Copper or Copper Alloy			Round Brass Object With Anchor	1		Inventoried - Ready to Process	2018P13																FALSE								1005705.9884	759719.04589	9/17/2015	7C		
2574	2018-051-		1881.05	No	G89	Metal	Pewter			Pewter (?) Sheetting	1		Unknown																	FALSE								1005705.9884	759719.04589	9/17/2015	7C		
2575	2018-051-		1881.06	No	G89	Metal	Iron			Nails, Complete	2		Inventoried - Ready to Process	Needs X-ray																FALSE								1005705.9884	759719.04589	9/17/2015	7C		
2576	2018-051-		1881.07	No	G89	Organic	Leather			Leather Strip	2		Complete	NHHC - Pallet 6 Large Tote 24	1															FALSE	1/11/2018							1005705.9884	759719.04589	9/17/2015	7C		
2577	2018-051-		1881.08	No	G89	Metal	Lead			Lead Patches	3		Inventoried - Ready to Process	BAGGED SEPARATELY																FALSE								1005705.9884	759719.04589	9/17/2015	7C		
2578	2018-051-		1881.09	No	G89	Metal	Copper or Copper Alloy			Concreted Brass Striker	2		Inventoried - Ready to Process	2018P13																FALSE								1005705.9884	759719.04589	9/17/2015	7C		
2579	2018-051-		1881.10	No	G89	Organic	Wood			Wedge	1		Complete - Needs Final Images	Photo Shelf				55.9	g		2.52	in	2.53	in			1.1	in		FALSE								1005705.9884	759719.04589	9/17/2015	7C		
2580	2018-051-		1881.11	No	G89	Metal	Iron			Eyebolt	1		Complete	NHHC - Pallet 2 Large Tote 16	1			248	g		14.6	cm	6.35	cm	3.175	cm				FALSE	4/12/2018								1005705.9884	759719.04589	9/17/2015	7C	
2581	2018-051-		1881.12	No	G89	Metal	Copper or Copper Alloy			Brass Fastener/Spacer	1		Complete	NHHC - Pallet 4 Large Divided Tote 1	1															FALSE	1/27/2017					21			1005705.9884	759719.04589	9/17/2015	7C	
2582	2018-051-		1881.13	No	G89	Glass	Unidentified			Glass	18		Complete	NHHC - Pallet 6 Medium Divided Tote 10	1		Clear, Clear/Light Blue, Light Blue, Blue, Blue/Green, Green/Olive													FALSE	11/14/2018							1005705.9884	759719.04589	9/17/2015	7C		
2583	2018-051-		1881.14	Yes	G89	Ceramic	Stoneware			Historic Ceramic Bases	5		Complete	BOX 7	2															FALSE	6/19/2018					0647, 0655, 0675	KAREN	1005705.9884	759719.04589	9/17/2015	7C		
2584	2018-051-		1881.15	No	G89	Recent/Synthetic	Unidentified			Fragments	3		Complete	C5																FALSE	6/28/2018							1005705.9884	759719.04589	9/17/2015	7C		
2585	2018-051-		1881.16	No	G89	Metal	Copper or Copper Alloy			Copper Sheathing	3		Complete	BOX 5	2			36.8	g		2.89	in	1.99	in						FALSE	10/23/2018					35			1005705.9884	759719.04589	9/17/2015	7C	
2586	2018-051-		1881.17	No	G89	Composite	Leather	Copper or Copper Alloy		Leather Strip with Copper Fasteners	1		Complete	NHHC - Pallet 6 Large Tote 24	1															FALSE	1/26/2018							1005705.9884	759719.04589	9/17/2015	7C		
2587	2018-051-		1881.18	No	G89	Metal	Lead			Square/Rectangular Lead Piece	1		Deaccessioned	DA																FALSE								1005705.9884	759719.04589	9/17/2015	7C		
2588	2018-051-		1881.19	No	G89	Metal	Copper or Copper Alloy			Brass Ring	1		Complete	NHHC - Pallet 5 Small Divided Tote 8	1															FALSE	12/16/2016					28			1005705.9884	759719.04589	9/17/2015	7C	
2589	2018-051-		1881.20	No	G89	Metal	Copper or Copper Alloy			Large Copper Pipe	1		Unknown																	FALSE								1005705.9884	759719.04589	9/17/2015	7C		
2590	2018-051-		1881.21	No	G89	Metal	Iron			Iron Object	1		Inventoried - Ready to Process	2018WB05																FALSE								1005705.9884	759719.04589	9/17/2015	7C		
2591	2018-051-		1881.22	No	G89	Metal	Copper or Copper Alloy			Spring/Coil	1		Complete	BOX 5	2															FALSE	5/3/2018					35			1005705.9884	759719.04589	9/17/2015	7C	
2592	2018-051-		1881.23	No	G89	Metal	Lead			Large Lead Sheet With Holes	1		Deaccessioned	DA																FALSE								1005705.9884	759719.04589	9/17/2015	7C		
2593	2018-051-		1881.24	No	G89	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Small Tote 22	1															FALSE	10/24/2017								1005705.9884	759719.04589	9/17/2015	7C	
2594	2018-051-		1881.25	No	G89	Stone	Slate			Slate	1		Unknown																	FALSE								1005705.9884	759719.04589	9/17/2015	7C		
2595	2018-051-		1881.26	No	G89	Metal	Iron			Manacles	1		Inventoried - Ready to Process	2018P9																FALSE								1005705.9884	759719.04589	9/17/2015	7C		
2596	2018-051-		1881.27	Yes	G89	Ceramic	Whiteware	Stoneware	Ironstone	Historic Ceramic	14		Complete	NHHC - Pallet 4 Small Tote 21	1	Impressed maker's mark on 1 whiteware base fragment															FALSE	10/23/2018					0647, 0655, 0670, 0673, 0675	KAREN	1005705.9884	759719.04589	9/17/2015	7C	
2597	2018-051-		1881.28	No	G89	Metal	Copper or Copper Alloy			Brass Forward Gun Sight Cover	1		Complete	NHHC - Pallet 1 Large Tote 6	1	"US W NY 2"															FALSE	2/1/2018					10.6			1005705.9884	759719.04589	9/17/2015	7C
2598	2018-051-		1881.29	No	G89	Metal	Copper or Copper Alloy			Powder Cammister Lid	1		Inventoried - Ready to Process	YB7																FALSE								1005705.9884	759719.04589	9/17/2015	7C		
2599	2018-051-		1881.30	No	G89	Metal	Copper or Copper Alloy			Powder Cammister Lid	1		Inventoried - Ready to Process	YB7																FALSE								1005705.9884	759719.04589	9/17/2015	7C		
2600	2018-051-		1881.31	No	G89	Metal	Copper or Copper Alloy			Brooke Sabot	1		Complete	BOX 14	2									1.44	in		6.25	in		FALSE	9/4/2018					35			1005705.9884	759719.04589	9/17/2015	7C	
2601	2018-051-		1881.32	No	G89	Metal	Iron			Knee	1		Inventoried - Ready to Process	Rolloff 2																FALSE								1005705.9884	759719.04589	9/17/2015	7C		
2602	2018-051-		1881.33	No	G89	Metal	Copper or Copper Alloy			Milled Brass Object	1		Complete	C2																FALSE	8/22/2018					25			1005705.9884	759719.04589	9/17/2015	7C	
2603	2018-051-		1881.34	No	G89	Metal	Iron			Plating(?) With Holes	1		Complete	C1				559.4	g		13.75	in	5.75	in	0.26	in				FALSE	2/22/2019					35			1005705.9884	759719.04589	9/17/2015	7C	
2604	2018-051-		1881.35	No	G89	Metal	Iron			Hollow Metal Pipes	2		Inventoried - Ready to Process	Rolloff 1?																FALSE								1005705.9884	759719.04589	9/17/2015	7C		
2605	2018-051-		1881.36	No	G89	Metal	Iron			Strap	1		Inventoried - Ready to Process	YB55																FALSE								1005705.9884	759719.04589	9/17/2015	7C		
2606	2018-051-		1881.37	No	G89	Metal	Iron			Hook	1		Inventoried - Ready to Process	2018WB05																FALSE								1005705.9884	759719.04589	9/17/2015	7C		
2607	2018-051-		1881.38	No	G89	Metal	Iron			Eccentric Wheel	1		Inventoried - Ready to Process	Rolloff 2?																FALSE								1005705.9884	759719.04589	9/17/2015	7C		
2608	2018-051-		1881.39	No	G89	Metal	Iron			Crows foot for boiler	5		Complete - Needs Final Images	BAGGED SEPARATELY																FALSE								1005705.9884	759719.04589	9/17/2015	7C		
2609	2018-051-		1881.40	No	G89	Metal	Iron			Curved Plating with Large Holes (Boiler section)	1		Inventoried - Ready to Process	Rolloff 2																FALSE								1005705.9884	759719.04589	9/17/2015	7C		
2610	2018-051-		1881.41	No	G89	Metal	Iron			Large Twisted Strap	1		Inventoried - Ready to Process	Rolloff 2																FALSE								1005705.9884	759719.04589	9/17/2015	7C		
2611	2018-051-		1881.42	No	G89	Ceramic	Coarse Earthenware			Prehistoric Ceramic	6		Complete	PX BOX 12	PX1	4 Cord marked		161	g		3.11	in	2.17	in	0.58	in					FALSE	9/25/2018					0655, 0671, 2, 0675, 0679	KAREN	1005705.9884	759719.04589	9/17/2015	7C	
2612	2018-051-		1881.43	No	G89	Metal	Iron			Plating(?) With Holes	1		Inventoried - Ready to Process																														

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2644	2018-051-		1884.04	No	G92	Organic	Wood			Barrel Staves	2	Mix of fragments and intact artifacts	Complete	C6				113.0	g	9.764	in	1.326	in	0.28	in					FALSE	3/20/2019							1005706.7151	759739.8646	9/17/2015	7E		
2645	2018-051-		1884.05	No	G92	Composite	Iron	Copper or Copper Alloy		Valve	1		Complete	PR																FALSE	7/12/2018							1005706.7151	759739.8646	9/17/2015	7E		
2646	2018-051-		1884.05.01	No	G92	Recent/Synthetic	Rubber			Gasket	1		Complete	C5																FALSE	6/18/2018							1005706.7151	759739.8646	9/17/2015	7E		
2647	2018-051-		1884.06	No	G92	Metal	Iron			Iron Fastener	1		Inventoried - Ready to Process	Rolloff 2																FALSE								1005706.7151	759739.8646	9/17/2015	7E		
2648	2018-051-		1884.07	No	G92	Organic	Wood			Pulley With 3 Grooves	1		Unknown																	FALSE								1005706.7151	759739.8646	9/17/2015	7E		
2649	2018-051-		1884.08	No	G92	Metal	Iron			Firebox Structure	2		Unknown																	FALSE								1005706.7151	759739.8646	9/17/2015	7E		
2650	2018-051-		1884.09	No	G92	Metal	Iron			Curved Iron Plate	1		Unknown																	FALSE								1005706.7151	759739.8646	9/17/2015	7E		
2651	2018-051-		1884.10	No	G92	Metal	Iron			Iron Straps	5		Inventoried - Ready to Process	18WB11																FALSE								1005706.7151	759739.8646	9/17/2015	7E		
2652	2018-051-		1884.11	No	G92	Metal	Iron			Misc. Firebox Iron	8		Inventoried - Ready to Process	YB144 (8/8)																FALSE								1005706.7151	759739.8646	9/17/2015	7E		
2653	2018-051-		1884.12	No	G92	Metal	Iron			Small Iron Plate	3		Inventoried - Ready to Process	ROLL-OFF 1 - Reburial																FALSE								1005706.7151	759739.8646	9/17/2015	7E		
2654	2018-051-		1884.13	No	G92	Metal	Iron			Rod With Eye	1		Inventoried - Ready to Process	KP29																FALSE								1005706.7151	759739.8646	9/17/2015	7E		
2655	2018-051-		1884.14	No	G92	Metal	Iron			Railroad Iron	2		Unknown																	FALSE								1005706.7151	759739.8646	9/17/2015	7E		
2656	2018-051-		1884.15	No	G92	Organic	Wood			Peg Wood	1		Inventoried - Ready to Process	YB12																FALSE								1005706.7151	759739.8646	9/17/2015	7E		
2657	2018-051-		1884.16	No	G92	Metal	Iron			Iron Nails	4		Inventoried - Ready to Process	WB50																FALSE								1005706.7151	759739.8646	9/17/2015	7E		
2658	2018-051-		1884.17	Yes	G92	Ceramic	Unidentified			Historic Ceramic	1		Inventoried - Ready to Process																	FALSE								1005706.7151	759739.8646	9/17/2015	7E		
2659	2018-051-		1884.18	No	G92	Metal	Copper or Copper Alloy			Copper Sheathing	1		Inventoried - Ready to Process																	FALSE						0721	KAREN	1005706.7151	759739.8646	9/17/2015	7E		
2660	2018-051-		1884.19	No	G92	Organic	Bone			Bone	1		Unknown																	FALSE								1005706.7151	759739.8646	9/17/2015	7E		
2661	2018-051-		1884.20	No	G92	Organic	Leather			Leather	1		Complete	NHHC - Pallet 6 Large Tote 24	1															FALSE	1/11/2018							1005706.7151	759739.8646	9/17/2015	7E		
2662	2018-051-		1884.21	No	G92	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Medium Divided Tote 12	1															FALSE	2/1/2016							1005706.7151	759739.8646	9/17/2015	7E		
2663	2018-051-		1884.22	No	G92	Metal	Iron			Firegrate	4		Complete	TO BE PHOTOGRAPHED						56	in	4.25	in					5	in	FALSE	5/14/2019					25	12/1/15	Karen	1005706.7151	759739.8646	9/17/2015	7E	
2664	2018-051-		1884.23	No	G92	Organic	Wood			Thick Round Wood	1		Complete - Needs Final Images	Photo Shelf				314.8	g	7.75	in	2.34	in					2.17	in	FALSE								1005706.7151	759739.8646	9/17/2015	7E		
2665	2018-051-		1884.24	No	G92	Metal	Iron			Firegrate	1		Complete	PR-S14, Rolloff 1 (5/67)						55.125	in	3.875	in	4.75	in					FALSE	12/19/2018					35			1005706.7151	759739.8646	9/17/2015	7E	
2666	2018-051-		1884.25	No	G92	Metal	Iron			Firegrate Fragment	1		Inventoried - Ready to Process	Rolloff 1																FALSE								1005706.7151	759739.8646	9/17/2015	7E		
2667	2018-051-		1885.01	No	G93	Metal	Copper or Copper Alloy			Skeleton Key	1		Complete	NHHC - Pallet 5 Small Divided tote 7	1															FALSE	5/26/2016							1005737.1718	759740.29253	9/17/2015	10D		
2668	2018-051-		1885.02	No	G93	Metal	Lead			Rolled Up Piece of Lead	1		Complete	NHHC - Pallet 1 Small Divided Tote 2	1															FALSE	9/5/2017							1005737.1718	759740.29253	9/17/2015	10D		
2669	2018-051-		1885.03	No	G93	Glass	Unidentified			Glass Bottle Top	1		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Green/Olive													FALSE	1/17/2018							1005737.1718	759740.29253	9/17/2015	10D		
2670	2018-051-		1885.04	No	G93	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB1																FALSE								1005737.1718	759740.29253	9/17/2015	10D		
2671	2018-051-		1885.05	No	G93	Metal	Iron			Fastener With Head And Square Plate	1		Inventoried - Ready to Process	YB137																FALSE								1005737.1718	759740.29253	9/17/2015	10D		
2672	2018-051-		1886	No	G94	Metal	Iron			Boiler Plate with Rivets	1		Inventoried - Ready to Process	YB137																FALSE								1005714.4799	759729.08362	9/17/2015	8D		
2673	2018-051-		1887	No	G95	Metal	Iron			Pipe, long	1		Inventoried - Ready to Process	Concrete tank by 7063												2.5	in			FALSE								1005708.0064	759729.73574	9/17/2015	7D		
2674	2018-051-		1888.01	No	G97	Metal	Iron			Iron Plate, 1 half rail	6		In Treatment	YB74 (3/6), YB147 (3/6)																FALSE								1005710.1594	759737.04611	9/17/2015	8E		
2675	2018-051-		1888.02	No	G97	Metal	Iron			Fastener	1		Inventoried - Ready to Process	YB147																FALSE								1005710.1594	759737.04611	9/17/2015	8E		
2676	2018-051-		1888.03	No	G97	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Clear													FALSE	11/27/2018							1005710.1594	759737.04611	9/17/2015	8E		
2677	2018-051-		1888.04	No	G97	Metal	Lead			Lead Patch	1		Inventoried - Ready to Process	LEAD2																FALSE								1005710.1594	759737.04611	9/17/2015	8E		
2678	2018-051-		1888.04.01	No	G97	Metal	Copper or Copper Alloy			Tacks	2		Complete	BOX 5	2																FALSE	5/30/2018					21			1005710.1594	759737.04611	9/17/2015	8E
2679	2018-051-		1888.05	Yes	G97	Ceramic	Whiteware			Historic Ceramic	1		Complete	BOX 1	2																FALSE	5/9/2018					1017	ERICA	1005710.1594	759737.04611	9/17/2015	8E	
2680	2018-051-		1888.06	No	G97	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1	Check stamped - faint															FALSE	11/7/2017					1017	ERICA/CORINNA	1005710.1594	759737.04611	9/17/2015	8E	
2681	2018-051-		1888.07	No	G97	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Medium Divided Tote 12	1															FALSE	10/19/2017							1005710.1594	759737.04611	9/17/2015	8E		
2682	2018-051-		1888.08	No	G97	Organic	Leather			Leather	1		Complete	C5				2.2	g	2.060	in	1.128	in	0.086	in					FALSE	10/31/2018							1005710.1594	759737.04611	9/17/2015	8E		
2683	2018-051-		1888.09	No	G97	Metal	Iron			Firebox Bottom	2		Inventoried - Ready to Process	YB147, Rolloff 2 (1/2), YB137 (1/37)																FALSE								1005710.1594	759737.04611	9/17/2015	8E		
2684	2018-051-		1888.09.01	No	G97	Metal	Iron			Machinery - keep	2		In Treatment	YB74 - ER																FALSE								1005710.1594	759737.04611	9/17/2015	8E		
2685	2018-051-		1888.10	No	G97	Metal	Iron			Small Iron Strap	1		Inventoried - Ready to Process	WB125																FALSE								1005710.1594	759737.04611	9/17/2015	8E		
2686	2018-051-		1888.11	No	G97	Metal	Iron			Rod With Indent/Shaft bar?	1		Inventoried - Ready to Process	Rolloff 2																FALSE								1005710.1594	759737.04611	9/17/2015	8E		
2687	2018-051-		1888.12	No	G97	Metal	Iron			Nails	3		Inventoried - Ready to Process	18WB12																FALSE								1005710.1594	759737.04611	9/17/2015	8E		
2688	2018-051-		1888.13	No	G97	Architecture	Brick			Bricks	4		Complete	NHHC - Pallet 4 Small Tote																													

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2724	2018-051-		1893.08	No	G102	Architecture	Firebrick			Complete Fire Brick	1		Complete	NHHC - Pallet 4 Small Tote 14	1	"BROOKLYN FIRE BRICK-WORKS NO. 1" surrounded by rectangular border																FALSE	6/17/2016							1005728.273	759731.49772	9/17/2015	9D		
2725	2018-051-		1893.09	No	G102	Composite	Iron	Wood		Possible Tool Handle	1		Inventoryied - Ready to Process	new white bucket 04/2019																		FALSE								1005728.273	759731.49772	9/17/2015	9D		
2726	2018-051-		1893.10	No	G102	Metal	Copper or Copper Alloy			Brass Tack	1		Inventoryied - Ready to Process	Brass ER bucket																		FALSE								1005728.273	759731.49772	9/17/2015	9D		
2727	2018-051-		1894	No	G106	Metal	Iron			Negative Iron Concretion	2		Unknown																				FALSE								1005663.2177	759749.40562	9/17/2015	4H	
2728	2018-051-		1895.01	No	G109	Composite	Iron	Wood		Wood in Iron Base - Engine bed assembly?	1		Inventoryied - Ready to Process	Rolloff 2																			FALSE								1005672.7122	759748.65488	9/17/2015	4G	
2729	2018-051-		1895.01.01	No	G109	Metal	Iron			Fastener-2 Ends	1		In Treatment	YB74 - ER																			FALSE								1005672.7122	759748.65488	9/17/2015	4G	
2730	2018-051-		1895.02	No	G109	Organic	Rosin			Rosin	7		Complete	C4																			FALSE	5/10/2018								1005672.7122	759748.65488	9/17/2015	4G
2731	2018-051-		1896	No	G110	Metal	Iron			Drop Shaft	2		Inventoryied - Ready to Process	KP29																			FALSE								1005688.8051	759708.38894	9/17/2015	5C	
2732	2018-051-		1897.01	No	G111	Metal	Iron			Door?	1		Inventoryied - Ready to Process	KP29								1 ft		1 ft									FALSE								1005698.2892	759720.73514	9/17/2015	6D	
2733	2018-051-		1897.02	No	G111	Metal	Iron			Misc. Machinery	2		Inventoryied - Ready to Process	KP29 ; JBV																			FALSE								1005698.2892	759720.73514	9/17/2015	6D	
2734	2018-051-		1897.03	No	G111	Composite	Iron	Wood		Large Metal Plate Fastened To Large Timber	1		Unknown																			FALSE								1005698.2892	759720.73514	9/17/2015	6D		
2735	2018-051-		1897.04	No	G111	Metal	Lead			Lead Tube/Pipe	1		Complete	NHHC - Pallet 4 Medium Divided Tote 2	1																	FALSE	9/5/2017								1005698.2892	759720.73514	9/17/2015	6D	
2736	2018-051-		1897.05	No	G111	Metal	Iron			Plate - May Have Detail	1		Inventoryied - Ready to Process	ROLL OFF 1 - Reburial																		FALSE								1005698.2892	759720.73514	9/17/2015	6D		
2737	2018-051-		1897.06	No	G111	Glass	Pane Glass			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Clear															FALSE	1/16/2019								1005698.2892	759720.73514	9/17/2015	6D	
2738	2018-051-		1897.07	No	G111	Metal	Iron			Metal Rod, Complete	1		Inventoryied - Ready to Process	Rolloff 2																		FALSE								1005698.2892	759720.73514	9/17/2015	6D		
2739	2018-051-	y	1898.01	No	G112	Glass	Unidentified			Glass	2		Complete	7064			Olive	55.2 g		2.245 in		1.391 in		1.371 in								FALSE	9/20/2019								1005700.5378	759707.07157	9/17/2015	6C	
2740	2018-051-		1898.02	No	G112	Recent/Synthetic	Plastic	Unidentified		Wire (Modern)	2		Complete	NHHC - Pallet 5 Small Divided Tote 11	1																	FALSE	7/10/2018								1005700.5378	759707.07157	9/17/2015	6C	
2741	2018-051-		1898.03	No	G112	Metal	Iron			Circular Iron With Bolt	1		Inventoryied - Ready to Process	KP29																		FALSE								1005700.5378	759707.07157	9/17/2015	6C		
2742	2018-051-		1898.04	No	G112	Organic	Wood			Curved Wood	1		In treatment	7064																		FALSE								1005700.5378	759707.07157	9/17/2015	6C		
2743	2018-051-		1898.05	No	G112	Composite	Wood	Rubber		Wood Coated with Rubber	1		Complete	C5																		FALSE	7/12/2018								1005700.5378	759707.07157	9/17/2015	6C	
2744	2018-051-		1898.06	No	G112	Metal	Iron			Riveted Iron	1		Inventoryied - Ready to Process	BARREL 23																		FALSE								1005700.5378	759707.07157	9/17/2015	6C		
2745	2018-051-		1898.07	No	G112	Metal	Iron			Fastener/Handle Sticking Out Of Concretion	1		Inventoryied - Ready to Process	BARREL 32																		FALSE								1005700.5378	759707.07157	9/17/2015	6C		
2746	2018-051-		1898.08	No	G112	Metal	Iron			Iron Track	1		Unknown																				FALSE								1005700.5378	759707.07157	9/17/2015	6C	
2747	2018-051-		1898.09	No	G112	Organic	Wood			Barrel Wood	1		In treatment	7064																			FALSE								1005700.5378	759707.07157	9/17/2015	6C	
2748	2018-051-		1898.10	No	G112	Metal	Iron			Plate With Fastener	1																																		

Appendix C: Artifact Database																																													
Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square				
2808	2018-051-		1901.04	No	G115	Glass	Unidentified			Glass	4		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1															FALSE	01/16/2019					10			1005695.1826	759707.50601	9/17/2015	5C			
2809	2018-051-		1901.05	Yes	G115	Ceramic	Whiteware	Whiteware		Historic Ceramic	1		Complete	BOX 1	2	blue floral decoration															FALSE	05/01/2018					10	0849	KAREN	1005695.1826	759707.50601	9/17/2015	5C		
2810	2018-051-		1902.01	No	G116	Metal	Iron			Large Pipe, Whole	9		Complete	7046				33.38	kg		26	in		9	in				8.5	in	FALSE	5/16/19					25	12/1/15	Karen	1005694.757	759719.54807	9/17/2015	6D		
2811	2018-051-		1902.02	No	G116	Metal	Copper or Copper Alloy			Pillow Block	1		Complete - Needs Final Images	To be photographed							13	in		12	in		6	in		FALSE											1005694.757	759719.54807	9/17/2015	6D	
2812	2018-051-		1902.03	No	G116	Metal	Iron			Large Metal Plates	2		Inventoried - Ready to Process	KP29																FALSE											1005694.757	759719.54807	9/17/2015	6D	
2813	2018-051-		1902.04	No	G116	Metal	Iron			Square Wrench	1		Inventoried - Ready to Process	YB46																FALSE											1005694.757	759719.54807	9/17/2015	6D	
2814	2018-051-		1902.05	No	G116	Metal	Iron			Machinery (?)	2		Inventoried - Ready to Process	YB46 (2/2)																FALSE											1005694.757	759719.54807	9/17/2015	6D	
2815	2018-051-		1902.06	No	G116	Metal	Iron			Ratchet Wrench	1		Inventoried - Ready to Process	YB46																FALSE											1005694.757	759719.54807	9/17/2015	6D	
2816	2018-051-		1902.07	No	G116	Metal	Iron			Large Washer/Head	1		Inventoried - Ready to Process	YB3																FALSE											1005694.757	759719.54807	9/17/2015	6D	
2817	2018-051-		1902.08	No	G116	Metal	Copper or Copper Alloy			Brass Scrap	1		Inventoried - Ready to Process	BARREL 50																FALSE											1005694.757	759719.54807	9/17/2015	6D	
2818	2018-051-		1902.09	No	G116	Metal	Iron			Small Wrench/Fastener	1		Inventoried - Ready to Process	YB3																FALSE											1005694.757	759719.54807	9/17/2015	6D	
2819	2018-051-		1902.10	Yes	G116	Ceramic	Whiteware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 21	1															FALSE	3/7/2018						0825	KAREN	1005694.757	759719.54807	9/17/2015	6D			
2820	2018-051-		1902.11	No	G116	Glass	Unidentified			Glass fragments	2		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Clear, Green/Olive													FALSE	11/27/2018											1005694.757	759719.54807	9/17/2015	6D
2821	2018-051-		1902.12	No	G116	Metal	Iron			Complete Fasteners	5		Inventoried - Ready to Process	YB147 (5/5)																FALSE											1005694.757	759719.54807	9/17/2015	6D	
2822	2018-051-		1902.13	No	G116	Metal	Copper or Copper Alloy			Brass Lever/Valve	2		Complete	NHHC - Pallet 5 Small Divided Tote 11	1															FALSE	12/16/2016						25				1005694.757	759719.54807	9/17/2015	6D	
2823	2018-051-		1902.14	No	G116	Metal	Iron			Square Washer	1		Inventoried - Ready to Process	YB147																FALSE											1005694.757	759719.54807	9/17/2015	6D	
2824	2018-051-		1902.15	No	G116	Metal	Iron			Nail	1		Complete	BOX 10	2			30.8	g		4.13	in		0.56	in		0.34	in		FALSE	04/05/2019						25				1005694.757	759719.54807	9/17/2015	6D	
2825	2018-051-		1902.16	No	G116	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 11		PX1														FALSE	3/6/2018											1005694.757	759719.54807	9/17/2015	6D
2826	2018-051-		1902.17	No	G116	Architecture	Mortar			Mortar	1		Complete	NHHC -	1															FALSE	3/7/2018											1005694.757	759719.54807	9/17/2015	6D
2827	2018-051-		1903.01	No	G118	Metal	Copper or Copper Alloy	Iron		Locking mechanism?		Fragment(s) of a single artifact	Complete - Needs Final Images	Photo shelf					249.2	g		3.206	in		2.085	in		0.695	in		FALSE						6.4	21				1005692.5034	759712.43356	9/17/2015	5C
2828	2018-051-		1903.02	No	G118	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Clear													FALSE	11/26/2018											1005692.5034	759712.43356	9/17/2015	5C
2829	2018-051-		1904.01	No	G119	Metal	Iron			Chain	1		Inventoried - Ready to Process	BARREL 32																FALSE											1005685.9693	759715.64535	9/17/2015	5D	
2830	2018-051-		1904.02	No	G119	Metal	Iron			Fasteners, Complete	1		Inventoried - Ready to Process	BARREL 68																FALSE											1005685.96				

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square		
2896	2018-051-		1912.03	No	G127	Metal	Copper or Copper Alloy			Brass Valve	1		Inventoried - Ready to Process	WB106																FALSE								1005683.8145	759720.64422	9/18/2015	5D		
2897	2018-051-		1912.04	No	G127	Stone	Unidentified			Stone	1		Complete	NHHC - Pallet 4 Small Tote 17	1															FALSE								1005683.8145	759720.64422	9/18/2015	5D		
2898	2018-051-		1912.05	No	G127	Metal	Iron			Wrought iron plate riveted to cast iron diamond plate	1		Complete	C9				14.05	lbs		16.5	in	9.875	in	1.178	in				FALSE	9/2/2019				6.4	32			1005683.8145	759720.64422	9/18/2015	5D	
2899	2018-051-		1912.06	No	G127	Architecture	Brick			Complete Brick	1		Complete	C7			Red													FALSE	6/20/2018							1005683.8145	759720.64422	9/18/2015	5D		
2900	2018-051-		1913.01	Yes	G128	Ceramic	Whiteware	Stoneware	Tin Enameled	Historic Ceramic	8		Complete	NHHC - Pallet 4 Small Tote 21	1	Blue circular pattern hand painting on tin enamel fragment														FALSE	7/5/2017						1171-1172	ERICA	1005708.5998	759705.22212	9/18/2015	6B	
2901	2018-051-		1913.02	No	G128	Glass	Unidentified			Glass	7		Complete	NHHC - Pallet 6 Medium Divided Tote 10	1		Clear, Green/Olive													FALSE	1/10/2019							1005708.5998	759705.22212	9/18/2015	6B		
2902	2018-051-		1913.03	No	G128	Organic	Bone			Bone	2		Complete	NHHC - Pallet 6 Small Tote 24	1	cut mark														FALSE	9/7/2017							1005708.5998	759705.22212	9/18/2015	6B		
2903	2018-051-		1913.04	No	G128	Metal	Copper or Copper Alloy			Brass Objects	3		Complete	C2																FALSE	7/13/2018							1005708.5998	759705.22212	9/18/2015	6B		
2904	2018-051-		1913.05	No	G128	Metal	Iron			Iron Handle	4		Complete	NHHC - Pallet 1 Large Tote 6	1															FALSE	1/31/2018							1005708.5998	759705.22212	9/18/2015	6B		
2905	2018-051-		1913.06	No	G128	Recent/Synthetic	Rubber			Round Rubber Gasket Seal (?)	4		Complete	C3				55.2	g					0.363	in	3.016	in			FALSE	8/7/2019					21			1005708.5998	759705.22212	9/18/2015	6B	
2906	2018-051-		1913.07	No	G128	Metal	Iron			Iron Hollow Tube	1		Unknown																	FALSE								1005708.5998	759705.22212	9/18/2015	6B		
2907	2018-051-		1913.08	No	G128	Composite	Iron	Wood		Long Rod With Fastener And Wood	1		Inventoried - Ready to Process	Rolloff 2																FALSE								1005708.5998	759705.22212	9/18/2015	6B		
2908	2018-051-		1913.09	No	G128	Composite	Wood	Iron		Possible Hull Wood With 2 Fasteners	1		Unknown	Blue 25																FALSE								1005708.5998	759705.22212	9/18/2015	6B		
2909	2018-051-		1913.10	No	G128	Metal	Iron			Iron Plates	2		Inventoried - Ready to Process	BARREL 23, Rolloff 2 (1/2)																FALSE								1005708.5998	759705.22212	9/18/2015	6B		
2910	2018-051-		1913.11	No	G128	Metal	Iron			Small Iron Strap	1		Complete	BOX 10	2			91.5	g		6.5	in	0.49	in	0.47	in				FALSE	04/05/2019					25			1005708.5998	759705.22212	9/18/2015	6B	
2911	2018-051-		1913.12	No	G128	Metal	Iron			Riveted Iron	1		Inventoried - Ready to Process	ST																FALSE								1005708.5998	759705.22212	9/18/2015	6B		
2912	2018-051-		1913.13	No	G128	Metal	Iron			Firebox Ends	2		Unknown																	FALSE								1005708.5998	759705.22212	9/18/2015	6B		
2913	2018-051-		1913.14	No	G128	Metal	Iron			Iron Rail	1		Unknown																	FALSE								1005708.5998	759705.22212	9/18/2015	6B		
2914	2018-051-		1913.15	No	G128	Metal	Iron			Firegrate Fragment	1		Complete	NHHC - Pallet 3 Medium Tote 1	1															FALSE	2/5/2018							1005708.5998	759705.22212	9/18/2015	6B		
2915	2018-051-		1913.16	No	G128	Composite	Wood	Lead		Wood With Lead Patch	1		Inventoried - Ready to Process	WB136																FALSE								1005708.5998	759705.22212	9/18/2015	6B		
2916	2018-051-		1913.17	No	G128	Metal	Iron			Chain Conglomerate	2		Inventoried - Ready to Process	BARREL 32																FALSE								1005708.5998	759705.22212	9/18/2015	6B		
2917	2018-051-		1913.18	No	G128	Metal	Iron			Iron Concretion	3		Inventoried - Ready to Process	BARREL 31																FALSE								1005708.5998	759705.22212	9/18/2015	6B		
2918	2018-051-		1913.19	No	G128	Metal	Iron			Round Machinery/Bolt	1		Unknown																	FALSE								1005708.5998	759705.22212	9/18/2015	6B		
2919	2018-051-		1913.20	No	G128	Metal	Iron			Pump Machinery	1		Inventoried - Ready to Process	KP29																FALSE								1005708.5998	759705.22212	9/18/2015	6B		
2920	2018-051-		1913.21	No	G128	Metal	Iron			Fasteners	2		Inventoried - Ready to Process	BARREL 23																FALSE								1005708.5998	759705.22212	9/18/2015	6B		
2921	2018-051-		1913.22	No	G128	Metal	Iron			Pipe With Coupling	1		Inventoried - Ready to Process	YB												2	in			FALSE								1005708.5998	759705.22212	9/18/2015	6B		
2922	2018-051-		1913.23	No	G128	Composite	Iron	Rubber		Iron Corner With Rubber	1		Inventoried - Ready to Process	BARREL 24																FALSE								1005708.5998	759705.22212	9/18/2015	6B		
2923	2018-051-		1913.24	No	G128	Metal	Iron			Flywheel rim or spoke?	1		Complete	C1			10.05	lb		12.25	in	2.65	in			73	cm	1.81	in	FALSE	09/11/2019					6.4	18			1005708.5998	759705.22212	9/18/2015	6B
2924	2018-051-		1913.25	No	G128	Organic	Wood			Carved Handle	1		Complete	NHHC - Pallet 6 Medium Tote 5	1															FALSE	1/9/2018							1005708.5998	759705.22212	9/18/2015	6B		
2925	2018-051-		1913.26	No	G128	Architecture	Mortar			Concretion Or Mortar	1		Inventoried - Ready to Process	WB125																FALSE								1005708.5998	759705.22212	9/18/2015	6B		
2926	2018-051-		1913.27	No	G128	Metal	Iron			Concretion	1		Inventoried - Ready to Process	YB																FALSE								1005708.5998	759705.22212	9/18/2015	6B		
2927	2018-051-		1913.28	No	G128	Organic	Coal/Charcoal			Coal	7		Complete	NHHC - Pallet 6 Small Tote 22	1															FALSE	7/3/2017							1005708.5998	759705.22212	9/18/2015	6B		
2928	2018-051-		1913.29	No	G128	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 3	PX1	Possibly Simple stamped (faint)															FALSE	7/3/2017							1005708.5998	759705.22212	9/18/2015	6B	
2929	2018-051-		1913.30	No	G128	Metal	Iron			Iron Nail	2		Complete	BOX 10	2			16.2	g		2.53	in	0.39	in	0.33	in				FALSE	04/05/2019					25			1005708.5998	759705.22212	9/18/2015	6B	
2930	2018-051-		1914.01	No	G129	Metal	Iron			Broken Fastener (With Strap?)	1		Inventoried - Ready to Process	18WB12																FALSE								1005725.0826	759710.84931	9/18/2015	8B		
2931	2018-051-		1914.02	Yes	G129	Ceramic	Whiteware	Stoneware		Historic Ceramic	5		Complete	BOX 3	2																FALSE	5/3/2018							1005725.0826	759710.84931	9/18/2015	8B	
2932	2018-051-		1914.03	No	G129	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Clear													FALSE	1/15/2019							1005725.0826	759710.84931	9/18/2015	8B		
2933	2018-051-		1914.04	No	G129	Metal	Iron			Iron Ring	1		Inventoried - Ready to Process	WB116																FALSE								1005725.0826	759710.84931	9/18/2015	8B		
2934	2018-051-		1914.05	No	G129	Metal	Iron			Iron Gear/Wheel	1		Complete	NHHC - Pallet 2 Large Tote 15	1												33	cm		FALSE	11/16/2017							1005725.0826	759710.84931	9/18/2015	8B		
2935	2018-051-		1914.06	No	G129	Metal	Iron			Thin Iron Plate With Strap	1		Inventoried - Ready to Process	YB28																FALSE								1005725.0826	759710.84931	9/18/2015	8B		
2936	2018-051-		1914.07	No	G129	Metal	Iron			Thick Iron Plate	1		Inventoried - Ready to Process	YB28																FALSE								1005725.0826	759710.84931	9/18/2015	8B		
2937	2018-051-		1914.08	No	G129	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 9	PX1															FALSE	1/11/2018							1005725.0826	759710.84931	9/18/2015	8B		
2938	2018-051-		1915.01	No	G130	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear, Green/Olive													FALSE	1/14/2019							1005716.0272	759716.5285	9/18/2015	7C		
2939	2018-051-		1915.02	No	G130	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 11	PX1															FALSE	3/15/2016							1005716.0272					

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square		
2985	2018-051-		1921.08	No	G136	Metal	Iron			Plate - small	1		Inventoried - Ready to Process	BARREL 24																FALSE								1005712.5242	759721.74256	9/18/2015	7C		
2986	2018-051-		1921.09	No	G136	Metal	Iron			Straps	3		Inventoried - Ready to Process	BARREL 23/24/31																FALSE								1005712.5242	759721.74256	9/18/2015	7C		
2987	2018-051-		1921.10	No	G136	Metal	Iron			Iron Handle?	1		Inventoried - Ready to Process	WB																FALSE								1005712.5242	759721.74256	9/18/2015	7C		
2988	2018-051-		1921.11	No	G136	Metal	Iron			Iron Plate With Hole	1		Complete	BOX 10	2				72 g		4.5 in		3.75 in		1.75 in					FALSE	6/4/2019				32					1005712.5242	759721.74256	9/18/2015	7C
2989	2018-051-		1921.12	No	G136	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	BARREL 24																FALSE									1005712.5242	759721.74256	9/18/2015	7C	
2990	2018-051-		1922	No	G137	Metal	Copper or Copper Alloy			Copper Scraps	2		Unknown																	FALSE									1005736.7326	759759.65434	9/18/2015	11F	
2991	2018-051-		1923.01	No	G138	Glass	Unidentified			Glass	6		Inventoried - Ready to Process	WB14			Amber, Clear													FALSE									1005731.9207	759737.18303	9/18/2015	10D	
2992	2018-051-		1923.02	No	G138	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Small Tote 23	1															FALSE	10/18/2017									1005731.9207	759737.18303	9/18/2015	10D
2993	2018-051-		1923.03	No	G138	Metal	Lead			Lead Shot	5		Complete	NHHC - Pallet 5 Small Divided Tote 15	1	3 narrow single ridge; 2 broad ridge														FALSE	5/25/2017									1005731.9207	759737.18303	9/18/2015	10D
2994	2018-051-		1923.04	No	G138	Metal	Iron			Firegrate	1		Complete	PR-S14																FALSE									1005731.9207	759737.18303	9/18/2015	10D	
2995	2018-051-		1923.05	No	G138	Metal	Iron			Gun Port	1		Inventoried - Ready to Process	KP29																FALSE									1005731.9207	759737.18303	9/18/2015	10D	
2996	2018-051-		1923.06	No	G138	Glass	Unidentified			Glass	6		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1	"DYOTTVI" on base	Blue/Green, Green/Olive													FALSE	1/17/2015									1005731.9207	759737.18303	9/18/2015	10D
2997	2018-051-		1923.07	Yes	G138	Ceramic	Stoneware			Historic Ceramic	1		Complete	BOX 1	2															FALSE	7/12/2018						1272	ERICA		1005731.9207	759737.18303	9/18/2015	10D
2998	2018-051-		1923.08	No	G138	Metal	Copper or Copper Alloy			Brass Tack	1		Complete	NHHC - Pallet 2 Small Divided Tote 5	1					1.3 in							0.4 in			FALSE	11/1/2017				32					1005731.9207	759737.18303	9/18/2015	10D
2999	2018-051-		1923.09	No	G138	Organic	Bone			Bone	1		Complete	C5				14.1 g		2.814 in		1.203 in			0.32 in					FALSE	3/6/2019									1005731.9207	759737.18303	9/18/2015	10D
3000	2018-051-		1923.10	No	G138	Metal	Iron			Large Concretion	3		In Treatment, Inventoried - Ready to Process	YB133, YB44 (2/3)																FALSE									1005731.9207	759737.18303	9/18/2015	10D	
3001	2018-051-		1923.11	No	G138	Organic	Leather			Shoe Heel	3	Fragment(s) of a single artifact	Complete	C5				37.6 g		4.284 in		2.846 in		0.242 in						FALSE	3/20/2019									1005731.9207	759737.18303	9/18/2015	10D
3002	2018-051-		1923.12	No	G138	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 3		1 possible Cord marked														FALSE	9/14/2017						1272	ERICA/CORRU NA		1005731.9207	759737.18303	9/18/2015	10D
3003	2018-051-		1924	No	G139	Metal	Iron			Fasteners, Complete	5		Unknown																	FALSE									1005742.8786	759737.69546	9/18/2015	11D	
3004	2018-051-		1925.01	No	G140	Metal	Iron			Door With Hinge	1		Unknown																	FALSE									1005715.5548	759708.61264	9/18/2015	7B	
3005	2018-051-		1925.02	No	G140	Metal	Iron			Drill Bit	1		Inventoried - Ready to Process	18WB11																FALSE									1005715.5548	759708.61264	9/18/2015	7B	
3006	2018-051-		1925.03	No	G140	Metal	Iron			Iron Nail	1		Deaccessioned	DA																FALSE									1005715.5548	759708.61264	9/18/2015	7B	
3007	2018-051-		1925.04	Yes	G140	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1															FALSE	7/2/2017						1267	ERICA		1005715.5548	759708.61264	9/18/2015	7B
3008	2018-051-		1926.01	No	G141	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Medium Divided Tote 12	1															FALSE	10/19/2017									1005717.6765	759737.02895	9/18/2015	8E
3009	2018-051-		1926.02	No	G141	Organic	Cask Head and Staves			Cask	3		Complete	NHHC - Pallet 6 Medium Tote 5	1															FALSE	1/9/2018									1005717.6765	759737.02895	9/18/2015	8E
3010	2018-051-		1926.03	No	G141	Organic	Bone			Bone	2		Inventoried - Ready to Process	WB20																FALSE									1005717.6765	759737.02895	9/18/2015	8E	
3011	2018-051-		1926.04	No	G141	Organic	Wood			Handle	1	Fragments of a single artifact	Complete	C3 - Photo				113.7 g		5.894 in						1.758 in				FALSE									1005717.6765	759737.02895	9/18/2015	8E	
3012	2018-051-		1926.05	No	G141	Metal	Nails, Complete			Nails	1		Inventoried - Ready to Process	18WB11																FALSE									1005717.6765	759737.02895	9/18/2015	8E	
3013	2018-051-		1926.06	No	G141	Organic	Ethnobotany			Fruit Pit	1		Complete	C5				1.0 g		0.596 in		0.496 in		0.355 in						FALSE	10/31/2018									1005717.6765	759737.02895	9/18/2015	8E
3014	2018-051-		1926.07	No	G141	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Green/Olive													FALSE	7/11/2016									1005717.6765	759737.02895	9/18/2015	8E
3015	2018-051-		1927	No	G142	Metal	Iron			Chunk Of Cast Iron	1		Unknown																	FALSE									1005746.6365	759742.29874	9/18/2015	11D	
3016	2018-051-		1928.01	Yes	G143	Ceramic	Refined Earthenware			Historic Ceramic	2		Complete	NHHC - Pallet 4 Small Tote 12	1		Blue, White													FALSE	1/23/2019							0962	KAREN	1005668.6449	759714.99841	9/18/2015	3D
3017	2018-051-		1928.02	No	G143	Metal	Copper or Copper Alloy			Pump Cover	1		Inventoried - Ready to Process																	FALSE									1005668.6449	759714.99841	9/18/2015	3D	
3018	2018-051-		1928.02.01	No	G143	Metal	Copper or Copper Alloy			Brass Screwplugs from Pump Cover	45		Complete	C2																FALSE	6/22/2018				32					1005668.6449	759714.99841	9/18/2015	3D
3019	2018-051-		1928.02.02	No	G143	Recent/Synthetic	Rubber			Gaskets From Pump Cover	1		Inventoried - Ready to Process																	FALSE						NA	NA		1005668.6449	759714.99841	9/18/2015	3D	
3020	2018-051-		1928.02.03	No	G143	Metal	Iron			Iron Machinery (Sulfite) Pump Cover	2		Complete	BOX 19	2					7.5 in		3.605 in		3.27 in						FALSE	12/12/2018									1005668.6449	759714.99841	9/18/2015	3D
3021	2018-051-		1928.03	No	G143	Glass	Unidentified			Glass	3		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear													FALSE	1/14/2019									1005668.6449	759714.99841	9/18/2015	3D
3022	2018-051-		1928.04	No	G143	Organic	Bone			Bone	1		Complete	C5				14.6 g		2.842 in		0.932 in		0.65 in						FALSE	3/6/2019									1005668.6449	759714.99841	9/18/2015	3D
3023	2018-051-		1928.05	No	G143	Organic	Wood			Long, Notched Handle	1		Inventoried - Ready to Process	Blue 25																FALSE									1005668.6449	759714.99841	9/18/2015	3D	
3024	2018-051-		1929.01	No	G144	Metal	Semicircular Sheeting With Rivets				1		Inventoried - Ready to Process	KP29																FALSE									1005662.2738	759709.21799	9/18/2015	2D	
3025	2018-051-		1929.02	No	G144	Composite	Iron	Wood		Iron/Wood Composite (from rudder?)	1		Unknown																	FALSE									1005662.2738	759709.21799	9/18/2015	2D	
3026	2018-051-		1929.03	Yes	G144	Ceramic	Whiteware			Historic Ceramic	1		Complete	BOX 1	2			20 g		3.29 in		1.89 in		0.23 in						FALSE	10/18/2018				0978	KAREN		1005662.2738	759709.21799	9/18/2015	2D		
3027	2018-051-		1930.01	Yes	G145	Ceramic	Refined Earthenware			Historic Ceramic	5		Complete	NHHC - Pallet 4 Small Tote 12	1															FALSE	1/23/2019				0987	KAREN		10					

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square
3070	2018-051-		1937.03	No	G154	Metal	Iron			Iron Plate With Fastener Holes	1		Inventoried - Ready to Process	Rolloff 1															FALSE								1005681.9863	759710.61291	9/18/2015	4C	
3071	2018-051-		1937.04	No	G154	Metal	Iron			DNS	1		DNS	DNS															FALSE	2-26-16							1005681.9863	759710.61291	9/18/2015	4C	
3072	2018-051-		1937.05	No	G154	Metal	Copper or Copper Alloy			Copper Tack	1		Unknown																FALSE								1005681.9863	759710.61291	9/18/2015	4C	
3073	2018-051-		1937.06	No	G154	Organic	Bone			Bone	1		Complete	C5				103.6g		4.337in		2.803in		1.346in					FALSE	3/6/2019								1005681.9863	759710.61291	9/18/2015	4C
3074	2018-051-		1937.07	No	G154	Glass	Unidentified			Glass	4		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Clear, Green/Olive												FALSE	1/14/2019								1005681.9863	759710.61291	9/18/2015	4C
3075	2018-051-		1937.08	Yes	G154	Ceramic	Stoneware			Historic Ceramic	1		Complete	BOX 1	2														FALSE	5/9/2018					1381	ERICA	1005681.9863	759710.61291	9/18/2015	4C	
3076	2018-051-		1937.09	No	G154	Metal	Copper or Copper Alloy			Copper Wire	1		Inventoried - Ready to Process	WB106															FALSE								1005681.9863	759710.61291	9/18/2015	4C	
3077	2018-051-		1937.10	No	G154	Metal	Copper or Copper Alloy			Copper Sheathing And Wire	3		Inventoried - Ready to Process	Brass chem bucket															FALSE								1005681.9863	759710.61291	9/18/2015	4C	
3078	2018-051-		1937.11	No	G154	Metal	Copper or Copper Alloy			Brass Tack	1		Inventoried - Ready to Process	Brass ER bucket															FALSE								1005681.9863	759710.61291	9/18/2015	4C	
3079	2018-051-		1937.12	No	G154	Metal	Iron			Possible Tool	1		Inventoried - Ready to Process	WB2018P1															FALSE								1005681.9863	759710.61291	9/18/2015	4C	
3080	2018-051-		1937.13	No	G154	Metal	Iron			Half Rail	1		Inventoried - Ready to Process	BARREL 56															FALSE								1005681.9863	759710.61291	9/18/2015	4C	
3081	2018-051-		1937.14	No	G154	Metal	Iron			Iron Plates	2		Inventoried - Ready to Process	BARREL 24															FALSE								1005681.9863	759710.61291	9/18/2015	4C	
3082	2018-051-		1938.01	No	G155	Metal	Iron			Fastener With Square Washer	2		Complete	NHHC - Pallet 1 Large Tote 5	1														FALSE	6/22/2018					35			1005675.4051	759712.11731	9/18/2015	3D
3083	2018-051-		1938.02	No	G155	Metal	Iron			Possible Pipe	1		Inventoried - Ready to Process																FALSE								1005675.4051	759712.11731	9/18/2015	3D	
3084	2018-051-		1938.03	No	G155	Metal	Iron			Fastener	1		In Treatment	YB74 - ER															FALSE								1005675.4051	759712.11731	9/18/2015	3D	
3085	2018-051-		1938.04	No	G155	Metal	Iron			Small Concretion	1		Inventoried - Ready to Process	YB															FALSE								1005675.4051	759712.11731	9/18/2015	3D	
3086	2018-051-		1938.05	No	G155	Metal	Iron			Concretion With Wood	1		Inventoried - Ready to Process	BARREL 24															FALSE								1005675.4051	759712.11731	9/18/2015	3D	
3087	2018-051-		1938.06	No	G155	Metal	Iron			Firegrate fragment?	1		Complete	C1				1.6kg		6.3in		3.24in					1.61in		FALSE	2/28/2019					32			1005675.4051	759712.11731	9/18/2015	3D
3088	2018-051-		1938.07	No	G155	Metal	Iron			Concretion	1		Inventoried - Ready to Process	BARREL 31															FALSE								1005675.4051	759712.11731	9/18/2015	3D	
3089	2018-051-		1938.08	No	G155	Glass	Unidentified			Glass	6		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Clear												FALSE	1/14/2019								1005675.4051	759712.11731	9/18/2015	3D
3090	2018-051-		1938.09	No	G155	Recent/Synthetic	Rubber			Rubber	1		Inventoried - Ready to Process	RUBBER															FALSE								1005675.4051	759712.11731	9/18/2015	3D	
3091	2018-051-		1938.10	No	G155	Stone	Unidentified			Stone	1		Complete	NHHC - Pallet 4 Small Tote 17	1														FALSE								1005675.4051	759712.11731	9/18/2015	3D	
3092	2018-051-		1938.11	No	G155	Metal	Iron			Iron Nail Fragment	1		Inventoried - Ready to Process	WB50															FALSE								1005675.4051	759712.11731	9/18/2015	3D	
3093	2018-051-		1938.12	No	G155	Organic	Wood			Barrel Stave	1		In treatment	7064															FALSE								1005675.4051	759712.11731	9/18/2015	3D	
3094	2018-051-		1939.01	No	G156	Metal	Iron			Railroad Iron	1		Unknown																FALSE								1005673.7184	759704.18831	9/18/2015	3C	
3095	2018-051-		1939.02	No	G156	Organic	Bone			Bone	1		Complete	C5				21.2g		1.955in		1.628in		0.762in					FALSE	3/6/2019								1005673.7184	759704.18831	9/18/2015	3C
3096	2018-051-		1940.01	No	G157	Organic	Leather			Tar Paper	9	Fragment(s)	Complete	C5				173.3g		13.209in		12.084in		0.038in					FALSE	3/20/2019								1005685.3905	759699.35804	9/18/2015	4B
3097	2018-051-		1940.02	No	G157	Metal	Iron			Iron Bracket	1		Inventoried - Ready to Process	YB62															FALSE								1005685.3905	759699.35804	9/18/2015	4B	
3098	2018-051-		1940.03	No	G157	Metal	Iron			Round Fastener	1		Inventoried - Ready to Process	YB44															FALSE								1005685.3905	759699.35804	9/18/2015	4B	
3099	2018-051-		1940.04	No	G157	Metal	Iron			Small Iron Strap	1		Inventoried - Ready to Process	YB44															FALSE								1005685.3905	759699.35804	9/18/2015	4B	
3100	2018-051-		1940.05	No	G157	Metal	Iron			Concretion	1		Inventoried - Ready to Process	WB125															FALSE								1005685.3905	759699.35804	9/18/2015	4B	
3101	2018-051-		1940.06	No	G157	Metal	Iron			Large Pipe	1		Inventoried - Ready to Process	Rolloff 1															FALSE								1005685.3905	759699.35804	9/18/2015	4B	
3102	2018-051-		1940.07	No	G157	Organic	Wood			Stave	1		Complete	NHHC - Pallet 6 Medium Tote 5	1														FALSE	1/10/2018								1005685.3905	759699.35804	9/18/2015	4B
3103	2018-051-		1940.08	Yes	G157	Ceramic	Refined Earthenware			Historic Ceramic	2		Complete	BOX 2	2														FALSE	6/14/2018						1395	ERICA	1005685.3905	759699.35804	9/18/2015	4B
3104	2018-051-		1940.09	No	G157	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Light Green/Olive												FALSE	1/14/2019								1005685.3905	759699.35804	9/18/2015	4B
3105	2018-051-		1941.01	No	G158	Metal	Iron			Plate With 2 Raised Lines	1		Inventoried - Ready to Process	YB134															FALSE								1005704.6535	759699.82901	9/18/2015	6B	
3106	2018-051-		1942	No	G159	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Clear												FALSE	12/10/2018								1005698.0193	759697.13127	9/18/2015	5B
3107	2018-051-		1943.01	Yes	G160	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1		Red												FALSE	4/22/2016								1005689.9761	759697.24122	9/20/2015	4B
3108	2018-051-		1943.02	No	G160	Metal	Iron			Chain	1		Unknown																FALSE								1005689.9761	759697.24122	9/20/2015	4B	
3109	2018-051-		1943.03	No	G160	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear												FALSE	1/15/2019								1005689.9761	759697.24122	9/20/2015	4B
3110	2018-051-		1943.04	No	G160	Recent/Synthetic	Rubber			Rubber	1		Complete	C5															FALSE	6/27/2018								1005689.9761	759697.24122	9/20/2015	4B
3111	2018-051-		1943.05	No	G160	Metal	Iron			Fastener/Bolt	1		Inventoried - Ready to Process	WB50															FALSE								1005689.9761	759697.24122	9/20/2015	4B	
3112	2018-051-		1943.06	No	G160	Metal	Iron			Fastener Frag?	1		Inventoried - Ready to Process	WB50															FALSE								1005689.9761	759697.24122	9/20/2015	4B	
3113	2018-051-		1943.07	No	G160	Composite	Wood		Iron	Fasteners Through Wood	2		Inventoried - Ready to Process	YB44															FALSE								1005689.9761	759697.24122	9/20/2015	4B	
3114	2018-051-		1944.01	No	G162	Glass	Unidentified			Glass	2		Unknown				Clear, Brown													FALSE								1005690.7208	759701.22106	9/20/2015	5B
3115	2018-051-		1944.02	Yes	G																																				

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square		
3230	2018-051-		1969.11	No	G192	Concretion	Concretion			Partial Ring (?)	2		Inventoried - Ready to Process	18WB04																FALSE						1218	KAREN	1005678.8628	759692.88662	9/20/2015	3B		
3231	2018-051-		1969.12	No	G192	Organic	Wood			Wood Plank With Curves Cut, Branch Fragment	2		Inventoried - Ready to Process	BAGGED SEPRATELY; Blue 25																FALSE						1219	KAREN	1005678.8628	759692.88662	9/20/2015	3B		
3232	2018-051-		1969.13	No	G192	Metal	Iron			Iron Strap (?)	1		Inventoried - Ready to Process	18WB10																FALSE						NO PHOTO	KAREN	1005678.8628	759692.88662	9/20/2015	3B		
3233	2018-051-		1969.14	No	G192	Metal	Iron			Railroad Iron	1		Inventoried - Ready to Process	Rolloff 1						44	in									FALSE								1005678.8628	759692.88662	9/20/2015	3B		
3234	2018-051-		1970.01	No	G193	Glass	Unidentified			Glass	1		Complete	GLASS BOX 3, PR-S9	1		Green/Olive													FALSE	11/7/2016						2837-2839	ERICA	1005683.7815	759696.38642	9/20/2015	4B	
3235	2018-051-		1970.02	No	G193	Organic	Paper			Pressed Fibers	1		Complete	C1	1															FALSE	9/5/2017						2837-2839	ERICA	1005683.7815	759696.38642	9/20/2015	4B	
3236	2018-051-		1970.03	No	G193	Metal	Iron			Iron Plate	1		Inventoried - Ready to Process	BARREL 23																FALSE							2837-2839	ERICA	1005683.7815	759696.38642	9/20/2015	4B	
3237	2018-051-		1970.04	No	G193	Metal	Iron			Square Stanchion Support	1		Complete	C1				5.80	lb		4.974	in						4.960	in	FALSE	4/15/2019					28	2837-2839	ERICA	1005683.7815	759696.38642	9/20/2015	4B	
3238	2018-051-		1971.01	No	G195	Metal	Iron			Spike	1		Inventoried - Ready to Process	NHHC - Pallet 6 Medium Divided Tote 11																FALSE						1227	KAREN	1005728.1878	759705.99202	9/20/2015	8A		
3239	2018-051-		1971.02	No	G195	Metal	Iron			Iron Pipe	1		Complete	NHHC - Pallet 5 Small Divided Tote 16																FALSE							1228	KAREN	1005728.1878	759705.99202	9/20/2015	8A	
3240	2018-051-		1972.01	No	G196	Metal	Copper or Copper Alloy			Sight Cover	1		Complete	NHHC - Pallet 2 Large Tote 12	1	"NO. 79"														FALSE	7/6/2016					21	2844-2846	ERICA	1005733.8318	759709.20424	9/20/2015	9B	
3241	2018-051-		1972.02	No	G196	Metal	Iron			Hook	1		Complete	NHHC - Pallet 6 Large Tote 26	1															FALSE	6/29/2016					21	2859-2861	ERICA	1005733.8318	759709.20424	9/20/2015	9B	
3242	2018-051-		1972.03	No	G196	Metal	Iron			Rigging Shackle	1		Inventoried - Ready to Process	P1																FALSE							2859-2861	ERICA	1005733.8318	759709.20424	9/20/2015	9B	
3243	2018-051-		1972.05	No	G196	Composite	Iron	Wood		Fastener With Wood	1		Inventoried - Ready to Process	YB134																FALSE							2859-2861	ERICA	1005733.8318	759709.20424	9/20/2015	9B	
3244	2018-051-		1972.06	No	G196	Metal	Iron			Cast Iron	1		Inventoried - Ready to Process	18WB04																FALSE							2859-2861	ERICA	1005733.8318	759709.20424	9/20/2015	9B	
3245	2018-051-		1972.07	No	G196	Metal	Iron			Firegrate	1		Inventoried - Ready to Process	ROLLOFF 1 - Reburial																FALSE							2859-2861	ERICA	1005733.8318	759709.20424	9/20/2015	9B	
3246	2018-051-		1972.08	Yes	G196	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1															FALSE	4/22/2016						2859-2861	ERICA	1005733.8318	759709.20424	9/20/2015	9B	
3247	2018-051-		1972.09	No	G196	Metal	Iron			Strap	1		Inventoried - Ready to Process	Rolloff 2																FALSE								1005733.8318	759709.20424	9/20/2015	9B		
3248	2018-051-		1972.10	No	G196	Metal	Iron			Valve/Machinery	1		Inventoried - Ready to Process	Rolloff 2																FALSE								1005733.8318	759709.20424	9/20/2015	9B		
3249	2018-051-		1972.11	No	G196	DMM - Discarded Military Munitions	DMM - Dahlgren Ball	Copper or Copper Alloy		9" Dahlgren Shell with Watercap Fuze (Removed)	1		Complete	Dahlgren Pallet																FALSE	12/18/2018					14			1005733.8318	759709.20424	9/20/2015	9B	
3250	2018-051-		1972.11.01	No	G196	Metal	Copper or Copper Alloy			Watercap Fuze	2		Complete	BOX 6	2															FALSE	5/22/2018					35			1005733.8318	759709.20424	9/20/2015	9B	
3251	2018-051-		1973.01	No	G197	Metal	Copper or Copper Alloy			Bayonet Handle	1		Complete	DISPLAY, HELEN'S OFFICE																FALSE	1/19/2018			6/14/2017			25	1260	KAREN	1005733.7554	759716.26072	9/21/2015	9B
3252	2018-051-		1973.02	No	G197	Metal	Iron			Wheel	2		Inventoried - Ready to Process	Rolloff 2																FALSE							1261	KAREN	1005733.7554	759716.26072	9/21/2015	9B	
3253	2018-051-		1973.04	No	G197	Metal	Iron			Circle With Fastener	1		Inventoried - Ready to Process	2018P7																FALSE							1261	KAREN	1005733.7554	759716.26072	9/21/2015	9B	
3254	2018-051-		1973.05	No	G197	Metal	Copper or Copper Alloy			Circular Hatch(?) Cover	1		In treatment																	FALSE							1261	KAREN	1005733.7554	759716.26072	9/21/2015	9B	
3255	2018-051-		1973.06	No	G197	Metal	Iron			Chain	1		Inventoried - Ready to Process	ST																FALSE							1261	KAREN	1005733.7554	759716.26072	9/21/2015	9B	
3256	2018-051-		1973.07	No	G197	Metal	Iron			Firegrate fragment	1		Inventoried - Ready to Process	Rolloff 1																FALSE							1261	KAREN	1005733.7554	759716.26072	9/21/2015	9B	
3257	2018-051-		1973.08	No	G197	Metal	Copper or Copper Alloy			Cupreous Sheathing	3		Inventoried - Ready to Process	Brass chem bucket																FALSE							1260	KAREN	1005733.7554	759716.26072	9/21/2015	9B	
3258	2018-051-		1973.09	Yes	G197	Ceramic	Stoneware	Porcelain	Whiteware	Historic Ceramic	7		Complete	NHHC - Pallet 4 Small Tote 21	1															FALSE	6/27/2017						1260	KAREN	1005733.7554	759716.26072	9/21/2015	9B	
3259	2018-051-		1973.10	No	G197	Metal	Iron			Iron Bar	1		Inventoried - Ready to Process	Rolloff 2?																FALSE							1261	KAREN	1005733.7554	759716.26072	9/21/2015	9B	
3260	2018-051-		1973.11	No	G197	Architecture	Brick			Whole Brick	1		Complete	C7			Red				7.5	in		3.25	in		2.25	in		FALSE	2/20/2019						1261	KAREN	1005733.7554	759716.26072	9/21/2015	9B	
3261	2018-051-		1973.12	No	G197	Metal	Copper or Copper Alloy			Screw	1		Inventoried - Ready to Process	Brass ER bucket																FALSE							1260	KAREN	1005733.7554	759716.26072	9/21/2015	9B	
3262	2018-051-		1973.13	No	G197	Glass	Unidentified			Glass	5		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear, Green/Olive													FALSE	1/14/2019						1260	KAREN	1005733.7554	759716.26072	9/21/2015	9B	
3263	2018-051-		1973.14	No	G197	Metal	Iron			Nail	1		Inventoried - Ready to Process	18WB11																FALSE							1260	KAREN	1005733.7554	759716.26072	9/21/2015	9B	
3264	2018-051-		1973.15	No	G197	Organic	Leather			Leather	1		Complete	NHHC - Pallet 6 Large Tote 24	1															FALSE	1/11/2018						1260	KAREN	1005733.7554	759716.26072	9/21/2015	9B	
3265	2018-051-		1973.16	No	G197	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4		PX1														FALSE	12/18/2017						1260	KAREN	1005733.7554	759716.26072	9/21/2015	9B	
3266	2018-051-		1974.01	No	G198	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Clear													FALSE	1/4/2019						1273	KAREN	1005730.7379	759713.01126	9/21/2015	9B	
3267	2018-051-		1974.02	Yes	G198	Ceramic	Whiteware	Stoneware		Historic Ceramic	5		Complete	BOX 3	2															FALSE	6/19/2018						1273	KAREN	1005730.7379	759713.01126	9/21/2015	9B	
3268	2018-051-		1974.03	No	G198	Metal	Copper or Copper Alloy			Copper Sheathing	1		Inventoried - Ready to Process	Brass chem bucket																FALSE							1273	KAREN	1005730.7379	759713.01126	9/21/2015	9B	
3269	2018-051-		1975.01	No	G199	Organic	Wood			Stave	2		Complete	NHHC - Pallet 6 Medium Tote 5	1															FALSE	10/31/2017						2889-2891	ERICA	1005729.4092	759717.49387	9/21/2015	9C	
3270	2018-051-		1975.02	No	G199	Glass	Unidentified			Glass	8		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Green/Olive, Clear, Light Blue													FALSE	1/16/2019						2889-2891	ERICA	1005729.4092	759717.49387	9/21/2015	9C	
3271	2018-051-		1975.03	Yes	G199	Ceramic	Unidentified			Historic Ceramic	7		Inventoried - Ready to Process	WB131																FALSE							2889-2891	ERICA	1005729.4092	759717.49387	9/21/2015	9C	
3272	2018-051-		1975.04	No	G199	Metal	Copper or Copper Alloy			Brass Strap	1		Inventoried - Ready to Process	Brass ER bucket																													

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square
3300	2018-051-		1977.05	No	G201	Metal	Iron			Steam Distribution Flange	1		Inventoried - Ready to Process	Blue ready vat																FALSE						2895-2898	ERICA	1005720.4468	759699.409	9/21/2015	7A
3301	2018-051-		1977.06	Yes	G201	Ceramic	Whiteware	Stoneware		Historic Ceramic	8		Complete	BOX 1	2															FALSE	5/9/2018					2905	ERICA	1005720.4468	759699.409	9/21/2015	7A
3302	2018-051-		1977.08	No	G201	Glass	Unidentified			Glass	4		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Amber, Green/Olive												FALSE	1/18/2018					2895-2898	ERICA	1005720.4468	759699.409	9/21/2015	7A	
3303	2018-051-		1977.09	No	G201	Organic	Bone			Bone	1		Complete	NHHC - Pallet 6 Small Tote 24	1														FALSE	11/14/2018					2895-2898	ERICA	1005720.4468	759699.409	9/21/2015	7A	
3304	2018-051-		1977.10	No	G201	Metal	Iron			Square Iron Plate	1		Inventoried - Ready to Process	YB98															FALSE						2895-2898	ERICA	1005720.4468	759699.409	9/21/2015	7A	
3305	2018-051-		1977.11	No	G201	Metal	Copper or Copper Alloy			Knob	1		Unknown																FALSE						2895-2898	ERICA	1005720.4468	759699.409	9/21/2015	7A	
3306	2018-051-		1977.12	No	G201	Metal	Copper or Copper Alloy			Copper Fragment	1		Complete	NHHC - Pallet 2 Small Divided Tote 4	1														FALSE	5/9/2018					2895-2898	ERICA	1005720.4468	759699.409	9/21/2015	7A	
3307	2018-051-		1977.13	No	G201	Metal	Copper or Copper Alloy			Powder Canister Lid	2		Inventoried - Ready to Process	BARREL 50															FALSE						2895-2898	ERICA	1005720.4468	759699.409	9/21/2015	7A	
3308	2018-051-		1977.14	No	G201	Metal	Iron			Iron Plate	1		Complete	C1															FALSE	11/21/2017					2895-2898	ERICA	1005720.4468	759699.409	9/21/2015	7A	
3309	2018-051-		1977.15	No	G201	Metal	Iron			Iron Strap/Plate	1		Complete	PR-S6				8.20 lbs		16.0 in		3.895 in		1.085 in					FALSE	5/16/2019				21	2895-2898	ERICA	1005720.4468	759699.409	9/21/2015	7A	
3310	2018-051-		1977.16	No	G201	Metal	Iron			Wheel?	1		Complete	NHHC - Pallet 5 Large Tote 22	1														FALSE						2895-2898	ERICA	1005720.4468	759699.409	9/21/2015	7A	
3311	2018-051-		1977.17	No	G201	Metal	Iron			Large Strap	1		Inventoried - Ready to Process	BARREL 68															FALSE						2895-2898	ERICA	1005720.4468	759699.409	9/21/2015	7A	
3312	2018-051-		1977.18	No	G201	Metal	Iron			Coal Door or Ash Door	1		Complete	NHHC - Pallet 3 Medium Tote 1	1														FALSE	1/24/2018					32	2895-2898	ERICA	1005720.4468	759699.409	9/21/2015	7A
3313	2018-051-		1977.19	No	G201	Composite	Wood	Iron		Wood With Iron Strap/Fastener	1		Unknown																FALSE						2895-2898	ERICA	1005720.4468	759699.409	9/21/2015	7A	
3314	2018-051-		1977.20	No	G201	Metal	Iron			Cast Iron Frag with 2 Fasteners	1		Complete	NHHC - Pallet 1 Large Tote 6	1														FALSE	1/31/2018				21	2895-2898	ERICA	1005720.4468	759699.409	9/21/2015	7A	
3315	2018-051-		1977.21	No	G201	Architecture	Concrete			Concrete	1		Complete	C7				18.4 kg		12.75 in		9.75 in		2.5 in					FALSE	2/20/2019					2895-2898	ERICA	1005720.4468	759699.409	9/21/2015	7A	
3316	2018-051-		1977.22	No	G201	Metal	Iron			Gear Mechanism (?)	1		Inventoried - Ready to Process	Rolloff 2															FALSE						2895-2898	ERICA	1005720.4468	759699.409	9/21/2015	7A	
3317	2018-051-		1977.23	No	G201	Organic	Wood			Curved Wood Fragment	1		Inventoried - Ready to Process	WB19															FALSE								1005720.4468	759699.409	9/21/2015	7A	
3318	2018-051-		1977.24	No	G201	Metal	Iron			Small Piece Of Plate?	1		Inventoried - Ready to Process	18WB10															FALSE								1005720.4468	759699.409	9/21/2015	7A	
3319	2018-051-		1977.25	No	G201	Metal	Copper or Copper Alloy			Brass Scrap	2		Inventoried - Ready to Process	BARREL 50															FALSE								1005720.4468	759699.409	9/21/2015	7A	
3320	2018-051-		1977.26	No	G201	Metal	Iron			Track Fragment With Fastener	2		Complete	NHHC - Medium Tote 2	1	3 Linear scores on bottom right corner of front														FALSE	1/27/2017				25			1005720.4468	759699.409	9/21/2015	7A
3321	2018-051-		1977.27	No	G201	Metal	Iron			Knee?	1		Inventoried - Ready to Process	ST															FALSE							1005720.4468	759699.409	9/21/2015	7A		
3322	2018-051-		1977.28	No	G201	Architecture	Mortar			Mortar fragment	1		Complete	NHHC - Pallet 4 Small Tote 7	1														FALSE	1/10/2018							1005720.4468	759699.409	9/21/2015	7A	
3323	2018-051-		1977.29	No	G201	DMM - Discarded Military Munitions	DMM - Brooke Shell	Copper or Copper Alloy		6.4" Brooke Shell	1		Complete	NHHC - AFA Crate 4	1														FALSE	9/27/2017				35			1005720.4468	759699.409	9/21/2015	7A	
3324	2018-051-		1977.30	No	G201	DMM - Discarded Military Munitions	DMM - Brooke Shell	Copper or Copper Alloy		6.4" Brooke Shell with Archer Fuze (Removed)	1		Complete	Brooke Pallet 2	2														FALSE	9/20/2018				35			1005720.4468	759699.409	9/21/2015	7A	
3325	2018-051-		1977.31	No	G201	DMM - Discarded Military Munitions	DMM - Dahlgren Ball	Copper or Copper Alloy		9" Dahlgren Ball	1		Complete	Dahlgren Pallet															FALSE	12/18/2018				14			1005720.4468	759699.409	9/21/2015	7A	
3326	2018-051-		1977.31.01	No	G201	DMM - Discarded Military Munitions	DMM - Dahlgren Ball	Copper or Copper Alloy		Watercap Fuze	1		Complete	BOX 6	2			106.9 g		2.45 in					1.3 in				FALSE	1/24/2019				14			1005720.4468	759699.409	9/21/2015	7A	
3327	2018-051-		1977.32	No	G201	DMM - Discarded Military Munitions	DMM - Dahlgren Ball			6.4" Brooke Shell with Archer Fuze	1		Inventoried - Ready to Process																FALSE							1005720.4468	759699.409	9/21/2015	7A		
3328	2018-051-		1977.33	No	G201	Architecture	Mortar			Mortar	1		Complete	C7															FALSE	5/9/2018							1005720.4468	759699.409	9/21/2015	7A	
3329	2018-051-		1977.34	No	G201	Metal	Iron			Iron Strap/Plate	1		Inventoried - Ready to Process	Rolloff 1															FALSE							1005720.4468	759699.409	9/21/2015	7A		
3330	2018-051-		1977.35	No	G201	Metal	Iron			Iron Strap/Plate	1		Inventoried - Ready to Process	Rolloff 1															FALSE							1005720.4468	759699.409	9/21/2015	7A		
3331	2018-051-		1978.01	No	G202	Metal	Copper or Copper Alloy			Thin Brass Fragment	2		Complete	BOX 5	2														FALSE	8/8/2018				32	2895-2898	ERICA	1005720.2667	759700.88416	9/21/2015	7A	
3332	2018-051-		1978.02	No	G202	Metal	Iron			Chain Link	1		Inventoried - Ready to Process	18WB15															FALSE						2895-2898	ERICA	1005720.2667	759700.88416	9/21/2015	7A	
3333	2018-051-		1978.03	No	G202	Metal	Iron			Large Pipe	1		Inventoried - Ready to Process	Rolloff 1 - Reburial						32 in					8 in			FALSE								1005720.2667	759700.88416	9/21/2015	7A		
3334	2018-051-		1978.04	No	G202	Metal	Copper or Copper Alloy			Large Pipe Sys.	1		Deaccessioned												8 in			TRUE						2895-2898	ERICA	1005720.2667	759700.88416	9/21/2015	7A		
3335	2018-051-		1978.05	No	G202	Metal	Iron			Pipe	1		Complete	NHHC - Pallet 2	1										4.5 in				FALSE	1/25/2018				35	2895-2898	ERICA	1005720.2667	759700.88416	9/21/2015	7A	
3336	2018-051-		1978.06	No	G202	Metal	Iron			Strap With Concretion	2		Inventoried - Ready to Process	BARREL 68															FALSE						2895-2898	ERICA	1005720.2667	759700.88416	9/21/2015	7A	
3337	2018-051-		1978.07	No	G202	Metal	Copper or Copper Alloy			Brass Plate Fragment	2		Complete	BOX 5	2														FALSE	5/17/2018					2895-2898	ERICA	1005720.2667	759700.88416	9/21/2015	7A	
3338	2018-051-		1978.08	No	G202	Metal	Copper or Copper Alloy			Brass Plate	1		Inventoried - Ready to Process	BARREL 50															FALSE							1005720.2667	759700.88416	9/21/2015	7A		
3339	2018-051-		1978.09	No	G202	DMM - Discarded Military Munitions	DMM - Brooke Shell			6.4" Brooke Shell with Archer Fuze	1		Inventoried - Ready to Process																FALSE							1005720.2667	759700.88416	9/21/2015	7A		
3340	2018-051-		1979.01	No	G204	Metal	Iron			Pipe System/Valve Assembly	1		Inventoried - Ready to Process	Rolloff 2															FALSE					1310	KAREN	1005714.4359	759699.7707	9/21/2015	7A		
3341	2018-051-		1979.02	No	G204	Metal	Copper or Copper Alloy			Part Of Clamp (?)	1		Inventoried - Ready to Process	YB?															FALSE					1310	KAREN	1005714.4359	759699.7707	9/21/2015	7A		
3342	2018-051-		1979.03	No	G204	Metal	Copper or Copper Alloy			Part of Clamp	1		Complete	PR-S16															FALSE	5/15/2018				32	1310	KAREN	1005714.4359	759699.7707	9/21/2015	7A	
3343	2018-051-		1979.04	No	G204	Glass	Unidentified			Glass	3		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Amber, Green/Olive												FALSE	1/18/2018				1291	KAREN	1005714.4359					

Appendix C: Artifact Database																																											
Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square		
3508	2018-051-		2015.01	No	G254	Glass	Unidentified			Glass	17		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Clear, Green/Olive, Light Blue													FALSE	11/20/2018					1508-1511	ERICA	1005736.236	759732.73272	9/22/2015	10D		
3509	2018-051-		2015.02	Yes	G254	Ceramic	Refined Earthenware			Historic Ceramic	6		Complete	BOX 3	2			191.4g		3.71in		1.22in		1.32in						FALSE	10/18/2018					1508-1511	ERICA	1005736.236	759732.73272	9/22/2015	10D		
3510	2018-051-		2015.03	No	G254	Metal	Iron			Manacle	1		Complete	NHHC - Pallet 5 Large Tote 19, NHHC - Pallet 6 Medium Divided Tote 6	1															FALSE	4/11/2018				32	1508-1511	ERICA	1005736.236	759732.73272	9/22/2015	10D		
3511	2018-051-		2015.04	No	G254	Metal	Copper or Copper Alloy			Brass Fragment	1		Complete	BOX 5	2															FALSE	5/30/2018				10.6	1508-1511	ERICA	1005736.236	759732.73272	9/22/2015	10D		
3512	2018-051-		2015.05	No	G254	Organic	Bone			Bone	1		Inventoried - Ready to Process	WB151																FALSE						1508-1511	ERICA	1005736.236	759732.73272	9/22/2015	10D		
3513	2018-051-		2015.06	No	G254	Metal	Iron			Iron Nails	2		Inventoried - Ready to Process	WB50																FALSE						1508-1511	ERICA	1005736.236	759732.73272	9/22/2015	10D		
3514	2018-051-		2015.07	No	G254	Organic	Coal/Charcoal			Stone/Coal (?). If Stone, Update Cat To "S".	3		Inventoried - Ready to Process	WB150																FALSE						1508-1511	ERICA	1005736.236	759732.73272	9/22/2015	10D		
3515	2018-051-		2015.08	No	G254	Metal	Iron			Railroad Iron	1		Unknown																	FALSE						1508-1511	ERICA	1005736.236	759732.73272	9/22/2015	10D		
3516	2018-051-		2015.09	No	G254	Metal	Iron			Guncarriage Track	1		Complete	PR-S6				13.30lbs		19.25in		4.0in		1.114in						FALSE	5/16/2019					18	1508-1511	ERICA	1005736.236	759732.73272	9/22/2015	10D	
3517	2018-051-		2015.10	No	G254	Metal	Iron			Fastener Fragment	1		Unknown																	FALSE						1508-1511	ERICA	1005736.236	759732.73272	9/22/2015	10D		
3518	2018-051-		2015.11	No	G254	Metal	Iron			Possible Gun Port Sections	2		Unknown																	FALSE						1508-1511	ERICA	1005736.236	759732.73272	9/22/2015	10D		
3519	2018-051-		2015.12	No	G254	Metal	Iron			Large Square Piece Of Metal	1		In Treatment	YB133																FALSE							1005736.236	759732.73272	9/22/2015	10D			
3520	2018-051-		2015.13	No	G254	DMM - Discarded Military Munitions	DMM - Brooke Shell	Copper or Copper Alloy		6.4" Brooke Shell with Archer Fuze (Removed)	1		Complete	NHHC - AFA Crate 2	1															FALSE	02/08/2018					35		1005736.236	759732.73272	9/22/2015	10D		
3521	2018-051-		2015.14	No	G254	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 9	PX1	Simple stamped															FALSE	4/19/2018					1508-1511	ERICA	1005736.236	759732.73272	9/22/2015	10D	
3522	2018-051-		2015.15	No	G254	Metal	Iron			Possible Firegrate	1		Inventoried - Ready to Process	YB155																FALSE						1508-1511	ERICA	1005736.236	759732.73272	9/22/2015	10D		
3523	2018-051-		2016.01	No	G255	Metal	Pewter			Spoon Handle	1		Complete	C4																FALSE	5/30/2018		10/31/2016			32	1535-1536	ERICA	1005748.0496	759730.00476	9/22/2015	11C	
3524	2018-051-		2016.02	No	G255	Glass	Unidentified			Glass Bottle Neck And Frags	3		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Green/Olive, Clear													FALSE	06/29/2017					1535-1536	ERICA	1005748.0496	759730.00476	9/22/2015	11C		
3525	2018-051-		2016.03	No	G255	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1	Simple stamped															FALSE	12/15/2017					1535-1536	ERICA	1005748.0496	759730.00476	9/22/2015	11C	
3526	2018-051-		2017.01	No	G256	Glass	Unidentified			Glass	6		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1	"H. H" on base frag	Green/Olive, Clear														FALSE	01/16/2019					1540-1541; 1545-1549	ERICA	1005739.2755	759718.78228	9/22/2015	10B	
3527	2018-051-		2017.02	Yes	G256	Ceramic	Refined Earthenware			Historic Ceramic	5		Complete	NHHC - Pallet 4 Small Tote 12	1																FALSE	05/02/2016					1540-1541; 1545-1549	ERICA	1005739.2755	759718.78228	9/22/2015	10B	
3528	2018-051-		2017.03	No	G256	Composite	Brass	Lead		Fuze	2		Complete	NHHC - Pallet 5 Small Divided Tote 14	1	Text on lead seal: "10 SEC"															FALSE	03/09/2016					28	1540-1541; 1545-1549	ERICA	1005739.2755	759718.78228	9/22/2015	10B
3529	2018-051-		2017.04	No	G256	Metal	Copper or Copper Alloy			Desk/Chest Corner Plate	1		Complete	C2				35.5g		3in		2.73in		0.5in							FALSE	10/23/2018					25	1540-1541; 1545-1549	ERICA	1005739.2755	759718.78228	9/22/2015	10B
3530	2018-051-		2017.05	No	G256	Metal	Copper or Copper Alloy			Elevation Sight	1																																

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square		
3550	2018-051-		2017.24	No	G256	Metal	Iron			Iron Ring	1		Complete	BOX 8	2			49.4 g						0.35 in		2.89 in				FALSE	9/2/2019					1540-1541; 1545-1549	ERICA	1005739.2755	759718.78228	9/22/2015	10B		
3551	2018-051-		2017.25	No	G256	Metal	Iron			Iron Nails	3		Inventoried - Ready to Process	18WB11																FALSE						1540-1541; 1545-1549	ERICA	1005739.2755	759718.78228	9/22/2015	10B		
3552	2018-051-		2017.26	No	G256	DMM - Discarded Military Munitions	DMM - Dahlgren Ball			9" Dahlgren Shell with Watercap Fuze	1		Inventoried - Ready to Process																	FALSE								1005739.2755	759718.78228	9/22/2015	10B		
3553	2018-051-		2017.27	No	G256	DMM - Discarded Military Munitions	DMM - Dahlgren Ball			9" Dahlgren Shell with Watercap Fuze	1		Inventoried - Ready to Process																	FALSE								1005739.2755	759718.78228	9/22/2015	10B		
3554	2018-051-		2017.28	No	G256	Metal	Copper or Copper Alloy			Brass Suspender Piece/Buckle	1		Complete	C2				2.8 g		1.25 in		1.03 in		0.14 in						FALSE	10/23/2018					25				1005739.2755	759718.78228	9/22/2015	10B
3555	2018-051-		2018.01	No	G257	Metal	Iron			Track	1		Inventoried - Ready to Process	YB																FALSE						1533	KAREN	1005740.8388	759725.9878	9/22/2015	10C		
3556	2018-051-		2018.02	No	G257	Metal	Lead			Maynard Bullet	1		Complete	NHHC - Pallet 2 Small Divided Tote 4	1															FALSE	06/20/2017					1528	KAREN	1005740.8388	759725.9878	9/22/2015	10C		
3557	2018-051-		2018.03	No	G257	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 2	PX1															FALSE	10/26/2017					1528	KAREN	1005740.8388	759725.9878	9/22/2015	10C		
3558	2018-051-		2018.04	Yes	G257	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1															FALSE	05/02/2016					1528	KAREN	1005740.8388	759725.9878	9/22/2015	10C		
3559	2018-051-		2018.05	No	G257	Metal	Iron			Chain	1		Inventoried - Ready to Process	WB152																FALSE					1533	KAREN	1005740.8388	759725.9878	9/22/2015	10C			
3560	2018-051-		2018.06	No	G257	Organic	Leather			Leather Fragment	1		Complete	NHHC - Pallet 6 Large Tote 24	1															FALSE	09/06/2017					1528	KAREN	1005740.8388	759725.9878	9/22/2015	10C		
3561	2018-051-		2019.01	No	G259	Organic	Unidentified			Fiber Fragments	10		Complete	NHHC - Pallet 5 Small Divided Tote 13	1															FALSE	12/15/2017					2069	KAREN	1005690.3343	759685.36255	9/26/2015	4A		
3562	2018-051-		2019.02	No	G259	Concretion	Concretion			Concretion Fragment	1		Did Not Survive	DNS																FALSE					2069	KAREN	1005690.3343	759685.36255	9/26/2015	4A			
3563	2018-051-		2019.03	No	G259	Glass	Unidentified			Bottle Neck/Rim	1		Complete	NHHC - Pallet 6 Medium Divided Tote 10	1	LAW FORBIDS LE	AMBER													FALSE	04/15/2016					2069	KAREN	1005690.3343	759685.36255	9/26/2015	4A		
3564	2018-051-		2020	No	G261	Glass	Unidentified			Glass Bottle	1		Complete	NHHC - Pallet 6 Medium Divided Tote 7	1	ON sides: "NO DEPOSIT NO RETURN" "INGEN PANT INGEN RETUR", on bottom: "5" AND SYMBOL	Clear													FALSE	01/23/2019					2203	ERICA	1005689.8139	759678.85764	9/26/2015	4AA		
3565	2018-051-		2021.01	No	G262	Organic	Wood			Cut/Shaped Wood	1		Inventoried - Ready to Process	YB71																FALSE					2209	ERICA	1005699.2999	759666.74946	9/26/2015	4BB			
3566	2018-051-		2021.02	No	G262	Glass	Unidentified			Glass Bottle	1		Complete	NHHC - Pallet 6 Large Tote 28	1	Stamped, on body: "INGEN PANT" "INGEN RETUR" "NO DEPOSIT" "NO RETURN" "33CL", On base: "PLM" "H02"	Green/Olive													FALSE	09/27/2017					2209	ERICA	1005699.2999	759666.74946	9/26/2015	4BB		
3567	2018-051-		2021.03	No	G262	Glass	Unidentified			Glass Fragment	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear													FALSE	01/10/2019					2210	ERICA	1005699.2999	759666.74946	9/26/2015	4BB		
3568	2018-051-		2021.04	No	G262	Organic	Wood			Dowels	2		Complete	NHHC - Pallet 6 Medium Tote 5	1															FALSE	10/31/2017					2210	ERICA	1005699.2999	759666.74946	9/26/2015	4BB		
3569	2018-051-		2021.05	No	G262	Metal	Iron			Welding Wire	1		Did Not Survive	DNS																FALSE					2210	ERICA	1005699.2999	759666.74946	9/26/2015	4BB			
3570	2018-051-		2022.01	Yes	G263	Ceramic	Refined Earthenware			Historic Ceramic	2		Complete	NHHC - Pallet 4 Small Tote 12	1															FALSE	05/02/2016					2229-2230	ERICA	1005699.1332	759673.05	9/26/2015	4BB		
3571	2018-051-		2022.02	No	G263	Metal	Copper or Copper Alloy			Brass Ribbon	1		Complete	NHHC - Pallet 5 Small Divided Tote 10	1															FALSE	01/11/2017					2229-2230	ERICA	1005699.1332	759673.05	9/26/2015	4BB		
3572	2018-051-		2022.03	No	G263	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Small Tote 23	1															FALSE	02/01/2016					2229-2230	ERICA	1005699.1332	759673.05	9/26/2015	4BB		
3573	2018-051-		2022.04	No	G263	Metal	Iron			Railroad Iron	3		Unknown																	FALSE					2241	ERICA	1005699.1332	759673.05	9/26/2015	4BB			
3574	2018-051-		2022.05	No	G263	Metal	Iron			Chain Link Fragment	1		Inventoried - Ready to Process	18WB04																FALSE					2237	ERICA	1005699.1332	759673.05	9/26/2015	4BB			
3575	2018-051-		2023.01	No	G265	Ceramic	Pipe			Pipe Bowl	3		Complete	NHHC - Pallet 5 Small Divided Tote 16	1	Molded leaf design descending from broken mouth piece, possible figure (woman?) sitting on cylindrical shape (wheel?)														FALSE	01/29/2019					2096	KAREN	1005695.9228	759678.52982	9/26/2015	4AA		
3576	2018-051-		2023.02	No	G265	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 1	PX1	Deep impressions covering 1/2 of sherd - Check stamped?															FALSE	4/13/2016					2096	KAREN	1005695.9228	759678.52982	9/26/2015	4AA	
3577	2018-051-		2024	No	G271	Metal	Iron			Nail	1		Inventoried - Ready to Process	18WB14																FALSE					2133	KAREN	1005715.3135	759679.33041	9/26/2015	6BB			
3578	2018-051-		2025.01	No	G273	Composite	Wood	Iron		Wood With 2 Fasteners	1		Inventoried - Ready to Process	YB124																FALSE					2251	ERICA	1005712.8154	759655.37419	9/26/2015	5DD			
3579	2018-051-		2025.02	Yes	G273	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1															FALSE	10/27/2016					2250	ERICA	1005712.8154	759655.37419	9/26/2015	5DD		
3580	2018-051-		2025.03	No	G273	Organic	Textile			Fabric	1		Inventoried - Ready to Process	WB17																FALSE					2250	ERICA	1005712.8154	759655.37419	9/26/2015	5DD			
3581	2018-051-		2026.01	Yes	G277	Ceramic	Whiteware			Historic Ceramic	1		Complete	BOX 1	2															FALSE	4/26/2018					2151	KAREN	1005679.5104	759687.64167	9/26/2015	3A		
3582	2018-051-		2026.02	No	G277	Organic	Ethnobotany			Fruit Pit/Hazelnut	2	Fragment(s) of a single artifact	Complete	C5				2.2 g		0.929 in		0.354 in		0.47 in						FALSE	3/20/2019					2151	KAREN	1005679.5104	759687.64167	9/26/2015	3A		
3583	2018-051-		2026.03	No	G277	Metal	Iron			Spike	1		Inventoried - Ready to Process	YB153																FALSE					2152	KAREN	1005679.5104	759687.64167	9/26/2015	3A			
3584	2018-051-		2026.04	No	G277	Organic	Coal/Charcoal			Coal	2		Complete	NHHC - Pallet 6 Small Tote 22	1															FALSE	03/25/2016					2151	KAREN	1005679.5104	759687.64167	9/26/2015	3A		
3585	2018-051-		2026.05	No	G277	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Clear													FALSE	01/16/2019					2151	KAREN	1005679.5104	759687.64167	9/26/2015	3A		
3586	2018-051-		2026.08	No	G300	Organic	Coal/Charcoal			Coal	2		Complete	C7																FALSE	6/19/2018					2266	KAREN	1005745.3176	759715.53235	9/26/2015	10B		
3587	2018-051-		2026.09	No	G300	Architecture	Mortar			Mortar	1		Complete	C7																FALSE	6/19/2018					2266	KAREN	1005745.3176	759715.53235	9/26/2015	10B		
3588	2018-051-		2027	No	G278	Organic	Textile			Textile	1		Complete	NHHC - Pallet 5 Small Divided Tote 16	1	Lace-flowers, off white color														FALSE	12/15/2017					2178	KAREN	1005671.4171	759686.30679	9/26/2015	2B		
3589	2018-051-		2028.01	No	G283	Metal	Iron			Firegrate	1		Complete	NHHC - Pallet 1	1					66 cm		12 cm								FALSE	01/30/2019					182311	ERICA	1005666.174	759679.42254	9/26/2015	1A		
3590	2018-051-		2028.02	No	G283	Organic	Wood			Timber with fastener	1		Unknown	Blue 22																FALSE					2312	ERICA	1005666.174	759679.42254	9/26/2015	1A			
3591	2018-051-		2029	No	G284	Glass	Modern Bottle			Bottle Fragments	63		Complete	NHHC - Pallet 6 Medium Divided Tote 14	1		Amber													FALSE	08/01/2017					2191	KAREN	1005680.0143	759671.3989	9/26/2015	2AA		
3592	2018-051-		2030.01	No	G285	Organic	Leather			Leather																																	

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square	
3620	2018-051-		2038	No	G311	Organic	Wood			Bucket Stave	1		Complete	NHHC - Pallet 6 Medium Tote 5	1															FALSE	01/09/2018					2435	ERICA	1005721.4468	759667.64552	9/26/2015	6CC	
3621	2018-051-		2039.01	No	G313	Metal	Iron			Iron Tool Piece?	1		Inventoried - Ready to Process	WB128																FALSE						2458-2459	ERICA	1005702.4919	759684.2139	9/26/2015	5AA	
3622	2018-051-		2039.02	No	G313	Organic	Wood			Flat Wood Piece with Small Hole	1		Complete	NHHC - Pallet 4 Large Divided Tote 1	1															FALSE	01/10/2018					2458-2459	ERICA	1005702.4919	759684.2139	9/26/2015	5AA	
3623	2018-051-		2039.03	No	G313	Metal	Iron			Railroad Iron	1		Unknown																	FALSE						2458-2459	ERICA	1005702.4919	759684.2139	9/26/2015	5AA	
3624	2018-051-		2040	No	G314	Concretion	Concretion			Concretion Fragment	1		Did Not Survive	DNS																FALSE							KAREN	1005707.0477	759672.70889	9/26/2015	5BB	
3625	2018-051-		2041.01	No	G315	Metal	Copper or Copper Alloy			Modern Chain	3		Complete	C7																FALSE	5/11/2018					2967	ERICA	1005832.0467	759784.74585	9/29/2015	21E	
3626	2018-051-		2041.02	No	G315	Organic	Bone			Long Bone	1		Complete - Needs Final Images	Photo Shelf				335.1 g			9.5 in		1.91 in					1.33 in		FALSE						2967	ERICA	1005832.0467	759784.74585	9/29/2015	21E	
3627	2018-051-		2042	No	G318	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 10	PX1															FALSE	1/11/2018					2775	KAREN	1005838.7931	759783.14477	9/29/2015	21E	
3628	2018-051-		2043	No	G322	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 9	PX1															FALSE	1/10/2018					2993	ERICA	1005863.1817	759795.29112	9/29/2015	24E	
3629	2018-051-		2044	No	G333	Metal	Iron			Big Concretion	1		Inventoried - Ready to Process	YB100																FALSE						2805	KAREN	1005842.5295	759765.45985	9/29/2015	21C	
3630	2018-051-		2045.01	No	G335	Concretion	Concretion			Large Concretion	1		Inventoried - Ready to Process	YB?																FALSE						2808	KAREN	1005823.3136	759794.00642	9/29/2015	20G	
3631	2018-051-		2045.02	No	G335	Metal	Iron			Concretion - Plate	1		Did Not Survive	DNS																FALSE						2808	KAREN	1005823.3136	759794.00642	9/29/2015	20G	
3632	2018-051-		2045.03	No	G335	Metal	Iron			Concreted Chain	1		Inventoried - Ready to Process	STEEL VAT																FALSE						2808	KAREN	1005823.3136	759794.00642	9/29/2015	20G	
3633	2018-051-		2045.04	No	G335	Ceramic	Coarse Earthenware			Prehistoric Ceramic	5		Complete	PX BOX 2	PX1															FALSE	11/7/2017					2813	KAREN	1005823.3136	759794.00642	9/29/2015	20G	
3634	2018-051-		2045.05	No	G335	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Green/Olive													FALSE	01/17/2018					2813	KAREN	1005823.3136	759794.00642	9/29/2015	20G	
3635	2018-051-		2046	No	G336	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 1	PX1																FALSE	2/17/2017					2823	KAREN	1005829.6933	759792.92657	9/29/2015	21F
3636	2018-051-		2047	No	G337	Concretion	Concretion			V-Shaped Concretion	1		Inventoried - Ready to Process	STEEL VAT																FALSE						2819	KAREN	1005837.3979	759790.745	9/29/2015	21F	
3637	2018-051-		2048.01	Yes	G338	Ceramic	Stoneware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1															FALSE	09/13/2017					3030	ERICA	1005827.0629	759784.2324	9/29/2015	20F	
3638	2018-051-		2048.02	No	G338	Metal	Iron			Iron Concretion	2		Inventoried - Ready to Process	YB																FALSE						3034	ERICA	1005827.0629	759784.2324	9/29/2015	20F	
3639	2018-051-		2048.03	No	G338	Stone	Ballast			Ballast Stone/Brick?	1		Reburial	R																FALSE	1/25/2016					3034	ERICA	1005827.0629	759784.2324	9/29/2015	20F	
3640	2018-051-		2048.04	No	G338	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	STEEL VAT																FALSE						3035	ERICA	1005827.0629	759784.2324	9/29/2015	20F	
3641	2018-051-		2048.05	No	G338	Concretion	Concretion			Concretion	2		Inventoried - Ready to Process	YB90																FALSE								1005827.0629	759784.2324	9/29/2015	20F	
3642	2018-051-		2049	No	G352	Metal	Iron			Gunport	1		Complete	7063 Walkthrough							31.5 in		17 in		4 in					FALSE	5/22/2019					252837	KAREN	1005857.1067	759762.13811	9/29/2015	22B	
3643	2018-051-		2050	No	G363	Metal	Iron			Railroad Iron	1		Unknown								15 ft									FALSE						3058	ERICA	1005792.555	759791.1462	9/29/2015	17G	
3644	2018-051-		2051	No	G365	Metal	Iron			Railroad Iron	3		Unknown								15 ft									FALSE						3058	ERICA	1005796.2436	759780.91198	9/29/2015	17F	
3645	2018-051-		2052	No	G367	Glass	Unidentified			Glass	1		Unknown				Green/Olive														FALSE						3224	KAREN	1005796.4891	759761.25264	9/30/2015	16D
3646	2018-051-		2053.01	No	G373	Metal	Copper or Copper Alloy			Compressor (partial)	1		In treatment	In treatment																FALSE						3227	KAREN	1005753.3704	759747.91895	9/30/2015	12E	
3647	2018-051-		2053.02	No	G373	Glass	Unidentified			Glass Fragment	1		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		"LE GLASS"	Green/Olive												FALSE	09/27/2016					3226	KAREN	1005753.3704	759747.91895	9/30/2015	12E	
3648	2018-051-		2054	No	G375	Concretion	Concretion			Concreted fastener?	1		Inventoried - Ready to Process	BARREL 23																FALSE							ERICA	1005765.3562	759750.51045	9/30/2015	13D	
3649	2018-051-		2055.01	No	G377	Metal	Iron			Gun Carriage Track	1		Complete	NHHC - Pallet 1 Large Tote 7	1					52 cm		10 cm								FALSE	01/30/2019					213037	ERICA	1005777.9396	759740.33961	9/30/2015	14C	
3650	2018-051-		2055.02	No	G377	Metal	Copper or Copper Alloy			Sheathing Fragment and Wire/Rod	2		Complete	NHHC - Pallet 1 Medium Divided Tote 3	1															FALSE	11/02/2017					183043	ERICA	1005777.9396	759740.33961	9/30/2015	14C	
3651	2018-051-		2055.03	Yes	G377	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1															FALSE	09/12/2017					3043	ERICA	1005777.9396	759740.33961	9/30/2015	14C	
3652	2018-051-		2055.04	No	G377	Ceramic	Coarse Earthenware			Prehistoric Ceramic	4		Complete	PX BOX 3	PX1																FALSE	12/15/2017					3043	ERICA	1005777.9396	759740.33961	9/30/2015	14C
3653	2018-051-		2055.05	No	G377	Ceramic	Pipe			Pipe Stem	1		Complete	NHHC - Pallet 4 Small Tote 12	1															FALSE	04/18/2016					3043	ERICA	1005777.9396	759740.33961	9/30/2015	14C	
3654	2018-051-		2055.06	No	G377	Metal	Lead			Lead Fragment	1		Complete	NHHC - Pallet 1 Small Divided Tote 2	1															FALSE	09/06/2017					3043	ERICA	1005777.9396	759740.33961	9/30/2015	14C	
3655	2018-051-		2055.07	No	G377	Metal	Iron			Fastener Head	1		Inventoried - Ready to Process	WB116																FALSE						3043	ERICA	1005777.9396	759740.33961	9/30/2015	14C	
3656	2018-051-		2055.08	No	G377	DMM - Discarded Military Munitions	DMM - Dahlgren Ball	Copper or Copper Alloy		9" Dahlgren Shell with Watercap Fuze (Removed)	1		Complete	NHHC - AFA Crate 1	1												9 in				FALSE	02/20/2017				35, 18			1005777.9396	759740.33961	9/30/2015	14C
3657	2018-051-		2055.09	No	G377	DMM - Discarded Military Munitions	DMM - Dahlgren Ball	Copper or Copper Alloy		9" Dahlgren Shell with Watercap Fuze (Removed)	1		Complete	NHHC - AFA Crate 3, NHHC - Pallet 5 Small Divided Tote 11	1															FALSE	11/02/2017					35			1005777.9396	759740.33961	9/30/2015	14C
3658	2018-051-		2056.01	No	G378	Metal	Lead			Enfield Bullet	1		Complete	NHHC - Pallet 1 Small Divided Tote 3	1		"57" Inside base, mold seam													FALSE	06/20/2017					3045	ERICA	1005768.9772	759743.49231	9/30/2015	13D	
3659	2018-051-		2056.02	No	G378	Metal	Copper or Copper Alloy			Sheathing Fragment	7		Complete	BOX 5	2															FALSE	5/9/2018					3045	ERICA	1005768.9772	759743.49231	9/30/2015	13D	
3660	2018-051-		2056.03	No	G378	Metal	Iron			Piston?	1		Inventoried - Ready to Process	Rolloff 2																FALSE						3046	ERICA	1005768.9772	759743.49231	9/30/2015	13D	
3661	2018-051-		2057	No	G381	Metal	Iron			Chain	1		Unknown																	FALSE						3243	KAREN	1005803.0655	759763.22761	9/30/2015	17D	
3662	2018-051-		2058.01	No	G385	Metal	Copper or Copper Alloy			Square Nail Head and Shaft	1		Complete	BOX 5	2															FALSE	8/22/2018				</							

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square		
3700	2018-051-		2068.08	No	G395	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB44																FALSE						3121	ERICA	1005803.7983	759750.10566	9/30/2015	17C		
3701	2018-051-		2068.09	No	G395	Metal	Copper or Copper Alloy			Sabot	1		Complete	BOX 13	2			6.05	lb							6.6	in	1.4	in		FALSE	1/25/2019				28			1005803.7983	759750.10566	9/30/2015	17C	
3702	2018-051-		2068.10	No	G395	Metal	Iron			Large fastener	1		Complete	PR-S14				18.144	kg	39.10	in			1.28	in	3.20	in			FALSE	12/20/2018				28		2955	759750.10566	42277	17C	0.453657 40741		
3703	2018-051-		2068.11	No	G395	Metal	Iron			Pipes?	2		Inventoried - Ready to Process	YB156															FALSE						2955	759750.10566	42277	17C	0.453657 40741				
3704	2018-051-		2069.01	No	G396	Metal	Iron			Grapeshot Stand with Grapeshot	10		Complete	BOX 9	2			30.8	lbs											FALSE	7/13/2018				35	3118	ERICA	1005809.3005	759751.24839	9/30/2015	17C		
3705	2018-051-		2069.01.01	No	G396	Recent/Synthetic	Silicone Rubber	Epoxy		Mold And Cast Of Ring From 2069.1	2		Complete - Cast	NHHC - Pallet 6 Medium Divided Tote 5	1															FALSE	3/28/2018							1005809.3005	759751.24839	9/30/2015	17C		
3706	2018-051-		2069.02	No	G396	Metal	Iron			Cannister Shot	1		Unknown													6.4	in			FALSE						3118	ERICA	1005809.3005	759751.24839	9/30/2015	17C		
3707	2018-051-		2069.03	No	G396	Metal	Iron			Cannister Shot Balls	6		Inventoried - Ready to Process	IN OWN BUCKET																FALSE						3118	ERICA	1005809.3005	759751.24839	9/30/2015	17C		
3708	2018-051-		2069.04	No	G396	Metal	Iron			Grapeshot Stand	1		Inventoried - Ready to Process	IN OWN BUCKET																FALSE						3118	ERICA	1005809.3005	759751.24839	9/30/2015	17C		
3709	2018-051-		2069.05	Yes	G396	Ceramic	Whiteware			Historic Ceramic	1		Complete	BOX 1	2	Leaf motif														FALSE	4/25/2018						3115	ERICA	1005809.3005	759751.24839	9/30/2015	17C	
3710	2018-051-		2069.06	No	G396	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 10	1		Green/Olive , Clear													FALSE	9/28/2016						3115	ERICA	1005809.3005	759751.24839	9/30/2015	17C	
3711	2018-051-		2069.07	No	G396	Metal	Iron			Chain, Long	1		Inventoried - Ready to Process	YB85																FALSE								1005809.3005	759751.24839	9/30/2015	17C		
3712	2018-051-		2069.08	No	G396	DMM - Discarded Military Munitions	DMM - Brooke Bolt			Bolt	1		Complete	Brooke Pallet 2	2															FALSE	11/30/2018				35			1005809.3005	759751.24839	9/30/2015	17C		
																	Brown, Green/Olive , Clear, Clear/Yello w																										
3713	2018-051-		2070.01	No	G398	Glass	Unidentified			Glass Fragment	11		Complete	NHHC - Pallet 6 Medium Divided Tote 10	1															FALSE	01/10/2019						3136	ERICA	1005808.3037	759743.26121	9/30/2015	17B	
3714	2018-051-		2070.02	No	G398	Ceramic	Coarse Earthenware			Prehistoric Ceramic	5		Complete	PX BOX 9	PX1	2 Cord marked															FALSE	5/9/2018						3136	ERICA	1005808.3037	759743.26121	9/30/2015	17B
3715	2018-051-		2070.03	Yes	G398	Ceramic	Whiteware			Historic Ceramic Plate	1		Complete	NHHC - Pallet 4 Small Tote 21	1	"STONE CHI."/"JAMES EDWARD..." Partial Edwards & Sons makers mark															FALSE	12/18/2017						3136-3138	ERICA	1005808.3037	759743.26121	9/30/2015	17B
3716	2018-051-		2070.04	No	G398	Glass	Liquor Bottle			Glass Bottle	1		Complete	NHHC - Pallet 6 Large Tote 28	1	"JOHN RYAN"/"PORTER & ALE PHILADA XX"/"1859"	Blue														FALSE	09/19/2017						3136	ERICA	1005808.3037	759743.26121	9/30/2015	17B
3717	2018-051-		2070.05	No	G398	Organic	Coal/Charcoal			Charcoal?	1		Complete	C7				59.7	g	3.22	in	2.06	in	0.56	in					FALSE	2/19/2019						3136	ERICA	1005808.3037	759743.26121	9/30/2015	17B	
3718	2018-051-		2070.06	No	G398	Metal	Iron			Iron Plate	2		Unknown	Blue 23						12	in									FALSE						3143	ERICA	1005808.3037	759743.26121	9/30/2015	17B		
3719	2018-051-		2070.07	No	G398	DMM - Discarded Military Munitions	DMM - Brooke Bolt			Bolt	1		Complete	NHHC - AFA Crate 2	1															FALSE	02/08/2018					28			1005808.3037	759743.26121	9/30/2015	17B	
3720	2018-051-		2070.08	No	G398	DMM - Discarded Military Munitions	DMM - Brooke Bolt			Bolt	1		Inventoried - Ready to Process																	FALSE													
3721	2018-051-		2071.01	No	G399	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Brown													FALSE	01/17/2018						3312	KAREN	1005810.9302	759752.31641	9/30/2015	18C	
3722	2018-051-		2071.02	Yes	G399	Ceramic	Whiteware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1															FALSE	10/31/2017						3312	KAREN	1005810.9302	759752.31641	9/30/2015	18C	
3723	2018-051-		2071.03	No	G399	DMM - Discarded Military Munitions	DMM - Brooke Bolt			Bolt	1		Complete	Brooke Pallet 2	2															FALSE	9/20/2018				35			1005810.9302	759752.31641	9/30/2015	18C		
3724	2018-051-		2071.03.01	No	G399	Metal	Copper or Copper Alloy			Sabot	1		Complete	PR-S2																FALSE	5/17/2018					32			1005810.9302	759752.31641	9/30/2015	18C	
3725	2018-051-		2072.01	No	G401	Metal	Iron			Pivot/Capstan	1		Unknown	Blue 23																FALSE							3327	KAREN	1005813.2335	759748.76343	9/30/2015	18C	
3726	2018-051-		2072.02	No	G401	Metal	Iron			Grapeshot	1		Complete	NHHC - Pallet 6 Medium Divided Tote 8	1	Mold seam										2.5	in			FALSE	07/27/2017				35	3329	KAREN	1005813.2335	759748.76343	9/30/2015	18C		
3727	2018-051-		2072.03	No	G401	Metal	Iron			Strap	1		Inventoried - Ready to Process	YB44																FALSE						3328	KAREN	1005813.2335	759748.76343	9/30/2015	18C		
3728	2018-051-		2072.04	No	G401	Ceramic	Coarse Earthenware			Prehistoric Ceramic	3		Complete	PX BOX 10	PX1															FALSE	11/2/2016						3329	KAREN	1005813.2335	759748.76343	9/30/2015	18C	
3729	2018-051-		2072.05	No	G401	Glass	Bottle Glass (Generic)			Bottle Neck	1		Complete - Needs Final Images	Photo Shelf				67.3	g	3.44	in	2.46	in							FALSE						3329	KAREN	1005813.2335	759748.76343	9/30/2015	18C		
3730	2018-051-		2072.05.01	No	G401	Organic	Textile			Fibrous/Textile Material	1		Complete - Needs Final Images	Photo Shelf				0.1	g	0.97	in	0.27	in	0.02	in					FALSE						3329	KAREN	1005813.2335	759748.76343	9/30/2015	18C		
3731	2018-051-		2072.06	No	G401	DMM - Discarded Military Munitions	DMM - Brooke Shell	Copper or Copper Alloy		6.4" Brooke Shell with Archer Fuze (Removed)	1		Complete	NHHC - AFA Crate 2	1															FALSE	05/15/2018				35			1005813.2335	759748.76343	9/30/2015	18C		
3732	2018-051-		2072.07	No	G401	DMM - Discarded Military Munitions	DMM - Brooke Bolt	Copper or Copper Alloy		Bolt with Brass Sabot	1		Complete	NHHC - AFA Crate 5	1															FALSE	05/24/2018				35			1005813.2335	759748.76343	9/30/2015	18C		
3733	2018-051-		2073.01	No	G405	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1	Check stamped														FALSE	10/10/2017					3158	ERICA	1005815.5984	759742.55233	9/30/2015	18B		
3734	2018-051-		2073.02	No	G405	Metal	Iron			Grapeshot	1		Inventoried - Ready to Process	GRAPESHOT4																FALSE							ERICA	1005815.5984	759742.55233	9/30/2015	18B		
3735	2018-051-		2073.03	No	G405	DMM - Discarded Military Munitions	DMM - Brooke Bolt			Bolt	1		Complete	Brooke Pallet 2	2															FALSE	09/20/2018				35			1005815.5984	759742.55233	9/30/2015	18B		
3736	2018-051-		2073.03.01	No	G405	Metal	Copper or Copper Alloy			Sabot	1		Complete	Brooke Pallet 2	2															FALSE	5/17/2018					35			1005815.5984	759742.55233	9/30/2015	18B	
3737	2018-051-		2073.03.02	No	G405	Metal	Iron			Cannon Ball	4		Complete	C1				502	g	2.46	in	2.39	in	1.94	in					FALSE	9/19/2018				35			1005815.5984	759742.55233	9/30/2015	18B		
3738	2018-051-		2073.04	No	G405	DMM - Discarded Military Munitions	DMM - Brooke Bolt			Bolt	1		Complete	NHHC - AFA Crate 5	1															FALSE	05/24/2018				35			1005815.5984	759742.55233	9/30/2015	18B		
3739	2018-051-		2073.04.01	No	G405	Metal	Copper or Copper Alloy			Sabot	1		Complete	Brooke Pallet 2	2															FALSE	5/17/2018					35			1005815.5984	759742.55233	9/30/2015	18B	
3740	2018-051-		2074.01	No</																																							

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square	
3858	2018-051-		2103.03	No	G465	Metal	Copper or Copper Alloy			Copper Sheathing	2		Complete	NHHC - Pallet 2 Small Divided Tote 4	1															FALSE	3/29/2018					143559	KAREN	1005749.5285	759705.56637	9/30/2015	10A	
3859	2018-051-		2103.04	No	G465	Composite	Brass	Wood		Wheel	1		Unknown																	FALSE						3558	KAREN	1005749.5285	759705.56637	9/30/2015	10A	
3860	2018-051-		2103.05	No	G465	Metal	Iron			Part Of Track?	1		In Treatment	YB133																FALSE						3558	KAREN	1005749.5285	759705.56637	9/30/2015	10A	
3861	2018-051-		2103.06	No	G465	Metal	Copper or Copper Alloy			Bayonet Handle	1		Complete	NHHC - Pallet 5 Small Divided Tote 12	1															FALSE	7/6/2016					143559	KAREN	1005749.5285	759705.56637	9/30/2015	10A	
3862	2018-051-		2103.07	No	G465	Glass	Unidentified			Glass Fragment	2		Complete	NHHC - Pallet 6 Medium Divided Tote 10	1		Green/Olive													FALSE	09/01/2016					3559	KAREN	1005749.5285	759705.56637	9/30/2015	10A	
3863	2018-051-		2103.08	No	G465	Organic	Bone			Bone	1		Complete	CS																FALSE	7/23/2018					3559	KAREN	1005749.5285	759705.56637	9/30/2015	10A	
3864	2018-051-		2104.01	No	G466	Metal	Copper or Copper Alloy			Brass Wire	1		Complete	NHHC - Pallet 1 Medium Divided Tote 3	1															FALSE	11/01/2017					3374	ERICA	1005758.0291	759726.89589	9/30/2015	12B	
3865	2018-051-		2104.02	No	G466	Concretion	Concretion			Long Fastener Concretion	1		Inventoried - Ready to Process	BARREL 23																FALSE						3375	ERICA	1005758.0291	759726.89589	9/30/2015	12B	
3866	2018-051-		2104.03	No	G466	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 4	PX1	Simple stamped														FALSE	12/15/2017					3374	ERICA	1005758.0291	759726.89589	9/30/2015	12B	
3867	2018-051-		2104.04	No	G466	Composite	Lead	Wood		Enfield Shot	2		Complete	NHHC - Pallet 5 Small Divided Tote 15	1	Mold seam														FALSE	05/24/2017					3374	ERICA	1005758.0291	759726.89589	9/30/2015	12B	
3868	2018-051-		2105	No	G467	Composite	Lead	Wood		Enfield Shot	1		Unknown																	FALSE						3372		1005758.3057	759734.71116	9/30/2015	12C	
3869	2018-051-		2106.01	No	G468	Metal	Copper or Copper Alloy			Brass Ring	1		Complete	NHHC - Pallet 5 Small Divided Tote 8	1															FALSE	10/05/2017					3389	ERICA	1005779.2988	759733.03441	9/30/2015	14B	
3870	2018-051-		2106.02	No	G468	Ceramic	Coarse Earthenware			Prehistoric Ceramic	8		Complete	PX BOX 11	PX1	3 possibly Cord marked, 2 with lines/incisions															FALSE	1/10/2018					3389	ERICA	1005779.2988	759733.03441	9/30/2015	14B
3871	2018-051-		2106.03	No	G468	Metal	Iron			Iron Nail	2		Inventoried - Ready to Process	18WB14																FALSE						3389	ERICA	1005779.2988	759733.03441	9/30/2015	14B	
3872	2018-051-		2106.04	No	G468	Unidentified	Unidentified			Slag?	1		Inventoried - Ready to Process	UNKNOWN																FALSE						3389	ERICA	1005779.2988	759733.03441	9/30/2015	14B	
3873	2018-051-		2106.05	No	G468	Metal	Iron			Iron Plate Fragment	1		Complete	NHHC	1															FALSE	03/06/2018					3393	ERICA	1005779.2988	759733.03441	9/30/2015	14B	
3874	2018-051-		2107	No	G470	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Green/Olive Clear/Light Blue													FALSE	01/16/2019					3391	ERICA	1005774.2281	759743.58194	9/30/2015	14C	
3875	2018-051-		2108.01	No	G471	Metal	Iron			Railroad Iron	1		Inventoried - Ready to Process	STAINLESS STEEL VAT																FALSE						3579	KAREN	1005803.768	759737.73042	9/30/2015	16B	
3876	2018-051-		2108.02	No	G471	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 3	PX1															FALSE	12/15/2017					3578	KAREN	1005803.768	759737.73042	9/30/2015	16B	
3877	2018-051-		2108.03	No	G471	Glass	Unidentified			Glass Fragment	1		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Clear													FALSE	01/16/2019						KAREN	1005803.768	759737.73042	9/30/2015	16B	
3878	2018-051-		2108.04	No	G471	DXM - Discarded Military Munitions	DMM - Brooke Bolt			Bolt	1		Complete	Brooke Pallet 2	2															FALSE	9/24/2018				35		1005803.768	759737.73042	9/30/2015	16B		
3879	2018-051-		2108.04.01	No	G471	Metal	Copper or Copper Alloy			Sabot	1		Complete	BOX 13	2															FALSE	5/17/2018				32		1005803.768	759737.73042	9/30/2015	16B		
3880	2018-051-		2109	No	G472	Metal	Iron			Fastener?	1		Reburial																	FALSE	5/31/2019					3576	KAREN	1005825.5581	759735.20885	9/30/2015	18A	
3881	2018-051-		2110	No	G475	Stone	Gun Flint			Gun Flint	1		Complete	BOX 7	2															FALSE	10/24/2016					4850	KAREN	1005784.0451	759769.82307	10/7/2015	16F	
3882	2018-051-		2111	No	G477	Metal	Iron			Iron Plate	1		Inventoried - Ready to Process	YB28																FALSE						0428	ERICA	1005777.0483	759765.07979	10/7/2015	15E	
3883	2018-051-		2112.01	No	G486	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 7	PX1															FALSE	8/14/2018					0445	ERICA	1005749.8514	759781.92009	10/7/2015	13H	
3884	2018-051-		2112.02	No	G486	Metal	Copper or Copper Alloy			Brass Tube	1		Complete	NHHC - Pallet 5 Medium Divided Tote 1	1															FALSE	1/30/2019				350445	ERICA	1005749.8514	759781.92009	10/7/2015	13H		
3885	2018-051-		2113	No	G487	Metal	Copper or Copper Alloy			Brass Pieces	8		Complete	NHHC - Pallet 2 Small Divided Tote 6	1															FALSE	1/11/2017				284866	KAREN	1005758.8097	759782.18111	10/7/2015	14H		
3886	2018-051-		2114	No	G488	Metal	Iron			Large Cast Iron Beam (?)	1		Unknown	Blue 23																FALSE						4862	KAREN	1005760.1511	759788.66208	10/7/2015	14H	
3887	2018-051-		2115	No	G491	Metal	Lead			Lead Fragment	1		Complete	NHHC - Pallet 1 Medium Divided Tote 3	1															FALSE	05/24/2017					4885	KAREN	1005772.7367	759793.45933	10/7/2015	15H	
3888	2018-051-		2116.01	No	G494	Metal	Iron			Concreted Chain	1		Inventoried - Ready to Process	YB153																FALSE						0472	ERICA	1005776.7097	759805.48332	10/7/2015	16I	
3889	2018-051-		2116.02	No	G494	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1	Simple stamped														FALSE	9/12/2017					0460	ERICA	1005776.7097	759805.48332	10/7/2015	16I	
3890	2018-051-		2116.03	No	G494	Metal	Iron			Long Railroad Iron	1		Unknown																	FALSE						0473-0474	ERICA	1005776.7097	759805.48332	10/7/2015	16I	
3891	2018-051-		2117	No	G495	Metal	Iron			Long Railroad Iron	1		Unknown																	FALSE						0464	ERICA	1005762.2196	759797.71125	10/7/2015	14I	
3892	2018-051-		2118	No	G498	Metal	Iron			Railroad Iron, Articulated	1		Unknown																	FALSE						0494-0495, 0497, 0499	ERICA	1005769.1149	759797.52324	10/7/2015	15I	
3893	2018-051-		2119.01	No	G499	Metal	Iron			Concreted Railroad Iron	1		Unknown																	FALSE						4902	KAREN	1005751.7257	759799.82982	10/7/2015	14J	
3894	2018-051-		2119.02	No	G499	Metal	Iron			Concreted Railroad Iron	1		Unknown																	FALSE						4903	KAREN	1005751.7257	759799.82982	10/7/2015	14J	
3895	2018-051-		2120	No	G500	Metal	Iron			Concreted Railroad Iron	1		Unknown																	FALSE						4898	KAREN	1005746.3527	759792.81286	10/7/2015	13I	
3896	2018-051-		2121	No	G506	Concretion	Concretion			Concretion - X-ray	2		Inventoried - Ready to Process	YB46		AC FOUND W/O ARTIFACT IN 2018 CLEANUP														FALSE						0511	ERICA	1005733.8988	759775.83908	10/7/2015	11H	
3897	2018-051-		2122.01	No	G513	Metal	Lead			Lead Shot	1		Complete	NHHC - Pallet 1 Small Divided Tote 3	1															FALSE	06/20/2017					4964	KAREN	1005750.7151	759808.28765	10/7/2015	14J	
3898	2018-051-		2122.02	No	G513	Glass	Unidentified			Glass Rim	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Green/Olive													FALSE	09/01/2016					4964	KAREN	1005750.7151	759808.28765	10/7/2015	14J	
3899	2018-051-		2122.03	No	G513	Metal	Iron			Half-Rail	1		Complete	PR-S1				21319 g			3.25 in				2 in			37.5 in		FALSE	7/2/2019			7.0		4961-4962, 4966	KAREN	1005750.7151	759808.28765	10/7/2015	14J	
3900	2018-051-		2122.05	No	G513	Metal	Iron			Half-Rails, From Long Railroad Iron	1		Unknown																		FALSE						4961-4962, 4966	KAREN	1005750.7151	759808.28765	10/7/2015	14J
3901	2018-051-		2122.04	No</																																						

Appendix C: Artifact Database																																										
Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square	
3927	2018-051-		2132.02	No	S8	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1	Check stamped														FALSE	11/8/2017					1586-1587; 1590-1591	ERICA	1005684.2586	759761.51576	9/22/2015	6H	
3928	2018-051-		2132.03	No	S8	Metal	Iron			Iron Ring	1		Inventoried - Ready to Process	WB50																FALSE					1586-1587; 1590-1591	ERICA	1005684.2586	759761.51576	9/22/2015	6H		
3929	2018-051-		2132.04	No	S8	Metal	Iron			Curved Iron	1		Inventoried - Ready to Process	BARREL 64																FALSE					1586-1587; 1590-1591	ERICA	1005684.2586	759761.51576	9/22/2015	6H		
3930	2018-051-		2132.05	No	S8	Metal	Iron			Concreted Iron Plate	1		Inventoried - Ready to Process	BARREL 64																FALSE					1586-1587; 1590-1591	ERICA	1005684.2586	759761.51576	9/22/2015	6H		
3931	2018-051-		2132.06	No	S8	Concretion	Concretion			Concretions	1		Inventoried - Ready to Process	BARREL 31																FALSE					1586-1587; 1590-1591	ERICA	1005684.2586	759761.51576	9/22/2015	6H		
3932	2018-051-		2133.01	No	S9	Organic	Coal/Charcoal			Coal	2		Complete	NHHC - Pallet 6 Small Tote 22	1															FALSE	02/02/2016					1558	KAREN	1005681.3896	759753.63962	9/22/2015	5H	
3933	2018-051-		2133.02	No	S9	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 1	PX1	Complicated stamped (faint)															FALSE	4/20/2016					1558	KAREN	1005681.3896	759753.63962	9/22/2015	5H
3934	2018-051-		2134.01	No	S10	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Clear													FALSE	1/16/2019					1563	KAREN	1005687.6883	759766.11549	9/22/2015	6H	
3935	2018-051-		2134.02	Yes	S10	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1															FALSE	05/02/2016					1563	KAREN	1005687.6883	759766.11549	9/22/2015	6H	
3936	2018-051-		2134.03	No	S10	Organic	Rosin			Rosin	1		Complete	C5																FALSE	5/2/2018					1563	KAREN	1005687.6883	759766.11549	9/22/2015	6H	
3937	2018-051-		2134.04	No	S10	Recent/Synthetic	Rubber			Rubber Ring	1		Inventoried - Ready to Process	WB24																FALSE					1563	KAREN	1005687.6883	759766.11549	9/22/2015	6H		
3938	2018-051-		2134.05	No	S10	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 1	PX1	Check stamped? (Very faint)															FALSE	4/22/2016					1563	KAREN	1005687.6883	759766.11549	9/22/2015	6H
3939	2018-051-		2135.01	No	S11	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear, Aqua													FALSE	01/11/2019					1567	KAREN	1005676.3891	759760.74131	9/22/2015	5H	
3940	2018-051-		2135.02	No	S11	Concretion	Concretion			Concretions	3		Unknown																	FALSE					1569	KAREN	1005676.3891	759760.74131	9/22/2015	5H		
3941	2018-051-		2136.01	No	S12	Organic	Bone			Bone	1		Complete	NHHC - Pallet 6 Small Tote 24	1	SAW MARKS														FALSE	09/07/2017					1571	KAREN	1005697.9845	759767.11313	9/22/2015	7H	
3942	2018-051-		2136.02	No	S12	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 10	1		Green/Olive													FALSE	04/15/2016					1571	KAREN	1005697.9845	759767.11313	9/22/2015	7H	
3943	2018-051-		2136.03	No	S12	Glass	Unidentified			Glass Bottle	1		Complete	NHHC - Pallet 6 Large Tote 28	1		Green/Olive													FALSE	12/01/2016					1571	KAREN	1005697.9845	759767.11313	9/22/2015	7H	
3944	2018-051-		2136.04	Yes	S12	Ceramic	Stoneware			Historic Ceramic	1		Complete	BOX 1	2	Blue flower	Blue, White														FALSE	4/17/2018					1571	KAREN	1005697.9845	759767.11313	9/22/2015	7H
3945	2018-051-		2136.05	No	S12	Metal	Iron			Nail	1		Inventoried - Ready to Process	18WB14																FALSE					1571	KAREN	1005697.9845	759767.11313	9/22/2015	7H		
3946	2018-051-		2136.06	No	S12	Organic	Coal/Charcoal			Charcoal	1		Complete	NHHC - Pallet 4 Small Tote 17	1															FALSE	02/01/2016					1571	KAREN	1005697.9845	759767.11313	9/22/2015	7H	
3947	2018-051-		2137.01	No	S13	Organic	Wood			Wooden Roller	1		Complete	NHHC - Pallet 6 Medium Tote 5	1															FALSE	06/12/2017					1621-1623; 1650	ERICA	1005694.9212	759762.02499	9/22/2015	7H	
3948	2018-051-		2137.02	No	S13	Organic	Wood			Barrel Stave	1		Complete	NHHC - Pallet 6 Medium Tote 5	1															FALSE	01/10/2018					1621-1623; 1650	ERICA	1005694.9212	759762.02499	9/22/2015	7H	
3949	2018-051-		2137.03	No	S13	Organic	Rosin			Rosin	5		Inventoried - Ready to Process	WB150																FALSE					1621-1623; 1650	ERICA	1005694.9212	759762.02499	9/22/2015	7H		
3950	2018-051-		2137.04	No	S13	Organic	Leather			Leather	6		Inventoried - Ready to Process	WB151																												

Appendix C: Artifact Database																																											
Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square		
3987	2018-051-		2141.06	No	S17	Metal	Copper or Copper Alloy			Brass Nail, bent	1		Complete	NHHC - Pallet 2 Small Divided Tote 5	1															FALSE	01/11/2017					35	1585	KAREN	1005671.8386	759750.51644	9/22/2015	4H	
3988	2018-051-		2141.07	No	S17	Concretion	Concretion			Concretion - pipe?	1		Inventoried - Ready to Process	BARREL 64																FALSE							1581	KAREN	1005671.8386	759750.51644	9/22/2015	4H	
3989	2018-051-		2142	No	S18	Metal	Iron			Square Washer	1		Unknown																	FALSE							1577	KAREN	1005669.0066	759754.39194	9/22/2015	4H	
3990	2018-051-		2143.01	No	S19	Glass	Unidentified			Glass Bottle	1		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Brown													FALSE	11/01/2016						1597	KAREN	1005688.5982	759748.76107	9/22/2015	6G	
3991	2018-051-		2143.02	Yes	S19	Ceramic	Whiteware			Historic Ceramic	1		Complete	BOX 1	2															FALSE	5/9/2018						1597	KAREN	1005688.5982	759748.76107	9/22/2015	6G	
3992	2018-051-		2143.03	No	S19	Concretion	Concretion			Grapeshot (?)	1		Inventoried - Ready to Process	18WB05																FALSE							1599	KAREN	1005688.5982	759748.76107	9/22/2015	6G	
3993	2018-051-		2143.04	No	S19	Organic	Coal/Charcoal			Coal	2		Complete	NHHC - Pallet 6 Small Tote 22	1															FALSE	02/02/2016						NO PHOTO		1005688.5982	759748.76107	9/22/2015	6G	
3994	2018-051-		2143.05	No	S19	Organic	Leather			Leather	2	Fragment(s) of a single artifact	Complete	C5				8.7 g		1.607 in		1.217 in		0.057 in						FALSE	3/20/2019							1005688.5982	759748.76107	9/22/2015	6G		
3995	2018-051-		2144.01	No	S20	Metal	Iron			Small Chain	1		Inventoried - Ready to Process	18WB14																FALSE							1603	KAREN	1005677.014	759745.45177	9/22/2015	5G	
3996	2018-051-		2144.02	No	S20	Organic	Bone			Bone	2		Complete	NHHC - Pallet 6 Small Tote 24	1	butcher marks														FALSE	09/12/2017							1603	KAREN	1005677.014	759745.45177	9/22/2015	5G
3997	2018-051-		2144.03	No	S20	Metal	Iron			Elliptical (Wheel)	1		Inventoried - Ready to Process	Jon's ready vat																FALSE							1604	KAREN	1005677.014	759745.45177	9/22/2015	5G	
3998	2018-051-		2144.04	No	S20	Architecture	Brick			Whole Brick	1	Intact	Complete	C7				5.45 lb		9.2 in		4.517 in		1.700 in						FALSE	03/26/19							1604	KAREN	1005677.014	759745.45177	9/22/2015	5G
3999	2018-051-		2144.05	No	S20	Organic	Wood			Barrel Head Fragment	1		Complete	NHHC - Pallet 6 Medium Tote 5	1															FALSE	01/09/2018							1603	KAREN	1005677.014	759745.45177	9/22/2015	5G
4000	2018-051-		2144.06	No	S20	Metal	Copper or Copper Alloy			Door Frame With Hinge	1		Inventoried - Ready to Process	YB70																FALSE							1604	KAREN	1005677.014	759745.45177	9/22/2015	5G	
4001	2018-051-		2144.07	No	S20	Metal	Copper or Copper Alloy			Hinges?	3		Inventoried - Ready to Process	YB70																FALSE							1604	KAREN	1005677.014	759745.45177	9/22/2015	5G	
4002	2018-051-		2144.08	No	S20	Metal	Iron			Strap With 3 Fasteners	1		Inventoried - Ready to Process	YB																FALSE							1605	KAREN	1005677.014	759745.45177	9/22/2015	5G	
4003	2018-051-		2144.09	No	S20	Metal	Iron			Corner With Spoke	1		Inventoried - Ready to Process	18WB05																FALSE							1606	KAREN	1005677.014	759745.45177	9/22/2015	5G	
4004	2018-051-		2144.10	No	S20	Metal	Iron			Nails	5		Inventoried - Ready to Process	WB150																FALSE							1603	KAREN	1005677.014	759745.45177	9/22/2015	5G	
4005	2018-051-		2144.11	No	S20	Metal	Copper or Copper Alloy			Nail	1		Inventoried - Ready to Process	Brass ER bucket																FALSE							1603	KAREN	1005677.014	759745.45177	9/22/2015	5G	
4006	2018-051-		2144.13	No	S20	Architecture	Mortar			Mortar	1		Complete	NHHC - Pallet 4 Small Tote 7	1															FALSE	09/12/2017							1603	KAREN	1005677.014	759745.45177	9/22/2015	5G
4007	2018-051-		2145.01	No	S21	Metal	Iron			Machinery	1		Inventoried - Ready to Process	Blue ready vat																FALSE								1677-1680	ERICA	1005684.2795	759744.41432	9/22/2015	5G
4008	2018-051-		2145.02	No	S21	Architecture	Mortar			Mortar	1		Complete	NHHC - Pallet 4 Small Tote 7	1															FALSE	10/19/2017							1677-1680	ERICA	1005684.2795	759744.41432	9/22/2015	5G
4009	2018-051-		2145.03	No	S21	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 10	PX1															FALSE	1/10/2018							1677-1680	ERICA	1005684.2795	759744.41432	9/22/2015	5G
4010	2018-051-		2145.04	No	S21	Organic	Rosin			Rosin	1		Inventoried - Ready to Process	WB150							</																						

Appendix C: Artifact Database																																											
Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square		
4063	2018-051-		2152.05	No	S29	Metal	Iron			Handle/Staple	1		Complete	Cart 3				438.2	g		7.1	in		3.8	in	0.65	in			FALSE	7/24/2019					21	1734-1737	ERICA	1005704.9227	759750.80866	9/22/2015	8F	
4064	2018-051-		2152.06	No	S29	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Small Tote 22	1														FALSE	10/19/2017						1734-1737	ERICA	1005704.9227	759750.80866	9/22/2015	8F		
4065	2018-051-		2152.07	No	S29	Metal	Iron			Iron Plate/small strap	1		Inventoried - Ready to Process	Needs X-ray															FALSE							1734-1737	ERICA	1005704.9227	759750.80866	9/22/2015	8F		
4066	2018-051-		2152.08	No	S29	Metal	Iron			Fastener	1		Inventoried - Ready to Process	WB50 (2018 LOOSE TAG, MAY HAVE INVENTORIED)															FALSE							1734-1737	ERICA	1005704.9227	759750.80866	9/22/2015	8F		
4067	2018-051-		2152.09	No	S29	Composite	Wood	Rubber		Wood with Rubber	1		Complete	C5															FALSE	1/10/2018							1734-1737	ERICA	1005704.9227	759750.80866	9/22/2015	8F	
4068	2018-051-		2152.10	No	S29	Metal	Iron			Strap Or Firegrate Fragment	1		In Treatment	YB133															FALSE								1734-1737	ERICA	1005704.9227	759750.80866	9/22/2015	8F	
4069	2018-051-		2152.11	No	S29	Metal	Iron			Iron Plate	1		Inventoried - Ready to Process	YB55															FALSE								1734-1737	ERICA	1005704.9227	759750.80866	9/22/2015	8F	
4070	2018-051-		2152.12	No	S29	Composite	Iron	Copper or Copper Alloy		Small Fragment Of Iron With Brass	1		Inventoried - Ready to Process	Brass chem bucket															FALSE								1734-1737	ERICA	1005704.9227	759750.80866	9/22/2015	8F	
4071	2018-051-		2152.13	No	S29	Metal	Iron			Firegrate end	1		Complete	C1				4.30	lb		10.25	in		3.042	in	1.392	in		FALSE	4/15/2019					28			1005704.9227	759750.80866	9/22/2015	8F		
4072	2018-051-		2153.01	No	S30	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Small Tote 23	1														FALSE	10/19/2017							1710-1711	ERICA	1005716.2312	759749.25692	9/22/2015	9F	
4073	2018-051-		2153.02	No	S30	Metal	Iron			Iron Nails	3		Inventoried - Ready to Process	WB116															FALSE								1710-1711	ERICA	1005716.2312	759749.25692	9/22/2015	9F	
4074	2018-051-		2153.03	No	S30	Organic	Wood			Cut Wood	1		Complete	C5															FALSE	7/11/2018							1710-1711	ERICA	1005716.2312	759749.25692	9/22/2015	9F	
4075	2018-051-		2153.04	No	S30	Glass	Unidentified			Glass	3		Complete	NHHC - Pallet 6 Medium Divided Tote 10	1		Green/Olive Light Blue												FALSE	09/07/2016							1710-1711	ERICA	1005716.2312	759749.25692	9/22/2015	9F	
4076	2018-051-		2153.05	Yes	S30	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1														FALSE	11/21/2016							1710-1711	ERICA	1005716.2312	759749.25692	9/22/2015	9F	
4077	2018-051-		2154.01	No	S31	Organic	Rosin			Rosin	6		Complete	NHHC - Pallet 4 Small Tote 16	1														FALSE	02/01/2016							1742-1744; 1747-1750	ERICA	1005699.6721	759756.75878	9/22/2015	7G	
4078	2018-051-		2154.02	No	S31	Metal	Iron			Hose Clamp	1		Complete?	PR-S15															FALSE								1742-1744; 1747-1750	ERICA	1005699.6721	759756.75878	9/22/2015	7G	
4079	2018-051-		2154.03	No	S31	Organic	Coal/Charcoal			Coal	4		Complete	NHHC - Pallet 6 Small Tote 22	1														FALSE	02/02/2016							1742-1744; 1747-1750	ERICA	1005699.6721	759756.75878	9/22/2015	7G	
4080	2018-051-		2154.04	No	S31	Metal	Copper or Copper Alloy			Brass Fragment	1		Inventoried - Ready to Process	2018P12															FALSE								1742-1744; 1747-1750	ERICA	1005699.6721	759756.75878	9/22/2015	7G	
4081	2018-051-		2154.05	No	S31	Metal	Iron			Iron Plate with fastener	1		In Treatment	YB152															FALSE								1742-1744; 1747-1750	ERICA	1005699.6721	759756.75878	9/22/2015	7G	
4082	2018-051-		2154.06	No	S31	Metal	Copper or Copper Alloy			Straps	2		Complete	PR-S8				651.6	g		9.25	in		2.52	in	.565	in		FALSE	3/19		2/26/2016			21	1747-1750	ERICA	1005699.6721	759756.75878	9/22/2015	7G		
4083	2018-051-		2154.07	No	S31	Organic	Wood			Wooden Handle	1		Inventoried - Ready to Process	YB75													2	in		FALSE								1742-1744; 1747-1750	ERICA	1005699.6721	759756.75878	9/22/2015	7G
4084	2018-051-		2154.08	No	S31	Metal	Copper or Copper Alloy			Sheathing (?)	1		Unknown																FALSE								1742-1744; 1747-1750	ERICA	1005699.6721	759756.75878	9/22/2015	7G	
4085	2018-051-		2154.09	No	S31	Metal	Iron			Iron Nails	1		Inventoried - Ready to Process	18WB14															FALSE								1742-1744; 1747-1750	ERICA	1005699.6721	759756.75878	9/22/2015	7G	
4086	2018-051-																																										

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square
4113	2018-051-		2160.04	No	S37	Organic	Wood			Barrel Stave	2		Inventoried - Ready to Process	YB12																FALSE					1787-1792; 1796-1797	ERICA	1005716.7248	759746.11109	9/22/2015	8F	
4114	2018-051-		2160.05	No	S37	Organic	Wood			Small Wood Frags	5		Inventoried - Ready to Process	LG BAGGED SEPARATELY																FALSE					1787-1792; 1796-1797	ERICA	1005716.7248	759746.11109	9/22/2015	8F	
4115	2018-051-		2160.06	No	S37	Organic	Wood			Notched Wood With Pegs	1		Inventoried - Ready to Process	YB12																FALSE					1787-1792; 1796-1797	ERICA	1005716.7248	759746.11109	9/22/2015	8F	
4116	2018-051-		2160.07	No	S37	Organic	Wood			Plank with Tack Holes	2		Complete	C6				552.8 g		16 in		3.7 in		1 in						FALSE	7/12/2019					1787-1792; 1796-1797	ERICA	1005716.7248	759746.11109	9/22/2015	8F
4117	2018-051-		2160.08	No	S37	Organic	Leather			Leather (iron removed)	1		Complete	C3				27.7 g		3.009 in		2.092 in		0.205 in						FALSE	8/7/2019					1787-1792; 1796-1797	ERICA	1005716.7248	759746.11109	9/22/2015	8F
4118	2018-051-		2160.09	No	S37	Metal	Copper or Copper Alloy			Brass Elevation Sight	1		Complete	NHHC - Pallet 1 Large Tote 9	1	"3.40 7.00 9.00 13.00 15.00 17.00"														FALSE	12/16/2018			25		1787-1792; 1796-1797	ERICA	1005716.7248	759746.11109	9/22/2015	8F
4119	2018-051-		2160.10	No	S37	Metal	Iron			Augers	2		Complete	PHOTOROOM																FALSE	12/6/2017			21		1787-1792; 1796-1797	ERICA	1005716.7248	759746.11109	9/22/2015	8F
4120	2018-051-		2160.11	No	S37	Metal	Copper or Copper Alloy			Brass Knob	1		Inventoried - Ready to Process	WB106																FALSE					1787-1792; 1796-1797	ERICA	1005716.7248	759746.11109	9/22/2015	8F	
4121	2018-051-		2160.12	No	S37	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Light Blue													FALSE	09/07/2016					1787-1792; 1796-1797	ERICA	1005716.7248	759746.11109	9/22/2015	8F
4122	2018-051-		2160.13	No	S37	Organic	Wood			Part Of Auger/Drill Holder	1		Unknown																	FALSE					1787-1792; 1796-1797	ERICA	1005716.7248	759746.11109	9/22/2015	8F	
4123	2018-051-		2160.14	No	S37	Organic	Wood			Plank	4		In treatment	7064																FALSE					1787-1792; 1796-1797	ERICA	1005716.7248	759746.11109	9/22/2015	8F	
4124	2018-051-		2160.15	No	S37	Metal	Iron			Small Iron	2		Unknown																	FALSE					1787-1792; 1796-1797	ERICA	1005716.7248	759746.11109	9/22/2015	8F	
4125	2018-051-		2160.16	No	S37	Metal	Iron			Long Fastener	1		Unknown																	FALSE					1787-1792; 1796-1797	ERICA	1005716.7248	759746.11109	9/22/2015	8F	
4126	2018-051-		2160.17	No	S37	Organic	Wood			Wooden Handle	1		Inventoried - Ready to Process	YB12																FALSE					1787-1792; 1796-1797	ERICA	1005716.7248	759746.11109	9/22/2015	8F	
4127	2018-051-		2160.18	No	S37	Metal	Iron			Stake With Pointed End	1		In treatment	7064																FALSE					1787-1792; 1796-1797	ERICA	1005716.7248	759746.11109	9/22/2015	8F	
4128	2018-051-		2160.19	No	S37	Metal	Iron			Iron Plate	1		Unknown																	FALSE					1787-1792; 1796-1797	ERICA	1005716.7248	759746.11109	9/22/2015	8F	
4129	2018-051-		2160.20	No	S37	Concretion	Concretion			Concretions	2		Unknown																	FALSE					1787-1792; 1796-1797	ERICA	1005716.7248	759746.11109	9/22/2015	8F	
4130	2018-051-		2160.21	No	S37	Organic	Wood			Block Of Wood	1		Unknown																	FALSE					1787-1792; 1796-1797	ERICA	1005716.7248	759746.11109	9/22/2015	8F	
4131	2018-051-		2161.01	No	S38	Organic	Leather			Leather	1	Fragment(s)	Complete	C5				5.6 g		4.581 in		0.985 in		0.085 in					FALSE	3/20/2019					1779-1782	ERICA	1005689.099	759754.05126	9/22/2015	6G	
4132	2018-051-		2161.02	No	S38	Organic	Wood			Barrel Stave	1		Inventoried - Ready to Process	WB17																FALSE					1779-1782	ERICA	1005689.099	759754.05126	9/22/2015	6G	
4133	2018-051-		2161.03	No	S38	Metal	Iron			Iron Nails	1		Inventoried - Ready to Process	WB50																FALSE					1779-1782	ERICA	1005689.099	759754.05126	9/22/2015	6G	
4134	2018-051-		2161.04	No	S38	Metal	Iron			Rod-End Concretion	1		Inventoried - Ready to Process	IN OWN BUCKET																FALSE					1779-1782	ERICA	1005689.099	759754.05126	9/22/2015	6G	
4135	2018-051-		2161.05	No	S38	Metal	Iron			Riveted Plate	1		Unknown																	FALSE					1779-1782	ERICA	1005689.099	759754.05126	9/22/2015	6G	
4136	2018-051-		2161.06	No	S38	Metal	Iron			Small Strap	1		Inventoried - Ready to Process	WB50																FALSE					1779-1782	ERICA	1005689.099	759754.05126	9/22/2015	6G	
4137	2018-051-		2162.01	No	S39	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 10	1		Clear													FALSE					1779-1782	ERICA	1005689.099	759754.05126	9/22/2015	6G	
4138	2018-051-		2162.02	No	S39	Metal	Iron			Nail	1		Inventoried - Ready to Process	18WB11																FALSE	01/11/2019				1679	KAREN	1005684.2046	759745.26695	9/23/2015	5G	
4139	2018-051-		2162.03	No	S39	Metal	Copper or Copper Alloy			Harmonica Reed	1		Complete	C2				6.1 g		1.76 in		0.44 in		0.09 in						FALSE	1/10/2019			28	1679	KAREN	1005684.2046	759745.26695	9/23/2015	5G	
4140	2018-051-		2162.04	No	S39	Organic	Coal/Charcoal			Coal	2		Complete	NHHC - Pallet 6 Small Tote 23	1															FALSE	02/02/2016				1679	KAREN	1005684.2046	759745.26695	9/23/2015	5G	
4141	2018-051-		2162.05	No	S39	Organic	Leather			Leather	2		Complete	NHHC - Pallet 6 Large Tote 24	1															FALSE	01/11/2018				1679	KAREN	1005684.2046	759745.26695	9/23/2015	5G	
4142	2018-051-		2163.01	Yes	S40	Ceramic	Whiteware			Historic Ceramic	2		Complete	BOX 1	2															FALSE	6/19/2018				1685	KAREN	1005687.1555	759742.5416	9/23/2015	6F	
4143	2018-051-		2163.02	No	S40	Metal	Iron			Bent Fastener With Threading	1		Inventoried - Ready to Process	18WB04																FALSE					1685	KAREN	1005687.1555	759742.5416	9/23/2015	6F	
4144	2018-051-		2163.03	No	S40	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Small Tote 22	1															FALSE	02/02/2016				1685	KAREN	1005687.1555	759742.5416	9/23/2015	6F	
4145	2018-051-		2163.04	No	S40	Metal	Iron			Track Fragment	1		Inventoried - Ready to Process	YB153																FALSE					1686	KAREN	1005687.1555	759742.5416	9/23/2015	6F	
4146	2018-051-		2163.05	No	S40	Metal	Iron			Part Of Firegrate	1		Inventoried - Ready to Process	YB149																FALSE					1686	KAREN	1005687.1555	759742.5416	9/23/2015	6F	
4147	2018-051-		2163.06	No	S40	Metal	Copper or Copper Alloy			Valve Mechanism	1		Unknown																	FALSE					1686	KAREN	1005687.1555	759742.5416	9/23/2015	6F	
4148	2018-051-		2163.07	No	S40	Concretion	Concretion			Concretion	1		Complete	C7																FALSE	5/9/2018				1685	KAREN	1005687.1555	759742.5416	9/23/2015	6F	
4149	2018-051-		2163.08	No	S40	Organic	Leather			Leather Strip	1		Complete	NHHC - Pallet 6 Large Tote 24	1															FALSE	01/11/2018				1685	KAREN	1005687.1555	759742.5416	9/23/2015	6F	
4150	2018-051-		2164.01	Yes	S41	Ceramic	Stoneware	Pearlware		Historic Ceramic	2		Complete	BOX 1	2															FALSE	6/19/2018				1815	ERICA	1005689.6139	759736.79105	9/23/2015	6F	
4151	2018-051-		2164.02	No	S41	Glass	Unidentified			Glass	3		Complete	NHHC - Pallet 6 Medium Divided Tote 14	1		Clear, Amber, Green/Olive													FALSE	01/14/2019					1814	ERICA	1005689.6139	759736.79105	9/23/2015	6F
4152	2018-051-		2164.03	No	S41	Organic	Wood			Stave	1		Complete	NHHC - Pallet 6 Medium Tote 5	1															FALSE	01/10/2018					1814	ERICA	1005689.6139	759736.79105	9/23/2015	6F
4153	2018-051-		2164.04	No	S41	Organic	Wood			Wood Handle	1		Complete	NHHC - Pallet 4 Large Divided Tote 1	1												28 mm			FALSE	06/19/2017					1814	ERICA	1005689.6139	759736.79105	9/23/2015	6F
4154	2018-051-		2164.05	No	S41	Metal	Iron			Nail And Square Fastener Head	2		Inventoried - Ready to Process	WB50																FALSE					1814	ERICA	1005689.6139	759736.79105	9/23/2015	6F	
4155	2018-051-		2164.06	No	S41	Metal	Iron			Iron Strap With Concretion	1		Inventoried - Ready to Process	YB82																FALSE					1816	ERICA	1005689.6139	759736.79105			

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square
4327	2018-051-		2205.06	No	S87	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process																	FALSE					2018	ERICA	1005736.7514	759736.67726	9/23/2015	10D	
4328	2018-051-		2205.05	No	S87	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process																	FALSE					2018	ERICA	1005736.7514	759736.67726	9/23/2015	10D	
4329	2018-051-		2206.01	No	S88	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Clear													FALSE	01/11/2019				2034	ERICA	1005715.0923	759733.16051	9/23/2015	8D	
4330	2018-051-		2206.02	No	S88	Metal	Copper or Copper Alloy			Brass Wire	1		Complete	NHHC - Pallet 1 Medium Divided Tote 3	1															FALSE	03/29/2018				35	2034	ERICA	1005715.0923	759733.16051	9/23/2015	8D
4331	2018-051-		2207.01	No	S90	Metal	Iron			Half Rail	1		Unknown	YB147																FALSE					1915	KAREN	1005678.7533	759727.28571	9/23/2015	4E	
4332	2018-051-		2207.02	No	S90	Metal	Iron			Pipe?	1		Inventoried - Ready to Process	Rolloff 2																FALSE					1915	KAREN	1005678.7533	759727.28571	9/23/2015	4E	
4333	2018-051-		2207.03	No	S90	Metal	Iron			Cast Iron Beam With 3 Fasteners	1		Unknown																	FALSE					1917	KAREN	1005678.7533	759727.28571	9/23/2015	4E	
4334	2018-051-		2207.04	Yes	S90	Ceramic	Refined Earthenware			Historic Ceramic	2		Complete	NHHC - Pallet 4 Small Tote 21	1															FALSE	05/02/2016				1914	KAREN	1005678.7533	759727.28571	9/23/2015	4E	
4335	2018-051-		2207.05	No	S90	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear													FALSE	01/16/2019				1914	KAREN	1005678.7533	759727.28571	9/23/2015	4E	
4336	2018-051-		2207.06	No	S90	Metal	Iron			Nail	1		Inventoried - Ready to Process	18WB14																FALSE					1914	KAREN	1005678.7533	759727.28571	9/23/2015	4E	
4337	2018-051-		2207.07	No	S90	Metal	Iron			Square Spike	1		Inventoried - Ready to Process	18WB14																FALSE					1918	KAREN	1005678.7533	759727.28571	9/23/2015	4E	
4338	2018-051-		2208.01	No	S91	Metal	Iron			Part OF A Door?	1		Unknown																	FALSE					1910	KAREN	1005679.892	759719.12468	9/23/2015	4D	
4339	2018-051-		2208.02	No	S91	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear													FALSE	01/14/2019				1909	KAREN	1005679.892	759719.12468	9/23/2015	4D	
4340	2018-051-		2209.01	No	S92	Metal	Copper or Copper Alloy			Bucket Handle	1		Inventoried - Ready to Process	Brass ER bucket																FALSE					1936	KAREN	1005740.5414	759768.65668	9/23/2015	11G	
4341	2018-051-		2209.02	No	S92	Organic	Bone			Bone	1		Complete	NHHC - Pallet 6 Small Tote 24	1															FALSE	09/07/2017				1936	KAREN	1005740.5414	759768.65668	9/23/2015	11G	
4342	2018-051-		2209.03	Yes	S92	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1															FALSE	05/02/2016				1936	KAREN	1005740.5414	759768.65668	9/23/2015	11G	
4343	2018-051-		2209.04	No	S92	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 10	1		Green/Olive													FALSE	11/01/2016				1936	KAREN	1005740.5414	759768.65668	9/23/2015	11G	
4344	2018-051-		2209.05	No	S92	Recent/Synthetic	Silicone Rubber	Epoxy		Mold Of Treemat Hole Or Mold Of Inside Of Bottle	3		Complete - Cast	NHHC - Pallet 5 Small Divided Tote 16	1															FALSE	12/15/2017				1936	KAREN	1005740.5414	759768.65668	9/23/2015	11G	
4345	2018-051-		2209.06	No	S92	Organic	Wood			Wedge	1		Complete	CS																FALSE	7/11/2018				1936	KAREN	1005740.5414	759768.65668	9/23/2015	11G	
4346	2018-051-		2210.01	No	S93	Metal	Iron			6 Spoked Wheel	1		Unknown																	FALSE					1931	KAREN	1005736.8586	759760.14807	9/23/2015	11F	
4347	2018-051-		2210.02	No	S93	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Medium Divided Tote 12	1															FALSE	02/02/2016				1930	KAREN	1005736.8586	759760.14807	9/23/2015	11F	
4348	2018-051-		2210.03	No	S93	Metal	Lead			Lead Patch	1		Complete	NHHC - Pallet 6 Medium Divided Tote 5	1															FALSE	09/07/2017				1930	KAREN	1005736.8586	759760.14807	9/23/2015	11F	
4349	2018-051-		2210.04	No	S93	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear													FALSE	01/16/2019				1930	KAREN	1005736.8586	759760.14807	9/23/2015	11F	
4350	2018-051-		2210.05	Yes	S93	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 21	1		Blue geometric decoration													FALSE	04/13/2016				1930	KAREN	1005736.8586	759760.14807	9/23/2015	11F	
4351	2018-051-		2210.06	No	S93	Metal	Copper or Copper Alloy			Small Brass Strap With Holes	1		Inventoried - Ready to Process	Brass chem bucket																FALSE					1930	KAREN	1005736.8586	759760.14807	9/23/2015	11F	
4352	2018-051-		2210.07	No	S93	Concretion	Concretion			Concretion Mold	1		Deaccessioned	DA																FALSE	01/27/2017				1930	KAREN	1005736.8586	759760.14807	9/23/2015	11F	
4353	2018-051-		2210.08	No	S93	Metal	Iron			Concreted Small Chain	1		Unknown																	FALSE					1932	KAREN	1005736.8586	759760.14807	9/23/2015	11F	
4354	2018-051-		2211.01	No	S94	Organic	Wood			Staves	5		Complete	NHHC - Pallet 6 Medium Tote 5	1															FALSE	01/10/2018				2053	ERICA	1005721.0381	759744.87759	9/23/2015	9E	
4355	2018-051-		2211.02	No	S94	Organic	Wood			Barrel Head Fragments	3		Complete	NHHC - Pallet 4 Large Divided Tote 1	1															FALSE	09/05/2017				2053	ERICA	1005721.0381	759744.87759	9/23/2015	9E	
4356	2018-051-		2211.03	No	S94	Organic	Wood			Cask Head	1		Complete	NHHC - Pallet 6 Medium Tote 5	1															FALSE	09/05/2017				2053	ERICA	1005721.0381	759744.87759	9/23/2015	9E	
4357	2018-051-		2211.04	No	S94	Metal	Iron			Nails	2		Inventoried - Ready to Process	Needs X-ray																FALSE					2055	ERICA	1005721.0381	759744.87759	9/23/2015	9E	
4358	2018-051-		2211.05	No	S94	Metal	Copper or Copper Alloy			Copper Fragment	1		Complete	BOX 5	2															FALSE	5/30/2018				21	2055	ERICA	1005721.0381	759744.87759	9/23/2015	9E
4359	2018-051-		2211.06	No	S94	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 10	1		"H", "BR" stamped on olive base frag	Clear, Green/Olive												FALSE	09/19/2017				2055	ERICA	1005721.0381	759744.87759	9/23/2015	9E	
4360	2018-051-		2211.07	No	S94	Composite	Iron	Copper or Copper Alloy		Pocket Knife	2	Fragment(s) of a single artifact	Complete - Needs Final Images	Photo shelf				14.3 g		3.047 in		0.547 in		0.430 in						FALSE			6.4	21	2055	ERICA	1005721.0381	759744.87759	9/23/2015	9E	
4361	2018-051-		2211.08	No	S94	Organic	Wood			Articulated Board	1		Inventoried - Ready to Process	YB75? Blue 25 in 09/2018																FALSE					2056	ERICA	1005721.0381	759744.87759	9/23/2015	9E	
4362	2018-051-		2211.09	No	S94	Metal	Iron			Iron Strap	1		Inventoried - Ready to Process	BARREL 64																FALSE					2056	ERICA	1005721.0381	759744.87759	9/23/2015	9E	
4363	2018-051-		2211.10	No	S94	Metal	Iron			Iron Triangle	1		Inventoried - Ready to Process	BARREL 66																FALSE					2056	ERICA	1005721.0381	759744.87759	9/23/2015	9E	
4364	2018-051-		2211.11	No	S94	Concretion	Concretion			Concretions	1		Inventoried - Ready to Process	YB82																FALSE					2056	ERICA	1005721.0381	759744.87759	9/23/2015	9E	
4365	2018-051-		2212.01	No	S95	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Clear													FALSE	01/03/2019				2049	ERICA	1005724.8105	759732.97021	9/23/2015	9D	
4366	2018-051-		2212.02	No	S95	Organic	Wood			Wood Wedges	4		Complete	NHHC - Pallet 6 Medium Tote 5	1															FALSE	06/19/2017				2049	ERICA	1005724.8105	759732.97021	9/23/2015	9D	
4367	2018-051-		2212.03	No	S95	Metal	Iron			Iron Nails	1		Inventoried - Ready to Process	WB50																FALSE					2049	ERICA	1005724.8105	759732.97021	9/23/2015	9D	
4368	2018-051-		2212.04	No	S95	Organic	Wood			Barrel Head Fragment	1		Complete	NHHC - Pallet 6 Medium Tote 5	1															FALSE	01/09/2018				2049	ERICA	1005724.8105	759732.97021	9/23/2015	9D	
4369	2018-051-		2212.05	Yes	S95	Ceramic	Unidentified			Historic Ceramic	1		Inventoried - Ready to Process	WB154																FALSE					2049	ERICA	1005724.8105	759732.97021	9/23/2015	9D	
4370	2018-051-		2213.01	No	S96	Metal	Iron			Hook	1		Complete	BOX 18	2			907 g		3.5 in				1 in																	

Appendix C: Artifact Database																																											
Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square		
4411	2018-051-		2219.05	No	S103	Metal	Iron			Eyelet	1		Unknown																	FALSE						2093	ERICA	1005739.7639	759725.22121	9/23/2015	10C		
4412	2018-051-		2219.06	No	S103	Metal	Iron			Weight (?)	1		Unknown																	FALSE							2093	ERICA	1005739.7639	759725.22121	9/23/2015	10C	
4413	2018-051-		2219.07	No	S103	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Green/Olive													FALSE	10/10/2016						2093	ERICA	1005739.7639	759725.22121	9/23/2015	10C	
4414	2018-051-		2219.08	No	S103	Metal	Copper or Copper Alloy			Copper Fragment	1		Complete	BOX 5	2															FALSE	8/7/2018					32	2093	ERICA	1005739.7639	759725.22121	9/23/2015	10C	
4415	2018-051-		2220.01	Yes	S104	Ceramic	Refined Earthenware			Historic Ceramic	2		Complete	NHHC - Pallet 4 Small Tote 12	1															FALSE	05/02/2016						2114	2119	ERICA	1005733.8761	759717.24677	9/23/2015	9B
4416	2018-051-		2220.02	No	S104	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 7	PX1	Complicated stamped														FALSE	1/11/2018						2119	ERICA	1005733.8761	759717.24677	9/23/2015	9B	
4417	2018-051-		2221.01	No	S105	Organic	Wood			Treenail	1		Complete	NHHC - Pallet 4 Large Divided Tote 1	1															FALSE	01/09/2018						2123	ERICA	1005722.6826	759714.23712	9/23/2015	8B	
4418	2018-051-		2221.02	No	S105	Metal	Iron			Iron Washer Fragment	1		Inventoried - Ready to Process	18WB11																FALSE						2123	ERICA	1005722.6826	759714.23712	9/23/2015	8B		
4419	2018-051-		2221.03	No	S105	Metal	Iron			Segment Of Iron Chain	2		Inventoried - Ready to Process	WB125																FALSE						2123	ERICA	1005722.6826	759714.23712	9/23/2015	8B		
4420	2018-051-		2221.04	No	S105	Glass	Unidentified			Glass	4		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Green/Olive ,Aqua													FALSE	01/16/2019						2123	ERICA	1005722.6826	759714.23712	9/23/2015	8B	
4421	2018-051-		2221.05	No	S105	Metal	Iron			Manacle	1		Complete	Cart 3				680 g		3.25 in								4.25 in	FALSE	7/1/2019		2/26/2016	7.0	35	2123	ERICA	1005722.6826	759714.23712	9/23/2015	8B			
4422	2018-051-		2221.06	No	S105	Ceramic	Coarse Earthenware			Prehistoric Ceramic	4		Complete	PX BOX 9	PX1	Cord marked														FALSE	1/11/2018						2123	ERICA	1005722.6826	759714.23712	9/23/2015	8B	
4423	2018-051-		2221.07	Yes	S105	Ceramic	Refined Earthenware			Historic Ceramic	4		Complete	NHHC - Pallet 4 Small Tote 12	1															FALSE	05/02/2016						2123	ERICA	1005722.6826	759714.23712	9/23/2015	8B	
4424	2018-051-		2222.01	No	S106	Glass	Unidentified			Glass	4		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Clear													FALSE	01/03/2019						1986	KAREN	1005743.9297	759719.42347	9/23/2015	10B	
4425	2018-051-		2222.02	No	S106	Metal	Copper or Copper Alloy			Copper Sheathing	1		Complete	BOX 5	2															FALSE	5/9/2018						1986	KAREN	1005743.9297	759719.42347	9/23/2015	10B	
4426	2018-051-		2222.03	Yes	S106	Ceramic	Stoneware	Refined Earthenware		Historic Ceramic	3		Complete	BOX 1	2															FALSE	5/1/2018						1986	KAREN	1005743.9297	759719.42347	9/23/2015	10B	
4427	2018-051-		2222.04	No	S106	Metal	Iron			Fastener/Partial Ring	1		Unknown																	FALSE							1987	KAREN	1005743.9297	759719.42347	9/23/2015	10B	
4428	2018-051-		2222.05	No	S106	Metal	Iron			Nail	1		Inventoried - Ready to Process	18WB14																FALSE							1986	KAREN	1005743.9297	759719.42347	9/23/2015	10B	
4429	2018-051-		2222.06	No	S106	Metal	Copper or Copper Alloy			Button with floral decoration	1		Complete	NHHC - Pallet 5 Small Divided Tote 7	1															FALSE	08/30/2016					14	1986	KAREN	1005743.9297	759719.42347	9/23/2015	10B	
4430	2018-051-		2222.07	No	S106	Metal	Lead			Fuze Seal	1		Complete	NHHC - Pallet 5 Small Divided Tote 11	1	"10"/"SEC"														FALSE	09/06/2017						1986	KAREN	1005743.9297	759719.42347	9/23/2015	10B	
4431	2018-051-		2222.08	No	S106	Metal	Iron			Round Plate With 2 Holes	1		Unknown																	FALSE							NO PHOTO	KAREN	1005743.9297	759719.42347	9/23/2015	10B	
4432	2018-051-		2222.09	No	S106	Metal	Copper or Copper Alloy			Archer Fuze	4		Complete	BOX 6	2			151.8 g		2.88 in							1.23 in			FALSE	1/15/2019					14	ERICA	1005743.9297	759719.42347	9/23/2015	10B		
4433	2018-051-		2222.10	No	S106	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1	incised?														FALSE	4/22/2016						1985	KAREN	1005743.9297	759719.42347	9/23/2015	10	

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square
4492	2018-051-		2242	No	S127	Metal	Iron			Plate	1		Inventoried - Ready to Process	YB?																FALSE						2366	KAREN	1005684.0171	759680.66594	9/27/2015	3A
4493	2018-051-		2243.01	No	S128	Metal	Iron			Railroad Iron	1		Unknown																	FALSE						2389	KAREN	1005686.2332	759700.3519	9/27/2015	4B
4494	2018-051-		2243.02	Yes	S128	Ceramic	Whiteware			Historic Ceramic	1		Complete	BOX 1	2		White, Blue													FALSE	5/1/2018					2391	KAREN	1005686.2332	759700.3519	9/27/2015	4B
4495	2018-051-		2243.03	No	S128	Metal	Iron			Firegrate fragment?	1		Reburial																FALSE	5/31/2019					2388	KAREN	1005686.2332	759700.3519	9/27/2015	4B	
4496	2018-051-		2243.04	No	S128	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 9	PX1														FALSE	1/10/2018					2391	KAREN	1005686.2332	759700.3519	9/27/2015	4B	
4497	2018-051-		2243.05	No	S128	Organic	Coal/Charcoal			Coal	3		Complete	NHHC - Pallet 6 Small Tote 23	1														FALSE	02/02/2016					2391	KAREN	1005686.2332	759700.3519	9/27/2015	4B	
4498	2018-051-		2243.06	No	S128	Organic	Wood			Wood	3		Complete	C5															FALSE	7/11/2018					2391	KAREN	1005686.2332	759700.3519	9/27/2015	4B	
4499	2018-051-		2244.01	Yes	S129	Ceramic	Whiteware	Stoneware		Historic Ceramic	4		Complete	NHHC - Pallet 4 Small Tote 12	1														FALSE	10/17/2018					2396	KAREN	1005710.4531	759691.68557	9/27/2015	6A	
4500	2018-051-		2244.02	No	S129	Metal	Copper or Copper Alloy			Copper Sheathing	2		Inventoried - Ready to Process	Brass chem bucket															FALSE						2396	KAREN	1005710.4531	759691.68557	9/27/2015	6A	
4501	2018-051-		2244.03	No	S129	Composite	Iron	Copper or Copper Alloy		Fastener With Copper Sheathing	1		Inventoried - Ready to Process	2018P5															FALSE							2396	KAREN	1005710.4531	759691.68557	9/27/2015	6A
4502	2018-051-		2244.04	No	S129	Composite	Rubber	Wood		Rubber and Wood	10		Complete	C5															FALSE	10/24/2018						2396	KAREN	1005710.4531	759691.68557	9/27/2015	6A
4503	2018-051-		2244.05	No	S129	Metal	Copper or Copper Alloy			Brass Nail	1		Inventoried - Ready to Process	Brass ER bucket															FALSE							2396	KAREN	1005710.4531	759691.68557	9/27/2015	6A
4504	2018-051-		2245	No	S130	Metal	Copper or Copper Alloy			Copper Fragment	2		Complete	BOX 5	2														FALSE	8/22/2018					352519	ERICA	1005718.8904	759688.52719	9/27/2015	7AA	
4505	2018-051-		2246	No	S131	Composite	Iron	Wood		Gunccarriage Wheel, 3 Fasteners, and Hitch	5		Complete	7046				58286 g			14.5 in			14.5 in				8 in	FALSE	7/2&9/2019		7.0		352517	ERICA	1005733.0426	759694.162	9/27/2015	8AA		
4506	2018-051-		2247.01	No	S133	Recent/Synthetic	Rubber			Rubber Fragment	1		Inventoried - Ready to Process	WB24															FALSE						2535	ERICA	1005703.9764	759686.56051	9/27/2015	5AA	
4507	2018-051-		2247.02	No	S133	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 1	PX1														FALSE	4/22/2016					2535	ERICA	1005703.9764	759686.56051	9/27/2015	5AA	
4508	2018-051-		2247.03	No	S133	Metal	Iron			Iron Strap	1		Inventoried - Ready to Process	YB?															FALSE						2543	ERICA	1005703.9764	759686.56051	9/27/2015	5AA	
4509	2018-051-		2248.01	No	S134	Architecture	Mortar			Possible Mortar?	1		Complete	NHHC - Pallet 4 Small Tote 7	1														FALSE	01/31/2018					2414	KAREN	1005724.7087	759690.78938	9/27/2015	7AA	
4510	2018-051-		2248.02	Yes	S134	Ceramic	Refined Earthenware			Historic Ceramic	1		Unknown																FALSE							2414	KAREN	1005724.7087	759690.78938	9/27/2015	7AA
4511	2018-051-		2248.03	No	S134	Organic	Coal/Charcoal			Coal	2		Complete	NHHC - Pallet 6 Small Tote 23	1														FALSE	02/02/2016					2414	KAREN	1005724.7087	759690.78938	9/27/2015	7AA	
4512	2018-051-		2248.04	No	S134	Metal	Iron			Square Fastener	1		Inventoried - Ready to Process	ROLL-OFF 1 - Reburial															FALSE								1005724.7087	759690.78938	9/27/2015	7AA	
4513	2018-051-		2249	No	S135	Organic	Coal/Charcoal			Coal	2		Complete	NHHC - Pallet 6 Small Tote 23	1														FALSE	02/02/2016					2416	KAREN	1005697.4157	759683.14142	9/27/2015	5AA	
4514	2018-051-		2250	No	S137	Composite	Iron	Wood		Sheave	1		Inventoried - Ready to Process	YB126															FALSE						2444	KAREN	1005749.4733	759701.56116	9/27/2015	10AA	
4515	2018-051-		2251.01	Yes	S140	Ceramic	Stoneware	Ironstone		Historic Ceramic	3		Complete	BOX 2	2			106.1 g			3.79 in	1.92 in		0.92 in					FALSE	10/18/2018					2560-2561	ERICA	1005751.5073	759732.01165	9/27/2015	11C	
4516	2018-051-		2251.02	No	S140	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 6	PX1	1 Complicated stamped														FALSE	4/10/2018					2560, 2564	ERICA	1005751.5073	759732.01165	9/27/2015	11C
4517	2018-051-		2251.03	No	S140	Metal	Copper or Copper Alloy			Copper Fragment	1		Complete	BOX 5	2															FALSE	6/12/2018				352560	ERICA	1005751.5073	759732.01165	9/27/2015	11C	
4518	2018-051-		2251.04	No	S140	Glass	Unidentified			Glass	3		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Clear, Green/Olive, Amber												FALSE	04/11/2017				2560-2561, 2563	ERICA	1005751.5073	759732.01165	9/27/2015	11C		
4519	2018-051-		2251.05	No	S140	Composite	Pewter	Copper or Copper Alloy		Friction Primer	1		Complete	C4				2.6 g		1.32 in	0.81 in		0.15 in						FALSE	1/10/2019				142563	ERICA	1005751.5073	759732.01165	9/27/2015	11C		
4520	2018-051-		2251.06	No	S140	Metal	Iron			Wrench	1		Complete	C1			0.45 kg		9.7 in	3.7 in		1.6 in							FALSE	5/16/2019				322565	ERICA	1005751.5073	759732.01165	9/27/2015	11C		
4521	2018-051-		2252.01	No	S143	Metal	Iron			Fastener with Square Washer	1		Complete	NHHC - Pallet 2 Large Tote 11	1														FALSE	11/21/2017				282461	KAREN	1005727.5081	759683.86083	9/27/2015	7BB		
4522	2018-051-		2252.02	No	S143	Glass	Unidentified			Glass Fragment	1		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Clear												FALSE	01/16/2019					2460	KAREN	1005727.5081	759683.86083	9/27/2015	7BB	
4523	2018-051-		2252.03	No	S143	Metal	Iron			Plate with Holes	1		Inventoried - Ready to Process	YB?															FALSE								1005727.5081	759683.86083	9/27/2015	7BB	
4524	2018-051-		2253	No	S144	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete - Needs Final Images	TO BE PHOTOGRAPHED		Cord marked													FALSE							2458	KAREN	1005724.5576	759680.48079	9/27/2015	7BB
4525	2018-051-		2254.01	No	S145	Glass	Unidentified			Glass Base	1		Complete	NHHC - Pallet 6 Medium Divided Tote 10	1		Clear												FALSE	01/10/2019					2475	KAREN	1005764.1014	759748.16632	9/27/2015	13D	
4526	2018-051-		2254.02	No	S145	Glass	Unidentified			Glass Fragment	2		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Black, Green/Olive												FALSE	11/01/2016					2475	KAREN	1005764.1014	759748.16632	9/27/2015	13D	
4527	2018-051-		2254.03	No	S145	Metal	Copper or Copper Alloy			Sherd/concretion with copper fragment?	1		Complete	NHHC - Pallet 5 Small Divided Tote 16	1														FALSE	09/06/2017					2475	KAREN	1005764.1014	759748.16632	9/27/2015	13D	
4528	2018-051-		2255.01	No	S146	Metal	Lead			2 Bullets, 1 Shot	5		Complete	NHHC - Pallet 5 Small Divided Tote 15	1	Mold marks on Enfield, 1 Enfield has "57" stamped on base													FALSE	05/26/2017					2479	KAREN	1005762.4704	759735.08446	9/27/2015	12C	
4529	2018-051-		2255.02	No	S146	Metal	Lead			Shot	1		Deaccessioned	DA															FALSE							2479	KAREN	1005762.4704	759735.08446	9/27/2015	12C
4530	2018-051-		2255.03	No	S146	Glass	Unidentified			Glass Fragment	1		Complete	NHHC - Pallet 6 Medium Divided Tote 10	1		Amber												FALSE	11/01/2016					2479	KAREN	1005762.4704	759735.08446	9/27/2015	12C	
4531	2018-051-		2255.04	No	S146	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 1	PX1	Too faint to determine													FALSE	4/22/2016					2479	KAREN	1005762.4704	759735.08446	9/27/2015	12C	
4532	2018-051-		2256	Yes	S148	Ceramic	Whiteware			Historic Ceramic	1		Complete	BOX 1	2														FALSE	6/26/2018					2580	ERICA	1005709.335	759670.63285	9/27/2015	SBB	
4533	2018-051-		2257.01	No	S149	Organic	Bone			Bone	1		Complete	Cart 6				11.9 g		3.35 in	0.36 in								FALSE	7/24/2019					2597	ERICA	1005693.1634	759678.72974	9/27/2015	4AA	
4534	2018-051-		2257.02	No	S149	Metal	Copper or Copper Alloy			Copper Fragment	1		Complete	NHHC - Pallet 2 Small Divided Tote 6	1														FALSE	03/29/2018				352597	ERICA	1005693.1634	759678.72974	9/27/2015	4AA		
4535																																									

Appendix C: Artifact Database																																										
Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square	
4572	2018-051-		2269.03	No	S168	Glass	Unidentified			Glass	5		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear, Green/Olive													FALSE	01/16/2019					2586, 2587	KAREN	1005661.3343	759698.96653	9/27/2015	2C	
4573	2018-051-		2270	Yes	S170	Ceramic	Whiteware			Historic Ceramic	2		Complete	NHHC - Pallet 4 Small Tote 12	1															FALSE	12/15/2017					2600	KAREN	1005786.1697	759753.29592	9/27/2015	15D	
4574	2018-051-		2271.01	No	S171	Metal	Iron			Chain	1		Inventoryied - Ready to Process	STEEL VAT																FALSE					2602	KAREN	1005801.6186	759751.32942	9/27/2015	17C		
4575	2018-051-		2271.02	No	S171	Metal	Iron			Pipe Flange	1		Complete	C1				4.9	kg	6.5	in			.749	in	6.5	in	4.475	in	FALSE	3/2019					32	2602	KAREN	1005801.6186	759751.32942	9/27/2015	17C
4576	2018-051-		2271.03	Yes	S171	Ceramic	Whiteware			Historic Ceramic	1		Complete	BOX 1	2															FALSE	4/25/2018					2603	KAREN	1005801.6186	759751.32942	9/27/2015	17C	
4577	2018-051-		2271.04	No	S171	Ceramic	Coarse Earthenware			Prehistoric Ceramic	5		Complete	PX BOX 2	PX1	2 Cord marked, 1 Complicated stamped														FALSE	11/7/2017					2603	KAREN	1005801.6186	759751.32942	9/27/2015	17C	
4578	2018-051-		2271.05	No	S171	Glass	Unidentified			Glass Fragments	4		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Clear, Green/Olive													FALSE	01/03/2019					2603	KAREN	1005801.6186	759751.32942	9/27/2015	17C	
4579	2018-051-		2271.06	No	S171	Stone	Stone Tool			Projectile Point	1		Complete	PX BOX 13	PX1		amber													FALSE	2/1/2016					2608	KAREN	1005801.6186	759751.32942	9/27/2015	17C	
4580	2018-051-		2271.07	No	S171	Metal	Lead			Lead Scrap	1		Complete	NHHC - Pallet 5 Small Divided Tote 15	1														FALSE	05/24/2017					2608	KAREN	1005801.6186	759751.32942	9/27/2015	17C		
4581	2018-051-		2272.01	No	S172	Metal	Lead			Enfield Bullet	1		Complete	NHHC - Pallet 1 Small Divided Tote 3	1															FALSE	06/20/2017					2705	ERICA	1005772.8775	759750.09944	9/27/2015	14D	
4582	2018-051-		2272.02	Yes	S172	Ceramic	Stoneware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1															FALSE	12/14/2017					2705	ERICA	1005772.8775	759750.09944	9/27/2015	14D	
4583	2018-051-		2273.01	No	S173	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1	Possibly Simple stamped															FALSE	9/14/2017					2703	ERICA	1005759.3629	759746.21124	9/27/2015	12D
4584	2018-051-		2273.02	No	S173	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Green/Olive													FALSE	10/17/2016					2703	ERICA	1005759.3629	759746.21124	9/27/2015	12D	
4585	2018-051-		2273.03	No	S173	Metal	Iron			Nail Fragment	1		Inventoryied - Ready to Process	18WB10																FALSE					2703	ERICA	1005759.3629	759746.21124	9/27/2015	12D		
4586	2018-051-		2274.01	No	S174	Metal	Iron			Link Of Chain Fragment	1		Inventoryied - Ready to Process	18WB14																FALSE					2717	ERICA	1005683.5462	759666.54623	9/27/2015	3BB		
4587	2018-051-		2274.02	No	S174	Metal	Iron			About 16 Links Of Chain	1		Inventoryied - Ready to Process	NHHC - Pallet 6 Medium Divided Tote 15																FALSE					2718	ERICA	1005683.5462	759666.54623	9/27/2015	3BB		
4588	2018-051-		2274.03	No	S174	Metal	Iron			Concreted Chain?	1		Inventoryied - Ready to Process	BARREL 31																FALSE					2718	ERICA	1005683.5462	759666.54623	9/27/2015	3BB		
4589	2018-051-		2275	No	S175	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Small Tote 22	1															FALSE	10/19/2017					2725	ERICA	1005664.8583	759679.67091	9/27/2015	1A	
4590	2018-051-		2276.01	No	S178	Composite	Wood	Iron		Wood With 2 Spikes	1		Unknown																	FALSE					2635	KAREN	1005690.5214	759652.90096	9/27/2015	3CC		
4591	2018-051-		2276.02	No	S178	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Clear													FALSE	01/03/2019					2634	KAREN	1005690.5214	759652.90096	9/27/2015	3CC	
4592	2018-051-		2277	No	S180	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear													FALSE	01/11/2019					2739	ERICA	1005689.5323	759656.33685	9/27/2015	3CC	
4593	2018-051-		2278	No	S181	Glass	Wine Bottle			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Green/Olive													FALSE	06/28/2017					2737	ERICA	1005701.7364	759659.98111	9/27/2015	4CC	
4594	2018-051-		2279.01	No	S182	Ceramic	Coarse Earthenware			Prehistoric Ceramic	3		Unknown																	FALSE					3078	ERICA	1005823.942	759790.5338	9/29/2015	20F		
4595	2018-051-		2279.02	No	S182	Stone	Ballast			Ballast (?) Stone	3		Complete	C7				2562.8	g	5.86																						

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square
4647	2018-051-		2302.01	Yes	S211	Ceramic	Stoneware			Historic Ceramic	1		Complete	BOX 1	2															FALSE	4/17/2018					3188	ERICA	1005829.5694	759770.99833	9/29/2015	20D
4648	2018-051-		2302.02	No	S211	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 7	PX1															FALSE	11/15/2016					3188	ERICA	1005829.5694	759770.99833	9/29/2015	20D
4649	2018-051-		2303.01	No	S213	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 1	PX1															FALSE	11/14/2016					3205	ERICA	1005819.0359	759801.05028	9/29/2015	20G
4650	2018-051-		2303.02	No	S213	Organic	Bone			Bone	1		Complete	C5				8.9 g		1.823 in		0.948 in		0.415 in					FALSE	10/25/2018					3205	ERICA	1005819.0359	759801.05028	9/29/2015	20G	
4651	2018-051-		2304.01	No	S214	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	BARREL 31															FALSE					3207	ERICA	1005837.1323	759754.60215	9/29/2015	20B		
4652	2018-051-		2304.02	No	S214	Ceramic	Coarse Earthenware			Prehistoric Ceramic	6		Complete	PX BOX 2	PX1	Possible simple stamp														FALSE	11/8/2017					3208	ERICA	1005837.1323	759754.60215	9/29/2015	20B
4653	2018-051-		2305	No	S215	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 1	PX1															FALSE	11/14/2016					3006	KAREN	1005840.2944	759744.49352	9/29/2015	20A
4654	2018-051-		2306	No	S216	Metal	Copper or Copper Alloy			Cylindrical Object	1		Did Not Survive	DNS															FALSE					3001	KAREN	1005850.0874	759749.52315	9/29/2015	21A		
4655	2018-051-		2307.01	Yes	S217	Ceramic	Ironstone			Historic Ceramic	2		Complete	C4															FALSE	6/26/2018					3584	KAREN	1005789.4553	759759.07578	10/1/2015	16D	
4656	2018-051-		2307.02	No	S217	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 12	PX1	incised lines													FALSE	8/21/2018					3584	KAREN	1005789.4553	759759.07578	10/1/2015	16D	
4657	2018-051-		2307.03	No	S217	Metal	Copper or Copper Alloy			Copper Sheathing	4		Complete	BOX 5	2														FALSE	4/25/2018					3584	KAREN	1005789.4553	759759.07578	10/1/2015	16D	
4658	2018-051-		2307.04	No	S217	Organic	Bone			Bone	1		Complete	C5															FALSE	7/24/2018					3589	KAREN	1005789.4553	759759.07578	10/1/2015	16D	
4659	2018-051-		2308.01	No	S218	Concretion	Concretion			Iron Concretion	1		Inventoried - Ready to Process	YB82															FALSE					3415	ERICA	1005795.2616	759762.45388	10/1/2015	16E		
4660	2018-051-		2308.02	No	S218	Organic	Bone			Bone	1		Complete	C5															FALSE	7/23/2018					3414	ERICA	1005795.2616	759762.45388	10/1/2015	16E	
4661	2018-051-		2308.03	No	S218	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1														FALSE	09/07/2016					3414	ERICA	1005795.2616	759762.45388	10/1/2015	16E	
4662	2018-051-		2308.04	No	S218	Metal	Iron			Iron Nail	1		Inventoried - Ready to Process	WB50															FALSE					3414	ERICA	1005795.2616	759762.45388	10/1/2015	16E		
4663	2018-051-		2309.01	No	S221	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 4	PX1	Cord marked													FALSE	12/15/2017					3429	ERICA	1005794.0172	759762.17782	10/1/2015	16E	
4664	2018-051-		2309.02	No	S221	Metal	Iron			Concretion	1		Inventoried - Ready to Process	YB158															FALSE					3429	ERICA	1005794.0172	759762.17782	10/1/2015	16E		
4665	2018-051-		2310.01	No	S222	Metal	Copper or Copper Alloy			Powder Canister base	1		In treatment	In treatment															FALSE					3607	KAREN	1005793.0091	759755.2409	10/1/2015	16D		
4666	2018-051-		2310.02	No	S222	Unidentified	Unidentified			Stone/Ceramic?	1		Complete	NHHC - Pallet 5 Small Divided Tote 16	1														FALSE	09/12/2017					3606	KAREN	1005793.0091	759755.2409	10/1/2015	16D	
4667	2018-051-		2310.03	No	S222	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 1	PX1														FALSE	11/15/2016					3606	KAREN	1005793.0091	759755.2409	10/1/2015	16D	
4668	2018-051-		2310.04	No	S222	Metal	Iron			Iron Strap, Small	1		Inventoried - Ready to Process	18WB10															FALSE					3606	KAREN	1005793.0091	759755.2409	10/1/2015	16D		
4669	2018-051-		2311.01	Yes	S223	Ceramic	Whiteware			Historic Ceramic	1		Complete	BOX 1	2														FALSE	4/25/2018					3602	KAREN	1005799.1455	759755.40576	10/1/2015	17D	
4670	2018-051-		2311.02	No	S223	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1	Cord marked													FALSE	12/15/2017					3602	KAREN	1005799.1455	759755.40576	10/1/2015	17D	
4671	2018-051-		2311.03	No	S223	Glass	Unidentified			Glass Fragment	5		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear, Green/Olive												FALSE	01/14/2019					3602	KAREN	1005799.1455	759755.40576	10/1/2015	17D	
4672	2018-051-		2311.04	No	S223	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB124															FALSE					3601	KAREN	1005799.1455	759755.40576	10/1/2015	17D		
4673	2018-051-		2311.05	No	S223	Architecture	Brick			Red Brick	1		Complete - Needs Final Images	TO BE PHOTOGRAPHED			Red												FALSE	5/10/2018					3601	KAREN	1005799.1455	759755.40576	10/1/2015	17D	
4674	2018-051-		2311.06	No	S223	Metal	Copper or Copper Alloy			Small brass fragment	1		Complete	BOX 5	2														FALSE	5/3/2018					3602	KAREN	1005799.1455	759755.40576	10/1/2015	17D	
4675	2018-051-		2311.07	No	S223	Stone	Slate			Slate	1		Complete	NHHC - Pallet 5 Small Divided Tote 16	1	Initials on top column w/ numbers beneath, "H" "K" "E" "1 2 3 11"													FALSE	01/30/2018					3602	KAREN	1005799.1455	759755.40576	10/1/2015	17D	
4676	2018-051-		2312.01	Yes	S224	Ceramic	Stoneware	Slipware		Historic Ceramic	2		Complete	BOX 7	2															FALSE	8/21/2018					3621	KAREN	1005791.5377	759766.84493	10/1/2015	16E
4677	2018-051-		2312.02	No	S224	Metal	Copper or Copper Alloy			Folded Sheathing	4		Complete	BOX 5	2														FALSE	4/25/2018					3621	KAREN	1005791.5377	759766.84493	10/1/2015	16E	
4678	2018-051-		2312.03	No	S224	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 8	PX1	Simple stamped													FALSE	6/19/2018					3621	KAREN	1005791.5377	759766.84493	10/1/2015	16E	
4679	2018-051-		2312.04	No	S224	Ceramic	Pipe			Pipe Bowl	1		Complete	C4															FALSE	4/17/2018					3626-3630	KAREN	1005791.5377	759766.84493	10/1/2015	16E	
4680	2018-051-		2313	No	S226	Architecture	Mortar			Mortar	1		Complete	C7															FALSE	5/9/2018					3450	ERICA	1005801.0764	759765.04428	10/1/2015	17E	
4681	2018-051-		2314.01	No	S227	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Green/Olive												FALSE	01/11/2018					3441	ERICA	1005801.0726	759768.42518	10/1/2015	17E	
4682	2018-051-		2314.02	No	S227	Metal	Iron			Iron Plate	1		Inventoried - Ready to Process	BARREL 75															FALSE					3442	ERICA	1005801.0726	759768.42518	10/1/2015	17E		
4683	2018-051-		2315.01	Yes	S229	Ceramic	Creamware			Historic Ceramic	1		Complete	BOX 1	2														FALSE	5/1/2018					3476	ERICA	1005781.6501	759752.36076	10/1/2015	15D	
4684	2018-051-		2315.02	No	S229	Ceramic	Coarse Earthenware			Prehistoric Ceramic	9		Complete	PX BOX 9	PX1														FALSE	6/12/2018					3476	ERICA	1005781.6501	759752.36076	10/1/2015	15D	
4685	2018-051-		2315.03	No	S229	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1														FALSE	10/18/2016					3476	ERICA	1005781.6501	759752.36076	10/1/2015	15D	
4686	2018-051-		2315.04	No	S229	Metal	Iron			Iron Fragment	3		Inventoried - Ready to Process	18WB04															FALSE					3476	ERICA	1005781.6501	759752.36076	10/1/2015	15D		
4687	2018-051-		2316.01	No	S230	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1	Simple stamped													FALSE	12/15/2017					3637	KAREN	1005779.3948	759754.50279	10/1/2015	15D	
4688	2018-051-		2316.02	No	S230	Organic	Bone			Bone	1		Complete	C5															FALSE	7/23/2018					3637	KAREN	1005779.3948	759754.50279	10/1/2015	15D	
4689	2018-051-		2316.03	No	S230	Metal	Copper or Copper Alloy			Copper Sheathing	2		Complete	NHHC - Pallet 2 Small Divided Tote 4	1														FALSE	11/02/2017					183637	KAREN	1005779.3948	759754.50279	10/1/2015	15D	
4690	2018-051-		2317.01	No	S231	Organic	Bone			Bone	1		Complete	C5				7.8 g		1.58 in																					

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square
4728	2018-051-		2327.02	No	S242	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Clear													FALSE	01/25/2019					3525	ERICA	1005813.1978	759755.09821	10/1/2015	18C
4729	2018-051-		2327.03	No	S242	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Small Tote 22	1															FALSE	10/19/2017					3525	ERICA	1005813.1978	759755.09821	10/1/2015	18C
4730	2018-051-		2328	No	S243	Recent/Synthetic	Other			Battery	1		Deaccessioned	DA															FALSE	5/29/2018					3521	ERICA	1005810.5504	759763.14445	10/1/2015	18D	
4731	2018-051-		2329.01	No	S244	Glass	Unidentified			Bottle Stopper/Finial	1		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Clear												FALSE	01/03/2019					3549-3550	ERICA	1005802.3222	759759.11648	10/1/2015	17D	
4732	2018-051-		2329.02	No	S244	Metal	Copper or Copper Alloy			Brass Pump Flange	1		Complete	NHHC - Pallet 1 Large Tote 9	1														FALSE	03/20/2018				21	3549	ERICA	1005802.3222	759759.11648	10/1/2015	17D	
4733	2018-051-		2329.03	No	S244	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 10	1		Green/Olive												FALSE	10/18/2016					3549-3550	ERICA	1005802.3222	759759.11648	10/1/2015	17D	
4734	2018-051-		2330.01	Yes	S245	Ceramic	Refined Earthenware			Historic Ceramic	2		Inventoryied - Ready to Process	WB81															FALSE	10/18/2016					3545	ERICA	1005785.6171	759758.87013	10/1/2015	15E	
4735	2018-051-		2330.02	No	S245	Architecture	Mortar			Mortar	1		Complete	C7															FALSE	6/21/2018					3545	ERICA	1005785.6171	759758.87013	10/1/2015	15E	
4736	2018-051-		2330.03	No	S245	Organic	Bone			Bone	1		Inventoryied - Ready to Process	WB104															FALSE						1005785.6171	759758.87013	10/1/2015	15E			
4737	2018-051-		2330.04	Yes	S245	Ceramic	Whiteware			Historic Ceramic	1		Complete	BOX 2	2														FALSE	4/26/2018					3545	ERICA	1005785.6171	759758.87013	10/1/2015	15E	
4738	2018-051-		2330.05	Yes	S245	Ceramic	Tile			Tile (?)	1		Complete	BOX 1	2														FALSE	4/26/2018					3545	ERICA	1005785.6171	759758.87013	10/1/2015	15E	
4739	2018-051-		2331.01	No	S246	Metal	Copper or Copper Alloy			Copper Sheathing	1		Complete	BOX 5	2														FALSE	6/12/2018					35	3704	KAREN	1005789.9064	759747.72331	10/1/2015	15C
4740	2018-051-		2331.02	Yes	S246	Ceramic	Stoneware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1														FALSE	09/11/2017					3704	KAREN	1005789.9064	759747.72331	10/1/2015	15C	
4741	2018-051-		2332.01	Yes	S247	Ceramic	Pearlware	Stoneware	Whiteware	Historic Ceramic	5		Complete	BOX 1	2														FALSE	6/19/2018					3710	KAREN	1005806.7179	759750.26854	10/1/2015	17C	
4742	2018-051-		2332.02	No	S247	Composite	Iron	Glass		Grapeshot/Nail/Bottle Neck	1		Inventoryied - Ready to Process	BRASS/ORG COMPOSITE															FALSE					3710	KAREN	1005806.7179	759750.26854	10/1/2015	17C		
4743	2018-051-		2332.03	No	S247	Metal	Iron			Grapeshot	1		Inventoryied - Ready to Process	GRAPESHOT1															FALSE					3710	KAREN	1005806.7179	759750.26854	10/1/2015	17C		
4744	2018-051-		2332.04	No	S247	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 10	PX1	1 Simple stamped													FALSE	6/19/2017					3710	KAREN	1005806.7179	759750.26854	10/1/2015	17C	
4745	2018-051-		2332.05	No	S247	Metal	Iron			Square Washer	1		Complete	NHHC - Pallet 5 Large Tote 21	1			1081.65	g	5.75	in	5.70	in	2.25	in				FALSE	04/11/2018					3710	KAREN	1005806.7179	759750.26854	10/1/2015	17C	
4746	2018-051-		2332.06	No	S247	DMM - Discarded Military Munitions	DMM - Brooke Bolt			Bolt	1		Inventoryied - Ready to Process																FALSE							1005806.7179	759750.26854	10/1/2015	17C		
4747	2018-051-		2333.01	No	S248	Ceramic	Coarse Earthenware			Prehistoric Ceramic	4		Complete	PX BOX 10	PX1	1 Possibly Simple stamped, 2 possibly Cord marked, 1 with square indents/punctations														FALSE	1/10/2018					3726	KAREN	1005817.469	759751.69782	10/1/2015	18C
4748	2018-051-		2333.02	No	S248	Organic	Coal/Charcoal			Coal	2		Complete	NHHC - Pallet 6 Small Tote 22	1														FALSE	10/19/2017					3726	KAREN	1005817.469	759751.69782	10/1/2015	18C	
4749	2018-051-		2333.03	No	S248	Organic	Bone			Bone	1		Complete	C5															FALSE	7/23/2018					3727	KAREN	1005817.469	759751.69782	10/1/2015	18C	
4750	2018-051-		2333.04	No	S248	Metal	Copper or Copper Alloy			Tack	1		Complete	BOX 5	2														FALSE	5/1/2018					3727	KAREN	1005817.469	759751.69782	10/1/2015	18C	
4751	2018-051-		2334.01	No	S250	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1														FALSE	12/15/2017					ERROR	ERICA	1005836.4259	759753.15022	10/1/2015	20B	
4752	2018-051-		2334.02	No	S250	Architecture	Concrete			Concrete Fragments	2		Reburial	R															FALSE	1/25/2016					3566	ERICA	1005836.4259	759753.15022	10/1/2015	20B	
4753	2018-051-		2334.03	No	S250	Metal	Iron			Chain? Rail?	1		Inventoryied - Ready to Process	YB															FALSE					3566	ERICA	1005836.4259	759753.15022	10/1/2015	20B		
4754	2018-051-		2335.01	No	S251	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1														FALSE	11/7/2017					3562	ERICA	1005819.5722	759763.60311	10/1/2015	19D	
4755	2018-051-		2335.02	Yes	S251	Ceramic	Stoneware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1														FALSE	11/07/2017					3562	ERICA	1005819.5722	759763.60311	10/1/2015	19D	
4756	2018-051-		2335.03	No	S251	Organic	Bone			Bone	1		Complete	C5															FALSE	7/23/2018					3562	ERICA	1005819.5722	759763.60311	10/1/2015	19D	
4757	2018-051-		2336.01	Yes	S253	Ceramic	Whiteware	Stoneware		Historic Ceramic	6		Complete	NHHC - Pallet 4 Small Tote 21	1	Partial Edwards & Sons makers mark													FALSE	12/09/2017					3588	ERICA	1005802.2742	759736.23716	10/1/2015	16B	
4758	2018-051-		2336.02	No	S253	Metal	Iron			Bolt - DMM?	1		Unknown																FALSE							3579	ERICA	1005802.2742	759736.23716	10/1/2015	16B
4759	2018-051-		2336.03	No	S253	Ceramic	Coarse Earthenware			Prehistoric Ceramic	14		Complete	PX BOX 5	PX1	3 Cord marked, 1 possibly cord marked, 1 possibly Check stamped, 2 with line incisions (1 in X pattern)														FALSE	1/10/2018					3588	ERICA	1005802.2742	759736.23716	10/1/2015	16B
4760	2018-051-		2336.04	No	S253	Glass	Wine Bottle/Case Bottle			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Green/Olive , Clear												FALSE	06/07/2017					3588	ERICA	1005802.2742	759736.23716	10/1/2015	16B	
4761	2018-051-		2336.05	No	S253	Metal	Copper or Copper Alloy			Copper Sheathing	1		Complete	NHHC - Pallet 2 Small Divided Tote 4	1														FALSE	11/02/2017				18	3588	ERICA	1005802.2742	759736.23716	10/1/2015	16B	
4762	2018-051-		2336.06	No	S253	Metal	Grapeshot			Grapeshot	1		Inventoryied - Ready to Process	GRAPESHOT1															FALSE					3588	ERICA	1005802.2742	759736.23716	10/1/2015	16B		
4763	2018-051-		2336.07	No	S253	Metal	Copper or Copper Alloy			Cufflink/Rivet?	1		Complete	C2				6.5	g	0.58	in					0.52	in		FALSE	1/10/2019				28	3588	ERICA	1005802.2742	759736.23716	10/1/2015	16B	
4764	2018-051-		2336.08	No	S253	Metal	Copper or Copper Alloy			Valve?	1		Complete	NHHC - Pallet 5 Small Divided Tote 12	1														FALSE	03/08/2016				28	3581	ERICA	1005802.2742	759736.23716	10/1/2015	16B	
4765	2018-051-		2336.09	No	S253	Concretion	Concretion			Clay	1		Did Not Survive	DNS															FALSE							3588	ERICA	1005802.2742	759736.23716	10/1/2015	16B
4766	2018-051-		2336.10	No	S253	DMM - Discarded Military Munitions	DMM - Brooke Bolt			Bolt	1		Complete	Brooke Pallet 2	2														FALSE	9/20/2018				35			1005802.2742	759736.23716	9/30/2015	16B	
4767	2018-051-		2336.10.01	No	S253	Metal	Copper or Copper Alloy			Sabot	1		Complete	BOX 13	2														FALSE	05/17/2018				32			1005802.2742	759736.23716	9/30/2015	16B	
4768	2018-051-		2336.11	No	S253	Architecture	Mortar			Mortar	1		Complete	NHHC - Pallet 4 Small Tote 7	1														FALSE	01/10/2018					3588	ERICA	1005802.2742	759736.23716	10/1/2015	16B	
4769	2018-051-		2337.01	No	S254	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 12	PX1	1 Cordmarked (exterior) with linear impressions (interior)		92.5	g	2.97	in	2.43	in	0.39	in				FALSE	9/12/2018					3739	KAREN	1005800.4293	759739.89357	10/1/2015	16B	
4770	2018-051-		2337.02	No	S254	Glass	Wine Bottle			Glass Fragment	1		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Green/Olive												FALSE	06/02/2017					374						

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square		
4803	2018-051-		2345.05	No	S266	Organic	Coal/Charcoal			Coal	1		Inventoried - Ready to Process	WB150																FALSE						3792	KAREN	1005768.7359	759741.52022	10/2/2015	13C		
4804	2018-051-		2345.06	No	S266	Ceramic	Coarse Earthenware			Prehistoric Ceramic	3		Complete	PX BOX 7	PX1															FALSE	6/21/2018						3792	KAREN	1005768.7359	759741.52022	10/2/2015	13C	
4805	2018-051-		2345.07	No	S266	Stone	Chipped Stone			Flake	2		Complete	PX BOX 13	PX1															FALSE	10/24/2016						3792	KAREN	1005768.7359	759741.52022	10/2/2015	13C	
4806	2018-051-		2345.08	No	S266	Composite	Iron	Wood		Knife Handle	1		Inventoried - Ready to Process	PRIORITY																FALSE							3792	KAREN	1005768.7359	759741.52022	10/2/2015	13C	
4807	2018-051-		2345.09	No	S266	Architecture	Concrete			Concrete	2		Complete	C7															FALSE	6/21/2018							3792	KAREN	1005768.7359	759741.52022	10/2/2015	13C	
4808	2018-051-		2346.01	No	S268	Ceramic	Coarse Earthenware			Prehistoric Ceramic	3		Complete	PX BOX 1	PX1															FALSE	11/10/2016							3807	KAREN	1005770.9202	759745.94235	10/2/2015	14D
4809	2018-051-		2346.02	No	S268	Glass	Unidentified			Glass Fragment	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Green/Olive													FALSE	10/10/2016							3807	KAREN	1005770.9202	759745.94235	10/2/2015	14D
4810	2018-051-		2346.03	No	S268	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Small Tote 22	1														FALSE	10/19/2017								3809	KAREN	1005770.9202	759745.94235	10/2/2015	14D
4811	2018-051-		2347.01	Yes	S269	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 21	1														FALSE	01/19/2018								3809	KAREN	1005812.9196	759762.61206	10/2/2015	18D
4812	2018-051-		2347.02	No	S269	Glass	Unidentified			Glass Fragment	1		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Clear												FALSE	11/16/2018								3809	KAREN	1005812.9196	759762.61206	10/2/2015	18D
4813	2018-051-		2348.01	No	S273	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear												FALSE	01/14/2019								3665	ERICA	1005808.9061	759748.25708	10/2/2015	17C
4814	2018-051-		2348.02	No	S273	Metal	Iron			Grapeshot	1		Complete	NHHC - Pallet 6 Medium Divided Tote 8	1	Mold seam										2.4 in			FALSE	07/27/2017						14	3665	ERICA	1005808.9061	759748.25708	10/2/2015	17C	
4815	2018-051-		2348.03	No	S273	Metal	Iron			Brass Tack	1		Unknown																FALSE								3665	ERICA	1005808.9061	759748.25708	10/2/2015	17C	
4816	2018-051-		2348.04	No	S273	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB82															FALSE								3666	ERICA	1005808.9061	759748.25708	10/2/2015	17C	
4817	2018-051-		2349.01	No	S274	Recent/Synthetic	Other	Rubber		Navy Dive Boot Sole	1		Unknown																FALSE								3676	ERICA	1005764.2065	759738.45135	10/2/2015	13C	
4818	2018-051-		2349.02	No	S274	Composite	Lead	Wood		Enfield Bullets	7		Complete	NHHC - Pallet 5 Small Divided Tote 15	1	5 with mold seams; 1 with very faint "7" on base													FALSE	05/24/2017							3676-3677	ERICA	1005764.2065	759738.45135	10/2/2015	13C	
4819	2018-051-		2349.03	Yes	S274	Ceramic	Stoneware			Historic Ceramic	2		Complete	BOX 2	2														FALSE	6/21/2018							3676	ERICA	1005764.2065	759738.45135	10/2/2015	13C	
4820	2018-051-		2349.04	No	S274	Ceramic	Coarse Earthenware			Prehistoric Ceramic	10		Complete	PX BOX 9	PX1	Ceek stamped, Cord marked													FALSE	6/12/2018							3676	ERICA	1005764.2065	759738.45135	10/2/2015	13C	
4821	2018-051-		2349.05	No	S274	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear, Green/Olive												FALSE	09/14/2017							3676	ERICA	1005764.2065	759738.45135	10/2/2015	13C	
4822	2018-051-		2349.06	No	S274	Metal	Copper or Copper Alloy			Thick Brass Fragment	1		Complete	BOX 5	2														FALSE	6/13/2018						35	3676	ERICA	1005764.2065	759738.45135	10/2/2015	13C	
4823	2018-051-		2349.07	No	S274	Metal	Iron			Gear Plate	2		Inventoried - Ready to Process	KP29															FALSE								3670	ERICA	1005764.2065	759738.45135	10/2/2015	13C	
4824	2018-051-		2349.08	No	S274	Metal	Iron			Iron Ring Fragments	2		Complete	NHHC - Pallet 6 Medium Divided Tote 5	1														FALSE	09/08/2017	1/26/2016				25	3672-3674	ERICA	1005764.2065	759738.45135	10/2/2015	13C		
4825	2018-051-		2349.09	No	S274	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Medium Divided Tote 12	1														FALSE	01/30/2018							3676	ERICA	1005764.2065	759738.45135	10/2/2015	13C	
4826	2018-051-		2349.10	No	S274	Unidentified	Unidentified			Concretion	1		Inventoried - Ready to Process	WB125															FALSE								3676	ERICA	1005764.2065	759738.45135	10/2/2015	13C	
4827	2018-051-		2349.11	No	S274	Metal	Iron			Iron Plate	1		Unknown										12 in						FALSE								3690	ERICA	1005764.2065	759738.45135	10/2/2015	13C	
4828	2018-051-		2349.12	No	S274	Glass	Unidentified			Glass	1		Unknown				Green/Olive												FALSE								3676?	ERICA	1005764.2065	759738.45135	10/2/2015	13C	
4829	2018-051-		2349.13	No	S274	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB82															FALSE								1005764.2065	759738.45135	10/2/2015	13C			
4830	2018-051-		2350.01	Yes	S275	Ceramic	Stoneware			Historic Ceramic	3		Complete	NHHC - Pallet 4 Small Tote 21	1														FALSE	12/15/2017							3828	KAREN	1005764.2432	759744.16325	10/2/2015	13D	
4831	2018-051-		2350.02	No	S275	Organic	Wood			Cone-Shaped Wood	1		Complete	C5				3.8 g		1.768 in		0.629 in		0.467 in				FALSE	10/26/2018							3828	KAREN	1005764.2432	759744.16325	10/2/2015	13D		
4832	2018-051-		2350.03	No	S275	Metal	Copper or Copper Alloy			Friction primer?	1		Complete	NHHC - Pallet 2 Small Divided Tote 6	1													FALSE	01/20/2017						25	3828	KAREN	1005764.2432	759744.16325	10/2/2015	13D		
4833	2018-051-		2350.04	No	S275	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1														FALSE	12/14/2017							3828	KAREN	1005764.2432	759744.16325	10/2/2015	13D	
4834	2018-051-		2350.05	No	S275	Organic	Leather			Leather	4		Complete	C5														FALSE	10/31/2018							3828	KAREN	1005764.2432	759744.16325	10/2/2015	13D		
4835	2018-051-		2350.06	No	S275	Metal	Copper or Copper Alloy			Half Of Hinge	1		Complete	C2				2.0 g		2.364 in		1.301 in		0.081 in				FALSE	6/13/2018							3828	KAREN	1005764.2432	759744.16325	10/2/2015	13D		
4836	2018-051-		2350.07	No	S275	Glass	Unidentified			Glass Fragment	2		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Light Blue, Green/Olive												FALSE	09/28/2016							3828	KAREN	1005764.2432	759744.16325	10/2/2015	13D	
4837	2018-051-		2350.08	No	S275	Metal	Iron			Hook/Bent Nail	1		Inventoried - Ready to Process	18WB10															FALSE								3828	KAREN	1005764.2432	759744.16325	10/2/2015	13D	
4838	2018-051-		2350.09	No	S275	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Medium Divided Tote 12	1														FALSE	10/18/2017							3829	KAREN	1005764.2432	759744.16325	10/2/2015	13D	
4839	2018-051-		2351.01	No	S276	Metal	Iron			Fastener	1		Inventoried - Ready to Process	YB44															FALSE								3824	KAREN	1005766.4328	759757.18551	10/2/2015	14E	
4840	2018-051-		2351.02	No	S276	Metal	Iron			Hook	1		Inventoried - Ready to Process	YB44															FALSE								3824	KAREN	1005766.4328	759757.18551	10/2/2015	14E	
4841	2018-051-		2351.03	No	S276	Concretion	Concretion			Fastener Hollow	3		Inventoried - Ready to Process	YB44															FALSE								3824	KAREN	1005766.4328	759757.18551	10/2/2015	14E	
4842	2018-051-		2351.04	No	S276	Metal	Iron			Small Ring	1		Inventoried - Ready to Process	18WB18															FALSE								3825	KAREN	1005766.4328	759757.18551	10/2/2015	14E	
4843	2018-051-		2351.05	No	S276	Metal	Lead			Lead Bullets	2		Complete	NHHC - Pallet 1 Small Divided Tote 3	1													FALSE	06/22/2017							3825-3826	KAREN	1005766.4328	759757.18551	10/2/2015	14E		
4844	2018-051-		2351.06	No	S276	Ceramic	Coarse Earthenware			Prehistoric Ceramic	6		Complete	PX BOX 1	PX1	1 Cord marked or Complicated stamped (crisscross pattern) 1 possibly Simple stamped													FALSE	6/19/2017							3825	KAREN	1005766.4328	759757.18551	1		

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square	
4879	2018-051-		2355.08	No	S282	DMM - Discarded Military Munitions	DMM - Brooke Bolt			Bolt	1		Inventoried - Ready to Process																	FALSE								1005815.192	759740.67692	10/2/2015	18B	
4880	2018-051-		2356.01	Yes	S283	Ceramic	Whiteware	Stoneware		Historic Ceramic	7		Complete		2	1 body fragment with stamped impression, possibly "MADDOCK" and "CHINA"	Green/Olive														FALSE	5/9/2018					3733, 3740	ERICA	1005781.7014	759732.43673	10/2/2015	14B
4881	2018-051-		2356.02	No	S283	Glass	Unidentified			Glass	14		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1	"NAVY" on one clear fragment														FALSE	01/14/2019					3733, 3747	ERICA	1005781.7014	759732.43673	10/2/2015	14B	
4882	2018-051-		2356.03	No	S283	Organic	Bone			Bone	3		Complete	C5				46.6 g		1.939 in		1.63 in		0.68 in					FALSE	3/6/2019					3733, 3747	ERICA	1005781.7014	759732.43673	10/2/2015	14B		
4883	2018-051-		2356.04	No	S283	Metal	Copper or Copper Alloy			Brass Lamp Piece	2		Complete	C2				2.0 g						0.02 in		1.1				FALSE	9/21/2018					28, 3733	ERICA	1005781.7014	759732.43673	10/2/2015	14B	
4884	2018-051-		2356.05	No	S283	Metal	Copper or Copper Alloy			Copper Sheathing	1		Complete	BOX 5	2															FALSE	6/12/2018					35, 3733	ERICA	1005781.7014	759732.43673	10/2/2015	14B	
4885	2018-051-		2356.06	No	S283	Metal	Copper or Copper Alloy			Sabot	1		Complete	BOX 12	2			8.10 lb								6.375 in	1.442 in			FALSE	5/28/2019					14, 3734	ERICA	1005781.7014	759732.43673	10/2/2015	14B	
4886	2018-051-		2356.07	No	S283	Composite	Brass	Iron		Wheel	1		Inventoried - Ready to Process	YB															FALSE					3734	ERICA	1005781.7014	759732.43673	10/2/2015	14B			
4887	2018-051-		2356.08	No	S283	Metal	Iron			Ring Fragment	1		Unknown	18WB12																FALSE					3733	ERICA	1005781.7014	759732.43673	10/2/2015	14B		
4888	2018-051-		2356.09	No	S283	Composite	Concretion	Copper or Copper Alloy		Concretion With Copper Rivet	1		Inventoried - Ready to Process	Brass ER bucket																FALSE					3733	ERICA	1005781.7014	759732.43673	10/2/2015	14B		
4889	2018-051-		2356.10	No	S283	Organic	Wood			Wood Pulley	1		Inventoried - Ready to Process	2018P7																FALSE					3731	ERICA	1005781.7014	759732.43673	10/2/2015	14B		
4890	2018-051-		2356.11	No	S283	Organic	Coal/Charcoal			Coal	2		Complete	NHHC - Pallet 6 Small Tote 23	1															FALSE	10/18/2017					3733, 3740	ERICA	1005781.7014	759732.43673	10/2/2015	14B	
4891	2018-051-		2356.12	No	S283	Organic	Wood			Wood Fragment	1		Inventoried - Ready to Process	YB75																FALSE					3735	ERICA	1005781.7014	759732.43673	10/2/2015	14B		
4892	2018-051-		2356.13	No	S283	Concretion	Concretion			Large Concretion	1		Inventoried - Ready to Process	ST						17 in		7 in								FALSE					3734	ERICA	1005781.7014	759732.43673	10/2/2015	14B		
4893	2018-051-		2356.14	No	S283	Composite	Concrete	Iron		Concrete With Iron Fastener	1		Unknown						5.5		4.5			2.5						FALSE					3734	ERICA	1005781.7014	759732.43673	10/2/2015	14B		
4894	2018-051-		2356.15	No	S283	Organic	Ethnobotany			Pit/Nut/Seed	1		Complete	C6				4.6 g		1.117 in		0.955 in		0.617 in						FALSE	10/31/2018					3733	ERICA	1005781.7014	759732.43673	10/2/2015	14B	
4895	2018-051-		2356.16	No	S283	Metal	Iron			Iron Plate	1		Inventoried - Ready to Process	BARREL 68																FALSE					3734	ERICA	1005781.7014	759732.43673	10/2/2015	14B		
4896	2018-051-		2356.17	No	S283	Metal	Iron			Small Iron Fasteners	2		Inventoried - Ready to Process	BARREL 23							>8 in									FALSE					3735	ERICA	1005781.7014	759732.43673	10/2/2015	14B		
4897	2018-051-		2356.18	No	S283	Composite	Wood	Concretion		Wood Frag With Concretion	1		In treatment	7046						13 in		1.5 in		2 in						FALSE					3734	ERICA	1005781.7014	759732.43673	10/2/2015	14B		
4898	2018-051-		2356.19	No	S283	Metal	Iron			Gear shaft	1		Complete	BOX 19	2					9.75 in										FALSE	4/15/2019					21, 3735	ERICA	1005781.7014	759732.43673	10/2/2015	14B	
4899	2018-051-		2356.20	No	S283	Architecture	Concrete			Concrete With Saw Marks	1		Complete	NHHC - Pallet 4 Small Tote 3	1					5.5 in		5.5 in		3 in						FALSE	06/17/2016					3739	ERICA	1005781.7014	759732.43673	10/2/2015	14B	
4900	2018-051-		2356.21	No	S283	Metal	Iron			Rectangular Piece of Metal	1		Unknown																	FALSE					3747	ERICA	1005781.7014	759732.43673	10/2/2015	14B		
4901	2018-051-		2356.22	No	S283	DMM - Discarded Military Munitions	DMM - Brooke Shell			Brooke	1		Inventoried - Ready to Process																	FALSE								1005781.7014	759732.43673	10/2/2015	14B	
4902	2018-051-		2356.23	No	S283	DMM - Discarded Military Munitions	DMM - Brooke Shell	Copper or Copper Alloy		6.4" Brooke Shell with Archer Fuze (Removed) and Sabot	1		Complete					62 lb								6.5 in				FALSE	06/12/2019					35			1005781.7014	759732.43673	10/2/2015	14B
4903	2018-051-		2356.24	No	S283	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 5 Small Divided Tote 16																FALSE	05/16/2018					3733, 3740	ERICA	1005781.7014	759732.43673	10/2/2015	14B	
4904	2018-051-		2356.25	No	S283	Ceramic	Coarse Earthenware			Prehistoric Ceramic	17		Complete	PX BOX 3	PX1	6 Cord marked, 2 Simple stamped															FALSE	12/15/2017					3733, 3740	ERICA	1005781.7014	759732.43673	10/2/2015	14B
4905	2018-051-		2356.26	No	S283	Stone	Natural Stone			Stone	1		Complete	NHHC - Pallet 5 Small Divided Tote 16	1		Green/Olive													FALSE	01/11/2018					3733, 3740	ERICA	1005781.7014	759732.43673	10/2/2015	14B	
4906	2018-051-		2357.01	No	S284	Composite	Brass	Lead		Watercap Fuze and Seal	2		Complete	NHHC - Pallet 5 Small Divided Tote 14	1	"10" / "SEC"														FALSE	05/26/2016					3743	ERICA	1005767.4313	759734.67857	10/2/2015	13C	
4907	2018-051-		2357.02	No	S284	Ceramic	Coarse Earthenware			Prehistoric Ceramic	6		Complete	PX BOX 10	PX1	Cord marked														FALSE	6/19/2018					3743	ERICA	1005767.4313	759734.67857	10/2/2015	13C	
4908	2018-051-		2357.03	No	S284	Composite	Lead	Wood		Enfield Bullets	3		Complete	NHHC - Pallet 2 Small Divided Tote 4	1	Mold seam														FALSE	09/06/2017					3743	ERICA	1005767.4313	759734.67857	10/2/2015	13C	
4909	2018-051-		2357.04	No	S284	Stone	Chipped Stone			Chert Distal	1		Complete	PX BOX 13	PX1															FALSE	1/27/2017					3743	ERICA	1005767.4313	759734.67857	10/2/2015	13C	
4910	2018-051-		2357.05	No	S284	Glass	Unidentified			Glass	3		Complete	BOX 4	2		Clear, Light Blue	40.5 g		2.81 in		0.86 in		0.56 in						FALSE	9/19/2018					3743	ERICA	1005767.4313	759734.67857	10/2/2015	13C	
4911	2018-051-		2357.06	No	S284	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Small Tote 23	1															FALSE	10/18/2017					3743	ERICA	1005767.4313	759734.67857	10/2/2015	13C	
4912	2018-051-		2357.07	No	S284	Metal	Iron			Iron In "L" Shape	1		Inventoried - Ready to Process	18WB04																FALSE					3743	ERICA	1005767.4313	759734.67857	10/2/2015	13C		
4913	2018-051-		2357.08	No	S284	Metal	Iron			Gear Plate	1		Complete	NHHC - Pallet 2 Large Tote 11	1					35.5 cm		9.5 cm		7 cm					FALSE	11/14/2017					18, 3742	ERICA	1005767.4313	759734.67857	10/2/2015	13C		
4914	2018-051-		2357.09	No	S284	Metal	Iron			Firegrate Fragments	2		Complete	NHHC - Pallet 2 Large Tote 13	1															FALSE	03/05/2018					10, 6, 3742	ERICA	1005767.4313	759734.67857	10/2/2015	13C	
4915	2018-051-		2357.10	No	S284	Metal	Iron			Chain Link Section	1		Inventoried - Ready to Process	YB82																FALSE					3742	ERICA	1005767.4313	759734.67857	10/2/2015	13C		
4916	2018-051-		2357.11	No	S284	Metal	Iron			Semicircular Iron	1		Inventoried - Ready to Process	YB																FALSE					3742	ERICA	1005767.4313	759734.67857	10/2/2015	13C		
4917	2018-051-		2357.12	No	S284	Metal	Iron			Large Fastener	1		Unknown																	FALSE					3742	ERICA	1005767.4313	759734.67857	10/2/2015	13C		
4918	2018-051-		2357.13	Yes	S284	Ceramic	Refined Earthenware			Historic Ceramic	3		Complete	BOX 1	2															FALSE	6/19/2018					3743	ERICA	1005767.4313	759734.67857	10/2/2015	13C	
4919	2018-051-		2357.14	No	S284	Metal	Iron			Gun Carriage Track	1		Complete	NHHC	1															FALSE	02/05/2018					10, 6, 3743	ERICA	1005767.4313	759734.67857	10/2/2015	13C	
4920	2018-051-		2358.01	No	S285	Metal	Copper or Copper Alloy			Infantry Button (Front Only)	1		Complete	NHHC - Pallet 5 Small Divided Tote 7	1	"I"														FALSE	08/30/2016					14, 3878	KAREN	1005761.1709	759730.80319	10/2/2015	12C	
4921	2018-051-		2358.02	No	S285	Ceramic	Coarse Earthenware		</																																	

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square	
4959	2018-051-		2364.11	No	S291	Metal	Copper or Copper Alloy			Copper Sheathing	1		Inventoried - Ready to Process	WB124												less than 0.5 in				FALSE						3769	ERICA	1005779.8883	759736.19196	10/2/2015	14C	
4960	2018-051-		2364.12	No	S291	Metal	Copper or Copper Alloy			Brass Wheel	1		Inventoried - Ready to Process												8 in					FALSE						3770	ERICA	1005779.8883	759736.19196	10/2/2015	14C	
4961	2018-051-		2364.13	No	S291	DMM - Discarded Military Munitions	DMM - Brooke Shell	Copper or Copper Alloy		6.4" Brooke Shell with Archer Fuze	1		Complete	NHHC - AFA Crate 4	1														FALSE	11/14/2017					35		1005779.8883	759736.19196	10/2/2015	14C		
4962	2018-051-		2364.14	No	S291	DMM - Discarded Military Munitions	DMM - Brooke Shell			Counterweight with Handle	1		Inventoried - Ready to Process																FALSE							1005779.8883	759736.19196	10/2/2015	14C			
4963	2018-051-		2365	Yes	S292	Ceramic	Whiteware	Stoneware		Historic Ceramic	2		Complete	BOX 1	2														FALSE	6/14/2018						3777	ERICA	1005765.1624	759728.97536	10/2/2015	12B	
4964	2018-051-		2366.01	No	S293	Composite	Lead	Wood		Enfield Bullets	7		Complete	NHHC - Pallet 5 Small Divided Tote 15	1	1 Mold seam													FALSE	05/24/2017						3920	KAREN	1005774.1648	759740.33161	10/2/2015	14C	
4965	2018-051-		2366.02	Yes	S293	Ceramic	Whiteware	Stoneware		Historic Ceramic*	2		Complete	BOX 7	2														FALSE	5/9/2018						3920	KAREN	1005774.1648	759740.33161	10/2/2015	14C	
4966	2018-051-		2366.03	No	S293	Ceramic	Coarse Earthenware			Prehistoric Ceramic	3		Complete	PX BOX 2	PX1														FALSE	11/7/2017						3920	KAREN	1005774.1648	759740.33161	10/2/2015	14C	
4967	2018-051-		2366.04	No	S293	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Green/Olive												FALSE	09/27/2017						3920	KAREN	1005774.1648	759740.33161	10/2/2015	14C	
4968	2018-051-		2367.01	Yes	S294	Ceramic	Whiteware			Historic Ceramic	1		Complete	BOX 1	2														FALSE	6/26/2018						3924	KAREN	1005769.863	759737.46215	10/2/2015	13C	
4969	2018-051-		2367.02	No	S294	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 9	PX1														FALSE	5/29/2018						3924	KAREN	1005769.863	759737.46215	10/2/2015	13C	
4970	2018-051-		2367.03	No	S294	Composite	Lead	Wood		Enfield Bullets	2		Complete	NHHC - Pallet 5 Small Divided Tote 15	1	2 MOLD SEAMS													FALSE	05/24/2017						3924	KAREN	1005769.863	759737.46215	10/2/2015	13C	
4971	2018-051-		2367.04	No	S294	Glass	Unidentified			Glass Fragment	1		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Green/Olive												FALSE	09/28/2016						3924	KAREN	1005769.863	759737.46215	10/2/2015	13C	
4972	2018-051-		2367.05	No	S294	DMM - Discarded Military Munitions	DMM - Brooke Bolt	Copper or Copper Alloy		6.4" Brooke Bolt with Sabot	1		Complete	NHHC - AFA Crate 2	1														FALSE	02/08/2018							1005769.863	759737.46215	10/2/2015	13C		
4973	2018-051-		2367.06	No	S294	Architecture	Concrete			Concrete fragment	1		Complete	C7															FALSE	5/29/2018						3924	KAREN	1005769.863	759737.46215	10/2/2015	13C	
4974	2018-051-		2368.01	Yes	S295	Ceramic	Refined Earthenware			Historic Ceramic	1		Inventoried - Ready to Process	WB119															FALSE							3936	KAREN	1005769.6766	759733.45552	10/2/2015	13C	
4975	2018-051-		2368.02	No	S295	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 9	PX1														FALSE	1/10/2018							3936	KAREN	1005769.6766	759733.45552	10/2/2015	13C
4976	2018-051-		2368.03	No	S295	Composite	Concretion	Plastic		Concretion With Plastic Straw	1		Inventoried - Ready to Process	WB116															FALSE							3936	KAREN	1005769.6766	759733.45552	10/2/2015	13C	
4977	2018-051-		2368.04	No	S295	Glass	Unidentified			Glass Fragment	1		Complete	NHHC - Pallet 6 Medium Divided Tote 10	1		Green/Olive												FALSE	09/08/2016							3936	KAREN	1005769.6766	759733.45552	10/2/2015	13C
4978	2018-051-		2369.01	Yes	S296	Ceramic	Porcelain	Stoneware	Whiteware	Historic Ceramic	5		Complete	BOX 7	2	Leaf motif 1 Simple stamped, 3 Cord marked, 2 possibly cord marked														FALSE	6/26/2018						3945	KAREN	1005787.7756	759735.32536	10/2/2015	15B
4979	2018-051-		2369.02	No	S296	Ceramic	Coarse Earthenware			Prehistoric Ceramic	13		Complete	PX BOX 5	PX1														FALSE	1/9/2018							3945	KAREN	1005787.7756	759735.32536	10/2/2015	15B
4980	2018-051-		2369.03	No	S296	Glass	Unidentified			Glass Fragments	12		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Clear, Light Blue, Green/Olive												FALSE	01/14/2019							3945	KAREN	1005787.7756	759735.32536	10/2/2015	15B
4981	2018-051-		2369.04	No	S296	Metal	Copper or Copper Alloy			Spylglass	2		Complete	NHHC - Pallet 5 Medium Divided Tote 1	1														FALSE	05/27/2016						143943	KAREN	1005787.7756	759735.32536	10/2/2015	15B	
4982	2018-051-		2369.05	No	S296	Metal	Copper or Copper Alloy			Small Wheel	1		Complete	C2				1113.6 g							0.7 in	6 in			FALSE	10/23/2018						253944	KAREN	1005787.7756	759735.32536	10/2/2015	15B	
4983	2018-051-		2369.06	No	S296	Metal	Copper or Copper Alloy			Brass Sheathing	2		Complete	NHHC - Pallet 2 Small Divided Tote 6	1														FALSE	06/29/2016						10.63943	KAREN	1005787.7756	759735.32536	10/2/2015	15B	
4984	2018-051-		2369.07	No	S296	Metal	Copper or Copper Alloy			Flat Ring with Threading	1		Complete	NHHC - Pallet 2 Small Divided Tote 6	1														FALSE	06/29/2016						10.63943	KAREN	1005787.7756	759735.32536	10/2/2015	15B	
4985	2018-051-		2369.08	No	S296	Metal	Copper or Copper Alloy			Brass Ring	1		Complete	C2															FALSE	05/30/2018						10.63943	KAREN	1005787.7756	759735.32536	10/2/2015	15B	
4986	2018-051-		2369.09	No	S296	Metal	Copper or Copper Alloy			Brass Corner Decoration	1		Complete	DISPLAY, HELEN'S OFFICE															FALSE	5/26/2016						143943	KAREN	1005787.7756	759735.32536	10/2/2015	15B	
4987	2018-051-		2369.10	No	S296	Metal	Copper or Copper Alloy			Floral Button	1		Complete	NHHC - Pallet 5 Small Divided Tote 7	1	Floral decoration on front													FALSE	08/30/2016						143943	KAREN	1005787.7756	759735.32536	10/2/2015	15B	
4988	2018-051-		2369.11	No	S296	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Medium Divided Tote 12	1														FALSE	10/18/2017							3945	KAREN	1005787.7756	759735.32536	10/2/2015	15B
4989	2018-051-		2369.12	No	S296	Concretion	Concretion			Metal Frag/Bleed/Concretion	2		Deaccessioned	NHHC - Pallet 4 Small Tote 21															FALSE	03/06/2018							3945	KAREN	1005787.7756	759735.32536	10/2/2015	15B
4990	2018-051-		2369.13	No	S269	Architecture	Mortar			Mortar	1		Complete	NHHC - Pallet 4 Small Tote 7	1														FALSE	01/09/2018							3945	KAREN	1005787.7756	759735.32536	10/2/2015	15B
4991	2018-051-		2370.01	No	S297	Metal	Copper or Copper Alloy			Copper Sheathing	1		Complete	NHHC - Pallet 2 Small Divided Tote 6	1														FALSE	03/29/2018						323795	ERICA	1005792.7846	759733.50853	10/2/2015	15B	
4992	2018-051-		2370.02	No	S297	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 3	PX1	1 Cord marked													FALSE	12/14/2017							3795	ERICA	1005792.7846	759733.50853	10/2/2015	15B
4993	2018-051-		2370.03	No	S297	Glass	Unidentified			Glass	4		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Green/Olive, Clear												FALSE	01/14/2019							3795	ERICA	1005792.7846	759733.50853	10/2/2015	15B
4994	2018-051-		2370.04	No	S297	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Medium Divided Tote 12	1														FALSE	10/18/2017							3795	ERICA	1005792.7846	759733.50853	10/2/2015	15B
4995	2018-051-		2370.05	No	S297	Concretion	Concretion			Iron Bleed	1		Did Not Survive	DNS															FALSE								3795	ERICA	1005792.7846	759733.50853	10/2/2015	15B
4996	2018-051-		2370.06	No	S297	Metal	Lead			Enfield Bullet	1		Complete	NHHC - Pallet 5 Small Divided Tote 15	1	Mold seam													FALSE	05/25/2017							3799	ERICA	1005792.7846	759733.50853	10/2/2015	15B
4997	2018-051-		2370.07	No	S297	Metal	Iron			Small Iron Nail	1		Inventoried - Ready to Process	WB50															FALSE								3799	ERICA	1005792.7846	759733.50853	10/2/2015	15B
4998	2018-051-		2371.01	No	S298	Glass	Unidentified			Bottle Neck Fragments	2		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Green/Olive												FALSE	09/08/2016							3791	ERICA	1005792.9611	759738.43414	10/2/2015	15B
4999	2018-051-		2371.02	No	S298	Metal	Copper or Copper Alloy			Tack	1		Complete	NHHC - Pallet 2 Small Divided Tote 4	1														FALSE	03/29/2018						143791	ERICA	1005792.9611	759738.43414	10/2/2015	15B	
5000	2018-051-		2372.01	No	S299	Metal	Iron			Grapeshot	1		Complete	NHHC - Pallet 2 Large Tote 12	1											5 in			FALSE	12/06/2017												

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square	
5034	2018-051-		2381.08	No	S308	DMM - Discarded Military Munitions	DMM - Brooke Bolt			6.4" Brooke Bolt	1		Inventoried - Ready to Process																	FALSE								1005812.2259	759738.741	10/2/2015	17B	
5035	2018-051-		2381.09	No	S308	Ceramic	Coarse Earthenware			Prehistoric Ceramic	3		Complete	PX BOX 4	PX1	1 Simple stamped, 1 Cord marked/simple stamped															FALSE	12/19/2017					3853-3854	ERICA	1005812.2259	759738.741	10/2/2015	17B
5036	2018-051-		2382	No	S309	Composite		Wood		Large Iron/Wood Composite Object	1		Inventoried - Ready to Process	YB26																FALSE						3995	KAREN	1005808.0938	759741.42076	10/2/2015	17B	
5037	2018-051-		2383.01	No	S310	Metal	Iron			Decorative Object	2		Inventoried - Ready to Process	PRIORITY																FALSE						3997	KAREN	1005807.1072	759744.6269	10/2/2015	17B	
5038	2018-051-		2383.02	No	S310	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1															FALSE	11/8/2017					3997	KAREN	1005807.1072	759744.6269	10/2/2015	17B	
5039	2018-051-		2383.03	No	S310	Glass				Glass Fragments	2		Complete	NHHC - Pallet 6 Medium Divided Tote 10	1		Green/Olive													FALSE	10/20/2016					3997	KAREN	1005807.1072	759744.6269	10/2/2015	17B	
5040	2018-051-		2383.04	No	S310	Metal	Iron			Heavy Concretion - From Boiler?	1		Inventoried - Ready to Process	2018P11																FALSE						3997	KAREN	1005807.1072	759744.6269	10/2/2015	17B	
5041	2018-051-		2383.05	No	S310	Metal	Lead			Typesetting	1		Complete	C2																FALSE	2/4/2016					3997	KAREN	1005807.1072	759744.6269	10/2/2015	17B	
5042	2018-051-		2384.01	No	S311	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 2	PX1															FALSE	10/3/2017					4013	KAREN	1005807.8612	759741.68084	10/2/2015	17B	
5043	2018-051-		2384.02	No	S311	Metal	Lead			Sounding Weight?	1		Complete	NHHC - Pallet 1 Small Divided Tote 1	1	Mold seam?														FALSE	09/06/2017					4013	KAREN	1005807.8612	759741.68084	10/2/2015	17B	
5044	2018-051-		2384.03	No	S311	Glass	Unidentified			Glass Fragment	1		Complete	NHHC - Pallet 6 Medium Divided Tote 10	1		Green/Olive													FALSE	10/20/2016					4013	KAREN	1005807.8612	759741.68084	10/2/2015	17B	
5045	2018-051-		2385.01	No	S312	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Medium Divided Tote 12	1															FALSE	10/18/2017					4017	KAREN	1005820.1019	759748.01711	10/2/2015	18B	
5046	2018-051-		2385.02	No	S312	Glass	Unidentified			Glass Fragment	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear													FALSE	01/11/2019					4017	KAREN	1005820.1019	759748.01711	10/2/2015	18B	
5047	2018-051-		2385.03	No	S312	Metal	Copper or Copper Alloy			Sabot	1		Complete	BOX 13	2			5.5 lb									6.25 in		1.3 in	FALSE	1/25/2019					284017	KAREN	1005820.1019	759748.01711	10/2/2015	18B	
5048	2018-051-		2385.04	No	S312	Ceramic	Coarse Earthenware			Prehistoric Ceramic	6		Complete	PX BOX 1	PX1	Scored incision designs on 2 fragments															FALSE	11/17/2016					4017	KAREN	1005820.1019	759748.01711	10/2/2015	18B
5049	2018-051-		2385.05	No	S312	Metal	Iron			Grapeshot	1		Complete	NHHC - Pallet 6 Medium Divided Tote 6	1											2 in				FALSE	07/03/2017					284017	KAREN	1005820.1019	759748.01711	10/2/2015	18B	
5050	2018-051-		2386.01	No	S313	Metal	Iron			Concretion	1		Inventoried - Ready to Process	YB44																FALSE					3875	ERICA	1005804.9692	759745.0305	10/2/2015	17C		
5051	2018-051-		2386.02	No	S313	Metal	Iron			Curved Iron Bar/Flange	1		Complete	C1				11.65 lb		14.75 in		2.255 in		2.408 in						FALSE	4/15/2019					323875	ERICA	1005804.9692	759745.0305	10/2/2015	17C	
5052	2018-051-		2386.03	No	S313	DMM - Discarded Military Munitions	DMM - Brooke Bolt			6.4" Mullane Bolt	1		Inventoried - Ready to Process																	FALSE								1005804.9692	759745.0305	10/2/2015	17C	
5053	2018-051-		2387.01	No	S314	Glass	Unidentified			Glass	5		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Blue, Clear, Green/Olive													FALSE	01/11/2019					3869	ERICA	1005805.7715	759743.69336	10/2/2015	17B	
5054	2018-051-		2387.02	No	S314	Composite		Lead		Lead Concreted To Iron	1		Inventoried - Ready to Process	2018P12																FALSE						3869	ERICA	1005805.7715	759743.69336	10/2/2015	17B	
5055	2018-051-		2387.03	No	S314	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 4	PX1	1 Check stamped															FALSE	12/18/2017					3869	ERICA	1005805.7715	759743.69336	10/2/2015	17B
5056	2018-051-		2387.04	No	S314	Metal	Iron			Fastener	1		Inventoried - Ready to Process	WB116																FALSE						3869	ERICA	1005805.7715	759743.69336	10/2/2015	17B	
5057	2018-051-		2387.05	Yes	S314	Ceramic	Stoneware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 21	1															FALSE	12/18/2017					3869	ERICA	1005805.7715	759743.69336	10/2/2015	17B	
5058	2018-051-		2388.01	No	S315	Metal	Lead			Lead Sounding Weight	1		Complete	NHHC - Pallet 1 Large Tote 7	1															FALSE	09/05/2017					4035	KAREN	1005783.4028	759726.87494	10/4/2015	14B	
5059	2018-051-		2388.02	No	S315	Glass	Unidentified			Glass Fragment	2		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Blue, Clear													FALSE	01/03/2019					4035	KAREN	1005783.4028	759726.87494	10/4/2015	14B	
5060	2018-051-		2389	No	S316	Metal	Iron			Concreted Fastener	1		Inventoried - Ready to Process	WB116																FALSE						4037	KAREN	1005807.6765	759737.51011	10/4/2015	17B	
5061	2018-051-		2390.01	Yes	S317	Ceramic	Creamware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1															FALSE	10/03/2017					3890	ERICA	1005804.3579	759740.85515	10/4/2015	17B	
5062	2018-051-		2390.02	No	S317	Metal	Iron			Small Fastener	1		Inventoried - Ready to Process	WB116							4 in									FALSE						3890	ERICA	1005804.3579	759740.85515	10/4/2015	17B	
5063	2018-051-		2391	No	S320	Glass	Wine Bottle			Glass	2		Complete	BOX 4	2		Green/Olive														FALSE	6/19/2018					3902	ERICA	1005809.0351	759745.43555	10/4/2015	17B
5064	2018-051-		2392	No	S321	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1																FALSE	12/15/2017					4051	KAREN	1005785.6688	759744.98585	10/4/2015	15C
5065	2018-051-		2393	No	S322	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 9	PX1																FALSE	1/11/2018					4049	KAREN	1005794.0372	759748.19472	10/4/2015	16C
5066	2018-051-		2393.02	No	S322	Metal	Copper or Copper Alloy			Sheathing	1		Complete	NHHC - Pallet 2 Small Divided Tote 5	1															FALSE	01/11/2017					18			1005794.0372	759748.19472	10/4/2015	16C
5067	2018-051-		2394.01	No	S323	Ceramic	Coarse Earthenware			Prehistoric Ceramic	3		Complete	PX BOX 6	PX1	2 Simple stamped															FALSE	4/10/2018					4065	KAREN	1005792.6282	759744.92983	10/4/2015	16C
5068	2018-051-		2394.02	No	S323	Glass	Unidentified			Glass Fragment	2		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Blue, Green/Olive													FALSE	09/28/2016					4065	KAREN	1005792.6282	759744.92983	10/4/2015	16C	
5069	2018-051-		2395.01	No	S324	Ceramic	Coarse Earthenware			Prehistoric Ceramic	6		Complete	PX BOX 3	PX1	Simple stamped															FALSE	10/3/2017					4069	KAREN	1005812.1352	759731.94531	10/4/2015	17A
5070	2018-051-		2395.02	No	S324	Stone	Stone Tool			Point	1		Complete	PX BOX 13	PX1															FALSE	4/19/2018					4069	KAREN	1005812.1352	759731.94531	10/4/2015	17A	
5071	2018-051-		2395.03	No	S324	Composite	Iron	Wood		Fastener Through Wood	1		Inventoried - Ready to Process	YB158																FALSE						4069	KAREN	1005812.1352	759731.94531	10/4/2015	17A	
5072	2018-051-		2395.04	No	S324	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB44																FALSE						4069	KAREN	1005812.1352	759731.94531	10/4/2015	17A	
5073	2018-051-		2395.05	No	S324	Glass	Unidentified			Glass Fragment	4		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Clear, Green/Olive													FALSE	01/14/2019					4069	KAREN	1005812.1352	759731.94531	10/4/2015	17A	
5074	2018-051-		2395.06	No	S324	DMM - Discarded Military Munitions	DMM - Brooke Bolt			6.4" Brooke Bolt	1		Inventoried - Ready to Process																	FALSE								1005812.1352	759731.94531	10/4/2015	17A	
5075	2018-051-		2396.01	No	S325	Metal	Iron			Grapeshot	3		Complete	NHHC - Pallet 6 Medium Divided Tote 8	1											2.4 in				FALSE	10/10/2017			1/26/2016		253915, 3920	ERICA	1005820.4932	759739.15868	10/4/2015	18A	
5076	2018-051-		2396.02	No	S325	Metal	Iron	</																																		

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square		
5109	2018-051-		2402.02	No	S331	Metal	Iron			Fastener with Square Nut	1		Complete	NHHC - Pallet 6 Large Tote 27	1															FALSE	04/19/2017		2/25/2016			28	4120	KAREN	1005804.8506	759728.68252	10/4/2015	16A	
5110	2018-051-		2402.03	No	S331	Metal	Lead			Lead Patch	1		Complete	NHHC - Pallet 1 Medium Divided Tote 3	1															FALSE	09/07/2017						4120	KAREN	1005804.8506	759728.68252	10/4/2015	16A	
5111	2018-051-		2402.04	No	S331	Ceramic	Coarse Earthenware			Prehistoric Ceramic	8		Complete	PX BOX 10	PX1	Simple stamped, Cord marked														FALSE	1/10/2018						4120	KAREN	1005804.8506	759728.68252	10/4/2015	16A	
5112	2018-051-		2402.05	No	S331	Glass	Unidentified			Glass Fragment	4		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Green/Olive , Clear/Mirror													FALSE	01/11/2019						4120	KAREN	1005804.8506	759728.68252	10/4/2015	16A	
5113	2018-051-		2402.06	Yes	S331	Ceramic	Stoneware			Historic Ceramic	1		Complete	BOX 1	2															FALSE	4/17/2018						4120	KAREN	1005804.8506	759728.68252	10/4/2015	16A	
5114	2018-051-		2402.07	No	S331	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Small Tote 23	1														FALSE	10/18/2017						4120	KAREN	1005804.8506	759728.68252	10/4/2015	16A		
5115	2018-051-		2402.08	No	S331	Metal	Iron			Plate	1		Inventoried - Ready to Process	YB61															FALSE							4111	KAREN	1005804.8506	759728.68252	10/4/2015	16A		
5116	2018-051-		2403.01	No	S332	Metal	Iron			Crankshaft Piece	1		Inventoried - Ready to Process	IN OWN BUCKET															FALSE							4117	KAREN	1005821.034	759731.64767	10/4/2015	18A		
5117	2018-051-		2403.02	No	S332	Metal	Copper or Copper Alloy			Sabot	1		Complete	BOX 13	2			4.9 lb								6.45 in		1.5 in		FALSE	1/25/2019						28	4118	KAREN	1005821.034	759731.64767	10/4/2015	18A
5118	2018-051-		2403.03	Yes	S332	Ceramic	Whiteware			Historic Ceramic	1		Complete	BOX 1	2														FALSE	6/21/2018						4118	KAREN	1005821.034	759731.64767	10/4/2015	18A		
5119	2018-051-		2403.04	No	S332	Organic	Bone			Bone	1		Complete	C5														FALSE	7/24/2018						4118	KAREN	1005821.034	759731.64767	10/4/2015	18A			
5120	2018-051-		2403.05	No	S332	Metal	Iron			Grapeshot	1		Complete	NHHC - Pallet 6 Medium Divided Tote 6	1											2.4 in			FALSE	09/08/2017		2/25/2016				35	4118	KAREN	1005821.034	759731.64767	10/4/2015	18A	
5121	2018-051-		2404.01	No	S333	Metal	Iron			Grapeshot Base	1		Inventoried - Ready to Process	YB															FALSE							3951	ERICA	1005832.9043	759735.81351	10/4/2015	19A		
5122	2018-051-		2404.02	No	S333	Metal	Iron			Grapeshot	12		Complete	NHHC - Pallet 6 Medium Divided Tote 7	1	Mold seams										2.4 in			FALSE	07/03/2017		1/26/2016				21	3951	ERICA	1005832.9043	759735.81351	10/4/2015	19A	
5123	2018-051-		2404.03	No	S333	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 10	1		Clear, Green/Olive												FALSE	01/11/2019						3952	ERICA	1005832.9043	759735.81351	10/4/2015	19A		
5124	2018-051-		2404.04	No	S333	Organic	Bone			Bone	1		Complete	C5														FALSE	7/23/2018						3952	ERICA	1005832.9043	759735.81351	10/4/2015	19A			
5125	2018-051-		2404.05	No	S333	Metal	Iron			Iron Fastener	1		Inventoried - Ready to Process	YB158														FALSE							3951	ERICA	1005832.9043	759735.81351	10/4/2015	19A			
5126	2018-051-		2404.06	No	S333	Metal	Iron			Door?	1		Complete	NHHC - Pallet 2 Large Tote 11	1													FALSE	05/24/2018						32	3951	ERICA	1005832.9043	759735.81351	10/4/2015	19A		
5127	2018-051-		2404.07	No	S333	DMM - Discarded Military Munitions	DMM - Brooke Bolt	Copper or Copper Alloy		6.4" Brooke Bolt	2		Complete	NHHC - AFA Crate 2	1													FALSE	01/03/2019						25			1005832.9043	759735.81351	10/4/2015	19A		
5128	2018-051-		2404.08	No	S333	DMM - Discarded Military Munitions	DMM - Brooke Bolt			6.4" Brooke Bolt	1		Complete	NHHC - AFA Crate 2	1													FALSE	02/08/2018						28			1005832.9043	759735.81351	10/4/2015	19A		
5129	2018-051-		2405.01	No	S334	Metal	Copper or Copper Alloy			Brass Bracket	1		Unknown															FALSE							3956	ERICA	1005819.4854	759726.11637	10/4/2015	17AA			
5130	2018-051-		2405.02	No	S334	Metal	Copper or Copper Alloy			Small Brass Object	1		Complete	NHHC - Pallet 5 Small Divided Tote 8	1													FALSE	11/01/2017						35	3956	ERICA	1005819.4854	759726.11637	10/4/2015	17AA		
5131	2018-051-		2405.03	No	S334	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 10	PX1													FALSE	1/10/2018						3956	ERICA	1005819.4854	759726.11637	10/4/2015	17AA			
5132	2018-051-		2405.04	No	S334	Metal	Iron			Iron Bar/Strap	1		Inventoried - Ready to Process	ST														FALSE							3957	ERICA	1005819.4854	759726.11637	10/4/2015	17AA			
5133	2018-051-		2405.05	No	S334	Concretion	Concretion			Impression/Concretion	1		Inventoried - Ready to Process	WB116														FALSE							3959	ERICA	1005819.4854	759726.11637	10/4/2015	17AA			
5134	2018-051-		2406.01	No	S335	Glass	Unidentified			Glass	4		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Green/Olive , Clear, Aqua											FALSE	01/25/2019						3984	ERICA	1005805.4409	759731.77443	10/4/2015	16A			
5135	2018-051-		2406.02	No	S335	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1													FALSE	10/10/2017						3984	ERICA	1005805.4409	759731.77443	10/4/2015	16A			
5136	2018-051-		2406.03	No	S335	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB82														FALSE							3983	ERICA	1005805.4409	759731.77443	10/4/2015	16A			
5137	2018-051-		2406.04	Yes	S335	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1													FALSE	10/10/2017						3984	ERICA	1005805.4409	759731.77443	10/4/2015	16A			
5138	2018-051-		2407.01	Yes	S336	Ceramic	Creamware	Ironstone	Stoneware	Historic Ceramic	3		Complete	NHHC - Pallet 4 Small Tote 12	1													FALSE	10/31/2017						3988	ERICA	1005787.5888	759725.27898	10/4/2015	14A			
5139	2018-051-		2407.02	No	S336	Metal	Copper or Copper Alloy			Powder Canister Base	1		Complete	NHHC - Pallet 4	1													FALSE	11/15/2017						21	3989	ERICA	1005787.5888	759725.27898	10/4/2015	14A		
5140	2018-051-		2407.03	No	S336	Metal	Iron			Bent Iron Fastener with Washer	1		Inventoried - Ready to Process	BARREL 23														FALSE							3989	ERICA	1005787.5888	759725.27898	10/4/2015	14A			
5141	2018-051-		2407.04	No	S336	Glass	Unidentified			Glass	3		Complete	NHHC - Pallet 6 Large Tote 28	1		Clear, Amber, Green/Olive											FALSE	01/10/2019						3988	ERICA	1005787.5888	759725.27898	10/4/2015	14A			
5142	2018-051-		2407.05	No	S336	Composite	Brass	Wood		Wooden Sheave With Brass Plate	1		Inventoried - Ready to Process	2018P7														FALSE							3988	ERICA	1005787.5888	759725.27898	10/4/2015	14A			
5143	2018-051-		2407.06	No	S336	Metal	Copper or Copper Alloy			Brass Fragment	1		Complete	BOX 5	2			86.5 g		3.7 in		3.7 in		3.2 in			FALSE	10/23/2018						25	3988	ERICA	1005787.5888	759725.27898	10/4/2015	14A			
5144	2018-051-		2407.07	No	S336	Organic	Ethnobotany			Pit/Seed/Nut	1		Complete	C5				3.7 g		1.044 in		0.929 in		0.644 in			FALSE	10/31/2018						3988	ERICA	1005787.5888	759725.27898	10/4/2015	14A				
5145	2018-051-		2407.08	No	S336	Metal	Copper or Copper Alloy			Small Brass Fragment	1		Complete	NHHC - Pallet 2 Small Divided Tote 5	1													FALSE	11/01/2017						14	3988	ERICA	1005787.5888	759725.27898	10/4/2015	14A		
5146	2018-051-		2407.09	No	S336	Ceramic	Coarse Earthenware			Prehistoric Ceramic	10		Complete	PX BOX 2	PX1													FALSE	10/10/2017							1005787.5888	759725.27898	10/4/2015	14A				
5147	2018-051-		2408	Yes	S337	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1													FALSE	10/27/2016							1005772.3761	759732.72975	10/4/2015	13C				
5148	2018-051-		2408.02	No	S337	DMM - Discarded Military Munitions	DMM - Brooke Shell	Copper or Copper Alloy		6.4" Brooke Shell with Archer Fuze	1		Complete	NHHC - AFA Crate 2	1													FALSE	05/15/2018						35			1005772.3761	759732.72975	10/4/2015	13C		
5149	2018-051-		2409.01	Yes	S338	Ceramic	Creamware	Whiteware		Historic Ceramic	3		Complete	NHHC - Pallet 4 Small Tote 12	1													FALSE	10/03/2017						4127	KAREN	1005777.4757	759725.56349	10/4/2015	14B			
5150	2018-051-		2409.02	No	S338	Metal	Iron			Fastener	2		Inventoried - Ready to Process	YB158													FALSE							4126	KAREN	1005777.4757	759725.56349	10/4/2015	14B				
5151	2018-051-		2409.03	No	S338	Concretion	Concretion		</																																		

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square	
5184	2018-051-		2418.03	No	S351	Metal	Iron			Small Fasteners	2		Inventoried - Status to Process	WB82																FALSE						4054	ERICA	1005826.5925	759745.78959	10/4/2015	19B	
5185	2018-051-		2418.04	No	S351	DMM - Discarded Military Munitions	DMM - Brooke Shell			6.4" Brooke Shell with Archer Fuze	1		Inventoried - Ready to Process																	FALSE							1005826.5925	759745.78959	10/4/2015	19B		
5186	2018-051-		2418.05	No	S351	DMM - Discarded Military Munitions	DMM - Brooke Bolt			6.4" Brooke Bolt	1		Inventoried - Ready to Process																	FALSE							1005826.5925	759745.78959	10/4/2015	19B		
5187	2018-051-		2419.01	No	S352	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	WB110																FALSE						4057	ERICA	1005829.9958	759731.58049	10/4/2015	19AA	
5188	2018-051-		2419.02	No	S352	Composite	Brass	Iron		Elevation Screw	2		Complete	X-RAY COMPUTER ROOM SHELVES																FALSE						254057	ERICA	1005829.9958	759731.58049	10/4/2015	19AA	
5189	2018-051-		2419.03	No	S352	Metal	Iron			Grapeshot	8		Inventoried - Ready to Process	WB127/GRAPESHOT2 (CT=7)																FALSE						4057	ERICA	1005829.9958	759731.58049	10/4/2015	19AA	
5190	2018-051-		2419.04	No	S352	Metal	Iron			Large Iron Fasteners	2		Inventoried - Ready to Process	BARREL 23																FALSE						4057	ERICA	1005829.9958	759731.58049	10/4/2015	19AA	
5191	2018-051-		2419.05	No	S352	Metal	Iron			Fastener	1		Inventoried - Ready to Process	WB125																FALSE						4057	ERICA	1005829.9958	759731.58049	10/4/2015	19AA	
5192	2018-051-		2419.06	No	S352	Ceramic	Coarse Earthenware			Prehistoric Ceramic	3		Complete	PX BOX 8	PX1	Cord marked														FALSE	6/19/2018					4056	ERICA	1005829.9958	759731.58049	10/4/2015	19AA	
5193	2018-051-		2419.07	Yes	S352	Ceramic	Whiteware			Historic Ceramic	1		Complete	BOX 1	2	"& SON"														FALSE	6/19/2018					4056	ERICA	1005829.9958	759731.58049	10/4/2015	19AA	
5194	2018-051-		2420.01	No	S353	Metal	Iron			Grapeshot	1		Complete	NHHC - Pallet 6 Medium Divided Tote 9	1											2.9 in				FALSE	09/08/2017					354194	KAREN	1005823.1715	759737.34947	10/4/2015	18A	
5195	2018-051-		2420.02	No	S353	Metal	Iron			Chain With Hook	1		Inventoried - Ready to Process	YB44																FALSE						4193	KAREN	1005823.1715	759737.34947	10/4/2015	18A	
5196	2018-051-		2420.03	No	S353	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1	Possibly Simple stamped															FALSE	10/3/2017					4194	KAREN	1005823.1715	759737.34947	10/4/2015	18A
5197	2018-051-		2420.04	No	S353	Recent/Synthetic	Epoxy			Cast of iron fragment	1		Complete	BOX 8	2															FALSE	3/5/2019					4194	KAREN	1005823.1715	759737.34947	10/4/2015	18A	
5198	2018-051-		2421.01	No	S354	Metal	Iron			Grapeshot	2		Inventoried - Ready to Process	GRAPESHOT2																FALSE						4196	KAREN	1005823.5943	759731.64254	10/4/2015	18A	
5199	2018-051-		2421.02	No	S354	Stone	Stone Tool			Projectile Point	1		Complete	PX BOX 13	PX1															FALSE	10/24/2016					4196	KAREN	1005823.5943	759731.64254	10/4/2015	18A	
5200	2018-051-		2422.01	No	S355	Concretion	Concretion			Chain - Hollow	1		Inventoried - Ready to Process	new white 04/2019																FALSE						4214	KAREN	1005831.8357	759740.52871	10/4/2015	19A	
5201	2018-051-		2422.02	No	S355	Metal	Iron			Grapeshot	2		Inventoried - Ready to Process	GRAPESHOT3																FALSE						4214	KAREN	1005831.8357	759740.52871	10/4/2015	19A	
5202	2018-051-		2422.03	No	S355	Ceramic	Coarse Earthenware			Prehistoric Ceramic	3		Complete	PX BOX 9	PX1	Possibly Cord marked														FALSE	6/12/2018					4214	KAREN	1005831.8357	759740.52871	10/4/2015	19A	
5203	2018-051-		2423.01	No	S358	Metal	Copper or Copper Alloy			Mullane Sabot	1		Inventoried - Ready to Process	WB151																FALSE						4071	ERICA	1005832.1358	759715.81496	10/4/2015	18BB	
5204	2018-051-		2423.02	No	S358	Metal	Iron			Large Chain Section	1		Inventoried - Ready to Process	YB44																FALSE						4071	ERICA	1005832.1358	759715.81496	10/4/2015	18BB	
5205	2018-051-		2423.03	No	S358	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 8	PX1															FALSE	6/21/2018					4075	ERICA	1005832.1358	759715.81496	10/4/2015	18BB	
5206	2018-051-		2423.04	No	S358	DMM - Discarded Military Munitions	DMM - Brooke Bolt			6.4" Brooke Bolt	1		Complete	NHHC - AFA Crate 2	1															FALSE	02/08/2018					28		1005832.1358	759715.81496	10/4/2015	18BB	
5207	2018-051-		2424.01	No	S359	Metal	Iron			Grapeshot	1		Complete	NHHC - Pallet 6 Medium Divided Tote 9	1											2.8 in				FALSE	09/08/2017					354089	ERICA	1005822.1152	759710.58592	10/4/2015	17BB	
5208	2018-051-		2424.02	No	S359	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 8	PX1															FALSE	6/21/2018					4089	ERICA	1005822.1152	759710.58592	10/4/2015	17BB	
5209	2018-051-		2424.03	No	S359	Metal	Iron			Tin Can Lid	1		Did Not Survive	DNS																FALSE						4089	ERICA	1005822.1152	759710.58592	10/4/2015	17BB	
5210	2018-051-		2424.04	No	S359	DMM - Discarded Military Munitions	DMM - Brooke Bolt			6.4" Tennessee TII Long Flat Top Bolt	1		Complete	NHHC - AFA Crate 5	1															FALSE	05/24/2018					35		1005822.1152	759710.58592	10/4/2015	17BB	
5211	2018-051-		2424.05	No	S359	Organic	Bone			Bone	1		Complete	NHHC - Pallet 6 Small Tote 24	1															FALSE	01/19/2018					4089	ERICA	1005822.1152	759710.58592	10/4/2015	17BB	
5212	2018-051-		2425.01	No	S360	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 4	PX1															FALSE	11/7/2017					4093	ERICA/CORRINA	1005811.648	759713.26279	10/4/2015	16BB	
5213	2018-051-		2425.02	No	S360	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Clear													FALSE	01/03/2019					1065		1005811.648	759713.26279	10/4/2015	16BB	
5214	2018-051-		2426.01	No	S361	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1															FALSE	10/26/2017					4234	KAREN	1005821.3587	759713.76173	10/4/2015	17BB	
5215	2018-051-		2426.02	No	S361	Stone	Chipped Stone			Stone	1		Complete	PX BOX 13	PX1															FALSE	8/1/2017					4234	KAREN	1005821.3587	759713.76173	10/4/2015	17BB	
5216	2018-051-		2427.01	No	S362	Metal	Iron			Grapeshot	2		Inventoried - Ready to Process	GRAPESHOT4																FALSE						4230	KAREN	1005822.5306	759720.73324	10/4/2015	18AA	
5217	2018-051-		2427.02	No	S362	Organic	Bone			Bone	1		Complete	C5				43.7 g		4.249 in		0.993 in						0.564 in	FALSE	10/16/2018					4230	KAREN	1005822.5306	759720.73324	10/4/2015	18AA		
5218	2018-051-		2427.03	No	S362	DMM - Discarded Military Munitions	DMM - Brooke Bolt			6.4" Tennessee TII Long Flat Top Bolt	1		Complete	NHHC - AFA Crate 2	1															FALSE	02/08/2018					28		1005822.5306	759720.73324	10/4/2015	18AA	
5219	2018-051-		2428.01	No	S363	Metal	Iron			Intact Fasteners	2		Inventoried - Ready to Process	YB156 (1/2), YB158																FALSE						4247	KAREN	1005824.7717	759719.90404	10/4/2015	18AA	
5220	2018-051-		2428.02	No	S363	Glass	Unidentified			Glass Fragment	1		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Clear													FALSE	01/14/2019					4248	KAREN	1005824.7717	759719.90404	10/4/2015	18AA	
5221	2018-051-		2428.03	No	S363	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1															FALSE	12/14/2017					4248	KAREN	1005824.7717	759719.90404	10/4/2015	18AA	
5222	2018-051-		2429.01	No	S364	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 9	PX1															FALSE	1/10/2018					4252	KAREN	1005829.2233	759721.06823	10/4/2015	18AA	
5223	2018-051-		2429.02	No	S364	Glass	Unidentified			Glass Fragment	1		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Clear													FALSE	01/03/2019					4252	KAREN	1005829.2233	759721.06823	10/4/2015	18AA	
5224	2018-051-		2430	No	S365	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 8	PX1	Simple stamped														FALSE	6/21/2018					4113	ERICA	1005829.3911	759717.68911	10/4/2015	18BB	
5225	2018-051-		2431.01	No	S366	Metal	Iron			Cast Iron?	1		Inventoried - Ready to Process	UNKNOWN																FALSE						4109	ERICA	1005816.6988	759719.71824	10/4/2015	17AA	
5226	2018-051-		2431.02	No	S366	Metal	Iron			Fastener	1		Complete	BOX 10	2			83.5 g		14.4 cm		2.2 cm		1.3 cm						FALSE	7/27/2018			1/26/20								

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square		
5266	2018-051-		2438.05.01	No	S373	Metal	Copper or Copper Alloy			Watercap Fuze	1		Complete	BOX 6	2															FALSE	5/22/2018					35				1005810.9253	759728.48563	10/4/2015	17A
5267	2018-051-		2439.01	No	S374	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 3	PX1	Cord marked														FALSE	12/14/2017					4146	ERICA	1005800.1148	759735.59013	10/4/2015	16B		
5268	2018-051-		2439.02	No	S374	Composite		Epoxy		Fastener	2		Complete - Cast	BOX 8	2														FALSE	7/13/2018		10/24/2018			4146	ERICA	1005800.1148	759735.59013	10/4/2015	16B			
5269	2018-051-		2440.01	No	S375	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Brown												FALSE	10/05/2016					4169	ERICA	1005795.9631	759730.98259	10/4/2015	15B			
5270	2018-051-		2440.02	No	S375	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 5	PX1	Cord marked													FALSE	1/10/2018					4169	ERICA	1005795.9631	759730.98259	10/4/2015	15B			
5271	2018-051-		2441	Yes	S376	Ceramic	Porcelain	Whiteware		Historic Ceramic	5		Complete - Needs Final Images	Problem Cart															FALSE						4167	ERICA	1005800.3301	759724.79313	10/4/2015	16A			
5272	2018-051-		2442.01	Yes	S377	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1		White, Pink												FALSE	01/23/2019					4307	KAREN	1005795.1267	759720.30552	10/4/2015	15A			
5273	2018-051-		2442.02	No	S377	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Green/Olive												FALSE	09/14/2017					4307	KAREN	1005795.1267	759720.30552	10/4/2015	15A			
5274	2018-051-		2442.03	No	S377	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 1	PX1														FALSE	11/10/2016					4307	KAREN	1005795.1267	759720.30552	10/4/2015	15A			
5275	2018-051-		2443.01	No	S378	Metal	Copper or Copper Alloy			Infantry Buton	1		Complete	NHHC - Pallet 5 Small Divided Tote 7	1	"I"													FALSE	08/30/2016					14	309	KAREN	1005785.6303	759712.12792	10/4/2015	14AA		
5276	2018-051-		2443.02	Yes	S378	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1														FALSE	11/08/2016					4309	KAREN	1005785.6303	759712.12792	10/4/2015	14AA			
5277	2018-051-		2444.01	No	S379	Ceramic	Coarse Earthenware			Prehistoric Ceramic	5		Complete	PX BOX 6	PX1	3 Cord marked													FALSE	4/10/2018					4327	KAREN	1005802.424	759728.45932	10/4/2015	16A			
5278	2018-051-		2444.02	Yes	S379	Ceramic	Creamware	Whiteware		Historic Ceramic	2		Complete	BOX 1	2														FALSE	6/21/2018					4327	KAREN	1005802.424	759728.45932	10/4/2015	16A			
5279	2018-051-		2444.03	No	S379	Glass	Unidentified			Glass Fragment	2		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear, Green/Olive												FALSE	01/11/2019					4327	KAREN	1005802.424	759728.45932	10/4/2015	16A			
5280	2018-051-		2444.04	No	S379	Stone	Chipped Stone			Stone	1		Complete	PX BOX 13	PX1														FALSE	10/24/2016					4327	KAREN	1005802.424	759728.45932	10/4/2015	16A			
5281	2018-051-		2444.05	No	S379	DDMM - Discarded Military Munitions	DDMM - Brooke Shell	Copper or Copper Alloy		6.4" Brooke Shell with Archer Fuze (Removed) and Sabot	1		Complete	NHHC - AFA Crate 4	1														FALSE	09/14/2017					35				1005802.424	759728.45932	10/4/2015	16A	
5282	2018-051-		2445.01	No	S380	Composite	Lead			Lead Patch and Brass Tack	1		Complete	BAGGED SEPARATELY AREA															FALSE	9/7/2017					4323	KAREN	1005811.6904	759724.52212	10/4/2015	17AA			
5283	2018-051-		2445.02	No	S380	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1														FALSE	9/13/2017					4323	KAREN	1005811.6904	759724.52212	10/4/2015	17AA			
5284	2018-051-		2446.01	Yes	S381	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete - Needs Final Images	Problem Cart															FALSE						4185	ERICA	1005781.9384	759719.63766	10/4/2015	14A			
5285	2018-051-		2446.02	No	S381	Ceramic	Coarse Earthenware			Prehistoric Ceramic	6		Complete	PX BOX 9	PX1	Check stamped													FALSE	5/17/2018					4185	ERICA	1005781.9384	759719.63766	10/4/2015	14A			
5286	2018-051-		2446.03	No	S381	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Amber											FALSE	10/05/2016					4185	ERICA	1005781.9384	759719.63766	10/4/2015	14A				
5287	2018-051-		2446.04	No	S381	Metal	Iron			Small Fastener	1		Inventoried - Ready to Process	18WB14							2 in							FALSE						4185	ERICA	1005781.9384	759719.63766	10/4/2015	14A				
5288	2018-051-		2447	Yes	S382	Ceramic	Whiteware			Historic Ceramic	1		Complete	BOX 1	2														FALSE	4/25/2018					4181	ERICA	1005784.9524	759723.21533	10/4/2015	14A			
5289	2018-051-		2448.01	Yes	S383	Ceramic	Unidentified			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1													FALSE	10/27/2016					4199	ERICA	1005788.7257	759723.35462	10/4/2015	14A				
5290	2018-051-		2448.02	No	S383	Metal	Copper or Copper Alloy			Brass Lock	3		Complete	C2														FALSE	9/21/2018					28	4199	ERICA	1005788.7257	759723.35462	10/4/2015	14A			
5291	2018-051-		2449.01	Yes	S384	Ceramic	Whiteware	Stoneware	Tin Enameled	Historic Ceramic	9		Complete	NHHC - Pallet 4 Small Tote 21	1													FALSE	01/11/2018					4201	ERICA	1005776.0279	759722.8562	10/4/2015	13A				
5292	2018-051-		2449.02	No	S384	Metal	Iron			Small Fastener	1		Inventoried - Ready to Process	WB82														FALSE						4201	ERICA	1005776.0279	759722.8562	10/4/2015	13A				
5293	2018-051-		2449.03	No	S384	Metal	Iron			Fastener Shaft	1		Inventoried - Ready to Process	18WB10														FALSE						4201	ERICA	1005776.0279	759722.8562	10/4/2015	13A				
5294	2018-051-		2449.04	No	S384	Glass	Unidentified			Glass	11		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Clear, Brown, Green/Olive												FALSE	09/07/2016					4201	ERICA	1005776.0279	759722.8562	10/4/2015	13A			
5295	2018-051-		2449.05	No	S384	Recent/Synthetic	Rubber			Synthetic fragments	2		Complete	CS														FALSE	7/11/2018					4201	ERICA	1005776.0279	759722.8562	10/4/2015	13A				
5296	2018-051-		2449.06	No	S384	Concretion	Concretion			Concretion - Grapeshot?	1		Inventoried - Ready to Process	WB50														FALSE						4201	ERICA	1005776.0279	759722.8562	10/4/2015	13A				
5297	2018-051-		2449.07	No	S384	Metal	Iron			Nail	1		Inventoried - Ready to Process	18WB14							5 in							FALSE						4201	ERICA	1005776.0279	759722.8562	10/4/2015	13A				
5298	2018-051-		2449.08	No	S384	Ceramic	Coarse Earthenware			Prehistoric Ceramic	10		Complete	PX BOX 4	PX1	1 Cord marked, 1 Simple stamped													FALSE	12/18/2017					4201	ERICA	1005776.0279	759722.8562	10/4/2015	13A			
5299	2018-051-		2450.01	Yes	S385	Ceramic	Refined Earthenware	Whiteware		Historic Ceramic	8		Complete	BOX 2	2														FALSE	4/19/2018					4343	KAREN	1005770.8104	759728.77386	10/4/2015	13B			
5300	2018-051-		2450.02	No	S385	Metal	Copper or Copper Alloy			Sabot	1		Complete	BOX 12	2											6.25 in	1.379 in	FALSE	5/28/2019					14	4343	KAREN	1005770.8104	759728.77386	10/4/2015	13B			
5301	2018-051-		2450.03	No	S385	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 9	PX1	1 Simple stamped													FALSE	1/10/2018					4343	KAREN	1005770.8104	759728.77386	10/4/2015	13B			
5302	2018-051-		2450.04	No	S385	Composite	Lead	Wood		Enfield Bullet	1		Complete	NHHC - Pallet 5 Small Divided Tote 15	1													FALSE	05/26/2017					4343	KAREN	1005770.8104	759728.77386	10/4/2015	13B				
5303	2018-051-		2450.05	No	S385	Metal	Iron			Fastener With Square Washer	1		Inventoried - Ready to Process	YB44														FALSE						4344	KAREN	1005770.8104	759728.77386	10/4/2015	13B				
5304	2018-051-		2450.06	No	S385	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Small Tote 23	1													FALSE	10/18/2017					4343	KAREN	1005770.8104	759728.77386	10/4/2015	13B				
5305	2018-051-		2450.07	No	S385	Glass	Unidentified			Glass Fragment	2		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Green/Olive											FALSE	09/08/2016					4343	KAREN	1005770.8104	759728.77386	10/4/2015	13B				
5306	2018-051-		2450.08	No	S385	Metal	Lead			Rolled-Up Lead	1		Complete	NHHC - Pallet 1 Small Divided Tote 2	1													FALSE	09/06/2017					4343	KAREN	1005770.8104	759728.77386	10/4/2015	13B				
5307	2018-051-		2451	Yes	S386	Ceramic	Stoneware			Historic Ceramic	2		Complete	NHHC - Pallet 4 Small Tote 12	1													FALSE	12/15/2017					4341	KAREN	1005772.156	759719.69597	10/4/2015	13A				
5308	2018-051-		2452.01	No	S387	Glass	Unidentified			Glass Fragments	4		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Clear, Green/Olive											FALSE	01/03/2019					4372	KAREN	1005763.41							

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square		
5346	2018-051-		2460.05	No	S395	Metal	Copper or Copper Alloy			Brass Sheathing	1		Complete	NHHC - Pallet 5 Small Divided Tote 7	1															FALSE	11/01/2017				14	4414	KAREN	1005780.9385	759708.89317	10/4/2015	13AA		
5347	2018-051-		2461.01	No	S397	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 10	1		Clear, Green/Olive													FALSE	05/30/2018					4423, 4427	KAREN	1005806.1779	759712.18606	10/4/2015	16BB		
5348	2018-051-		2461.02	No	S397	Organic	Bone			Bone	1		Complete	C5																FALSE	7/23/2018						4423	KAREN	1005806.1779	759712.18606	10/4/2015	16BB	
5349	2018-051-		2461.03	No	S397	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 8	PX1	Cord marked														FALSE	5/9/2018						4427	KAREN	1005806.1779	759712.18606	10/4/2015	16BB	
5350	2018-051-		2462	No	S398	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 9	PX1															FALSE	1/10/2018						4418	KAREN	1005811.081	759717.12997	10/4/2015	16AA	
5351	2018-051-		2463	No	S400	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 7	PX1	incised markings														FALSE	6/21/2018						4439	KAREN	1005791.9821	759710.58822	10/5/2015	14AA	
5352	2018-051-		2463.01	No	S400	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Green/Olive													FALSE	01/26/2018						4439	KAREN	1005791.9821	759710.58822	10/5/2015	14AA	
5353	2018-051-		2464.01	No	S401	Metal	Copper or Copper Alloy			Thin Ring	1		Complete	C2																FALSE	5/30/2018					10.6	0081	BLUE CAM	1005790.406	759716.70939	10/5/2015	14AA	
5354	2018-051-		2464.02	Yes	S401	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1		White													FALSE	09/12/2017						0081	ERICA	1005790.406	759716.70939	10/5/2015	14AA	
5355	2018-051-		2464.03	No	S401	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear													FALSE	01/14/2019						0081	BLUE CAM	1005790.406	759716.70939	10/5/2015	14AA	
5356	2018-051-		2464.04	No	S401	Metal	Iron			Small Nail	1		Inventoried - Ready to Process	WB116																FALSE	10/24/2016						0081	BLUE CAM	1005790.406	759716.70939	10/5/2015	14AA	
5357	2018-051-		2464.05	No	S401	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1		Blue													FALSE	9/12/2017						0081	BLUE CAM	1005790.406	759716.70939	10/5/2015	14AA	
5358	2018-051-		2465	No	S402	Organic	Wood			Small Bucket Head	1		Inventoried - Ready to Process	WB30																FALSE						0077	BLUE CAM	1005777.4387	759713.81185	10/5/2015	13A		
5359	2018-051-		2466.01	No	S403	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 4	PX1															FALSE	11/7/2017						0095	BLUE CAM	1005768.4866	759716.01274	10/5/2015	12A	
5360	2018-051-		2466.02	No	S403	Metal	Copper or Copper Alloy			Folded Brass Sheathing	1		Complete	BOX 5	2															FALSE	8/8/2018					35	0095	BLUE CAM	1005768.4866	759716.01274	10/5/2015	12A	
5361	2018-051-		2466.03	No	S403	Architecture	Concrete			Concrete	2		Complete	NHHC - Pallet 5 Small Divided Tote 16	1															FALSE	11/07/2017						0095	BLUE CAM	1005768.4866	759716.01274	10/5/2015	12A	
5362	2018-051-		2466.04	Yes	S403	Ceramic	Stoneware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1															FALSE	11/07/2017						0095	ERICA	1005768.4866	759716.01274	10/5/2015	12A	
5363	2018-051-		2467.01	No	S404	Metal	Iron			Small Fastener	1		Inventoried - Ready to Process	18WB14							1.5	in								FALSE						0097	BLUE CAM	1005762.5306	759726.48504	10/5/2015	12B		
5364	2018-051-		2467.02	No	S404	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 10	1		Clear													FALSE	01/10/2019						0097	BLUE CAM	1005762.5306	759726.48504	10/5/2015	12B	
5365	2018-051-		2467.03	No	S404	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1															FALSE	10/3/2017						0097	BLUE CAM	1005762.5306	759726.48504	10/5/2015	12B	
5366	2018-051-		2468.01	No	S405	Composite	Iron	Glass		Fastener With Glass	1		Complete - Needs Final Images	TO BE PHOTOGRAPHED																FALSE							4456	KAREN	1005755.72	759727.95413	10/5/2015	12C	
5367	2018-051-		2468.02	No	S405	Ceramic	Coarse Earthenware			Prehistoric Ceramic	7		Complete	PX BOX 7	PX1	Cord marked, Simple stamped															FALSE	6/21/2018						4456	KAREN	1005755.72	759727.95413	10/5/2015	12C
5368	2018-051-		2468.03	Yes	S405	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	BOX 7	2																FALSE	10/24/2016						4456	KAREN	1005755.72	759727.95413	10/5/2015	12C
5369	2018-051-		2468.04	No	S405	Glass	Unidentified			Glass	7		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear, Blue													FALSE	01/14/2019						4456	KAREN	1005755.72	759727.95413	10/5/2015	12C	
5370	2018-051-		2468.05	No	S405	Metal	Copper or Copper Alloy			Brass Objects	2		Complete	NHHC - Pallet 2 Small Divided Tote 5	1															FALSE	11/01/2017					14	4456	KAREN	1005755.72	759727.95413	10/5/2015	12C	
5371	2018-051-		2468.06	No	S405	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Small Tote 23	1															FALSE	10/18/2017						4456	KAREN	1005755.72	759727.95413	10/5/2015	12C	
5372	2018-051-		2468.07	No	S405	Metal	Lead			Lead Bullets	2		Complete	NHHC - Pallet 1 Small Divided Tote 3	1															FALSE	06/22/2017						4456	KAREN	1005755.72	759727.95413	10/5/2015	12C	
5373	2018-051-		2469.01	No	S406	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 8	PX1															FALSE	5/9/2018						4451	KAREN	1005773.6734	759715.97037	10/5/2015	13A	
5374	2018-051-		2469.02	No	S406	Glass	Unidentified			Bottle Stopper	1		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Clear													FALSE	01/03/2019						4451	KAREN	1005773.6734	759715.97037	10/5/2015	13A	
5375	2018-051-		2469.03	Yes	S406	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1															FALSE	11/10/2016						4451	KAREN	1005773.6734	759715.97037	10/5/2015	13A	
5376	2018-051-		2470.01	No	S407	Glass	Unidentified			Glass	3		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear, Green/Olive														FALSE	02/17/2017						0111	BLUE CAM	1005791.268	759712.87822	10/6/2015	14AA
5377	2018-051-		2470.02	No	S407	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 1	PX1																FALSE	11/10/2016						0111	BLUE CAM	1005791.268	759712.87822	10/6/2015	14AA
5378	2018-051-		2471.01	Yes	S408	Ceramic	Whiteware	Stoneware		Historic Ceramic	2		Complete	BOX 2	2																FALSE	4/25/2018						0113	BLUE CAM	1005771.1698	759710.72416	10/6/2015	12AA
5379	2018-051-		2471.02	No	S408	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 9	PX1																FALSE	4/24/2018						0113	BLUE CAM	1005771.1698	759710.72416	10/6/2015	12AA
5380	2018-051-		2472.01	No	S409	Metal	Iron			Partial Wheel	1		Complete	Cart 3		3 spokes		2722	g		15.25	in			2.25	in			9.75	in	FALSE	7/2/2019			6.4	35	4476	KAREN	1005757.6138	759719.76844	10/6/2015	11B	
5381	2018-051-		2472.02	No	S409	Glass	Unidentified			Salt Cellar?	1		Inventoried - Ready to Process	PRIORITY																FALSE							4477	KAREN	1005757.6138	759719.76844	10/6/2015	11B	
5382	2018-051-		2472.03	No	S409	Glass	Unidentified			Glass Fragments	5		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear, Green/Olive													FALSE	01/11/2019						4477	KAREN	1005757.6138	759719.76844	10/6/2015	11B	
5383	2018-051-		2472.04	No	S409	Ceramic	Coarse Earthenware			Prehistoric Ceramic	3		Complete	PX BOX 3	PX1	1 Simple stamped, 1 Check stamped															FALSE	12/14/2017						4477	KAREN	1005757.6138	759719.76844	10/6/2015	11B
5384	2018-051-		2472.05	Yes	S409	Ceramic	Refined Earthenware	Stoneware	Whiteware	Historic Ceramic	7		Complete	BOX 7	2																FALSE						4477	KAREN	1005757.6138	759719.76844	10/6/2015	11B	
5385	2018-051-		2472.06	No	S409	Metal	Copper or Copper Alloy			Nail	1		Complete	NHHC - Pallet 2 Small Divided Tote 5	1															FALSE	03/29/2018					28	4477	KAREN	1005757.6138	759719.76844	10/6/2015	11B	
5386	2018-051-		2472.07	No	S409	Metal	Iron			Nail	1		Inventoried - Ready to Process	WB50																FALSE							4477	KAREN	1005757.6138	759719.76844	10/6/2015	11B	
5387	2018-051-		2472.08	No	S409	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Small Tote 23	1																												

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square
5426	2018-051-		2477.02	No	S414	Glass	Unidentified			Glass	4		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Green/Olive ,Brown													FALSE	01/10/2019					0137, 0139	BLUE CAM	1005746.2828	759726.44059	10/6/2015	11C
5427	2018-051-		2477.03	No	S414	Metal	Iron			Nail	2		Inventoried - Ready to Process	WB50							2.5	in							FALSE						0137	BLUE CAM	1005746.2828	759726.44059	10/6/2015	11C	
5428	2018-051-		2477.04	No	S414	Metal	Copper or Copper Alloy			Thin Copper Sheathing	1		Complete	NHHC - Pallet 2 Small Divided Tote 5	1						2.5	in	0.5	in					FALSE	01/26/2018					35	0137	BLUE CAM	1005746.2828	759726.44059	10/6/2015	11C
5429	2018-051-		2477.05	No	S414	Metal	Lead			Maynard Bullet	1		Complete	NHHC - Pallet 5 Small Divided Tote 15	1														FALSE	05/26/2017					0139	BLUE CAM	1005746.2828	759726.44059	10/6/2015	11C	
5430	2018-051-		2477.06	No	S414	Metal	Copper or Copper Alloy			Tack and Lamp Piece	2		Complete	NHHC - Pallet 5 Small Divided Tote 8	1						1.3	in				0.4	in		FALSE	11/01/2017					35	0139	BLUE CAM	1005746.2828	759726.44059	10/6/2015	11C
5431	2018-051-		2477.07	No	S414	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 10	PX1	Cord marked, Simple stamped													FALSE	6/6/2018					0139	BLUE CAM	1005746.2828	759726.44059	10/6/2015	11C	
5432	2018-051-		2478.01	No	S415	Ceramic	Coarse Earthenware			Prehistoric Ceramic	6		Complete	PX BOX 4	PX1	1 Check stamped, 1 Cord marked, 1 with large indent													FALSE	12/18/2017					0164-0165	BLUE CAM	1005745.6832	759721.18215	10/6/2015	10B	
5433	2018-051-		2478.02	No	S415	Organic	Paper			Paper	1		Complete	C5				17.9	g	7.198	in	5.768	in	0.026	in				FALSE	10/31/2018					0164-0165	BLUE CAM	1005745.6832	759721.18215	10/6/2015	10B	
5434	2018-051-		2478.03	No	S415	Glass	Unidentified			Glass	12		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Clear, Brown, Green/Olive												FALSE	11/20/2018					0164-0165	BLUE CAM	1005745.6832	759721.18215	10/6/2015	10B	
5435	2018-051-		2478.04	No	S415	Metal	Iron			Iron Nail, Partial Chain Link	3		Inventoried - Ready to Process	18WB14							3.5	in							FALSE						0164-0165	BLUE CAM	1005745.6832	759721.18215	10/6/2015	10B	
5436	2018-051-		2478.05	No	S415	Metal	Copper or Copper Alloy			Brass Bolt	1		Complete	NHHC - Pallet 2 Small Divided Tote 4	1						4	in	0.8	in			0.7	in	FALSE	11/01/2017					18	0164-0165	BLUE CAM	1005745.6832	759721.18215	10/6/2015	10B
5437	2018-051-		2478.06	No	S415	Metal	Copper or Copper Alloy			Powder Canister Lid Knob	1		Complete	NHHC - Pallet 5 Small Divided Tote 13	1														FALSE	01/20/2017					28	0164-0165	BLUE CAM	1005745.6832	759721.18215	10/6/2015	10B
5438	2018-051-		2478.07	No	S415	Metal	Copper or Copper Alloy			Sheathing	2		Complete	NHHC - Pallet 2 Small Divided Tote 4	1						2	in	1.5						FALSE	01/23/2017					21	0164-0165	BLUE CAM	1005745.6832	759721.18215	10/6/2015	10B
5439	2018-051-		2478.08	No	S415	Organic	Bone			Scalpula	2		Complete	C5				185.9	g	7.948	in	4.193	in	1.273	in				FALSE	3/6/2019					0164-0165	BLUE CAM	1005745.6832	759721.18215	10/6/2015	10B	
5440	2018-051-		2478.09	No	S415	Architecture	Brick			Brick	1		Complete	C4			Red												FALSE	5/10/2018					0166	BLUE CAM	1005745.6832	759721.18215	10/6/2015	10B	
5441	2018-051-		2478.10	No	S415	Metal	Iron			Strap/capsquare fragment?	1		Inventoried - Ready to Process	YB142															FALSE					0166	BLUE CAM	1005745.6832	759721.18215	10/6/2015	10B		
5442	2018-051-		2478.11	No	S415	Organic	Ethnobotany			Pit/Seed/Nut	2		Complete	C5				4.4	g	1.275	in	0.981		0.670				FALSE	10/31/2018					0164-0165	BLUE CAM	1005745.6832	759721.18215	10/6/2015	10B		
5443	2018-051-		2478.12	No	S415	Metal	Copper or Copper Alloy			Brass Ring	1		Complete	NHHC - Pallet 5 Small Divided Tote 8	1									0.3	in		2.4	in	FALSE	10/05/2017					35	0164-0165	BLUE CAM	1005745.6832	759721.18215	10/6/2015	10B
5444	2018-051-		2478.13	No	S415	Metal	Lead			Fuze Seal	1		Complete	NHHC - Pallet 5 Small Divided Tote 11	1	"10 SEC"													FALSE	09/06/2017					0164-0165	BLUE CAM	1005745.6832	759721.18215	10/6/2015	10B	
5445	2018-051-		2478.14	No	S415	Metal	Nut, Square			Nut, Square	Iron	1	Inventoried - Ready to Process	18WB10															FALSE					0166	BLUE CAM	1005745.6832	759721.18215	10/6/2015	10B		
5446	2018-051-		2478.15	No	S415	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	18WB14															FALSE					0166	BLUE CAM	1005745.6832	759721.18215	10/6/2015	10B		
5447	2018-051-		2478.16	No	S415	Metal	Iron			Plate	1		Inventoried - Ready to Process	YB61															FALSE					0166	BLUE CAM	1005745.6832	759721.18215	10/6/2015	10B		
5448	2018-051-		2478.17	No	S415	Metal	Iron			Small Fastener	1		Inventoried - Ready to Process	WB116 or YB141															FALSE					0166	BLUE CAM	1005745.6832	759721.18215	10/6/2015	10B		
5449	2018-051-		2478.18	No	S415	Organic	Wood			Wedge	1		Complete	C5				19	g	2.505	in	1.241	in	0.692	in				FALSE	10/26/2018					0164-0165	BLUE CAM	1005745.6832	759721.18215	10/6/2015	10B	
5450	2018-051-		2478.20	No	S415	Organic	Leather			Unknown/Leather?	1		Inventoried - Ready to Process	WB46															FALSE					0164-0165	BLUE CAM	1005745.6832	759721.18215	10/6/2015	10B		
5451	2018-051-		2478.21	No	S415	Metal	Iron			Spike	1		Inventoried - Ready to Process	18WB10															FALSE					0166	BLUE CAM	1005745.6832	759721.18215	10/6/2015	10B		
5452	2018-051-		2478.22	No	S415	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB153, YB149 (? - wood and concretion)															FALSE							1005745.6832	759721.18215	10/6/2015	10B		
5453	2018-051-		2478.23	No	S415	Metal	Iron			Railroad Iron	1		Inventoried - Ready to Process	BARREL 33															FALSE							1005745.6832	759721.18215	10/6/2015	10B		
5454	2018-051-		2478.24	No	S415	DMM - Discarded Military Munitions	DMM - Brooke Shell	Copper or Copper Alloy		6.4" Brooke Shell with Archer Fuze (Removed) and Sabot (Removed)	1		Complete	Brooke Pallet 1	2						13	in				6.2	in		FALSE	5/7/2019					32			1005745.6832	759721.18215	10/6/2015	10B
5455	2018-051-		2478.25	Yes	S415	Ceramic	Pearlware	Stoneware	Whiteware	Historic Ceramic	7		Complete	NHHC - Pallet 4 Small Tote 21	1														FALSE	12/18/2017					0164-0165	BLUE CAM	1005745.6832	759721.18215	10/6/2015	10B	
5456	2018-051-		2479.01	No	S416	Organic	Wood			Wood Plug	1		Inventoried - Ready to Process	C3 - Photo				27.0	g		2.7	in				1.029	in		FALSE	3/14/2019					0172	BLUE CAM	1005735.4081	759721.26795	10/6/2015	9C	
5457	2018-051-		2479.02	No	S416	Ceramic	Coarse Earthenware			Prehistoric Ceramic	13		Complete	PX BOX 10	PX1	Cord marked, Simple stamped													FALSE	6/6/2018					0172-0173	BLUE CAM	1005735.4081	759721.26795	10/6/2015	9C	
5458	2018-051-		2479.03	No	S416	Glass	Unidentified			Glass	11		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1	1 clear = "C"/"PAR"	Clear, Brown, Green/Olive												FALSE	01/03/2019					0172	BLUE CAM	1005735.4081	759721.26795	10/6/2015	9C	
5459	2018-051-		2479.04	No	S416	Organic	Bone			Bone	2		Complete	C5				102.1	g	4.045	in	2.921	in	1.33	in				FALSE	10/25/2018					0172	BLUE CAM	1005735.4081	759721.26795	10/6/2015	9C	
5460	2018-051-		2479.05	No	S416	Organic	Coal/Charcoal			Coal	2		Complete	NHHC - Pallet 6 Small Tote 23	1														FALSE	10/17/2017					0172	BLUE CAM	1005735.4081	759721.26795	10/6/2015	9C	
5461	2018-051-		2479.06	No	S416	Metal	Copper or Copper Alloy			Brass Valve	2		Complete	C2															FALSE	5/30/2018					18	0172	BLUE CAM	1005735.4081	759721.26795	10/6/2015	9C
5462	2018-051-		2479.07	No	S416	Metal	Copper or Copper Alloy			Small Brass Piping	1		Unknown																FALSE					0172	BLUE CAM	1005735.4081	759721.26795	10/6/2015	9C		
5463	2018-051-		2479.08	No	S416	Metal	Copper or Copper Alloy			Copper Sheathing	1		Complete	NHHC - Pallet 2 Small Divided Tote 4	1														FALSE	05/02/2018					35	0172	BLUE CAM	1005735.4081	759721.26795	10/6/2015	9C
5464	2018-051-		2479.09	No	S416	Metal	Iron			Iron Strap	1		Inventoried - Ready to Process	YB59															FALSE					0171	BLUE CAM	1005735.4081	759721.26795	10/6/2015	9C		
5465	2018-051-		2479.10	No	S416	Architecture	Concrete			Concrete Fragment	2		Complete	C7				1060.4	g	5/47	in	4.18	in	2.18	in				FALSE	2/19/2019					0171	BLUE CAM	1005735.4081	759721.26795	10/6/2015	9C	
5466	2018-051-		2479.11	No	S416	Metal	Lead			Maynard Bullet	1		Complete	NHHC - Pallet 1 Small Divided Tote 3	1														FALSE	06/22/2017					0172	BLUE CAM	1005735.4081	759721.26795	10/6/2015	9C	
5467	2018-051-		2479.12	No	S416	Metal	Iron			Firegrate Fragment	1		Inventoried - Ready to Process	YB153															FALSE					0171	BLUE CAM						

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square		
5493	2018-051-		2481.03	No	S418	Metal	Copper or Copper Alloy			Brass Ring	1		Complete	NHHC - Pallet 5 Small Divided Tote 9	1															FALSE	01/20/2017				28	4503	KAREN	1005746.1998	759721.97553	10/6/2015	10B		
5494	2018-051-		2481.04	No	S418	Glass	Unidentified			Glass	3		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Green/Olive ,Amber													FALSE	09/29/2016					4503	KAREN	1005746.1998	759721.97553	10/6/2015	10B		
5495	2018-051-		2481.05	No	S418	Organic	Coal/Charcoal			Coal	3		Complete	C7																FALSE	12/4/2018					4503	KAREN	1005746.1998	759721.97553	10/6/2015	10B		
5496	2018-051-		2481.06	No	S418	Metal	Lead			Colt Bullet	1		Complete	NHHC - Pallet 1 Small Divided Tote 3	1															FALSE	06/22/2017					4503	KAREN	1005746.1998	759721.97553	10/6/2015	10B		
5497	2018-051-		2481.07	No	S418	Metal	Fastener With Square Head			Iron	1		Inventoried - Ready to Process	18WB10																FALSE						4503	KAREN	1005746.1998	759721.97553	10/6/2015	10B		
5498	2018-051-		2482.01	Yes	S420	Ceramic	Stoneware			Historic Ceramic	3		Complete	NHHC - Pallet 4 Small Tote 21	1															FALSE	12/15/2017					4536	KAREN	1005763.6943	759706.90129	10/6/2015	12AA		
5499	2018-051-		2482.02	No	S420	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1															FALSE						4536	KAREN	1005763.6943	759706.90129	10/6/2015	12AA		
5500	2018-051-		2482.03	No	S420	Stone	Slate			Slate	1		Inventoried - Ready to Process	STONE																FALSE						4536	KAREN	1005763.6943	759706.90129	10/6/2015	12AA		
5501	2018-051-		2482.04	No	S420	Organic	Coal/Charcoal			Coal	2		Complete	NHHC - Pallet 6 Small Tote 23	1															FALSE	10/18/2017					4537	KAREN	1005763.6943	759706.90129	10/6/2015	12AA		
5502	2018-051-		2483.01	No	S421	Organic	Coal/Charcoal			Coal	1		Complete	C7																FALSE	6/14/2018					4539	KAREN	1005763.1081	759712.54079	10/6/2015	12A		
5503	2018-051-		2483.02	No	S421	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 1	PX1															FALSE	9/7/2017					4539	KAREN	1005763.1081	759712.54079	10/6/2015	12A		
5504	2018-051-		2483.03	No	S421	Metal	Iron			Nail	1		Inventoried - Ready to Process	WB50																FALSE						4539	KAREN	1005763.1081	759712.54079	10/6/2015	12A		
5505	2018-051-		2483.04	Yes	S421	Ceramic	Whiteware			Historic Ceramic	1		Complete	BOX 1	2																FALSE	4/25/2018					4539	KAREN	1005763.1081	759712.54079	10/6/2015	12A	
5506	2018-051-		2484.01	No	S422	Glass	Pane Glass/Unidentified			Glass	4		Complete	NHHC - Pallet 6 Medium Divided Tote 10	1		Clear													FALSE	01/11/2019					4543	KAREN	1005765.325	759720.01598	10/6/2015	12B		
5507	2018-051-		2484.02	No	S422	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 2	PX1	Possible Cord marked															FALSE	10/10/2017					4543	KAREN	1005765.325	759720.01598	10/6/2015	12B	
5508	2018-051-		2484.03	No	S422	Stone	Natural Stone			Stone	2		Complete	BOX 7	2																FALSE	4/19/2018					4543	KAREN	1005765.325	759720.01598	10/6/2015	12B	
5509	2018-051-		2485	No	S423	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 1	PX1																FALSE	11/21/2016					0185	BLUE CAM	1005776.582	759711.07813	10/6/2015	13AA	
5510	2018-051-		2486	No	S424	Metal	Iron			Small Fastener	1		Inventoried - Ready to Process	18WB10							2.5 in									FALSE					0187	BLUE CAM	1005771.2807	759709.5765	10/6/2015	12AA			
5511	2018-051-		2487.01	No	S425	Metal	Copper or Copper Alloy			Sheathing	1		Complete	NHHC - Pallet 2 Small Divided Tote 6	1															FALSE	01/20/2017					21	4562	KAREN	1005768.8706	759704.79085	10/6/2015	12AA	
5512	2018-051-		2487.02	No	S425	Glass	Unidentified			Glass Fragment	3		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear													FALSE	01/11/2019					4562	KAREN	1005768.8706	759704.79085	10/6/2015	12AA		
5513	2018-051-		2487.03	No	S425	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1																FALSE	9/14/2017					4562	KAREN	1005768.8706	759704.79085	10/6/2015	12AA	
5514	2018-051-		2488.01	Yes	S426	Ceramic	Refined Earthenware			Historic Ceramic	2		Complete	NHHC - Pallet 4 Small Tote 12	1																FALSE	06/02/2016					4559	KAREN	1005765.2733	759700.51755	10/6/2015	11AA	
5515	2018-051-		2488.02	No	S426	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1																FALSE	12/14/2017					4559	KAREN	1005765.2733	759700.51755	10/6/2015	11AA	
5516	2018-051-		2488.03	No	S426	Metal	Copper or Copper Alloy			Brass Sheathing	1		Complete	BOX 5	2																FALSE	08/07/2018					32	4559	KAREN	1005765.2733	759700.51755	10/6/2015	11AA
5517	2018-051-		2489.01	No	S427	Composite	Copper or Copper Alloy			Engine Rod Slide	1		Complete	7064 and C9							16.5 in		10.2 in					7.2 in		FALSE	5/16/19					35	4574	KAREN	1005760.914	759702.96507	10/6/2015	11AA	
5518	2018-051-		2489.02	No	S427	Glass	Unidentified			Glass Fragment	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1	"25"	Amber														FALSE	10/20/2016					4576	KAREN	1005760.914	759702.96507	10/6/2015	11AA	
5519	2018-051-		2489.03	No	S427	Metal	Copper or Copper Alloy			Brass Scrap	1		Complete	NHHC - Pallet 2 Small Divided Tote 5	1																FALSE	03/29/2018					35	4576	KAREN	1005760.914	759702.96507	10/6/2015	11AA
5520	2018-051-		2489.04	No	S427	DMM - Discarded Military Munitions	DMM - Brooke Shell	Copper or Copper Alloy		6.4" Brooke Shell with Archer Fuze (Removed) and Sabot	1		Complete	NHHC - AFA Crate 4	1																FALSE	09/14/2017					35			1005760.914	759702.96507	10/6/2015	11AA
5521	2018-051-		2489.05	No	S427	DMM - Discarded Military Munitions	DMM - Brooke Shell			6.4" Brooke Shell with Archer Fuze	1		Inventoried - Ready to Process																		FALSE								1005760.914	759702.96507	10/6/2015	11AA	
5522	2018-051-		2490.01	No	S431	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Green/Olive														FALSE	09/09/2016					0211	BLUE CAM	1005791.0202	759708.47703	10/6/2015	14AA	
5523	2018-051-		2490.02	No	S431	Metal	Iron			Spike	1		Inventoried - Ready to Process	YB44							13.5 in										FALSE					0211	BLUE CAM	1005791.0202	759708.47703	10/6/2015	14AA		
5524	2018-051-		2491.01	Yes	S432	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1																FALSE	11/15/2016					0209	BLUE CAM	1005770.6243	759703.49683	10/6/2015	12AA	
5525	2018-051-		2491.02	No	S432	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Small Tote 22	1																FALSE	10/12/2017					0209	BLUE CAM	1005770.6243	759703.49683	10/6/2015	12AA	
5526	2018-051-		2492.01	No	S433	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 1	PX1																FALSE	11/21/2016					4592	KAREN	1005766.6837	759697.57859	10/6/2015	12BB	
5527	2018-051-		2492.02	No	S433	Metal	Copper or Copper Alloy			Valve	1		Complete	NHHC - Pallet 5 Small Divided Tote 11	1																FALSE	01/20/2017					35	4592	KAREN	1005766.6837	759697.57859	10/6/2015	12BB
5528	2018-051-		2492.03	No	S433	Metal	Pewter			Partial Ring	1		Complete	C2																	FALSE	8/8/2018					32	4592	KAREN	1005766.6837	759697.57859	10/6/2015	12BB
5529	2018-051-		2493.01	No	S434	Metal	Iron			Rounded Plate with Fastener	1		Complete	PR-S8							14 in		2.28 in		8 in						FALSE					4599	KAREN	1005734.7141	759724.73986	10/6/2015	9C		
5530	2018-051-		2493.02	No	S434	Ceramic	Coarse Earthenware			Prehistoric Ceramic	5		Complete	PX BOX 3	PX1																FALSE	12/14/2017					4600	KAREN	1005734.7141	759724.73986	10/6/2015	9C	
5531	2018-051-		2493.03	Yes	S434	Ceramic	Whiteware	Stoneware		Historic Ceramic	6		Complete	BOX 2	2																FALSE	1/23/2019					4600	KAREN	1005734.7141	759724.73986	10/6/2015	9C	
5532	2018-051-		2493.04	No	S434	Metal	Iron			Flat, Round Concretion	1		Inventoried - Ready to Process	2018P11																	FALSE					4600	KAREN	1005734.7141	759724.73986	10/6/2015	9C		
5533	2018-051-		2493.05	No	S434	Organic	Wood			Barrel Piece	1		Unknown																		FALSE					4601	KAREN	1005734.7141	759724.73986	10/6/2015	9C		
5534	2018-051-		2493.06	No	S434	Metal	Copper or Copper Alloy			Plate Corner (Powder canmister base/lid?)	1		In treatment	In treatment																	FALSE					4600	KAREN	1005734.7141	759724.73986	10/6/2015	9C		
5535	2018-05																																										

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square		
5574	2018-051-		2496.14	No	S437	Architecture	Mortar			Mortar	3		Complete	NHHC - Pallet 4 Small Tote 7	1															FALSE	12/19/2017					0241	BLUE CAM	1005743.2295	759714.3609	10/6/2015	10B		
5575	2018-051-		2497.01	No	S438	Metal	Iron			Crank Shaft and eccentric	1		Inventoried - Ready to Process	YB156																FALSE						0233	BLUE CAM	1005740.5001	759708.75118	10/6/2015	9A		
5576	2018-051-		2497.02	No	S438	Metal	Copper or Copper Alloy			Small Valve	1		Complete	C2				362.5	g		3.07	in	2.3	in						FALSE	6/27/2019					0234	BLUE CAM	1005740.5001	759708.75118	10/6/2015	9A		
5577	2018-051-		2497.03	No	S438	Metal	Copper or Copper Alloy			Axle? Sheave?	1		Inventoried - Ready to Process																	FALSE					0233	BLUE CAM	1005740.5001	759708.75118	10/6/2015	9A			
5578	2018-051-		2497.04	No	S438	Metal	Iron			Pivot carriage slide wheel/machinery	1		Complete	7064							38.5	in	14.75	in	8	in				FALSE	9/17/2019			6	35	0233	BLUE CAM	1005740.5001	759708.75118	10/6/2015	9A		
5579	2018-051-		2497.05	No	S438	Metal	Iron			Iron Fastener with concretion	1		Inventoried - Ready to Process	WB50																FALSE					0234	BLUE CAM	1005740.5001	759708.75118	10/6/2015	9A			
5580	2018-051-		2497.06	No	S438	Metal	Iron			Concreted Fastener	1		Inventoried - Ready to Process	YB158																FALSE								1005740.5001	759708.75118	10/6/2015	9A		
5581	2018-051-		2498.01	No	S439	Metal	Copper or Copper Alloy			Brooke Sabot	1		Complete	BOX 16	2			7.70	lb							6.25	in	1.449	in	FALSE	5/28/2019					14	0256	BLUE CAM	1005725.9714	759734.8866	10/6/2015	9D	
5582	2018-051-		2498.02	No	S439	Organic	Wood			Wood Artifacts	4	Intact	Complete	C3 - Photo				169.0	g		3.428	in	2.44	in	1.032	in				FALSE						0254-0255	BLUE CAM	1005725.9714	759734.8866	10/6/2015	9D		
5583	2018-051-		2498.03	No	S439	Metal	Iron			Firegrate	1		Inventoried - Ready to Process	BARREL 75																FALSE						0256	BLUE CAM	1005725.9714	759734.8866	10/6/2015	9D		
5584	2018-051-		2498.04	No	S439	Metal	Iron			Firebox	1		Inventoried - Ready to Process	YB68																FALSE						0256	BLUE CAM	1005725.9714	759734.8866	10/6/2015	9D		
5585	2018-051-		2498.05	No	S439	Metal	Iron			Thin Iron Pole	1		Inventoried - Ready to Process	18WB10																FALSE						0254-0255	BLUE CAM	1005725.9714	759734.8866	10/6/2015	9D		
5586	2018-051-		2498.06	No	S439	Metal	Copper or Copper Alloy			Copper Plating	1		Complete	NHHC - Pallet 1 Medium Divided Tote 3	1						11.5	in	3.75	in	0.1	in				FALSE	03/20/2018					10.6	0254-0255	BLUE CAM	1005725.9714	759734.8866	10/6/2015	9D	
5587	2018-051-		2498.07	No	S439	Organic	Pitch			Leather fragments	2	Fragment(s)	Complete	C5				6.0	g		3.065	in	1.972	in	0.09	in				FALSE	3/20/2019						0254-0255	BLUE CAM	1005725.9714	759734.8866	10/6/2015	9D	
5588	2018-051-		2498.08	No	S439	Concretion	Concretion			Large Concretion - need to xray	1		Inventoried - Ready to Process	YB142																FALSE						0256	BLUE CAM	1005725.9714	759734.8866	10/6/2015	9D		
5589	2018-051-		2498.09	No	S439	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Green/Olive													FALSE	10/04/2016						0254-0255	BLUE CAM	1005725.9714	759734.8866	10/6/2015	9D	
5590	2018-051-		2498.10	No	S439	Stone	Ballast			Ballast (?) Stone	1		Complete	C7				1428.8	g		4.63	in	4.12	in	2.89	in				FALSE	2/19/2019						0256	BLUE CAM	1005725.9714	759734.8866	10/6/2015	9D	
5591	2018-051-		2499.01	No	S440	Architecture	Brick			Brick	1		Inventoried - Ready to Process	YB32			White													FALSE						0265	BLUE CAM	1005736.8819	759727.65188	10/6/2015	10C		
5592	2018-051-		2499.02	No	S440	Organic	Wood			Barrel Stave	1	Intact	Complete	C6				59.5	g		9.643	in	2.345	in	0.255	in				FALSE	3/20/2019						0267-0268	BLUE CAM	1005736.8819	759727.65188	10/6/2015	10C	
5593	2018-051-		2499.03	No	S440	Ceramic	Coarse Earthenware			Prehistoric Ceramic	4		Complete	PX BOX 4	PX1	1	Check stamped													FALSE	12/19/2017						0264	BLUE CAM	1005736.8819	759727.65188	10/6/2015	10C	
5594	2018-051-		2499.04	No	S440	Metal	Iron			Firegrates	2		Inventoried - Ready to Process	BARREL 75																FALSE						0265	BLUE CAM	1005736.8819	759727.65188	10/6/2015	10C		
5595	2018-051-		2499.05	No	S440	Glass	Unidentified			Glass	14		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1	1	clear = "AE"	Green/Olive , Brown, Blue, Clear													FALSE	01/14/2019						0264	BLUE CAM	1005736.8819	759727.65188	10/6/2015	10C
5596	2018-051-		2499.06	No	S440	Metal	Iron			Small Iron Artifacts	4		Inventoried - Ready to Process	WB4																FALSE						0264	BLUE CAM	1005736.8819	759727.65188	10/6/2015	10C		
5597	2018-051-		2499.07	No	S440	Organic	Bone			Bone	1		Complete	C5				27.2	g		2.959	in	1.39	in	0.503	in				FALSE	3/6/2019						0264	BLUE CAM	1005736.8819	759727.65188	10/6/2015	10C	
5598	2018-051-		2499.08	No	S440	Organic	Coal/Charcoal			Coal	3		Complete	NHHC - Pallet 6 Small Tote 23	1															FALSE	10/24/2017						0264	BLUE CAM	1005736.8819	759727.65188	10/6/2015	10C	
5599	2018-051-		2499.09	No	S440	Metal	Copper or Copper Alloy			Cufflink/Rivet and Tack	1		Complete	NHHC - Pallet 5 Small Divided Tote 7	1															FALSE	01/27/2017					25	0264	BLUE CAM	1005736.8819	759727.65188	10/6/2015	10C	
5600	2018-051-		2499.10	No	S440	Metal	Iron			Small Fastener	2		Deaccessioned	DA																FALSE						0264	BLUE CAM	1005736.8819	759727.65188	10/6/2015	10C		
5601	2018-051-		2499.11	No	S440	Composite	Pewter	Copper or Copper Alloy		Friction Primer	1		Complete	C4																FALSE	1/11/2019					28	0264	BLUE CAM	1005736.8819	759727.65188	10/6/2015	10C	
5602	2018-051-		2499.12	No	S440	Metal	Lead			Lead Patch, 9 Bullets	10		Complete	NHHC - Pallet 5 Small Divided Tote 15	1		Single and double ridged .44													FALSE	04/17/2017						0264	BLUE CAM	1005736.8819	759727.65188	10/6/2015	10C	
5603	2018-051-		2499.13	No	S440	Metal	Copper or Copper Alloy			Copper Sheathing, Folded	2		Complete	NHHC - Pallet 2 Small Divided Tote 4	1															FALSE	05/09/2018						0264	BLUE CAM	1005736.8819	759727.65188	10/6/2015	10C	
5604	2018-051-		2499.14	Yes	S440	Ceramic	Unidentified			Historic Ceramic	7		Complete	NHHC - Pallet 4 Small Tote 21	1															FALSE	12/19/2017						0264	BLUE CAM	1005736.8819	759727.65188	10/6/2015	10C	
5605	2018-051-		2500.01	No	S441	Metal	Lead			Lead Bullets	2		Complete	NHHC - Pallet 2 Small Divided Tote 4	1		Possible mold seam on Calt													FALSE	06/22/2017						4636	KAREN	1005743.4835	759727.29657	10/6/2015	10C	
5606	2018-051-		2500.02	No	S441	Composite	Brass	Lead		Fuze	2		Complete	DISPLAY, HELEN'S OFFICE			TEXT ON LEAD STAMP: "10 SEC"													FALSE	03/08/2016					28	4636	KAREN	1005743.4835	759727.29657	10/6/2015	10C	
5607	2018-051-		2500.03	No	S441	Glass	Unidentified			Glass Base	1		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Clear													FALSE	01/25/2019						4636	KAREN	1005743.4835	759727.29657	10/6/2015	10C	
5608	2018-051-		2500.04	No	S441	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Medium Divided Tote 12	1															FALSE	01/30/2018						4636	KAREN	1005743.4835	759727.29657	10/6/2015	10C	
5609	2018-051-		2500.05	No	S441	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 10	PX1		Cord marked													FALSE	6/21/2018						4636	KAREN	1005743.4835	759727.29657	10/6/2015	10C	
5610	2018-051-		2500.06	No	S441	Organic	Wood			Wood Fragment	1		Complete	NHHC - Pallet 6 Medium Tote 5	1															FALSE	11/08/2017							1005743.4835	759727.29657	10/6/2015	10C		
5611	2018-051-		2501.01	No	S442	Metal	Iron			Firegrate Fragment	1		Inventoried - Ready to Process	YB153																FALSE							4632	KAREN	1005733.6899	759731.42502	10/6/2015	10D	
5612	2018-051-		2501.02	No	S442	Composite	Brass	Wood		Bucket Handle	1		Inventoried - Ready to Process	2018P12																FALSE							4633	KAREN	1005733.6899	759731.42502	10/6/2015	10D	
5613	2018-051-		2501.03	No	S442	Glass	Unidentified			Glass Fragments	3		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Green/Olive													FALSE	10/04/2016							4633	KAREN	1005733.6899	759731.42502	10/6/2015	10D
5614	2018-051-		2501.04	Yes	S442	Ceramic	Whiteware			Historic Ceramic	1		Complete	BOX 7	2															FALSE	5/9/2018					< 10	4633	KAREN	1005733.6899	759731.42502	10/6/2015	10D	
5615	2018-051-		2501.05	No	S442	Ceramic	Pipe			Pipe Stem	1		Complete	NHHC - Pallet 4 Small Tote 12																													

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square	
5654	2018-051-		2505.10	No	S446	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Green/Olive Brown/Green/Olive													FALSE	01/17/2018					0271-0272	BLUE CAM	1005738.7444	759746.6447	10/6/2015	11E	
5655	2018-051-		2505.11	No	S446	Metal	Lead			Maynard Bullets	3		Complete	NHHC - Pallet 5 Small Divided Tote 15	1	1 with small circular divet in side														FALSE	05/24/2017					0271-0272	BLUE CAM	1005738.7444	759746.6447	10/6/2015	11E	
5656	2018-051-		2505.12	No	S446	Metal	Iron			Hook	1		Complete	BOX 18	2															FALSE						0273	BLUE CAM	1005738.7444	759746.6447	10/6/2015	11E	
5657	2018-051-		2505.13	No	S446	Ceramic	Coarse Earthenware			Prehistoric Ceramic	3		Complete	PX BOX 4	PX1	2 Cord marked														FALSE	12/15/2017					0271-0272	BLUE CAM	1005738.7444	759746.6447	10/6/2015	11E	
5658	2018-051-		2506.01	No	S447	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 9	PX1															FALSE	4/25/2018					0300	BLUE CAM	1005724.4143	759730.143	10/6/2015	9D	
5659	2018-051-		2506.02	No	S447	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Small Tote 23	1															FALSE	10/18/2017					0300	BLUE CAM	1005724.4143	759730.143	10/6/2015	9D	
5660	2018-051-		2506.03	No	S447	Metal	Fastener Shaft			Iron	1		Inventoried - Ready to Process	YB24																FALSE						0299	BLUE CAM	1005724.4143	759730.143	10/6/2015	9D	
5661	2018-051-		2506.04	No	S447	Metal	Iron			Concreted Partial Shaft? - xray	1		Inventoried - Ready to Process	YB142																FALSE						0299	BLUE CAM	1005724.4143	759730.143	10/6/2015	9D	
5662	2018-051-		2506.05	No	S447	Organic	Bone			Distal Tip Of Fossilized Bone	1		Complete	C5				10.5 g		1.088 in		1.042 in		0.514 in						FALSE	10/25/2018					0300	BLUE CAM	1005724.4143	759730.143	10/6/2015	9D	
5663	2018-051-		2506.06	No	S447	Metal	Iron			Iron Square With Raised Edges	1		Unknown																	FALSE						0299	BLUE CAM	1005724.4143	759730.143	10/6/2015	9D	
5664	2018-051-		2506.07	No	S447	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Green/Olive													FALSE	10/04/2016					0300	BLUE CAM	1005724.4143	759730.143	10/6/2015	9D	
5665	2018-051-		2506.08	No	S447	Ceramic	Pipe			Pipe Stem	1		Complete	C4						4.13 in						0.3 in				FALSE	4/17/2018					0303	BLUE CAM	1005724.4143	759730.143	10/6/2015	9D	
5666	2018-051-		2506.09	No	S447	Metal	Copper or Copper Alloy			Buckle	1		Complete	C2																FALSE	5/3/2018					350318	BLUE CAM	1005724.4143	759730.143	10/6/2015	9D	
5667	2018-051-		2506.10	Yes	S447	Ceramic	Whiteware	Stoneware		Historic Ceramic	4		Complete	BOX 1	2															FALSE	4/25/2018					0300	BLUE CAM	1005724.4143	759730.143	10/6/2015	9D	
5668	2018-051-		2507.01	No	S448	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 7	PX1															FALSE	8/14/2018					0305	BLUE CAM	1005726.7357	759730.98873	10/6/2015	9D	
5669	2018-051-		2507.02	No	S448	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Medium Divided Tote 12	1															FALSE	10/18/2017					0305	BLUE CAM	1005726.7357	759730.98873	10/6/2015	9D	
5670	2018-051-		2507.03	No	S448	Architecture	Mortar			Mortar	1		Complete	C7																FALSE	8/21/2018					0305	BLUE CAM	1005726.7357	759730.98873	10/6/2015	9D	
5671	2018-051-		2508.01	No	S449	Organic	Wood			Staves and Head	5	Mix of fragments and intact artifacts	Complete	C6				370.4 g		8.673 in		2.417 in		0.46 in						FALSE	3/20/2019					4681	KAREN	1005730.5708	759737.56232	10/6/2015	9D	
5672	2018-051-		2508.02	No	S449	Metal	Copper or Copper Alloy			Pump Knob	1		Complete	NHHC - Pallet 5 Small Divided Tote 8	1															FALSE	01/23/2017					214681	KAREN	1005730.5708	759737.56232	10/6/2015	9D	
5673	2018-051-		2508.03	No	S449	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Medium Divided Tote 12	1															FALSE	10/11/2017					4681	KAREN	1005730.5708	759737.56232	10/6/2015	9D	
5674	2018-051-		2508.04	No	S449	Organic	Hair/Fur			Brush	1		Complete	NHHC - Pallet 5 Small Divided Tote 16	1															FALSE	09/05/2017					4681	KAREN	1005730.5708	759737.56232	10/6/2015	9D	
5675	2018-051-		2508.05	Yes	S449	Ceramic	Whiteware	Stoneware		Historic Ceramic	2		Complete	BOX 1	2	"SON" beneath unicorn (partial Edwards and Sons makers mark)															FALSE	6/21/2018					4681	KAREN	1005730.5708	759737.56232	10/6/2015	9D
5676	2018-051-		2508.06	No	S449	Metal	Iron			Nails	2		Inventoried - Ready to Process	18WB10																FALSE						4681	KAREN	1005730.5708	759737.56232	10/6/2015	9D	
5677	2018-051-		2508.07	No	S449	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Clear													FALSE	11/26/2018					4681	KAREN	1005730.5708	759737.56232	10/6/2015	9D	
5678	2018-051-		2508.08	No	S449	Metal	Copper or Copper Alloy			Small Brass Hook	1		Complete	NHHC - Pallet 5 Small Divided Tote 7	1															FALSE	01/23/2017					214682	KAREN	1005730.5708	759737.56232	10/6/2015	9D	
5679	2018-051-		2509.01	No	S451	Composite	Wood	Copper or Copper Alloy/Iron		Machinery	1		Inventoried - Ready to Process	2018P5																FALSE						4694	KAREN	1005752.7105	759757.3325	10/6/2015	12E	
5680	2018-051-		2509.02	No	S451	Organic	Wood			Stave and Head	3		In treatment	7064																FALSE						4694	KAREN	1005752.7105	759757.3325	10/6/2015	12E	
5681	2018-051-		2509.02.01	No	S451	Metal	Iron			Nail fragments	2		Reburial	R				3.2 g		27.34 mm		9.15 mm								FALSE	3/20/2019					4694	KAREN	1005752.7105	759757.3325	10/6/2015	12E	
5682	2018-051-		2509.03	No	S451	Organic	Wood			Bevelled Wood With Hole	1		Deaccessioned	DA																FALSE						4695	KAREN	1005752.7105	759757.3325	10/6/2015	12E	
5683	2018-051-		2509.04	No	S451	Organic	Bone			Bone	2		Complete	C5																FALSE	7/23/2018					4694	KAREN	1005752.7105	759757.3325	10/6/2015	12E	
5684	2018-051-		2509.05	Yes	S451	Ceramic	Stoneware			Historic Ceramic	2		Complete	NHHC - Pallet 4 Small Tote 12	1															FALSE	10/10/2017					4694	KAREN	1005752.7105	759757.3325	10/6/2015	12E	
5685	2018-051-		2509.06	No	S451	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 9	PX1	Simple stamped															FALSE	6/12/2018					4694	KAREN	1005752.7105	759757.3325	10/6/2015	12E
5686	2018-051-		2509.07	No	S451	Metal	Copper or Copper Alloy			Brass Scrap	2		Complete	BOX 5	2															FALSE	5/1/2018					4694	KAREN	1005752.7105	759757.3325	10/6/2015	12E	
5687	2018-051-		2509.08	No	S451	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Green/Olive													FALSE	09/14/2017					4694	KAREN	1005752.7105	759757.3325	10/6/2015	12E	
5688	2018-051-		2509.09	No	S451	Metal	Copper or Copper Alloy			Tack	1		Complete	NHHC - Pallet 2 Small Divided Tote 5	1															FALSE	01/23/2017					284694	KAREN	1005752.7105	759757.3325	10/6/2015	12E	
5689	2018-051-		2510.01	No	S452	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1	Complicated stamped															FALSE	9/13/2017					4702	KAREN	1005752.3262	759747.34963	10/6/2015	12E
5690	2018-051-		2510.02	No	S452	Organic	Coal/Charcoal			Coal	2		Complete	NHHC - Pallet 6 Small Tote 23	1															FALSE	10/18/2017					4702	KAREN	1005752.3262	759747.34963	10/6/2015	12E	
5691	2018-051-		2510.03	Yes	S452	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	7064				4.7 g		0.983 in		0.902 in		0.312 in						FALSE	9/20/2019					4702	KAREN	1005752.3262	759747.34963	10/6/2015	12E	
5692	2018-051-		2511.01	No	S453	Concretion	Concretion			Mold/Impression	1		Inventoried - Ready to Process	DONNYBUCKET																FALSE						0325	BLUE CAM	1005741.8298	759752.71782	10/6/2015	11E	
5693	2018-051-		2511.02	No	S453	Organic	Bone			Bone	1		Complete	C5																FALSE	7/24/2018					0325, 0329	BLUE CAM	1005741.8298	759752.71782	10/6/2015	11E	
5694	2018-051-		2511.03	No	S453	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Green/Olive Clear													FALSE	01/16/2019					0325, 0329	BLUE CAM	1005741.8298	759752.71782	10/6/2015	11E	
5695	2018-051-		2511.04	No	S453	Architecture	Mortar			Mortar	2		Complete	NHHC - Pallet 4 Small Tote 7	1															FALSE	01/19/2018					0329	BLUE CAM	1005741.8298	759752.71782	10/6/2015	11E	
5696	2018-051-		2511.05	No	S45																																					

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square	
5733	2018-051-		2520.02	Yes	S463	Ceramic	Stoneware			Historic Ceramic	3		Complete	BOX 1	2															FALSE	5/31/2018					0359-0360	BLUE CAM	1005742.7857	759734.14938	10/6/2015	11D	
5734	2018-051-		2520.03	No	S463	Metal	Copper or Copper Alloy			Wheel Hub	1		Complete	C2				324.0 g						0.74 in		2.24 in				FALSE	10/23/2018					250359-0360	BLUE CAM	1005742.7857	759734.14938	10/6/2015	11D	
5735	2018-051-		2520.04	No	S463	Metal	Iron			Iron Nail	2		Inventoried - Ready to Process	18WB14															FALSE						0359-0360	BLUE CAM	1005742.7857	759734.14938	10/6/2015	11D		
5736	2018-051-		2520.05	No	S463	Metal	Copper or Copper Alloy			Tack	1		Complete	NHHC - Pallet 2 Small Divided Tote 5	1														FALSE	03/29/2018					350359-0360	BLUE CAM	1005742.7857	759734.14938	10/6/2015	11D		
5737	2018-051-		2520.06	No	S463	Metal	Lead			Maynard Bullets	3		Complete	NHHC - Pallet 1 Small Divided Tote 3	1														FALSE	06/26/2017					0359-0360	BLUE CAM	1005742.7857	759734.14938	10/6/2015	11D		
5738	2018-051-		2520.07	No	S463	Metal	Lead			Lead Weight	1		Complete	NHHC - Pallet 1 Small Divided Tote 1	1														FALSE	09/05/2017					0359-0360	BLUE CAM	1005742.7857	759734.14938	10/6/2015	11D		
5739	2018-051-		2520.08	No	S463	Glass	Unidentified			Glass	4		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Green/Olive , Clear												FALSE	11/26/2018					0359-0360	BLUE CAM	1005742.7857	759734.14938	10/6/2015	11D		
5740	2018-051-		2520.09	No	S463	Metal	Lead			Fuze Seal	1		Complete	NHHC - Pallet 5 Small Divided Tote 11	1		"10"/"SEC"												FALSE	09/06/2017					0359-0360	BLUE CAM	1005742.7857	759734.14938	10/6/2015	11D		
5741	2018-051-		2520.10	No	S463	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 9	PX1		Simple stamped													FALSE	5/31/2018					0359-0361	BLUE CAM	1005742.7857	759734.14938	10/6/2015	11D	
5742	2018-051-		2521.01	No	S464	Organic	Coal/Charcoal			Coal	2		Complete	NHHC - Pallet 6 Small Tote 23	1														FALSE	10/11/2017					0365-0366	BLUE CAM	1005747.8844	759742.24658	10/6/2015	11D		
5743	2018-051-		2521.02	No	S464	Glass	Unidentified			Glass	5		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Green/Olive , Clear												FALSE	11/26/2018					0365-0366	BLUE CAM	1005747.8844	759742.24658	10/6/2015	11D		
5744	2018-051-		2521.03	No	S464	Metal	Copper or Copper Alloy			Handle?	1		Complete	NHHC - Pallet 5 Small Divided Tote 7	1					3.75 in									FALSE	01/23/2017					350366	BLUE CAM	1005747.8844	759742.24658	10/6/2015	11D		
5745	2018-051-		2521.04	No	S464	Metal	Gold			Gold Setting - Jewelry	1		Complete	NHHC - Pallet 5 Small Divided Tote 7	1														FALSE	07/07/2016					0366	BLUE CAM	1005747.8844	759742.24658	10/6/2015	11D		
5746	2018-051-		2521.05	Yes	S464	Ceramic	Stoneware			Historic Ceramic	2		Complete	BOX 1	2															FALSE	5/31/2018					0366	BLUE CAM	1005747.8844	759742.24658	10/6/2015	11D	
5747	2018-051-		2521.06	No	S464	Metal	Lead			Bullet	1		Complete	NHHC - Pallet 5 Small Divided Tote 15	1		Double ridge									0.44 in			FALSE	04/17/2017					0366	BLUE CAM	1005747.8844	759742.24658	10/6/2015	11D		
5748	2018-051-		2521.07	No	S464	Metal	Copper or Copper Alloy			Copper Sheathing	1		Unknown							0.75 in		0.5 in							FALSE						0366	BLUE CAM	1005747.8844	759742.24658	10/6/2015	11D		
5749	2018-051-		2522.01	No	S465	Metal	Copper or Copper Alloy			Thin Brass Rod, Bent	1		Complete	NHHC - Pallet 1 Medium Divided Tote 3	1														FALSE	03/07/2018					354773	KAREN	1005757.114	759738.67006	10/6/2015	12D		
5750	2018-051-		2522.02	No	S465	Glass	Unidentified			Glass Fragment	1		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Amber												FALSE	11/26/2018						4773	KAREN	1005757.114	759738.67006	10/6/2015	12D	
5751	2018-051-		2523.01	No	S466	Metal	Lead			Maynard Bullet	1		Complete	NHHC - Pallet 5 Small Divided Tote 15	1														FALSE	05/26/2017						4771	KAREN	1005745.7256	759747.60648	10/6/2015	11E	
5752	2018-051-		2523.02	No	S466	Glass	Unidentified			Glass Fragment	2		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Amber, Clear												FALSE	11/26/2018						4771	KAREN	1005745.7256	759747.60648	10/6/2015	11E	
5753	2018-051-		2523.03	No	S466	Organic	Ethnobotany			Pn/Nut	1		Complete	C5				0.7 g		0.996 in		0.450 in		0.224 in					FALSE	10/31/2018						4771	KAREN	1005745.7256	759747.60648	10/6/2015	11E	
5754	2018-051-		2523.04	No	S466	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1		Possibly Simple stamped													FALSE	10/3/2017						4771	KAREN	1005745.7256	759747.60648	10/6/2015	11E
5755	2018-051-		2523.05	No	S466	Metal	Iron			Nail	1		Inventoried - Ready to Process	18WB10															FALSE							KAREN	1005745.7256	759747.60648	10/6/2015	11E		
5756	2018-051-		2524.01	No	S467	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Amber												FALSE	10/04/2016						4791	KAREN	1005758.2874	759766.74786	10/6/2015	13F	
5757	2018-051-		2524.02	No	S467	Organic	Wood			Knife Handle or Withy Fragments	3		Complete	C5				2.8 g		1.801 in		0.646 in		0.237 in					FALSE	10/26/2018						4791	KAREN	1005758.2874	759766.74786	10/6/2015	13F	
5758	2018-051-		2524.03	Yes	S467	Ceramic	Stoneware			Historic Ceramic	3		Complete	BOX 1	2															FALSE	6/21/2018						4791	KAREN	1005758.2874	759766.74786	10/6/2015	13F
5759	2018-051-		2524.04	No	S467	Organic	Coal/Charcoal			Coal	2		Complete	NHHC - Pallet 6 Small Tote 22	1														FALSE	03/07/2018						4791	KAREN	1005758.2874	759766.74786	10/6/2015	13F	
5760	2018-051-		2524.05	No	S467	Organic	Wood			Stave	1		Inventoried - Ready to Process	WB64															FALSE							4791	KAREN	1005758.2874	759766.74786	10/6/2015	13F	
5761	2018-051-		2524.06	No	S467	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 9	PX1		Large indent													FALSE	1/10/2018						4791	KAREN	1005758.2874	759766.74786	10/6/2015	13F
5762	2018-051-		2525	No	S468	Glass	Unidentified			Base	1		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Clear												FALSE	11/20/2018						4787	KAREN	1005757.645	759756.33548	10/6/2015	13E	
5763	2018-051-		2526.01	No	S470	Organic	Bone			Bone	1		In treatment	7064															FALSE							0383	BLUE CAM	1005763.6684	759769.99006	10/6/2015	14F	
5764	2018-051-		2526.02	No	S470	Composite	Wood	Rubber	Iron	Wood Block with Rubber	1		Complete	C5															FALSE	7/12/2018						0383	BLUE CAM	1005763.6684	759769.99006	10/6/2015	14F	
5765	2018-051-		2526.03	No	S470	Metal	Copper or Copper Alloy			Brass Button	1		Unknown													1.25 in			FALSE							0383	BLUE CAM	1005763.6684	759769.99006	10/6/2015	14F	
5766	2018-051-		2526.04	Yes	S470	Ceramic	Stoneware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1														FALSE	09/07/2017						0383	BLUE CAM	1005763.6684	759769.99006	10/6/2015	14F	
5767	2018-051-		2526.05	No	S470	Metal	Iron			Nail?	1		Did Not Survive	DNS															FALSE							0383	BLUE CAM	1005763.6684	759769.99006	10/6/2015	14F	
5768	2018-051-		2526.06	No	S470	Organic	Coal/Charcoal			Coal	5		Complete	NHHC - Pallet 6 Small Tote 23	1														FALSE	10/18/2017						0383	BLUE CAM	1005763.6684	759769.99006	10/6/2015	14F	
5769	2018-051-		2526.07	No	S470	Metal	Copper or Copper Alloy			Disc	1		Complete	NHHC - Pallet 2 Small Divided Tote 6	1														FALSE	06/27/2017						32		1005763.6684	759769.99006	10/6/2015	14F	
5770	2018-051-		2527.01	Yes	S472	Ceramic	Stoneware	Refined Earthenware		Historic Ceramic	2		Complete	BOX 1	2															FALSE	6/12/2018						0399-0400	BLUE CAM	1005782.8517	759768.72045	10/6/2015	15F
5771	2018-051-		2527.02	No	S472	Glass	Unidentified			Glass	3		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Clear, Green/Olive												FALSE	01/14/2019						0399-0400	BLUE CAM	1005782.8517	759768.72045	10/6/2015	15F	
5772	2018-051-		2527.03	No	S472	Stone	Natural Stone			Stone	2		Complete	NHHC - Pallet 4 Small Tote 17	1														FALSE	01/30/2017						0399-0400	BLUE CAM	1005782.8517	759768.72045	10/6/2015	15F	
5773	2018-051-		2527.04	No	S472	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Medium Divided Tote 12	1														FALSE	10/18/2017						0399-0400	BLUE CAM	1005782.8517	759768.72045	10/6/2015	15F	
5774	2018-051-		2527.05	No	S472	Metal	Copper or Copper Alloy			Partial Buckle	1		Complete	NHHC - Pallet 2 Small Divided Tote 6	1														FALSE	01/23/2017						350399-0400						

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square	
5809	2018-051-		2535.02	No	S482	Composite	Brass	Wood		Sheave	1		Inventoried - Ready to Process	2018P7																FALSE						5040	KAREN	1005803.4909	759772.45595	10/8/2015	18E	
5810	2018-051-		2535.03	No	S482	Architecture	Mortar			Mortar	1		Complete	C7																FALSE	6/21/2018					5039	KAREN	1005803.4909	759772.45595	10/8/2015	18E	
5811	2018-051-		2535.04	Yes	S482	Ceramic	Stoneware			Historic Ceramic	2		Complete	BOX 1	2															FALSE	4/25/2018					5039	KAREN	1005803.4909	759772.45595	10/8/2015	18E	
5812	2018-051-		2535.05	No	S482	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 10	PX1	Simple stamped (possibly Cord marked)															FALSE	1/27/2017					5039	KAREN	1005803.4909	759772.45595	10/8/2015	18E
5813	2018-051-		2535.06	No	S482	Composite	Ceramic	Concretion		Historic Ceramic In Concretion	1		Inventoried - Ready to Process	WB115																FALSE					5039	KAREN	1005803.4909	759772.45595	10/8/2015	18E		
5814	2018-051-		2535.07	No	S482	Metal	Copper or Copper Alloy			Brass Scrap	1		Complete	BOX 5	2															FALSE	5/11/2018					5039	KAREN	1005803.4909	759772.45595	10/8/2015	18E	
5815	2018-051-		2536.01	No	S483	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 10	PX1															FALSE	11/21/2016					5044	KAREN	1005817.5027	759775.88998	10/8/2015	19E	
5816	2018-051-		2536.02	No	S483	Organic	Coal/Charcoal			Coal	1		Complete	C7																FALSE	06/14/2018					5044	KAREN	1005817.5027	759775.88998	10/8/2015	19E	
5817	2018-051-		2536.03	No	S483	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear													FALSE	01/14/2019					5044	KAREN	1005817.5027	759775.88998	10/8/2015	19E	
5818	2018-051-		2537.01	No	S486	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 10	PX1	Cord marked															FALSE	1/10/2018					5059	KAREN	1005816.1126	759764.81303	10/8/2015	18D
5819	2018-051-		2537.02	No	S486	Stone	Gun Flint			Gun Flint?	1		Complete	BOX 7	2																FALSE	1/30/2017					5059	KAREN	1005816.1126	759764.81303	10/8/2015	18D
5820	2018-051-		2538.01	Yes	S487	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1															FALSE	10/25/2016					5061	KAREN	1005825.7798	759772.3688	10/8/2015	20D	
5821	2018-051-		2538.02	No	S487	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 9	PX1															FALSE	5/31/2018					5061	KAREN	1005825.7798	759772.3688	10/8/2015	20D	
5822	2018-051-		2538.03	No	S487	Organic	Bone			Bone	1		Complete	C5																FALSE	7/23/2018					5061	KAREN	1005825.7798	759772.3688	10/8/2015	20D	
5823	2018-051-		2538.04	No	S487	Metal	Copper or Copper Alloy			Copper Wire	3		Complete	BOX 5	2															FALSE	8/7/2018				35	5061	KAREN	1005825.7798	759772.3688	10/8/2015	20D	
5824	2018-051-		2539.01	Yes	S492	Ceramic	Stoneware			Historic Ceramic	1		Complete	BOX 1	2															FALSE	4/25/2018					5076	KAREN	1005788.8338	759771.01724	10/8/2015	16F	
5825	2018-051-		2539.02	No	S492	Architecture	Mortar			Mortar	3		Complete	C7																FALSE	5/9/2018					5076	KAREN	1005788.8338	759771.01724	10/8/2015	16F	
5826	2018-051-		2539.03	No	S492	Glass	Unidentified			Glass Fragment	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Green/Olive													FALSE	10/20/2016					5076	KAREN	1005788.8338	759771.01724	10/8/2015	16F	
5827	2018-051-		2539.04	No	S492	Metal	Copper or Copper Alloy			Rim Fragments	2		Complete	BOX 5	2															FALSE	6/13/2018				35	5076	KAREN	1005788.8338	759771.01724	10/8/2015	16F	
5828	2018-051-		2540.01	No	S493	Concretion	Concretion			Concretion Fragment	1		Deaccessioned	NA																FALSE					5074	KAREN	1005796.7103	759768.11539	10/8/2015	17E		
5829	2018-051-		2540.02	No	S493	Stone	Gun Flint			Gun Flint	1		Complete	BOX 7	2															FALSE	1/30/2017					5074	KAREN	1005796.7103	759768.11539	10/8/2015	17E	
5830	2018-051-		2541.01	No	S494	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 10	PX1															FALSE	11/21/2016					5102	KAREN	1005757.3921	759782.75662	10/8/2015	14H	
5831	2018-051-		2541.02	No	S494	Glass	Unidentified			Glass Fragment	1		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Light Blue													FALSE	01/16/2019					5102	KAREN	1005757.3921	759782.75662	10/8/2015	14H	
5832	2018-051-		2541.03	No	S494	Organic	Bone			Bone	1		Complete	C5																FALSE	7/23/2018					5102	KAREN	1005757.3921	759782.75662	10/8/2015	14H	
5833	2018-051-		2541.04	No	S494	Organic	Ethnobotany			Peach Pit	1		Complete	C5																FALSE	7/6/2018					5102	KAREN	1005757.3921	759782.75662	10/8/2015	14H	
5834	2018-051-		2542.01	No	S495	Metal	Iron			Nail	1		Inventoried - Ready to Process	18WB13																FALSE					5104	KAREN	1005760.5056	759780.16433	10/8/2015	14G		
5835	2018-051-		2542.02	No	S495	Organic	Bone			Bone	1		Complete	C5																FALSE	7/23/2018					5104	KAREN	1005760.5056	759780.16433	10/8/2015	14G	
5836	2018-051-		2543.01	No	S501	Glass	Unidentified			Glass Fragment	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1															FALSE	01/14/2019					5129	KAREN	1005747.6712	759792.30193	10/8/2015	13I	
5837	2018-051-		2543.02	No	S501	Concretion	Concretion			Concretion Fragment	1		Did Not Survive	DNS																FALSE					5129	KAREN	1005747.6712	759792.30193	10/8/2015	13I		
5838	2018-051-		2543.03	No	S501	Metal	Copper or Copper Alloy			Brass Object In Concretion	1		Inventoried - Ready to Process	2018P13																FALSE					5129	KAREN	1005747.6712	759792.30193	10/8/2015	13I		
5839	2018-051-		2544.01	No	S509	Metal	Copper or Copper Alloy			Brass Strip	1		Complete	NHHC - Pallet 5 Small Divided Tote 8	1															FALSE	03/07/2018				35	5156	KAREN	1005758.1238	759790.97071	10/8/2015	14H	
5840	2018-051-		2544.02	No	S509	Ceramic	Coarse Earthenware			Prehistoric Ceramic	4		Complete	PX BOX 9	PX1	Simple stamped															FALSE	4/30/2018					5156	KAREN	1005758.1238	759790.97071	10/8/2015	14H
5841	2018-051-		2544.03	No	S509	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Medium Divided Tote 12	1															FALSE	01/30/2018					5156	KAREN	1005758.1238	759790.97071	10/8/2015	14H	
5842	2018-051-		2544.04	No	S509	Organic	Bone			Bone	1		Complete	C5				0.7 g		1.676 in		0.291 in		0.096 in						FALSE	10/25/2018					5156	KAREN	1005758.1238	759790.97071	10/8/2015	14H	
5843	2018-051-		2545.01	No	S510	Glass	Unidentified			Glass Fragment	1		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Green/Olive													FALSE	09/27/2017					5176	KAREN	1005745.5241	759781.41373	10/8/2015	12H	
5844	2018-051-		2545.02	No	S510	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 4	PX1	1 Simple stamped, 1 possible complicated stamp															FALSE	10/3/2017					5176-5177	KAREN	1005745.5241	759781.41373	10/8/2015	12H
5845	2018-051-		2545.03	No	S510	Composite	Brass	Iron		Escutcheon Plate and Mordiced Drawer Lock	1		Complete	C3						3.5 in		1.29 in		0.52 in						FALSE	9/5/2018		7/2/2019			5178	KAREN	1005745.5241	759781.41373	10/8/2015	12H	
5846	2018-051-		2546	No	S511	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1	Cord marked															FALSE	10/26/2017					5180	KAREN	1005741.9791	759775.33564	10/8/2015	12H
5847	2018-051-		2547	No	S518	Organic	Bone			Bone	1		Complete	C5				74.9 g		5.428 in		0.951 in		0.602 in						FALSE	03/06/2019					5195	KAREN	1005752.5441	759793.96305	10/8/2015	13I	
5848	2018-051-		2548.01	No	S521	Glass	Unidentified			Glass Fragment	2		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Clear, Green/Olive													FALSE	01/16/2019					5209	KAREN	1005758.8357	759801.02277	10/8/2015	14I	
5849	2018-051-		2548.02	Yes	S521	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	BOX 3	2															FALSE	6/14/2018					5209	KAREN	1005758.8357	759801.02277	10/8/2015	14I	
5850	2018-051-		2548.03	No	S521	Ceramic	Coarse Earthenware			Prehistoric Ceramic	5		Complete	PX BOX 9	PX1	Check stamped, line markings															FALSE	5/9/2018					5209	KAREN	1005758.8357	759801.02277	10/8/2015	14I
5851	2018-051-		2548.04	No	S521																																					

Appendix C: Artifact Database

C-73
CSS Georgia Archeological Data Recovery and Mitigation

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square	
5970	2018-051-		2587.01	No	S575	Ceramic	Coarse Earthenware			Prehistoric Ceramic	5		Complete	PX BOX 2	PX1	Cord marked, Simple stamped														FALSE	11/1/2017					1194	ERICA	1005817.9428	759841.41283	10/9/2015	21K	
5971	2018-051-		2587.02	No	S575	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Light Blue													FALSE	01/03/2019					1194	ERICA	1005817.9428	759841.41283	10/9/2015	21K	
5972	2018-051-		2587.03	No	S575	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Small Tote 23	1															FALSE	10/18/2017					1194	ERICA	1005817.9428	759841.41283	10/9/2015	21K	
5973	2018-051-		2588.01	No	S576	Metal	Iron			Grape Shot Canister	1		Inventoried - Ready to Process	IN OWN BUCKET																FALSE					1197	ERICA	1005830.9037	759838.82858	10/9/2015	22K		
5974	2018-051-		2588.02	No	S576	Organic	Bone			Bone	1		Complete	C5																FALSE	7/23/2018					1196	ERICA	1005830.9037	759838.82858	10/9/2015	22K	
5975	2018-051-		2588.03	No	S576	Metal	Iron			Grape Shot	1		Unknown																	FALSE					1196	ERICA	1005830.9037	759838.82858	10/9/2015	22K		
5976	2018-051-		2588.04	No	S576	Ceramic	Coarse Earthenware			Prehistoric Ceramic	3		Complete	PX BOX 8	PX1	Cord marked, Simple stamped															FALSE	6/19/2018					1196	ERICA	1005830.9037	759838.82858	10/9/2015	22K
5977	2018-051-		2588.05	No	S576	Concretion	Concretion			Fastener Hollow	1		Inventoried - Ready to Process	WB115																FALSE					1196	ERICA	1005830.9037	759838.82858	10/9/2015	22K		
5978	2018-051-		2588.06	No	S576	Metal	Iron			Fastener Head	1		Inventoried - Ready to Process	18WB12																FALSE							1005830.9037	759838.82858	10/9/2015	22K		
5979	2018-051-		2589.01	No	S577	Architecture	Mortar			Mortar	17		Complete	NHHC - Pallet 4 Small Tote 7	1															FALSE	11/07/2017					1202	ERICA	1005817.7978	759818.40115	10/11/2015	20I	
5980	2018-051-		2589.02	No	S577	Ceramic	Coarse Earthenware			Prehistoric Ceramic	3		Complete	PX BOX 6	PX1	1 cord/Simple stamped; 1 looks like it has elongated check stamping															FALSE	3/23/2016					1202	ERICA	1005817.7978	759818.40115	10/11/2015	20I
5981	2018-051-		2590.01	No	S578	Metal	Iron			Upside Right Railroad Spike	1		Inventoried - Ready to Process	18WB10																FALSE					1210	ERICA	1005817.4132	759823.61612	10/11/2015	21J		
5982	2018-051-		2590.02	No	S578	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear													FALSE	01/14/2019					1210	ERICA	1005817.4132	759823.61612	10/11/2015	21J	
5983	2018-051-		2590.03	No	S578	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 7	PX1	Faint cord/Simple stamped markings															FALSE	4/13/2016					1210	ERICA	1005817.4132	759823.61612	10/11/2015	21J
5984	2018-051-		2590.04	Yes	S578	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1															FALSE	05/02/2016					1210	ERICA	1005817.4132	759823.61612	10/11/2015	21J	
5985	2018-051-		2590.05	No	S578	Organic	Wood			Cut Wood	2		Complete	C5				9.1 g		1.446 in		1.249 in		0.336 in						FALSE	10/26/2018					1210	ERICA	1005817.4132	759823.61612	10/11/2015	21J	
5986	2018-051-		2591.01	No	S579	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 4	PX1	Cord marked															FALSE	12/15/2017					5708	KAREN	1005831.7697	759822.49125	10/11/2015	22I
5987	2018-051-		2591.02	No	S579	Glass	Unidentified			Button	1		Complete	NHHC - Pallet 5 Small Divided Tote 7	1															FALSE	01/23/2019					5709	KAREN	1005831.7697	759822.49125	10/11/2015	22I	
5988	2018-051-		2592	No	S580	Organic	Coal/Charcoal			Coal	2		Inventoried - Ready to Process	BAGGED SEPARATELY																FALSE					5703	KAREN	1005826.2333	759821.47944	10/11/2015	21I		
5989	2018-051-		2593.01	No	S581	Metal	Iron			Bar With Fastener (hinge)	1		Inventoried - Ready to Process	YB155																FALSE					5732	KAREN	1005832.1784	759827.1896	10/11/2015	22I		
5990	2018-051-		2593.02	No	S581	Metal	Iron			Fastener	1		Inventoried - Ready to Process	18WB13																FALSE					5731	KAREN	1005832.1784	759827.1896	10/11/2015	22I		
5991	2018-051-		2593.03	No	S581	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 3	PX1																FALSE	12/14/2017					5731	KAREN	1005832.1784	759827.1896	10/11/2015	22I
5992	2018-051-		2593.04	No	S581	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Clear, Green/Olive														FALSE	01/03/2019					5731	KAREN	1005832.1784	759827.1896	10/11/2015	22I
5993	2018-051-		2593.05	No	S581	Organic	Coal/Charcoal			Coal	1		Unknown																		FALSE					5731	KAREN	1005832.1784	759827.1896	10/11/2015	22I	
5994	2018-051-		2594	No	S582	Metal	Iron			Large Concretion	1		Inventoried - Ready to Process	IN OWN BUCKET																	FALSE					5738	KAREN	1005828.6469	759832.00945	10/11/2015	22J	
5995	2018-051-		2595	No	S583	Metal	Iron			Railroad Spike	2		Inventoried - Ready to Process	18WB13																	FALSE					1217	ERICA	1005824.2653	759839.54456	10/11/2015	22K	
5996	2018-051-		2596.01	No	S585	Ceramic	Coarse Earthenware			Prehistoric Ceramic	3		Complete	PX BOX 1	PX1	1 Cord marked; 1 has small hole															FALSE	4/15/2016					1231	ERICA	1005830.5645	759839.84247	10/11/2015	22K
5997	2018-051-		2596.02	No	S585	Organic	Bone			Jaw Bone	1		Complete	C5				3.8 g		2.867 in		0.261 in		0.768 in						FALSE	10/26/2018					1231	ERICA	1005830.5645	759839.84247	10/11/2015	22K	
5998	2018-051-		2597.01	No	S586	Metal	Copper or Copper Alloy			Brass Ring	1		Complete	NHHC - Pallet 5 Small Divided Tote 8	1																FALSE	03/07/2018				35	1234	ERICA	1005834.9375	759833.09507	10/11/2015	23J
5999	2018-051-		2597.02	No	S586	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Green/Olive														FALSE	01/14/2019					1234	ERICA	1005834.9375	759833.09507	10/11/2015	23J
6000	2018-051-		2597.03	No	S586	Organic	Bone			Bone	1		Complete	C5				1.9 g		0.667 in		0.619 in		0.495 in						FALSE	10/25/2018					1234	ERICA	1005834.9375	759833.09507	10/11/2015	23J	
6001	2018-051-		2597.04	No	S586	Ceramic	Coarse Earthenware			Prehistoric Ceramic	6		Complete	PX BOX 11	PX1	3 Cord/Simple stamped; 1 Check stamped															FALSE	4/13/2016					1234	ERICA	1005834.9375	759833.09507	10/11/2015	23J
6002	2018-051-		2598.01	No	S587	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 10	PX1	1 Simple stamped/incised															FALSE	4/13/2016					5756	KAREN	1005836.2446	759839.70697	10/11/2015	23J
6003	2018-051-		2598.02	Yes	S587	Ceramic	Refined Earthenware			Historic Ceramic	2		Complete	NHHC - Pallet 4 Small Tote 12	1																FALSE	04/15/2016					5756	KAREN	1005836.2446	759839.70697	10/11/2015	23J
6004	2018-051-		2598.03	No	S587	Metal	Copper or Copper Alloy			Folded Brass Scrap	1		Complete	BOX 5	2																FALSE	5/11/2018					5756	KAREN	1005836.2446	759839.70697	10/11/2015	23J
6005	2018-051-		2599.01	No	S588	Ceramic	Coarse Earthenware			Prehistoric Ceramic	4		Complete	PX BOX 3	PX1	1 Cord marked															FALSE	5/2/2016					5752	KAREN	1005824.5298	759842.40317	10/11/2015	22K
6006	2018-051-		2599.02	No	S588	Metal	Lead			Lead Bullet	1		Complete	NHHC - Pallet 1 Small Divided Tote 3	1															FALSE	06/26/2017					5758	KAREN	1005824.5298	759842.40317	10/11/2015	22K	
6007	2018-051-		2600.01	No	S589	Organic	Bone			Bone	3		Complete	C5				22.5 g		2.58 in		0.968 in		0.7 in						FALSE	3/6/2019					5780	KAREN	1005828.5017	759845.43318	10/11/2015	22K	
6008	2018-051-		2600.02	No	S589	Ceramic	Coarse Earthenware			Prehistoric Ceramic	14		Complete	PX BOX 7	PX1	3 Simple stamped; 3 Cord marked; 1 can't tell if simple/cord/incised															FALSE	4/13/2016					5780	KAREN	1005828.5017	759845.43318	10/11/2015	22K
6009	2018-051-		2600.03	No	S589	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Medium Divided Tote 12	1															FALSE	10/26/2017					5780	KAREN	1005828.5017	759845.43318	10/11/2015	22K	
6010	2018-051-		2600.04	No	S589	Glass	Unidentified			Glass Fragment	1		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Clear													FALSE	01/16/2019					5780	KAREN	1005828.5017	759845.43318	10/11/2015	22K	
6011	2018-051-		2600.05	Yes	S589	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1																FALSE	04/15/2016					5780	KAREN	1005828.5017	759845.43318	10/11/	

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square	
6046	2018-051-		2617.01	No	S609	Ceramic	Coarse Earthenware			Prehistoric Ceramic	4		Complete	PX BOX 6	PX1	2 rim fragments; 1 Simple stamped														FALSE	3/24/2016					1326	ERICA	1005814.7129	759842.62523	10/11/2015	21K	
6047	2018-051-		2617.02	Yes	S609	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1														FALSE	04/18/2016					1326	ERICA	1005814.7129	759842.62523	10/11/2015	21K		
6048	2018-051-		2617.03	No	S609	Organic	Ethnobotany			Seed/Pit	1		Complete																FALSE	10/31/2018					1326	ERICA	1005814.7129	759842.62523	10/11/2015	21K		
6049	2018-051-		2617.04	No	S609	Organic	Coal/Charcoal			Charcoal	1		Complete	NHHC - Pallet 6 Medium Divided Tote 12	1			6.39	g		1.214	in		1.102	in	0.910	in			FALSE	10/11/2017					1326	ERICA	1005814.7129	759842.62523	10/11/2015	21K	
6050	2018-051-		2618	No	S610	Organic	Bone			Bone	1		Complete	C5				1.1	g		1.208	in		0.178	in	0.270	in			FALSE	10252018					1330	ERICA	1005807.1729	759826.55804	10/11/2015	20J	
6051	2018-051-		2619	No	S615	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1	Cord marked														FALSE	10/3/2017					5868	KAREN	1005823.495	759822.76281	10/11/2015	21I	
6052	2018-051-		2620.01	No	S616	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Amber, Green/Olive													FALSE	09/21/2017					1346	ERICA	1005808.5844	759844.75819	10/11/2015	20L	
6053	2018-051-		2620.02	No	S616	Ceramic	Coarse Earthenware			Prehistoric Ceramic	4		Complete	PX BOX 1	PX1															FALSE	4/15/2016					1346	ERICA	1005808.5844	759844.75819	10/11/2015	20L	
6054	2018-051-		2620.03	No	S616	Metal	Iron			Railroad Spikes And Iron Strap (?)	4		Inventoried - Ready to Process	18WB10																FALSE					1346	ERICA	1005808.5844	759844.75819	10/11/2015	20L		
6055	2018-051-		2620.04	No	S616	Organic	Bone			Vertebra	1		Complete	C5																FALSE	7/23/2018					1346	ERICA	1005808.5844	759844.75819	10/11/2015	20L	
6056	2018-051-		2620.05	No	S616	Metal	Copper or Copper Alloy			Brass Wire	1		Complete	BOX 5	2															FALSE	8/8/2018					35	1346	ERICA	1005808.5844	759844.75819	10/11/2015	20L
6057	2018-051-		2620.07	No	S616	Organic	Coal/Charcoal			Coal	3		Complete	C7																FALSE	6/14/2018					1346	ERICA	1005808.5844	759844.75819	10/11/2015	20L	
6058	2018-051-		2621.01	Yes	S617	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	BOX 2	2		Red													FALSE	4/15/2016					1342	ERICA	1005809.9109	759840.4725	10/11/2015	20K	
6059	2018-051-		2621.02	No	S617	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 11	PX1															FALSE	3/15/2016					1342	ERICA	1005809.9109	759840.4725	10/11/2015	20K	
6060	2018-051-		2622	No	S618	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 1	PX1																FALSE	4/15/2016					1360	ERICA	1005821.714	759847.82161	10/11/2015	22L
6061	2018-051-		2623.01	No	S619	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Clear													FALSE	01/16/2019					1363	ERICA	1005815.8738	759844.54162	10/11/2015	21L	
6062	2018-051-		2623.02	No	S619	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 1	PX1																FALSE	3/15/2016					1363	ERICA	1005815.8738	759844.54162	10/11/2015	21L
6063	2018-051-		2624.01	No	S621	Ceramic	Coarse Earthenware			Prehistoric Ceramic	11		Complete	PX BOX 1	PX1	2 Cord marked; 3 incised marks															FALSE	3/25/2016					5882	KAREN	1005753.624	759815.50773	10/11/2015	14K
6064	2018-051-		2624.02	No	S621	Metal	Copper or Copper Alloy			Brass Wire	1		Complete	NHHC - Pallet 5 Small Divided Tote 11	1															FALSE	01/30/2018				35	5882	KAREN	1005753.624	759815.50773	10/11/2015	14K	
6065	2018-051-		2624.03	No	S621	Glass	Unidentified			Glass Fragment	3		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Amber, Clear													FALSE	04/14/2016					5882	KAREN	1005753.624	759815.50773	10/11/2015	14K	
6066	2018-051-		2624.04	Yes	S621	Ceramic	Refined Earthenware			Historic Ceramic	2		Complete	BOX 7	2															FALSE	4/18/2016					5882	KAREN	1005753.624	759815.50773	10/11/2015	14K	
6067	2018-051-		2625.01	No	S622	Metal	Iron			Plate	1		Inventoried - Ready to Process	YB36																FALSE					5906	KAREN	1005758.504	759822.585	10/11/2015	15K		
6068	2018-051-		2625.02	No	S622	Ceramic	Coarse Earthenware			Prehistoric Ceramic	3		Complete	PX BOX 3	PX1	1 Possible Simple stamped															FALSE	12/14/2017					5907	KAREN	1005758.504	759822.585	10/11/2015	15K
6069	2018-051-		2625.03	No	S622	Metal	Copper or Copper Alloy			Nail	1		Complete	NHHC - Pallet 2 Small Divided Tote 5	1												0.3	in		FALSE	11/01/2017				18	5907	KAREN	1005758.504	759822.585	10/11/2015	15K	
6070	2018-051-		2625.04	No	S622	Metal	Iron			Bolt	1		Inventoried - Ready to Process	18WB13																FALSE					5907	KAREN	1005758.504	759822.585	10/11/2015	15K		
6071	2018-051-		2625.05	No	S622	Organic	Coal/Charcoal			Coal	2		Complete	NHHC - Pallet 6 Small Tote 23	1															FALSE	10/17/2017					5907	KAREN	1005758.504	759822.585	10/11/2015	15K	
6072	2018-051-		2626.01	No	S623	Organic	Wood			Treenail	1		Complete	C5				35.0	g		4.7	in					1.26	in			FALSE	10/24/2018					5909	KAREN	1005750.9437	759808.3886	10/11/2015	14J
6073	2018-051-		2626.02	No	S623	Metal	Lead			Lead Weight	1		Complete	NHHC - Pallet 1 Small Divided Tote 1	1															FALSE	09/05/2017					5909	KAREN	1005750.9437	759808.3886	10/11/2015	14J	
6074	2018-051-		2626.03	No	S623	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 1	PX1	Simple stamped															FALSE	3/25/2016					5909	KAREN	1005750.9437	759808.3886	10/11/2015	14J
6075	2018-051-		2626.04	No	S623	Organic	Ethnobotany			Pit/Nut	1		Complete	C5																	FALSE	7/6/2018					5909	KAREN	1005750.9437	759808.3886	10/11/2015	14J
6076	2018-051-		2627.01	No	S624	Organic	Wood			Wedges	2		Complete	C5																FALSE	10/26/2018					1377	ERICA	1005746.1426	759815.26268	10/11/2015	14K	
6077	2018-051-		2627.02	No	S624	Organic	Ethnobotany			Nut Shell	8		Complete	C5																FALSE	7/6/2018					1377	ERICA	1005746.1426	759815.26268	10/11/2015	14K	
6078	2018-051-		2627.03	No	S624	Organic	Bone			Bone	5		Complete	C5		1 cut, stained.															FALSE	7/23/2018					1377	ERICA	1005746.1426	759815.26268	10/11/2015	14K
6079	2018-051-		2627.04	No	S624	Glass	Unidentified			Glass	8		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Clear, Green/Olive														FALSE	01/16/2019					1377	ERICA	1005746.1426	759815.26268	10/11/2015	14K
6080	2018-051-		2627.05	No	S624	Metal	Copper or Copper Alloy			Brass Tack	1		Complete	NHHC - Pallet 2 Small Divided Tote 5	1						0.8	in					0.3	in			FALSE	11/01/2017				32	1378	ERICA	1005746.1426	759815.26268	10/11/2015	14K
6081	2018-051-		2627.06	No	S624	Ceramic	Coarse Earthenware			Prehistoric Ceramic	21		Complete	PX BOX 10	PX1	Cord marked, Check stamped, Complicated stamped															FALSE	10/4/2017					1379	ERICA	1005746.1426	759815.26268	10/11/2015	14K
6082	2018-051-		2627.07	No	S624	Stone	Unidentified			Stone	2		Complete	BOX 7																	FALSE	4/19/2018					1005746.1426	759815.26268	10/11/2015	14K		
6083	2018-051-		2627.08	No	S624	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Small Tote 22	1															FALSE	10/12/2017					1005746.1426	759815.26268	10/11/2015	14K			
6084	2018-051-		2628.01	No	S625	Glass	Pharmaceutical/Wine Bottle			Glass	3		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Clear, Green/Olive														FALSE	06/28/2017					1368	ERICA	1005745.7456	759821.62637	10/11/2015	14L
6085	2018-051-		2628.02	No	S625	Ceramic	Coarse Earthenware			Prehistoric Ceramic	14		Complete	PX BOX 3	PX1	5 Cord marked; 2 too faint to determine															FALSE	12/15/2017					1368	ERICA	1005745.7456	759821.62637	10/11/2015	14L
6086	2018-051-		2628.03	No	S625	Organic	Ethnobotany			Seed	1		Complete	C5				4.9	g		0.9723	in		0.897	in	0.6	in				FALSE	10/31/2018					1368	ERICA	1005745.7456	759821.62637	10/11/2015	14L
6087	2018-051-		2628.04	No	S625	Architecture	Tile			Modern Marble Tiles Frags	4		Unknown																		FALSE					1372	ERICA	1005745.7456	759821.			

Appendix C: Artifact Database

C-76
CSS Georgia Archeological Data Recovery and Mitigation

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square	
6199	2018-051-		2658.02	No	S665	Ceramic	Coarse Earthenware			Prehistoric Ceramic	3		Complete	PX BOX 10	PX1	Cord marked														FALSE	1/10/2018					1624	ERICA	1005811.9585	759857.53067	10/12/2015	21M	
6200	2018-051-		2658.03	No	S665	Composite	Lead	Wood		Enfield Bullet	2		Complete	NHHC - Pallet 5 Small' Divided Tote 15	1	Mold seam														FALSE	05/26/2017					1624	ERICA	1005811.9585	759857.53067	10/12/2015	21M	
6201	2018-051-		2658.04	No	S665	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	WB110															FALSE						1624	ERICA	1005811.9585	759857.53067	10/12/2015	21M		
6202	2018-051-		2659.01	No	S666	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 1	PX1	Cord marked														FALSE	4/22/2016					1644	ERICA	1005820.1171	759852.82651	10/12/2015	22L	
6203	2018-051-		2659.02	No	S666	Organic	Bone			Bone	2		Complete	C5															FALSE	7/23/2018					1644	ERICA	1005820.1171	759852.82651	10/12/2015	22L		
6204	2018-051-		2660.01	No	S667	Metal	Iron			Grapeshot Canister	1		Inventoried - Ready to Process	IN OWN BUCKET															FALSE						1641	ERICA	1005826.4728	759850.92578	10/12/2015	22L		
6205	2018-051-		2660.02	No	S667	Metal	Iron			Grapeshot	1		Inventoried - Ready to Process	GRAPESHOT1															FALSE						1641	ERICA	1005826.4728	759850.92578	10/12/2015	22L		
6206	2018-051-		2660.03	No	S667	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 4	PX1	1 Cord marked														FALSE	10/26/2017					1642	ERICA	1005826.4728	759853.92578	10/12/2015	22L	
6207	2018-051-		2661.01	No	S668	Metal	Iron			Grapeshot/Canister	2		Unknown																FALSE						6219	KAREN	1005823.8781	759857.13441	10/12/2015	22L		
6208	2018-051-		2661.02	No	S668	Ceramic	Coarse Earthenware			Prehistoric Ceramic	3		Complete	PX BOX 9	PX1															FALSE	4/13/2016					6220	KAREN	1005823.8781	759857.13441	10/12/2015	22L	
6209	2018-051-		2661.03	No	S668	Glass	Unidentified			Glass Fragment	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Green/Olive													FALSE	04/15/2016					6220	KAREN	1005823.8781	759857.13441	10/12/2015	22L	
6210	2018-051-		2661.04	No	S668	Metal	Copper or Copper Alloy			Strap	1		Complete	BOX 5	1															FALSE	8/7/2018					32	6220	KAREN	1005823.8781	759857.13441	10/12/2015	22L
6211	2018-051-		2662.01	No	S669	Glass	Unidentified			Stopper	1		Complete	NHHC - Pallet 6 Medium Divided Tote 10	1															FALSE	01/10/2019					6217	KAREN	1005817.0274	759862.31225	10/12/2015	22M	
6212	2018-051-		2662.02	No	S669	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1															FALSE	4/10/2018					6217	KAREN	1005817.0274	759862.31225	10/12/2015	22M	
6213	2018-051-		2663	No	S670	Metal	Lead			Shot	1		Complete	NHHC - Pallet 5 Small' Divided Tote 15	1														FALSE	05/26/2017					6238	KAREN	1005818.6447	759858.45643	10/12/2015	22M		
6214	2018-051-		2664.01	No	S671	Metal	Iron			Grapeshot	1		Inventoried - Ready to Process	IN OWN BUCKET																FALSE						6234	KAREN	1005828.7743	759853.60948	10/12/2015	23L	
6215	2018-051-		2664.02	No	S671	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 6	PX1															FALSE	3/24/2016					6233	KAREN	1005828.7743	759853.60948	10/12/2015	23L	
6216	2018-051-		2664.03	No	S671	Glass	Unidentified			Glass Fragment	2		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1															FALSE	01/14/2019					6233	KAREN	1005828.7743	759853.60948	10/12/2015	23L	
6217	2018-051-		2664.04	Yes	S671	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small' Tote 21	1															FALSE	03/24/2016					6233	KAREN	1005828.7743	759853.60948	10/12/2015	23L	
6218	2018-051-		2664.05	Yes	S671	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	C4		Buck/Hunting dog motif															FALSE	4/17/2018					6233	KAREN	1005828.7743	759853.60948	10/12/2015	23L
6219	2018-051-		2665	No	S672	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 1	PX1	1 Cord/Simple stamped															FALSE	4/15/2016					1658	ERICA	1005810.2845	759854.49269	10/12/2015	21M
6220	2018-051-		2666.01	No	S673	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Small' Tote 23	1															FALSE	10/19/2017					1660	ERICA	1005805.1213	759855.38875	10/12/2015	20M	
6221	2018-051-		2666.02	No	S673	Ceramic	Coarse Earthenware			Prehistoric Ceramic	4		Complete	PX BOX 6	PX1	1 Simple stamped, 1 incised															FALSE	3/15/2016					1660	ERICA	1005805.1213	759855.38875	10/12/2015	20M
6222	2018-051-		2666.03	No	S673	Metal	Iron			Chain Link	1		Inventoried - Ready to Process	18WB12																FALSE						1660	ERICA	1005805.1213	759855.38875	10/12/2015	20M	
6223	2018-051-		2667	No	S674	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 8	PX1																FALSE	5/9/2018					1675	ERICA	1005814.9365	759855.3308	10/12/2015	21M
6224	2018-051-		2668.01	Yes	S675	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small' Tote 12	1															FALSE	10/03/2017					1679	ERICA	1005834.2628	759859.0521	10/12/2015	23L	
6225	2018-051-		2668.02	No	S675	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 2	PX1	Simple stamped															FALSE	10/26/2017					1679	ERICA	1005834.2628	759859.0521	10/12/2015	23L
6226	2018-051-		2668.03	No	S675	Organic	Coal/Charcoal			Coal	1		Inventoried - Ready to Process	WB150																FALSE						1679	ERICA	1005834.2628	759859.0521	10/12/2015	23L	
6227	2018-051-		2669.01	No	S676	Metal	Iron			Grapeshot	1		Inventoried - Ready to Process	GRAPESHOT1																FALSE						6252	KAREN	1005826.5651	759863.62994	10/12/2015	23M	
6228	2018-051-		2669.02	No	S676	Ceramic	Coarse Earthenware			Prehistoric Ceramic	3		Complete	PX BOX 1	PX1																FALSE	1/4/2019					6252	KAREN	1005826.5651	759863.62994	10/12/2015	23M
6229	2018-051-		2669.03	No	S676	Organic	Coal/Charcoal			Coal	2		Complete	NHHC - Pallet 1 Small' Divided Tote 2	1															FALSE	10/19/2017					6252	KAREN	1005826.5651	759863.62994	10/12/2015	23M	
6230	2018-051-		2670.01	No	S678	Metal	Lead			Lead Rod	1		Complete	NHHC - Pallet 1 Small' Divided Tote 2	1															FALSE	09/05/2017					6250	KAREN	1005821.6406	759863.70797	10/12/2015	22M	
6231	2018-051-		2670.02	No	S678	Metal	Iron			Grapeshot	1		Inventoried - Ready to Process	GRAPESHOT1																FALSE						6250	KAREN	1005821.6406	759863.70797	10/12/2015	22M	
6232	2018-051-		2670.03	No	S678	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 1	PX1																FALSE	4/18/2016					6250	KAREN	1005821.6406	759863.70797	10/12/2015	22M
6233	2018-051-		2670.04	No	S678	Glass	Unidentified			Glass Fragment	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Green/Olive														FALSE	04/15/2016					6250	KAREN	1005821.6406	759863.70797	10/12/2015	22M
6234	2018-051-		2671	No	S680	Architecture	Concrete			Concrete Or Mortar?	2		Inventoried - Ready to Process	WB72																FALSE						6264	KAREN	1005835.9342	759853.22738	10/12/2015	23L	
6235	2018-051-		2672	No	S681	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 1	PX1																FALSE	4/22/2016					6266	KAREN	1005832.8258	759858.38006	10/12/2015	23L
6236	2018-051-		2673.01	No	S682	Ceramic	Coarse Earthenware			Prehistoric Ceramic	4		Complete	PX BOX 2	PX1	Simple stamped															FALSE	10/3/2017					1696	ERICA	1005831.7496	759866.83719	10/12/2015	23M
6237	2018-051-		2673.02	No	S682	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Green/Olive													FALSE	09/27/2017					1696	ERICA	1005831.7496	759866.83719	10/12/2015	23M	
6238	2018-051-		2674.01	No	S683	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Small' Tote 23	1															FALSE	10/19/2017					1694	ERICA	1005842.2411	759858.8758	10/12/2015	24L	
6239	2018-051-		2674.02	No	S683	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1	Cord marked															FALSE	12/15/2017					1694	ERICA	1005842.2411	759858.8758	10/12/2015	24L
6240	2018-051-		2675.01	No	S685	Glass	Unidentified			Glass	3		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear, Green/Olive														FALSE	01/14/2019					1708	ERICA	1005846.6549	759866.5717	10/12/2015	25M
6241	2018-051-		2675.02	No	S685	Organic	Coal/Charcoal																																			

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6276	2018-051-		2680.09	No	S691	Organic	Unidentified			Slag	1		Inventoried - Ready to Process	18WB14																FALSE						1720	ERICA	1005770.4142	759832.16734	10/12/2015	16L	
6277	2018-051-		2680.10	No	S691	Metal	Iron			Iron Fragment	2		Inventoried - Ready to Process	WB50																FALSE						1720	ERICA	1005770.4142	759832.16734	10/12/2015	16L	
6278	2018-051-		2681.01	No	S693	Metal	Lead			Lead Patch	1		Complete	NHHC - Pallet 6 Medium Divided Tote 4	1															FALSE	09/07/2017					1734	ERICA	1005777.0223	759846.38626	10/12/2015	18M	
6279	2018-051-		2681.02	No	S693	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1	Cord marked														FALSE	10/26/2017					1734	ERICA	1005777.0223	759846.38626	10/12/2015	18M	
6280	2018-051-		2681.03	No	S693	Glass	Modern Bottle	Pharmaceutical		Glass	3		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1	"15"	Amber, Light Blue													FALSE	06/28/2017					1734	ERICA	1005777.0223	759846.38626	10/12/2015	18M	
6281	2018-051-		2681.04	No	S693	Metal	Iron			Iron Nails	2		Inventoried - Ready to Process	18WB10																FALSE						1734	ERICA	1005777.0223	759846.38626	10/12/2015	18M	
6282	2018-051-		2681.05	No	S693	Organic	Coal/Charcoal			Coal	6		Inventoried - Ready to Process	WB150																FALSE						1734	ERICA	1005777.0223	759846.38626	10/12/2015	18M	
6283	2018-051-		2681.06	Yes	S693	Ceramic	Pearlware			Historic Ceramic	1		Complete	BOX 1	2	Transfer print (?) farm scene with sheep														FALSE	4/17/2018					1734	ERICA	1005777.0223	759846.38626	10/12/2015	18M	
6284	2018-051-		2682.01	No	S694	Metal	Copper or Copper Alloy			Tack and Fragment	2		Complete	BOX 5	2															FALSE	5/30/2018				21	1739	ERICA	1005749.8686	759833.98484	10/12/2015	15M	
6285	2018-051-		2682.02	No	S694	Glass	Pane Glass/Unidentified			Glass	3		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Clear, Green/Olive													FALSE	06/28/2017					1739	ERICA	1005749.8686	759833.98484	10/12/2015	15M	
6286	2018-051-		2682.03	No	S694	Ceramic	Coarse Earthenware			Prehistoric Ceramic	7		Complete	PX BOX 2	PX1															FALSE	11/7/2017					1739	ERICA	1005749.8686	759833.98484	10/12/2015	15M	
6287	2018-051-		2682.04	No	S694	Metal	Iron			Iron Nail	2		Inventoried - Ready to Process	18WB10																FALSE						1739	ERICA	1005749.8686	759833.98484	10/12/2015	15M	
6288	2018-051-		2682.05	No	S694	Metal	Lead			Shot	1		Complete	NHHC - Pallet 5 Small Divided Tote 15	1															FALSE	05/26/2017					1739	ERICA	1005749.8686	759833.98484	10/12/2015	15M	
6289	2018-051-		2682.06	No	S694	Organic	Unidentified			Possible Bone Or Wood	1		Inventoried - Ready to Process	WB151																FALSE						1739	ERICA	1005749.8686	759833.98484	10/12/2015	15M	
6290	2018-051-		2682.07	No	S694	Organic	Coal/Charcoal			Coal	7		Inventoried - Ready to Process	WB150																FALSE						1739	ERICA	1005749.8686	759833.98484	10/12/2015	15M	
6291	2018-051-		2682.08	No	S694	Architecture	Mortar			Mortar	2		Complete	NHHC - Pallet 4 Small Tote 7	1															FALSE	11/07/2017					1739	ERICA	1005749.8686	759833.98484	10/12/2015	15M	
6292	2018-051-		2683.01	No	S695	Ceramic	Coarse Earthenware			Prehistoric Ceramic	12		Complete	PX BOX 12	PX1	3 Cord marked (1 rim?); 1 Check stamped															FALSE	8/21/2018					6310	KAREN	1005763.575	759833.24223	10/12/2015	16L
6293	2018-051-		2683.02	No	S695	Metal	Lead			Lead Bullets	2		Complete	NHHC - Pallet 1 Small Divided Tote 3	1															FALSE	06/26/2017					6310	KAREN	1005763.575	759833.24223	10/12/2015	16L	
6294	2018-051-		2683.03	No	S695	Metal	Iron			Nail And Square Washer/Fastener	2		Inventoried - Ready to Process	18WB10																FALSE						6310	KAREN	1005763.575	759833.24223	10/12/2015	16L	
6295	2018-051-		2683.04	No	S695	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Small Tote 23	1															FALSE	10/19/2017					6310	KAREN	1005763.575	759833.24223	10/12/2015	16L	
6296	2018-051-		2683.05	No	S695	Architecture	Mortar			Mortar	1		Complete	C7																FALSE	6/14/2018					6310	KAREN	1005763.575	759833.24223	10/12/2015	16L	
6297	2018-051-		2684.01	No	S696	Ceramic	Coarse Earthenware			Prehistoric Ceramic	7		Complete	PX BOX 3	PX1	2 Cord/Simple stamped															FALSE	3/25/2016					6308	KAREN	1005755.7251	759833.68251	10/12/2015	15M
6298	2018-051-		2684.02	No	S696	Metal	Lead			Maynard Bullet, Enfield Bullet	2		Complete	NHHC - Pallet 5 Small Divided Tote 15	1	Mold seam on Enfield														FALSE	05/26/2017					6308	KAREN	1005755.7251	759833.68251	10/12/2015	15M	
6299	2018-051-		2684.03	No	S696	Organic	Coal/Charcoal			Coal	3		Complete	C7																FALSE	6/14/2018					6308	KAREN	1005755.7251	759833.68251	10/12/2015	15M	
6300	2018-051-		2684.04	No	S696	Glass	Unidentified			Glass Neck	1		Complete	NHHC - Pallet 6 Medium Divided Tote 10	1															FALSE	01/10/2019					6308	KAREN	1005755.7251	759833.68251	10/12/2015	15M	
6301	2018-051-		2684.05	Yes	S696	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1	"AENCI"														FALSE	04/18/2016					6308	KAREN	1005755.7251	759833.68251	10/12/2015	15M	
6302	2018-051-		2684.06	No	S696	Metal	Pewter			Pewter Syringe	1		Complete	C4																FALSE	7/6/2018					80	6308	KAREN	1005755.7251	759833.68251	10/12/2015	15M
6303	2018-051-		2684.07	No	S696	Metal	Iron			Nail	1		Inventoried - Ready to Process	18WB10																FALSE						6308	KAREN	1005755.7251	759833.68251	10/12/2015	15M	
6304	2018-051-		2685.01	No	S697	Organic	Bone			Bone	1		Complete	C5																FALSE	7/23/2018					6322	KAREN	1005782.4208	759844.96755	10/12/2015	18M	
6305	2018-051-		2685.02	No	S697	Organic	Coal/Charcoal			Coal	3		Complete	NHHC - Pallet 6 Small Tote 23	1															FALSE	10/17/2017					6322	KAREN	1005782.4208	759844.96755	10/12/2015	18M	
6306	2018-051-		2685.03	No	S697	Ceramic	Coarse Earthenware			Prehistoric Ceramic	4		Complete	PX BOX 6	PX1															FALSE	3/24/2016					6322	KAREN	1005782.4208	759844.96755	10/12/2015	18M	
6307	2018-051-		2686.01	No	S698	Glass	Unidentified			Glass Fragment	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Green/Olive													FALSE	06/22/2016					6326	KAREN	1005777.3411	759832.07815	10/12/2015	17L	
6308	2018-051-		2686.02	No	S698	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 9	PX1	1 Cord marked														FALSE	4/13/2016					6326-6327	KAREN	1005777.3411	759832.07815	10/12/2015	17L	
6309	2018-051-		2686.03	Yes	S698	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 21	1															FALSE	03/15/2016					6327	KAREN	1005777.3411	759832.07815	10/12/2015	17L	
6310	2018-051-		2687.01	No	S699	Ceramic	Coarse Earthenware			Prehistoric Ceramic	9		Complete	PX BOX 9	PX1	4 Cord marked, 1 Check stamped, 2 Simple stamped															FALSE	7/11/2018					1757	ERICA	1005747.083	759828.46837	10/12/2015	14L
6311	2018-051-		2687.02	No	S699	Metal	Iron			Iron Fragment	1		Inventoried - Ready to Process	18WB10																FALSE						1757	ERICA	1005747.083	759828.46837	10/12/2015	14L	
6312	2018-051-		2687.03	No	S699	Organic	Bone			Bone	1		Complete	C5				5 g	1.569	in	1.020	in		0.534	in					FALSE	10/25/2018					1757	ERICA	1005747.083	759828.46837	10/12/2015	14L	
6313	2018-051-		2687.04	No	S699	Metal	Iron			Metal Fragment	1		Inventoried - Ready to Process	18WB14																FALSE						1757	ERICA	1005747.083	759828.46837	10/12/2015	14L	
6314	2018-051-		2688.01	No	S700	Ceramic	Coarse Earthenware			Prehistoric Ceramic	10		Complete	PX BOX 2	PX1	1 Cord marked, 2 Simple stamped														FALSE	10/4/2017					1753	ERICA	1005752.1827	759827.37467	10/12/2015	15L	
6315	2018-051-		2688.02	No	S700	Metal	Iron			Iron Nail	1		Inventoried - Ready to Process	WB50																FALSE						1753	ERICA	1005752.1827	759827.37467	10/12/2015	15L	
6316	2018-051-		2688.03	No	S700	Organic	Bone			Bone	1		Complete	C5				10.7 g	2.403	in	0.783	in		0.397	in					FALSE	10/26/2018					1753	ERICA	1005752.1827	759827.37467	10/12/2015	15L	
6317	2018-051-		2688.04	No	S700	Glass	Unidentified			Glass	4		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Clear, Green/Olive													FALSE	01/16/2019							1005752.1827	759827.37467	10/12/2015	15L	
6318	2018-051-		2689.01	No	S701																																					

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square
6416	2018-051-		2700.02	No	S712	Glass	Unidentified			Glass	4		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear, Amber, Green/Olive													FALSE	06/22/2016					6407	KAREN	1005723.0727	759832.93541	10/13/2015	North
6417	2018-051-		2700.03	Yes	S712	Ceramic	Refined Earthenware			Historic Ceramic	5		Complete	NHHC - Pallet 4 Small Tote 21	1	Partial Edwards & Sons makers mark														FALSE	03/23/2016					6406-6407	KAREN	1005723.0727	759832.93541	10/13/2015	North
6418	2018-051-		2700.04	No	S712	Ceramic	Coarse Earthenware			Prehistoric Ceramic	30		Complete	PX BOX 3	PX1	9 Too faint to determine pattern; 3 Cord marked; 2 Check stamped														FALSE	12/15/2017					6406	KAREN	1005723.0727	759832.93541	10/13/2015	North
6419	2018-051-		2700.05	No	S712	Metal	Brooke Cannon Muzzle Fragment			Iron	1		Complete	NHHC - Large Tote 14	1															FALSE	11/28/2016				35	6408	KAREN	1005723.0727	759832.93541	10/13/2015	North
6420	2018-051-		2700.06	No	S712	Metal	Copper or Copper Alloy			Copper Scrap	1		Inventoried - Ready to Process	Brass chem bucket															FALSE						6407	KAREN	1005723.0727	759832.93541	10/13/2015	North	
6421	2018-051-		2700.07	No	S712	Metal	Iron			Partial Iron Ring	1		Inventoried - Ready to Process	18WB10															FALSE						6407	KAREN	1005723.0727	759832.93541	10/13/2015	North	
6422	2018-051-		2700.08	No	S712	Metal	Pewter			Spoon	3		Complete	NHHC - Pallet 6 Medium Divided Tote 4	1														FALSE	03/12/2018		10/31/2016		35	6407	KAREN	1005723.0727	759832.93541	10/13/2015	North	
6423	2018-051-		2700.09	No	S712	Organic	Bone			Bone	1		Complete	C5				0.592 g		4.61 in		1.456 in		0.592 in					FALSE	3/6/2019					6407	KAREN	1005723.0727	759832.93541	10/13/2015	North	
6424	2018-051-		2700.10	No	S712	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Small Tote 22	1														FALSE	12/14/2017					6407	KAREN	1005723.0727	759832.93541	10/13/2015	North	
6425	2018-051-		2700.11	No	S712	Stone	Natural Stone			Chipped Stone	2		Complete	BOX 7	2														FALSE	4/19/2018					6407	KAREN	1005723.0727	759832.93541	10/13/2015	North	
6426	2018-051-		2700.12	No	S712	Architecture	Mortar			Mortar	1		Complete	NHHC - Pallet 4 Small Tote 7	1														FALSE	12/14/2017					6406	KAREN	1005723.0727	759832.93541	10/13/2015	North	
6427	2018-051-		2700.13	No	S712	Stone	Unidentified			Stone	1		Complete	NHHC - Pallet 4 Small Tote 17	1														FALSE	12/14/2017					6407	KAREN	1005723.0727	759832.93541	10/13/2015	North	
6428	2018-051-		2700.14	No	S712	Stone	Chipped Stone			Worked Stone	1		Complete	PX BOX 13	PX1														FALSE	4/19/2018											
6429	2018-051-		2701.01	No	S713	Glass	Pane Glass/Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 14	1		Clear, Green/Olive													FALSE	01/03/2019					6439	KAREN	1005759.3165	759847.6062	10/13/2015	North
6430	2018-051-		2701.02	No	S713	Metal	Iron			Nails	3		Inventoried - Ready to Process	18WB14															FALSE						6439	KAREN	1005759.3165	759847.6062	10/13/2015	North	
6431	2018-051-		2701.03	No	S713	Ceramic	Coarse Earthenware			Prehistoric Ceramic	5		Complete	PX BOX 2	PX1	1 Check stamped														FALSE	10/26/2017					6439	KAREN	1005759.3165	759847.6062	10/13/2015	North
6432	2018-051-		2701.04	No	S713	Metal	Pewter			Button	1		Did Not Survive	DNS															FALSE						6439	KAREN	1005759.3165	759847.6062	10/13/2015	North	
6433	2018-051-		2701.05	No	S713	Organic	Ethnobotany			Pit/Seed/Nut	1		Complete	C5															FALSE	7/6/2018					6439	KAREN	1005759.3165	759847.6062	10/13/2015	North	
6434	2018-051-		2701.06	No	S713	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Small Tote 23	1														FALSE	10/18/2017					6439	KAREN	1005759.3165	759847.6062	10/13/2015	North	
6435	2018-051-		2702.01	No	S714	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Medium Divided Tote 12	1														FALSE	10/18/2017					6435	KAREN	1005767.1396	759846.60761	10/13/2015	17M	
6436	2018-051-		2702.02	No	S714	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1														FALSE	12/14/2017					6435	KAREN	1005767.1396	759846.60761	10/13/2015	17M	
6437	2018-051-		2703	No	S715	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 1	PX1	1 Simple stamped														FALSE	4/22/2016					1814	ERICA	1005777.1118	759853.28042	10/13/2015	North
6438	2018-051-		2704.01	No	S716	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 3	PX1														FALSE	12/14/2017					1818	ERICA	1005789.4934	759852.65938	10/13/2015	19M	
6439	2018-051-		2704.02	No	S716	Organic	Coal/Charcoal			Coal	3		Complete	C7															FALSE	6/14/2018					1818	ERICA	1005789.4934	759852.65938	10/13/2015	19M	
6440	2018-051-		2704.03	No	S716	Metal	Copper or Copper Alloy			Copper Fragment	1		Complete	BOX 5	2														FALSE	6/13/2018				35	1818	ERICA	1005789.4934	759852.65938	10/13/2015	19M	
6441	2018-051-		2705.01	No	S717	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear, Green/Olive												FALSE	01/10/2019					1830	ERICA	1005756.5045	759843.57117	10/13/2015	15M	
6442	2018-051-		2705.02	No	S717	Ceramic	Coarse Earthenware			Prehistoric Ceramic	3		Complete	PX BOX 1	PX1														FALSE	3/25/2016					1830	ERICA	1005756.5045	759843.57117	10/13/2015	15M	
6443	2018-051-		2705.03	No	S717	Metal	Lead			Shot	1		Complete	DISPLAY, HELEN'S OFFICE															FALSE	5/24/2017					1830	ERICA	1005756.5045	759843.57117	10/13/2015	15M	
6444	2018-051-		2705.04	No	S717	Organic	Coal/Charcoal			Coal	1		Inventoried - Ready to Process	WB150															FALSE						1830	ERICA	1005756.5045	759843.57117	10/13/2015	15M	
6445	2018-051-		2705.05	No	S717	Metal	Iron			Iron Nail	2		Inventoried - Ready to Process	18WB14(COUNT=1); 18WB10(COUNT=1)															FALSE						1830	ERICA	1005756.5045	759843.57117	10/13/2015	15M	
6446	2018-051-		2706.01	No	S718	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 8	PX1														FALSE	5/9/2018					1836	ERICA	1005750.2082	759843.01069	10/13/2015	North	
6447	2018-051-		2706.02	No	S718	Organic	Coal/Charcoal			Coal	1		Inventoried - Ready to Process	WB150															FALSE						1836	ERICA	1005750.2082	759843.01069	10/13/2015	North	
6448	2018-051-		2707.01	No	S719	Organic	Coal/Charcoal			Coal	6		Complete	C7															FALSE	6/27/2018					6456	KAREN	1005743.1666	759841.55589	10/13/2015	North	
6449	2018-051-		2707.02	No	S719	Organic	Bone			Bone	3		Complete	C5															FALSE	7/24/2018					6456	KAREN	1005743.1666	759841.55589	10/13/2015	North	
6450	2018-051-		2707.03	No	S719	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Amber												FALSE	01/17/2018					6456	KAREN	1005743.1666	759841.55589	10/13/2015	North	
6451	2018-051-		2707.04	No	S719	Metal	Copper or Copper Alloy			Copper Wire	1		Inventoried - Ready to Process	Brass chem bucket															FALSE						6456	KAREN	1005743.1666	759841.55589	10/13/2015	North	
6452	2018-051-		2707.05	No	S719	Ceramic	Coarse Earthenware			Prehistoric Ceramic	3		Complete	PX BOX 4	PX1														FALSE	12/15/2017					6456	KAREN	1005743.1666	759841.55589	10/13/2015	North	
6453	2018-051-		2708.01	Yes	S720	Ceramic	Refined Earthenware			Historic Ceramic	3		Complete	BOX 1	2															FALSE	7/10/2018					6454, 6459	KAREN	1005738.77	759841.37703	10/13/2015	North
6454	2018-051-		2708.02	No	S720	Organic	Coal/Charcoal			Coal	9		Complete	NHHC - Pallet 6 Small Tote 22	1														FALSE	04/12/2018					6454, 6459	KAREN	1005738.77	759841.37703	10/13/2015	North	
6455	2018-051-		2708.03	No	S720	Glass	Pane Glass/Unidentified			Glass	4		Complete	NHHC - Pallet 6 Medium Divided Tote 14	1		Amber, Clear												FALSE	06/12/2017					6454	KAREN	1005738.77	759841.37703	10/13/2015	North	
6456	2018-051-		2708.04	No	S720	Ceramic	Coarse Earthenware			Prehistoric Ceramic	5		Complete	PX BOX 12	PX1	2 Cord marked		79.0 g		2.22 in		1.47 in		0.41 in					FALSE	9/25/2018					6454, 6459	KAREN	1005738.77	759841.37703	10/13/2015	North	
6457	2018-051-		2708.05	No	S720	Organic	Bone			Bone	1		Complete	C5															FALSE	7/23/2018					6459	KAREN	1005738.77	759841.37703	10/13/2015	North	
6458	2018-051-		2708.06	No	S720	Architecture	Mortar			Mortar	2		Complete	NHHC - Pallet 4 Small Tote 7	1														FALSE	11/14/2017					6459	KAREN	1005738.77	759841.37703	10/13/2015	North	

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square	
6495	2018-051-		2714.04	No	S726	Metal	Iron			Iron Yoke?	1		Complete	PR-S6				12.38	kg	22	in	6.025	in	2.04	in					FALSE	2/22/2019					35	1877	ERICA	1005706.7418	759819.33346	10/13/2015	10M
6496	2018-051-		2714.05	No	S726	Stone	Stone Tool			Projectile Point/Knife	1		Complete	PX BOX 13	PX1															FALSE	4/19/2018					1883	ERICA	1005706.7418	759819.33346	10/13/2015	10M	
6497	2018-051-		2714.06	No	S726	Metal	Iron			Iron Nails And Screw	3		Inventoried - Ready to Process	18WB10															FALSE						1882	ERICA	1005706.7418	759819.33346	10/13/2015	10M		
6498	2018-051-		2714.07	No	S726	Metal	Iron			Screw	1		Deaccessioned	DA															FALSE						1883	ERICA	1005706.7418	759819.33346	10/13/2015	10M		
6499	2018-051-		2714.08	No	S726	Organic	Bone			Bone	3		Inventoried - Ready to Process	WB151															FALSE						1882	ERICA	1005706.7418	759819.33346	10/13/2015	10M		
6500	2018-051-		2714.09	No	S726	Metal	Copper or Copper Alloy			Copper Fragment	1		Complete	BOX 5	2														FALSE	5/1/2018						1883	ERICA	1005706.7418	759819.33346	10/13/2015	10M	
6501	2018-051-		2714.10	No	S726	Metal	Iron			Iron Nut?	1		Inventoried - Ready to Process	Needs X-ray												1 in			FALSE							1883	ERICA	1005706.7418	759819.33346	10/13/2015	10M	
6502	2018-051-		2714.11	Yes	S726	Ceramic	Refined Earthenware			Historic Ceramic			Complete	NHHC - Pallet 4 Small Tote 12	1		Clear, Green/Olive													FALSE	12/15/2017						1882	ERICA	1005706.7418	759819.33346	10/13/2015	10M
6503	2018-051-		2715.01	No	S727	Ceramic	Coarse Earthenware			Prehistoric Ceramic	4		Complete	PX BOX 3	PX1															FALSE	10/3/2017						6486	KAREN	1005710.1555	759819.33756	10/13/2015	10M
6504	2018-051-		2715.02	No	S727	Metal	Iron			Nail	1		Inventoried - Ready to Process	18WB10															FALSE							6486	KAREN	1005710.1555	759819.33756	10/13/2015	10M	
6505	2018-051-		2715.03	No	S727	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Green/Olive												FALSE	09/27/2017						6486	KAREN	1005710.1555	759819.33756	10/13/2015	10M	
6506	2018-051-		2715.04	No	S727	Metal	Copper or Copper Alloy			Copper Strap	1		Inventoried - Ready to Process	Brass chem bucket																FALSE						6486	KAREN	1005710.1555	759819.33756	10/13/2015	10M	
6507	2018-051-		2716.01	No	S728	Ceramic	Coarse Earthenware			Prehistoric Ceramic	11		Complete	PX BOX 4	PX1	Cord marked, faint markings														FALSE	12/15/2017						6482	KAREN	1005714.6046	759820.7315	10/13/2015	11M
6508	2018-051-		2716.02	No	S728	Organic	Coal/Charcoal			Coal	2		Complete	NHHC - Pallet 6 Small Tote 22	1														FALSE	03/07/2018						6482	KAREN	1005714.6046	759820.7315	10/13/2015	11M	
6509	2018-051-		2716.03	No	S728	Metal	Iron			Nail	1		Inventoried - Ready to Process	18WB10															FALSE							6482	KAREN	1005714.6046	759820.7315	10/13/2015	11M	
6510	2018-051-		2717.01	No	S730	Ceramic	Coarse Earthenware			Prehistoric Ceramic	4		Complete	PX BOX 2	PX1	1 Check stamped, 1 Cord marked														FALSE	10/26/2017						6508	KAREN	1005751.823	759833.31205	10/13/2015	15M
6511	2018-051-		2717.02	Yes	S730	Ceramic	Whiteware			Historic Ceramic	1		Complete	BOX 1	2															FALSE	5/9/2018						6508	KAREN	1005751.823	759833.31205	10/13/2015	15M
6512	2018-051-		2717.03	No	S730	Metal	Lead			Bullet?	1		Complete	NHHC - Pallet 5 Small Divided Tote 15	1														FALSE	05/25/2017						6508	KAREN	1005751.823	759833.31205	10/13/2015	15M	
6513	2018-051-		2717.04	No	S730	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Small Tote 22	1														FALSE	01/11/2018						6508	KAREN	1005751.823	759833.31205	10/13/2015	15M	
6514	2018-051-		2718.01	No	S731	Ceramic	Coarse Earthenware			Prehistoric Ceramic	6		Complete	PX BOX 11	PX1														FALSE	1/11/2018						6511	KAREN	1005759.5831	759835.10288	10/13/2015	15M	
6515	2018-051-		2718.02	No	S731	Metal	Iron			Half-Rail	1		Inventoried - Ready to Process	Rolloff 1							37	in							FALSE						6510	KAREN	1005759.5831	759835.10288	10/13/2015	15M		
6516	2018-051-		2718.03	No	S731	Metal	Copper or Copper Alloy			Curved Strap with Hole	1		Complete	NHHC - Pallet 5 Small Divided Tote 8	1														FALSE	11/01/2017						32	6511	KAREN	1005759.5831	759835.10288	10/13/2015	15M
6517	2018-051-		2718.04	No	S731	Organic	Coal/Charcoal			Coal	3		Complete	NHHC - Pallet 6 Small Tote 22	1														FALSE	04/12/2018						6511	KAREN	1005759.5831	759835.10288	10/13/2015	15M	
6518	2018-051-		2719.01	No	S732	Metal	Iron			Nail	1		Inventoried - Ready to Process	18WB14															FALSE							6515	KAREN	1005756.8573	759838.25739	10/13/2015	15M	
6519	2018-051-		2719.02	No	S732	Architecture	Mortar			Mortar	1		Complete	NHHC - Pallet 4 Small Tote 7	1														FALSE	12/15/2017						6515	KAREN	1005756.8573	759838.25739	10/13/2015	15M	
6520	2018-051-		2720.01	No	S733	Ceramic	Coarse Earthenware			Prehistoric Ceramic	3		Complete	PX BOX 6	PX1	2 have faint Simple stamped or Cord marked patterns														FALSE	3/22/2018						1906	ERICA	1005761.5751	759826.95108	10/13/2015	15L
6521	2018-051-		2720.02	No	S733	Composite	Lead	Copper or Copper Alloy		Lead Weight With Brass Wire	1		Complete	NHHC - Pallet 1 Small Divided Tote 1	1	* stamped on both sides														FALSE	09/06/2017						1908	ERICA	1005761.5751	759826.95108	10/13/2015	15L
6522	2018-051-		2720.03	No	S733	Organic	Coal/Charcoal			Coal	2		Inventoried - Ready to Process	WB150															FALSE							1906	ERICA	1005761.5751	759826.95108	10/13/2015	15L	
6523	2018-051-		2720.04	No	S733	Metal	Iron			Iron Nail	1		Inventoried - Ready to Process	18WB10															FALSE							1906	ERICA	1005761.5751	759826.95108	10/13/2015	15L	
6524	2018-051-		2721	No	S734	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 10	PX1	1 Simple stamped														FALSE	4/13/2016						1901	ERICA	1005760.7081	759831.24173	10/13/2015	15L
6525	2018-051-		2722.01	No	S735	Organic	Ethnobotany			Pit/Seed/Nut	1		Complete	C5				2	g	1.003	in	0.781	in	0.446	in				FALSE	10/31/2018						6529	KAREN	1005745.8462	759842.66809	10/13/2015	North	
6526	2018-051-		2722.02	No	S735	Glass	Unidentified			Glass Fragment	1		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Clear/Light Blue												FALSE	01/16/2019						6529	KAREN	1005745.8462	759842.66809	10/13/2015	North	
6527	2018-051-		2722.03	No	S735	Metal	Copper or Copper Alloy			Brass Sheathing	1		Inventoried - Ready to Process	Brass chem bucket																FALSE						6529	KAREN	1005745.8462	759842.66809	10/13/2015	North	
6528	2018-051-		2722.04	No	S735	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1														FALSE	12/14/2017						6529	KAREN	1005745.8462	759842.66809	10/13/2015	North	
6529	2018-051-		2723.01	No	S739	Ceramic	Coarse Earthenware			Prehistoric Ceramic	4		Complete	PX BOX 3	PX1	1 Simple stamped, 2 Cord marked														FALSE	12/14/2017						1922	ERICA	1005779.7328	759832.49791	10/13/2015	17L
6530	2018-051-		2723.02	No	S739	Metal	Lead			Shot	1		Complete	NHHC - Pallet 5 Small Divided Tote 15	1														FALSE	05/26/2017						1923	ERICA	1005779.7328	759832.49791	10/13/2015	17L	
6531	2018-051-		2723.03	No	S739	Metal	Lead			Lead Rod	1		Complete	NHHC - Pallet 1 Small Divided Tote 2	1	Seam?													FALSE	09/06/2017						1923	ERICA	1005779.7328	759832.49791	10/13/2015	17L	
6532	2018-051-		2724.01	No	S740	Metal	Iron			Iron Nail, Chain Link	4		Inventoried - Ready to Process	18WB14															FALSE	09/06/2017						1925	ERICA	1005779.1065	759841.84617	10/13/2015	18M	
6533	2018-051-		2724.02	No	S740	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 2	PX1														FALSE	10/26/2017						1925	ERICA	1005779.1065	759841.84617	10/13/2015	18M	
6534	2018-051-		2724.03	No	S740	Glass	Pane Glass/Wine Bottle			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 14	1		Clear, Green/Olive												FALSE	06/12/2017						1925	ERICA	1005779.1065	759841.84617	10/13/2015	18M	
6535	2018-051-		2724.04	No	S740	Organic	Coal/Charcoal			Coal	2		Complete	NHHC - Pallet 6 Small Tote 23	1														FALSE	10/19/2017						1925	ERICA	1005779.1065	759841.84617	10/13/2015	18M	
6536	2018-051-		2724.05	No	S740	Organic	Bone			Bone	4		Complete	C5				39.3	g	1.794	in	1.18	in	0.696	in				FALSE	3/6/2019						1925	ERICA	1005779.1065	759841.84617	10/13/2015	18M	
6537																																										

Appendix C: Artifact Database																																										
Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square	
6573	2018-051-		2741.02	No	S770	Glass	Unidentified			Glass Fragment	2		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Clear, Green/Olive													FALSE	01/6/2019					6627	KAREN	1005707.0338	759816.61217	10/13/2015	10M	
6574	2018-051-		2741.03	Yes	S770	Ceramic	Refined Earthenware			Historic Ceramic	1		Inventoried - Ready to Process	WB101																FALSE						6627	KAREN	1005707.0338	759816.61217	10/13/2015	10M	
6575	2018-051-		2741.04	No	S770	Organic	Coal/Charcoal			Coal/Charcoal	2		Complete	C7																FALSE	6/14/2018					6627	KAREN	1005707.0338	759816.61217	10/13/2015	10M	
6576	2018-051-		2741.05	No	S770	Organic	Bone			Bone	1		Complete	C5																FALSE	7/23/2018					6627	KAREN	1005707.0338	759816.61217	10/13/2015	10M	
6577	2018-051-		2742.01	No	S772	Metal	Iron			Hawse Pipe Section	1	Fragment(s) of a single artifact	Complete	PR-S8						42.75	in	18.45	in	2.8	in					FALSE	2/18/2019				35	6646	KAREN	1005715.9487	759839.09504	10/13/2015	North	
6578	2018-051-		2742.02	No	S772	Ceramic	Coarse Earthenware			Prehistoric Ceramic	49		Complete	PX BOX 5	PX1	1 Check stamped; 9 Cord marked; 10 Simple stamped														FALSE	4/13/2016					6641-6647	KAREN	1005715.9487	759839.09504	10/13/2015	North	
6579	2018-051-		2742.03	No	S772	Organic	Bone			Bone	4		Complete	C5																FALSE	7/24/2018					6648	KAREN	1005715.9487	759839.09504	10/13/2015	North	
6580	2018-051-		2742.04	No	S772	Glass	Unidentified			Bottle Base and Fragments	5		Complete	BOX 4	2		Green/Olive, Light Blue, Amber, Clear	53	g	3.34	in	1.72	in	0.16	in					FALSE	9/19/2018					6648	KAREN	1005715.9487	759839.09504	10/13/2015	North	
6581	2018-051-		2742.05	No	S772	Organic	Wood			Bucket Handle and Treenail?	2		Complete	C5				83.6	g	4.820	in					1.354	in			FALSE	10/30/2018					6648	KAREN	1005715.9487	759839.09504	10/13/2015	North	
6582	2018-051-		2742.06	No	S772	Organic	Wood			Treenail?	1		Deaccessioned	DA																FALSE						6648	KAREN	1005715.9487	759839.09504	10/13/2015	North	
6583	2018-051-		2742.07	No	S772	Glass	Unidentified			Glass Fragments	4		Deaccessioned	DA			Green/Olive, Amber, Clear													FALSE						6648	KAREN	1005715.9487	759839.09504	10/13/2015	North	
6584	2018-051-		2742.08	No	S772	Stone	Slate			Slate	5		Complete	BOX 7	2															FALSE	4/19/2018					6648	KAREN	1005715.9487	759839.09504	10/13/2015	North	
6585	2018-051-		2742.09	No	S772	Organic	Coal/Charcoal			Coal	2		Complete	NHHC - Pallet 6 Small Tote 23	1															FALSE						6648	KAREN	1005715.9487	759839.09504	10/13/2015	North	
6586	2018-051-		2742.10	No	S772	Stone	Stone Tool			Projectile Point	1		Complete	PX BOX 13	PX1															FALSE	7/11/2018					6648	KAREN	1005715.9487	759839.09504	10/13/2015	North	
6587	2018-051-		2742.11	Yes	S772	Ceramic	Stoneware			Historic Ceramic	1		Complete	BOX 1	2															FALSE	5/9/2018					6648	KAREN	1005715.9487	759839.09504	10/13/2015	North	
6588	2018-051-		2742.12	No	S772	Concretion	Concretion			Manacles?	1		Inventoried - Ready to Process	2018P11																FALSE						6649	KAREN	1005715.9487	759839.09504	10/13/2015	North	
6589	2018-051-		2742.13	No	S772	Metal	Pewter			Spoon	1		Complete	NHHC - Pallet 4 Medium Divided Tote 2	1															FALSE	03/12/2018		10/31/2016		35	6650	KAREN	1005715.9487	759839.09504	10/13/2015	North	
6590	2018-051-		2742.14	No	S772	Stone	Chipped Stone			Stone	1		Complete	NHHC - Pallet 4 Small Tote 17	1															FALSE	10/11/2017					6648	KAREN	1005715.9487	759839.09504	10/13/2015	North	
6591	2018-051-		2743.01	No	S773	Composite	Iron	Wood		Guncarriage Wheel	1		Complete	PR12				29.6	kg		35	in			6	in			20	in	FALSE	6/6/2019				18	2038	ERICA	1005703.4386	759818.21451	10/13/2015	10M
6592	2018-051-		2743.02	No	S773	Metal	Iron			Iron Fragment	1		Inventoried - Ready to Process	18WB11																FALSE						2044	ERICA	1005703.4386	759818.21451	10/13/2015	10M	
6593	2018-051-		2743.03	No	S773	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 1	PX1															FALSE	10/27/2016					2044	ERICA	1005703.4386	759818.21451	10/13/2015	10M	
6594	2018-051-		2744.01	No	S774	Organic	Wood			Shim/Wedge	1	Fragments of a single artifact	Complete	C3 - Photo				32.5	g	4.188	in	2.184	in	0.386	in					FALSE	3/14/2019					2048	ERICA	1005690.8953	759824.67659	10/13/2015	North	
6595	2018-051-		2744.02	No	S774	Glass	Unidentified			Glass	4		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear, Green/Olive													FALSE	01/14/2019					2048	ERICA	1005690.8953	759824			

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square
6641	2018-051-		2752.04	No	S784	Organic	Bone			Bone	3		Complete	C5															FALSE	8/21/2018					6692	KAREN	1005676.8034	759810.44237	10/14/2015	7M	
6642	2018-051-		2752.05	No	S784	Organic	Ethnobotany			Seed/Nut	1		Complete	C5															FALSE	7/6/2018					6692	KAREN	1005676.8034	759810.44237	10/14/2015	7M	
6643	2018-051-		2752.06	No	S784	Metal	Lead			Bullet	1		Deaccessioned	DA															FALSE					6692	KAREN	1005676.8034	759810.44237	10/14/2015	7M		
6644	2018-051-		2752.07	No	S784	Metal	Lead			Lead Patch and Maynard Bullet	2		Complete	NHHC - Pallet 5 Small Divided Tote 11	1														FALSE	09/07/2017					6692	KAREN	1005676.8034	759810.44237	10/14/2015	7M	
6645	2018-051-		2752.08	No	S784	Architecture	Mortar			Mortar	1		Complete	NHHC - Pallet 4 Small Tote 7	1														FALSE	01/11/2018					6692	KAREN	1005676.8034	759810.44237	10/14/2015	7M	
6646	2018-051-		2753.01	No	S785	Ceramic	Coarse Earthenware			Prehistoric Ceramic	12		Complete	PX BOX 3	PX1	4 Cord marked, 1 Check stamped, 1 Simple stamped														FALSE	12/14/2017					6690	KAREN	1005689.1974	759808.67261	10/14/2015	8L
6647	2018-051-		2753.02	No	S785	Metal	Copper or Copper Alloy			Strap With 3 Holes	1		Complete	BOX 5	2														FALSE	5/3/2018					35	6690	KAREN	1005689.1974	759808.67261	10/14/2015	8L
6648	2018-051-		2753.03	No	S785	Metal	Iron			Nail	2		Inventoried - Ready to Process	18WB14															FALSE						6690	KAREN	1005689.1974	759808.67261	10/14/2015	8L	
6649	2018-051-		2753.04	No	S785	Metal	Iron			Nut/Washer	2		Inventoried - Ready to Process	18WB14															FALSE						6690	KAREN	1005689.1974	759808.67261	10/14/2015	8L	
6650	2018-051-		2753.05	No	S785	Metal	Iron			Concreted Strap/Blade?	2		Inventoried - Ready to Process	18WB14															FALSE						6690	KAREN	1005689.1974	759808.67261	10/14/2015	8L	
6651	2018-051-		2753.06	No	S785	Glass	Unidentified			Glass	2		Complete	BOX 4	2		Clear, Green/Olive	40.5 g		2.44 in		1.21 in		0.25 in					FALSE	9/19/2018					6690	KAREN	1005689.1974	759808.67261	10/14/2015	8L	
6652	2018-051-		2753.07	No	S785	Metal	Pewter			Handle? Caming?	2		Complete	C4				3.9 g		1.63 in		0.33 in		0.17 in					FALSE	1/11/2019					14	6690	KAREN	1005689.1974	759808.67261	10/14/2015	8L
6653	2018-051-		2753.08	Yes	S785	Ceramic	Refined Earthenware			Historic Ceramic	4		Complete	BOX 1	2															FALSE	7/12/2018					6690	KAREN	1005689.1974	759808.67261	10/14/2015	8L
6654	2018-051-		2753.09	No	S785	Metal	Copper or Copper Alloy			Small Brass Nail	1		Unknown																FALSE						6690	KAREN	1005689.1974	759808.67261	10/14/2015	8L	
6655	2018-051-		2753.10	No	S785	Organic	Coal/Charcoal			Coal	2		Complete	NHHC - Pallet 6 Small Tote 23	1														FALSE	10/19/2017					6690	KAREN	1005689.1974	759808.67261	10/14/2015	8L	
6656	2018-051-		2753.11	No	S785	Organic	Ethnobotany			Peach Pit	1		Complete	C5															FALSE	7/6/2018					6690	KAREN	1005689.1974	759808.67261	10/14/2015	8L	
6657	2018-051-		2753.12	No	S785	Stone	Slate			Slate	1		Complete	NHHC - Pallet 5 Small Divided Tote 16	1														FALSE	03/25/2016					6690	KAREN	1005689.1974	759808.67261	10/14/2015	8L	
6658	2018-051-		2754.01	No	S786	Ceramic	Coarse Earthenware			Prehistoric Ceramic	4		Complete	PX BOX 3	PX1	Cord marked														FALSE	12/14/2017					2106	ERICA	1005681.1924	759808.29059	10/14/2015	7M
6659	2018-051-		2754.02	No	S786	Metal	Iron			Nails	2		Inventoried - Ready to Process	18WB14															FALSE						2106	ERICA	1005681.1924	759808.29059	10/14/2015	7M	
6660	2018-051-		2754.03	No	S786	Metal	Copper or Copper Alloy			Brass Tack	1		Complete	NHHC - Pallet 2 Small Divided Tote 5	1						1.2 in					0.4 in			FALSE	11/01/2017					32	2106	ERICA	1005681.1924	759808.29059	10/14/2015	7M
6661	2018-051-		2754.04	No	S786	Organic	Bone			Bone	1		Complete	C5															FALSE	7/23/2018					2106	ERICA	1005681.1924	759808.29059	10/14/2015	7M	
6662	2018-051-		2754.05	No	S786	Organic	Coal/Charcoal			Coal	3		Complete	NHHC - Pallet 6 Small Tote 23	1														FALSE	10/17/2017					2106	ERICA	1005681.1924	759808.29059	10/14/2015	7M	
6663	2018-051-		2755	Yes	S787	Ceramic	Whiteware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1	Dark red stripe along rim													FALSE	09/06/2017					2102	ERICA	1005681.1286	759811.14565	10/14/2015	7M	
6664	2018-051-		2756.01	No	S789	Metal	Iron			Iron Nail And Fastener	2		Inventoried - Ready to Process	18WB10															FALSE						2133	ERICA	1005666.8645	759818.9021	10/14/2015	North	
6665	2018-051-		2756.02	Yes	S789	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 21	1														FALSE	03/24/2016					2133	ERICA	1005666.8645	759818.9021	10/14/2015	North	
6666	2018-051-		2756.03	No	S789	Ceramic	Coarse Earthenware			Prehistoric Ceramic	8		Complete	PX BOX 6	PX1	2 Check stamped, 1 Cord marked, 2 Simple stamped														FALSE	3/15/2016					2133	ERICA	1005666.8645	759818.9021	10/14/2015	North
6667	2018-051-		2756.04	No	S789	Glass	Unidentified			Glass	3		Complete	NHHC - Pallet 6 Medium Divided Tote 10	1		Clear												FALSE	01/10/2019					2133	ERICA	1005666.8645	759818.9021	10/14/2015	North	
6668	2018-051-		2756.05	No	S789	Organic	Wood			Charred Wood?	1		Inventoried - Ready to Process	WB151															FALSE						2133	ERICA	1005666.8645	759818.9021	10/14/2015	North	
6669	2018-051-		2756.06	No	S789	Organic	Coal/Charcoal			Coal	2		Inventoried - Ready to Process	WB150															FALSE						2133	ERICA	1005666.8645	759818.9021	10/14/2015	North	
6670	2018-051-		2756.07	No	S789	Metal	Unidentified			Disc	1		Inventoried - Ready to Process	UNKNOWN															FALSE						2133	ERICA	1005666.8645	759818.9021	10/14/2015	North	
6671	2018-051-		2756.08	No	S789	Organic	Bone			Bone	1		Inventoried - Ready to Process	WB151															FALSE						2133	ERICA	1005666.8645	759818.9021	10/14/2015	North	
6672	2018-051-		2757.01	No	S790	Glass	Unidentified			Glass	3		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Clear, Green/Olive												FALSE	01/16/2019					6700	KAREN	1005672.2625	759820.5689	10/14/2015	North	
6673	2018-051-		2757.02	No	S790	Ceramic	Coarse Earthenware			Prehistoric Ceramic	6		Complete	PX BOX 5	PX1	Cord marked														FALSE	1/10/2018					6700	KAREN	1005672.2625	759820.5689	10/14/2015	North
6674	2018-051-		2757.03	Yes	S790	Ceramic	Stoneware			Historic Ceramic	1		Complete	BOX 1	2															FALSE	5/9/2018					6700	KAREN	1005672.2625	759820.5689	10/14/2015	North
6675	2018-051-		2757.04	No	S790	Organic	Coal/Charcoal			Coal	3		Inventoried - Ready to Process	WB150, 2018P4 (CT=1)															FALSE						6700	KAREN	1005672.2625	759820.5689	10/14/2015	North	
6676	2018-051-		2758.01	Yes	S791	Ceramic	Stoneware			Historic Ceramic	2		Complete	BOX 7	2															FALSE	4/17/2018					6698	KAREN	1005684.5152	759816.69683	10/14/2015	8M
6677	2018-051-		2758.02	No	S791	Glass	Pharmaceutical			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Light Blue												FALSE	01/16/2019					6698	KAREN	1005684.5152	759816.69683	10/14/2015	8M	
6678	2018-051-		2758.03	No	S791	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Medium Divided Tote 12	1														FALSE	10/11/2017					6698	KAREN	1005684.5152	759816.69683	10/14/2015	8M	
6679	2018-051-		2758.04	Yes	S791	Ceramic	Refined Earthenware			Historic Ceramic	1		Unknown																	FALSE						6698	KAREN	1005684.5152	759816.69683	10/14/2015	8M
6680	2018-051-		2758.05	No	S791	Metal	Lead			Folded Lead Strap	1		Unknown																FALSE						7498	KAREN	1005684.5152	759816.69683	10/14/2015	8M	
6681	2018-051-		2758.06	No	S791	Glass	Unidentified			Glass	1		Unknown				Amber												FALSE						7498	KAREN	1005684.5152	759816.69683	10/14/2015	8M	
6682	2018-051-		2759.01	No	S793	Ceramic	Coarse Earthenware			Prehistoric Ceramic	24		Complete	PX BOX 13	PX1	Rim fragments - 2 Cord marked, 1 Check stamped, 1 Cord complicated stamped. Body fragments - 12 cord marked, 2 Check stamped, 1 Simple stamped		568.7 g		3.64 in		3.09 in		0.39 in					FALSE	10/2/2018					6718	KAREN	1005666.5595	759813.71251	10/14/2015	North	
6683	2018-051-		2759.02	No	S793	Glass	Unidentified			Glass	4		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Clear, Green/Olive												FALSE	0/16/2019					6718	KAREN	1005666.5595	759813.71251	10/14/2015	North	
6684																																									

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square
6714	2018-051-		2762.05	No	S796	Glass	Unidentified			Glass	3		Complete	NHHC - Pallet 6 Medium Divided Tote 14	1		Clear, Green/Olive													FALSE	11/26/2018				2150	ERICA	1005673.2579	759807.4498	10/14/2015	6M	
6715	2018-051-		2762.06	No	S796	Metal	Iron			Nails	2		Inventoried - Ready to Process	WB50																FALSE					2150	ERICA	1005673.2579	759807.4498	10/14/2015	6M	
6716	2018-051-		2762.07	No	S796	Metal	Iron			Strap/Rim	1		Inventoried - Ready to Process	18WB14																FALSE					2150	ERICA	1005673.2579	759807.4498	10/14/2015	6M	
6717	2018-051-		2762.08	No	S796	Organic	Coal/Charcoal			Charcoal	1		Complete	NHHC - Pallet 6 Medium Divided Tote 12	1															FALSE	02/17/2017				2150	ERICA	1005673.2579	759807.4498	10/14/2015	6M	
6718	2018-051-		2762.09	No	S796	Architecture	Mortar			Mortar	1		Complete	C7																FALSE	6/21/2018				2150	ERICA	1005673.2579	759807.4498	10/14/2015	6M	
6719	2018-051-		2762.10	No	S796	Concretion	Concretion			Concretion	1		Deaccessioned	DA																FALSE	01/19/2018				2150	ERICA	1005673.2579	759807.4498	10/14/2015	6M	
6720	2018-051-		2763.01	No	S797	Organic	Wood			Wood frag (Petrified/Fossilized?)	1		Inventoried - Ready to Process	18WB01																FALSE					2165	ERICA	1005678.1448	759804.77821	10/14/2015	7L	
6721	2018-051-		2763.02	No	S797	Ceramic	Coarse Earthenware			Prehistoric Ceramic	41		Complete	PX BOX 12	PX1	Simple stamped, Cord marked, Check stamped, indent															FALSE	8/14/2018				2164-2165	ERICA	1005678.1448	759804.77821	10/14/2015	7L
6722	2018-051-		2763.03	No	S797	Metal	Copper or Copper Alloy			Brass Tack	1		Complete	BOX 5	2																FALSE	4/25/2018				2165	ERICA	1005678.1448	759804.77821	10/14/2015	7L
6723	2018-051-		2763.04	No	S797	Organic	Coal/Charcoal			Coal	2		Inventoried - Ready to Process	WB150																FALSE					2165	ERICA	1005678.1448	759804.77821	10/14/2015	7L	
6724	2018-051-		2763.05	No	S797	Metal	Iron			Nail	1		Inventoried - Ready to Process	18WB10																FALSE					2165	ERICA	1005678.1448	759804.77821	10/14/2015	7L	
6725	2018-051-		2763.06	No	S797	Metal	Iron			Iron Fragment	1		Inventoried - Ready to Process	WB125																FALSE					2165	ERICA	1005678.1448	759804.77821	10/14/2015	7L	
6726	2018-051-		2763.07	No	S797	Organic	Bone			Bone	1		Inventoried - Ready to Process	WB151																FALSE					2165	ERICA	1005678.1448	759804.77821	10/14/2015	7L	
6727	2018-051-		2763.08	No	S797	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear, Green/Olive													FALSE	01/14/2019				2165	ERICA	1005678.1448	759804.77821	10/14/2015	7L	
6728	2018-051-		2763.09	Yes	S797	Ceramic	Refined Earthenware			Historic Ceramic	4		Complete	NHHC - Pallet 4 Small Tote 21	1															FALSE	4/13/2016				2164	ERICA	1005678.1448	759804.77821	10/14/2015	7L	
6729	2018-051-		2763.10	No	S797	Metal	Lead			Lead Fragment	1		Complete	NHHC - Pallet 1 Small Divided Tote 1	1															FALSE	09/06/2017				2165	ERICA	1005678.1448	759804.77821	10/14/2015	7L	
6730	2018-051-		2763.11	No	S797	Architecture	Concrete			Concrete	1		Complete	C7																FALSE	8/21/2018				2165	ERICA	1005678.1448	759804.77821	10/14/2015	7L	
6731	2018-051-		2764.01	No	S798	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 10	1		Clear													FALSE	01/10/2019				2157	ERICA	1005670.036	759804.88745	10/14/2015	6M	
6732	2018-051-		2764.02	No	S798	Ceramic	Coarse Earthenware			Prehistoric Ceramic	13		Complete	PX BOX 5	PX1	3 Simple stamped															FALSE	4/13/2016				2157	ERICA	1005670.036	759804.88745	10/14/2015	6M
6733	2018-051-		2764.03	Yes	S798	Ceramic	Refined Earthenware			Historic Ceramic	2		Complete	NHHC - Pallet 4 Small Tote 21	1															FALSE	03/24/2016				2157	ERICA	1005670.036	759804.88745	10/14/2015	6M	
6734	2018-051-		2764.04	No	S798	Metal	Iron			Cut Nail	1		Inventoried - Ready to Process	Needs X-ray																FALSE					2157	ERICA	1005670.036	759804.88745	10/14/2015	6M	
6735	2018-051-		2765.01	No	S799	Ceramic	Coarse Earthenware			Prehistoric Ceramic	14		Complete	PX BOX 5	PX1	2 Check stamped, 2 Cord marked, 4 possibly cord marked, 1 with deep line indent															FALSE	1/9/2018				6728	KAREN	1005674.154	759800.46783	10/14/2015	6L
6736	2018-051-		2765.02	Yes	S799	Ceramic	Stoneware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1															FALSE	10/26/2017				6728	KAREN	1005674.154	759800.46783	10/14/2015	6L	
6737	2018-051-		2765.03	No	S799	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Green/Olive													FALSE	01/17/2018				6728	KAREN	1005674.154	759800.46783	10/14/2015	6L	
6738	2018-051-		2765.04	No	S799	Organic	Bone			Bone	1		Complete	C5																FALSE	7/23/2018				6728	KAREN	1005674.154	759800.46783	10/14/2015	6L	
6739	2018-051-		2765.05	No	S799	Organic	Coal/Charcoal			Coal	2		Complete	NHHC - Pallet 6 Small Tote 22	1															FALSE	10/17/2017				6728	KAREN	1005674.154	759800.46783	10/14/2015	6L	
6740	2018-051-		2765.06	No	S799	Organic	Bone			Crab Shell Frags	2		Complete	NHHC - Pallet 6 Small Tote 24	1															FALSE	1/9/2018				6728	KAREN	1005674.154	759800.46783	10/14/2015	6L	
6741	2018-051-		2765.07	No	S799	Organic	Coal/Charcoal			Charcoal	1		Inventoried - Ready to Process																	FALSE						1005674.154	759800.46783	10/14/2015	6L		
6742	2018-051-		2765.08	No	S799	Organic	Bone			Shell	2		Inventoried - Ready to Process																	FALSE						1005674.154	759800.46783	10/14/2015	6L		
6743	2018-051-		2766.01	No	S800	Ceramic	Coarse Earthenware			Prehistoric Ceramic	26		Complete	PX BOX 5	PX1	7 Cord marked, 1 with hole, 1 Simple stamped, 1 with 2 depressions															FALSE	1/10/2018				6725, 6733	KAREN	1005670.626	759798.88691	10/14/2015	6L
6744	2018-051-		2766.02	No	S800	Organic	Bone			Bone	2		Complete	C5																FALSE	7/23/2018				6725	KAREN	1005670.626	759798.88691	10/14/2015	6L	
6745	2018-051-		2766.03	No	S800	Stone	Slate			Slate	1		Complete	NHHC - Pallet 5 Small Divided Tote 16	1															FALSE	11/21/2016				6725	KAREN	1005670.626	759798.88691	10/14/2015	6L	
6746	2018-051-		2766.04	No	S800	Stone	Chipped Stone			Worked Stone	1		Complete	PX BOX 13	PX1															FALSE	10/25/2016				6726	KAREN	1005670.626	759798.88691	10/14/2015	6L	
6747	2018-051-		2767.01	No	S801	Organic	Coal/Charcoal			Coal	6		Complete	NHHC - Pallet 6 Small Tote 22	1															FALSE	04/12/2018				6758	KAREN	1005664.7091	759793.60378	10/14/2015	5L	
6748	2018-051-		2767.02	No	S801	Ceramic	Coarse Earthenware			Prehistoric Ceramic	37		Complete	PX BOX 8	PX1	4 Simple stamped; 7 Cord marked; 1 Complicated stamped; 1 Check stamped; 5 unable to determine															FALSE	4/13/2016				6758	KAREN	1005664.7091	759793.60378	10/14/2015	5L
6749	2018-051-		2767.03	Yes	S801	Ceramic	Refined Earthenware			Historic Ceramic	3		Complete	BOX 3	2																FALSE	6/14/2018				6758	KAREN	1005664.7091	759793.60378	10/14/2015	5L
6750	2018-051-		2767.04	Yes	S801	Ceramic	Refined Earthenware			Historic Ceramic	1		Deaccessioned	DA																	FALSE					6758	KAREN	1005664.7091	759793.60378	10/14/2015	5L
6751	2018-051-		2767.05	No	S801	Glass	Unidentified			Glass	3		Complete	NHHC - Pallet 6 Medium Divided Tote 14	1		Clear, Green/Olive													FALSE	01/03/2019				6758	KAREN	1005664.7091	759793.60378	10/14/2015	5L	
6752	2018-051-		2767.06	No	S801	Organic	Bone			Bone	2		Complete	C5																FALSE	7/23/2018				6758	KAREN	1005664.7091	759793.60378	10/14/2015	5L	
6753	2018-051-		2767.07	No	S801	Metal	Copper or Copper Alloy			Brass Concreted To Stone	1		Inventoried - Ready to Process	2018P3																FALSE					6758	KAREN	1005664.7091	759793.60378	10/14/2015	5L	
6754	2018-051-		2767.08	No	S801	Metal	Iron			Nail	1		Inventoried - Ready to Process	18WB14																FALSE					6762	KAREN	1005664.7091	759793.60378	10/14/2015	5L	
6755	2018-051-		2767.09	No	S801	Metal	Copper or Copper Alloy			Button	1		Complete	NHHC - Pallet 5 Small Divided Tote 7	1	"I" (Infantry)														FALSE	03/07/2018				35	6758	KAREN	1005664.7091	759793.60378	10/14/2015	5L
6756	2018-051-		2767.10	No	S801	Metal	Pewter			Spoon	1		Complete	NHHC - Pallet 6 Medium Divided Tote 4	1															FALSE	01/19/2018		10/31/2016		35			1005664.7091	759793.60378	10/14/2015	5L
6757	2018-05																																								

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square		
6784	2018-051-		2771.02	No	S807	Stone	Chipped Stone			Scraper	1		Complete	PX BOX 13	PX1															FALSE	9/12/2017					6768	KAREN	1005659.9691	759809.99768	10/14/2015	North		
6785	2018-051-		2771.03	No	S807	Metal	Iron			Nail	1		Inventoried - Ready to Process	WB50																FALSE						6768	KAREN	1005659.9691	759809.99768	10/14/2015	North		
6786	2018-051-		2771.04	No	S807	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Clear													FALSE	01/16/2019					6768	KAREN	1005659.9691	759809.99768	10/14/2015	North		
6787	2018-051-		2771.05	No	S807	Organic	Coal/Charcoal			Coal	1		Complete	C7																FALSE	6/14/2018						6782	KAREN	1005659.9691	759809.99768	10/14/2015	North	
6788	2018-051-		2772.01	No	S808	Metal	Copper or Copper Alloy			Trigger	1		Complete	NHHC - Pallet 2 Small Divided Tote 6	1															FALSE	07/03/2017				32	6766	KAREN	1005653.7401	759806.25393	10/14/2015	5M		
6789	2018-051-		2772.02	No	S808	Organic	Bone			Bone	1		Complete	C5																FALSE	7/23/2018						6766	KAREN	1005653.7401	759806.25393	10/14/2015	5M	
																1 Check stamped, 2 red coloring on one side possibly Check stamped, 6 possible Cord marked, 2 with reddish orange coloring on one side, one with extra indents. 1 with dark line and no extra marks, 4 unmarked																											
6790	2018-051-		2772.03	No	S808	Ceramic	Coarse Earthenware			Prehistoric Ceramic	14		Complete	PX BOX 13	PX1			340 g		3.63 in		2.36 in		0.44 in							FALSE	10/2/2018					6766	KAREN	1005653.7401	759806.25393	10/14/2015	5M	
6791	2018-051-		2772.04	No	S808	Glass	Bottle Neck-Partial			Unidentified	1		Unknown				Clear														FALSE						6766	KAREN	1005653.7401	759806.25393	10/14/2015	5M	
6792	2018-051-		2772.05	No	S808	Organic	Coal/Charcoal			Coal	3		Complete	C7																	FALSE	4/24/2018						6766	KAREN	1005653.7401	759806.25393	10/14/2015	5M
6793	2018-051-		2772.06	No	S808	Glass	Unidentified			Glass	4		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Clear, Light Blue/Green/Olive, Green/Olive														FALSE	01/16/2019					6766	KAREN	1005653.7401	759806.25393	10/14/2015	5M	
6794	2018-051-		2772.07	Yes	S808	Ceramic	Whiteware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1																FALSE	10/31/2017					6766	KAREN	1005653.7401	759806.25393	10/14/2015	5M	
6795	2018-051-		2772.08	No	S808	Metal	Iron			Nail	1		Inventoried - Ready to Process	18WB10																	FALSE						6766	KAREN	1005653.7401	759806.25393	10/14/2015	5M	
6796	2018-051-		2772.09	No	S808	Architecture	Mortar			Mortar	1		Complete	NHHC - Pallet 4 Small Tote 7	1																FALSE	10/10/2017						6766	KAREN	1005653.7401	759806.25393	10/14/2015	5M
6797	2018-051-		2773.01	No	S809	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 9	PX1	Cord marked															FALSE	6/14/2018					6780	KAREN	1005657.1959	759811.47761	10/14/2015	North	
6798	2018-051-		2773.02	No	S809	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 14	1		Clear														FALSE	12/17/2018					6780	KAREN	1005657.1959	759811.47761	10/14/2015	North	
																4 Cord marked; 3 Simple stamped; 2 incised, 1 rim, cord marked																											
6799	2018-051-		2774.01	No	S810	Ceramic	Coarse Earthenware			Prehistoric Ceramic	13		Complete	PX BOX 7	PX1																FALSE	12/15/2017					6782	KAREN	1005655.4516	759802.79303	10/14/2015	5M	
6800	2018-051-		2774.02	No	S810	Glass	Unidentified			Glass	6		Complete	NHHC - Pallet 6 Medium Divided Tote 14	1		Clear														FALSE	11/21/2018					6782	KAREN	1005655.4516	759802.79303	10/14/2015	5M	
6801	2018-051-		2774.03	No	S810	Organic	Coal/Charcoal			Coal	6		Complete	NHHC - Pallet 6 Small Tote 22	1																FALSE	04/12/2018					6782	KAREN	1005655.4516	759802.79303	10/14/2015	5M	
6802	2018-051-		2774.04	No	S810	Metal	Iron			Nail	1		Inventoried - Ready to Process	18WB14																	FALSE						6782	KAREN	1005655.4516	759802.79303	10/14/2015	5M	
6803	2018-051-		2774.05	No	S810	Organic	Bone			Bone	1		Complete	C5																	FALSE	7/23/2018					6782	KAREN	1005655.4516	759802.79303	10/14/2015	5M	
6804	2018-051-		2774.06	Yes	S810	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 21	1																FALSE	04/12/2018					6782	KAREN	1005655.4516	759802.79303	10/14/2015	5M	
6805	2018-051-		2774.07	No	S810	Organic	Coal/Charcoal			Coal	2		Deaccessioned	DA																	FALSE	04/12/2018					6782	KAREN	1005655.4516	759802.79303	10/14/15	5M	
6806	2018-051-		2775.01	No	S811	Ceramic	Coarse Earthenware			Prehistoric Ceramic	4		Complete	PX BOX 4	PX1	Cord marked															FALSE	12/15/2017				2214	ERICA	1005655.2083	759788.87273	10/14/2015	4L		
6807	2018-051-		2775.02	No	S811	Metal	Lead			Lead Fragment	1		Complete	NHHC - Pallet 5 Small Divided Tote 10	1																FALSE	05/24/2017					2214	ERICA	1005655.2083	759788.87273	10/14/2015	4L	
6808	2018-051-		2775.03	No	S811	Glass	Unidentified			Glass	4		Unknown				Clear?														FALSE						2214	ERICA	1005655.2083	759788.87273	10/14/2015	4L	
6809	2018-051-		2775.04	No	S811	Metal	Iron			Nails	2		Inventoried - Ready to Process	18WB10																	FALSE						2214	ERICA	1005655.2083	759788.87273	10/14/2015	4L	
6810	2018-051-		2775.05	No	S811	Metal	Copper or Copper Alloy			Brass Strip?	1		Complete	BOX 5	2																FALSE	6/13/2018				35	2214	ERICA	1005655.2083	759788.87273	10/14/2015	4L	
6811	2018-051-		2775.06	No	S811	Organic	Coal/Charcoal			Coal	4		Complete	NHHC - Pallet 6 Small Tote 22	1															FALSE	10/17/2017							1005655.2083	759788.87273	10/14/2015	4L		
6812	2018-051-		2776.01	No	S812	Organic	Coal/Charcoal			Coal	3		Complete	C7																	FALSE	1/11/2018					2208	ERICA	1005656.9187	759797.65542	10/14/2015	5M	
6813	2018-051-		2776.02	No	S812	Ceramic	Coarse Earthenware			Prehistoric Ceramic	12		Complete	PX BOX 2	PX1	Cord marked															FALSE	9/6/2017					2208	ERICA	1005656.9187	759797.65542	10/14/2015	5M	
6814	2018-051-		2776.03	No	S812	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 10	1		Green/Olive, Clear														FALSE	01/14/2019					2208	ERICA	1005656.9187	759797.65542	10/14/2015	5M	
6815	2018-051-		2776.04	No	S812	Organic	Bone			Bone	5		Complete	C5																	FALSE	7/24/2018					2208	ERICA	1005656.9187	759797.65542	10/14/2015	5M	
6816	2018-051-		2776.05	No	S812	Metal	Iron			Iron Nail And Fragments	3		Inventoried - Ready to Process	18WB14																	FALSE					2208	ERICA	1005656.9187	759797.65542	10/14/2015	5M		
6817	2018-051-		2776.06	No	S812	Metal	Lead			Lead Strip	1		Complete	NHHC - Pallet 1 Small Divided Tote 2	1															FALSE	05/25/2017					2208	ERICA	1005656.9187	759797.65542	10/14/2015	5M		
6818	2018-051-		2777.01	No	S813	Ceramic	Coarse Earthenware			Prehistoric Ceramic	14		Complete	PX BOX 12	PX1	7 Cord marked, 2 incised		394 g		3.43 in		2.57 in		0.28 in							FALSE	9/12/2018					2229	ERICA	1005660.8588	759788.44148	10/14/2015	5L	
6819	2018-051-		2777.02	Yes	S813	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1	Blue geometric pattern															FALSE	04/15/2016					2229	ERICA	1005660.8588	759788.44148	10/14/2015	5L	
6820	2018-051-		2777.03	No	S813	Glass	Unidentified			Glass	5		Complete	NHHC - Pallet 6 Medium Divided Tote 10	1		Clear, Green/Olive														FALSE	01/11/2019					2229	ERICA	1005660.8588	759788.44148	10/14/2015	5L	
6821	2018-051-		2777.04	No	S813	Organic	Bone			Bone	2		Inventoried - Ready to Process	WB151																	FALSE						2229	ERICA	1005660.8588	759788.44148	10/14/2015	5L	
6822	2018-051-		2777.05	No	S813	Metal	Iron			Unknown Iron Piece	1		Deaccessioned	DA																	FALSE						2229	ERICA	1005660.8588	759788.44148	10/14/2015	5L	
6823	2018-051-		2777.06	No	S813	Organic	Coal/Charcoal			Coal	2		Inventoried - Ready to Process	WB150																													

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square	
6917	2018-051-		2792.04	No	S828	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 14	1		Green/Olive													FALSE	10/06/2016					2265	ERICA	1005641.0734	759805.91997	10/14/2015	North	
6918	2018-051-		2792.05	Yes	S828	Ceramic	Whiteware	Stoneware		Historic Ceramic	2		Complete	BOX 1	2																FALSE	4/24/2018					2265	ERICA	1005641.0734	759805.91997	10/14/2015	North
6919	2018-051-		2793.01	No	S829	Glass	Unidentified			Glass	3		Complete	NHHC - Pallet 6 Medium Divided Tote 14	1		Clear, Green/Olive													FALSE	04/12/2017					2288	ERICA	1005637.5242	759794.16316	10/14/2015	3M	
6920	2018-051-		2793.02	No	S829	Ceramic	Coarse Earthenware			Prehistoric Ceramic	33		Complete	PX BOX 13	PX1	1 Possibly Complicated stamped, 1 w/with deep indent, 3 with incisions, 16 Cord marked		730.0 g		3.24 in		2.36 in		0.39 in							FALSE	10/2/2018					2288	ERICA	1005637.5242	759794.16316	10/14/2015	3M
6921	2018-051-		2793.03	No	S829	Metal	Copper or Copper Alloy			Brass Tack	1		Complete	BOX 5	2															FALSE	8/8/2018					322288	ERICA	1005637.5242	759794.16316	10/14/2015	3M	
6922	2018-051-		2793.04	No	S829	Glass	Unidentified			Green Marble	1		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Green/Olive, White													FALSE	01/25/2019					2289	ERICA	1005637.5242	759794.16316	10/14/2015	3M	
6923	2018-051-		2793.05	No	S829	Organic	Bone			Bone	7		Inventoried - Ready to Process	WB151																FALSE					2288	ERICA	1005637.5242	759794.16316	10/14/2015	3M		
6924	2018-051-		2793.06	Yes	S829	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1															FALSE	04/22/2016					2288	ERICA	1005637.5242	759794.16316	10/14/2015	3M	
6925	2018-051-		2793.07	No	S829	Metal	Iron			Iron Nail	3		Inventoried - Ready to Process	18WB10 (COUNT=2)																FALSE					2288	ERICA	1005637.5242	759794.16316	10/14/2015	3M		
6926	2018-051-		2794.01	No	S830	Ceramic	Coarse Earthenware			Prehistoric Ceramic	22		Complete	PX BOX 4	PX1	7 Cord marked; 1 Complicated stamped; 1 rim (faint simple stamp); 1 sherd with grooved lip															FALSE	6/2/2016					2293	ERICA	1005635.9886	759790.47019	10/14/2015	2M
6927	2018-051-		2794.02	No	S830	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Green/Olive													FALSE	04/18/2017					2293	ERICA	1005635.9886	759790.47019	10/14/2015	2M	
6928	2018-051-		2794.03	No	S830	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Small Tote 22	1															FALSE	10/04/2017					2293	ERICA	1005635.9886	759790.47019	10/14/2015	2M	
6929	2018-051-		2794.04	No	S830	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	18WB14																FALSE					2293	ERICA	1005635.9886	759790.47019	10/14/2015	2M		
6930	2018-051-		2794.05	No	S830	Composite	Lead	Wood		Enfield Bullet	1		Complete	NHHC - Pallet 5 Small Divided Tote 15	1															FALSE	05/26/2017					2293	ERICA	1005635.9886	759790.47019	10/14/2015	2M	
6931	2018-051-		2794.06	No	S830	Metal	Iron Nail			Iron Nail	1		Inventoried - Ready to Process	18WB10																FALSE					2293	ERICA	1005635.9886	759790.47019	10/14/2015	2M		
6932	2018-051-		2794.07	No	S830	Metal	Iron			Concreted Tube	1		Did Not Survive	DNS																FALSE					2293	ERICA	1005635.9886	759790.47019	10/14/2015	2M		
6933	2018-051-		2794.08	No	S830	Organic	Bone			Bone	3		Inventoried - Ready to Process	WB151																FALSE					2293	ERICA	1005635.9886	759790.47019	10/14/2015	2M		
6934	2018-051-		2794.09	No	S830	Metal	Copper or Copper Alloy			Anchor Button	1		Did Not Survive	DNS																FALSE					2294	ERICA	1005635.9886	759790.47019	10/14/2015	2M		
6935	2018-051-		2794.10	No	S830	Organic	Bone			Bone	1		Complete	NHHC - Pallet 6 Small Tote 24	1															FALSE	06/02/2016					1005635.9886	759790.47019	10/14/2015	2M			
6936	2018-051-		2795.01	No	S831	Ceramic	Coarse Earthenware			Prehistoric Ceramic	21		Complete	PX BOX 5	PX1	3 Possible Simple stamped, 3 Cord marked, 2 possible Complicated stamped (1 with circular decoration at rim), 1 Check stamped and 1 possible Check stamped.															FALSE	1/9/2018					6891	KAREN	1005635.9824	759788.00827	10/14/2015	2L
6937	2018-051-		2795.02	No	S831	Ceramic	Pipe			Part Of Pipe Bowl	1		Complete	NHHC - Pallet 4 Small Tote 12	1	Fluting on side, leaf design at seam															FALSE	03/25/2016					6891	KAREN	1005635.9824	759788.00827	10/14/2015	2L
6938	2018-051-		2795.03	Yes	S831	Ceramic	Whiteware			Historic Ceramic	1		Complete	BOX 7	2																FALSE	6/26/2018					6891	KAREN	1005635.9824	759788.00827	10/14/2015	2L
6939	2018-051-		2795.04	No	S831	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Medium Divided Tote 12	1															FALSE	10/19/2017					6891	KAREN	1005635.9824	759788.00827	10/14/2015	2L	
6940	2018-051-		2795.05	No	S831	Organic	Bone			Bone	1		Complete	C5																FALSE	7/24/2018					6891	KAREN	1005635.9824	759788.00827	10/14/2015	2L	
6941	2018-051-		2795.06	No	S831	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Green/Olive													FALSE	09/27/2017					6891	KAREN	1005635.9824	759788.00827	10/14/2015	2L	
6942	2018-051-		2796.01	No	S832	Ceramic	Coarse Earthenware			Prehistoric Ceramic	39		Complete	PX BOX 10	PX1																FALSE	5/9/2018					6889	KAREN	1005633.0271	759782.03503	10/14/2015	2L
6943	2018-051-		2796.02	Yes	S832	Ceramic	Whiteware			Historic Ceramic	1		Complete	BOX 1	2																FALSE	5/9/2018					6889	KAREN	1005633.0271	759782.03503	10/14/2015	2L
6944	2018-051-		2796.03	No	S832	Organic	Bone			Bone	2		Complete	C5																FALSE	7/23/2018					6889	KAREN	1005633.0271	759782.03503	10/14/2015	2L	
6945	2018-051-		2796.04	No	S832	Organic	Coal/Charcoal			Coal	4		Complete	C7																FALSE	5/3/2018					6889	KAREN	1005633.0271	759782.03503	10/14/2015	2L	
6946	2018-051-		2796.05	No	S832	Metal	Pewter			Utensil Handle	1		Complete	NHHC - Pallet 6 Medium Divided Tote 4	1															FALSE	03/12/2018	10/31/2016			356889	KAREN	1005633.0271	759782.03503	10/14/2015	2L		
6947	2018-051-		2796.06	No	S832	Metal	Iron			Triangular Fragment	1		Inventoried - Ready to Process	18WB10																FALSE					6889	KAREN	1005633.0271	759782.03503	10/14/2015	2L		
6948	2018-051-		2796.07	No	S832	Glass	Wine Bottle			Glass	1		Complete	BOX 4	2		Green/Olive	40 g		4.26 in		2.49 in		0.25 in						FALSE	9/19/2018					6889	KAREN	1005633.0271	759782.03503	10/14/2015	2L	
6949	2018-051-		2796.08	No	S832	Stone	Natural Stone			Stone	1		Complete	BOX 7	2																FALSE	5/3/2018					6889	KAREN	1005633.0271	759782.03503	10/14/2015	2L
6950	2018-051-		2797.01	No	S833	Ceramic	Coarse Earthenware			Prehistoric Ceramic	55		Complete	PX BOX 5	PX1	2 Check stamped, 25 Cord marked, 9 Simple stamped, 1 with smooth impressed band, 2 unknown decoration															FALSE	1/9/2018					6913-6914	KAREN	1005628.3711	759799.77565	10/14/2015	North
6951	2018-051-		2797.02	No	S833	Organic	Bone			Bone	6		Complete	C5																FALSE	7/24/2018					6914	KAREN	1005628.3711	759799.77565	10/14/2015	North	
6952	2018-051-		2797.03	No	S833	Metal	Copper or Copper Alloy			Copper Fragment	1		Complete	BOX 5	2																FALSE	8/8/2018					326914	KAREN	1005628.3711	759799.77565	10/14/2015	North
6953	2018-051-		2797.04	Yes	S833	Ceramic	Whiteware	Stoneware		Historic Ceramic	5		Complete	BOX 3	2	Largest: "STONE CHINA / JAMES EDWARDS & SON / DALEHALL". Small: Blue hand-painted design															FALSE	6/14/2018					6914	KAREN	1005628.3711	759799.77565	10/14/2015	North
6954	2018-051-		2797.05	No	S833	Organic	Coal/Charcoal			Coal	6		Complete	NHHC - Pallet 6 Small Tote 22	1															FALSE	06/27/2018					6914	KAREN	1005628.3711	759799.77565	10/14/2015	North	
6955	2018-051-		2797.06	No	S833	Stone	Chipped Stone			Worked Stone	1		Complete	PX BOX 13	PX1																FALSE	4/19/2018					6914	KAREN	1005628.3711	759799.77565	10/14/2015	North
6956	2018-051-		2797.07	No	S833	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 14	1	"...U..."	Green/Olive, Light Blue														FALSE	04/12/2017					6914	KAREN	1005628.3711	759799.77565	10/14/2015	North
6957	2018-051-		2797.08	Yes	S833	Ceramic	Refined Earthenware			Historic Ceramic	1		Deaccessioned	DA																	FALSE					6914	KAREN	1005628.3711	759799.77565	10/14/2015	North	
6958	2018-051-		2797.09	No	S833	Architecture	Mortar			Mortar	1		Complete	NHHC - Pallet 4 Small Tote 7	1															FALSE	01/09/2018					6913-6914	KAREN	1005628.3711	759799.77565	10/		

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square
7051	2018-051-		2813.04	No	S849	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear													FALSE	01/11/2019					6980	KAREN	1005607.3566	759803.42165	10/15/2015	North
7052	2018-051-		2813.05	No	S849	Architecture	Concrete			Concrete	1		Complete	C7																FALSE	6/21/2018					6980	KAREN	1005607.3566	759803.42165	10/15/2015	North
7053	2018-051-		2814.01	No	S850	Ceramic	Coarse Earthenware			Prehistoric Ceramic	21		Complete	PX BOX 8	PX1	2 Check stamped, 7 Cord marked, 1 too faint to determine, 11 plain (1 with red-orange stain)														FALSE	6/20/2018					6982	KAREN	1005608.135	759795.19107	10/15/2015	North
7054	2018-051-		2814.02	No	S850	Organic	Bone			Bone	2		Complete	C5															FALSE	7/23/2018					6982	KAREN	1005608.135	759795.19107	10/15/2015	North	
7055	2018-051-		2814.03	No	S850	Organic	Coal/Charcoal			Coal	2		Complete	NHHC - Pallet 6 Small Tote 23	1														FALSE	10/17/2017					6982	KAREN	1005608.135	759795.19107	10/15/2015	North	
7056	2018-051-		2814.04	Yes	S850	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1														FALSE	10/27/2016					6982	KAREN	1005608.135	759795.19107	10/15/2015	North	
7057	2018-051-		2814.05	No	S850	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Clear												FALSE	01/03/2019					6982	KAREN	1005608.135	759795.19107	10/15/2015	North	
7058	2018-051-		2815.01	No	S851	Organic	Wood			Wedge	1	Intact	Inventoried - Ready to Process	C3 - Photo				25.8g		3.072in		1.485in		0.754in					FALSE	3/14/2019					2375	ERICA	1005603.0428	759789.52297	10/15/2015	North	
7059	2018-051-		2815.02	No	S851	Ceramic	Coarse Earthenware			Prehistoric Ceramic	32		Complete	PX BOX 7	PX1	14 Cord marked, 1 Simple stamped, 1 possibly simple stamped, 2 Check stamped, 1 possibly cord marked with punctates														FALSE	9/12/2018					2381	ERICA	1005603.0428	759789.52297	10/15/2015	North
7060	2018-051-		2815.03	No	S851	Organic	Coal/Charcoal			Coal	13		Complete	C7															FALSE	6/27/2018					2382	ERICA	1005603.0428	759789.52297	10/15/2015	North	
7061	2018-051-		2815.04	No	S851	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Green/Olive												FALSE	09/19/2017					2382	ERICA	1005603.0428	759789.52297	10/15/2015	North	
7062	2018-051-		2815.05	No	S851	Organic	Bone			Bone	2		Complete	C5															FALSE	7/23/2018					2382	ERICA	1005603.0428	759789.52297	10/15/2015	North	
7063	2018-051-		2815.06	No	S851	Stone	Slate			Slate	1		Complete	NHHC - Pallet 5 Small Divided Tote 16	1														FALSE	04/22/2016					2375	ERICA	1005603.0428	759789.52297	10/15/2015	North	
7064	2018-051-		2815.07	Yes	S851	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	BOX 1	2														FALSE	5/3/2018					2381	ERICA	1005603.0428	759789.52297	10/15/2015	North	
7065	2018-051-		2815.08	No	S851	Metal	Iron			Iron Fragment	1		Inventoried - Ready to Process	18WB14															FALSE	5/9/2018					2381	ERICA	1005603.0428	759789.52297	10/15/2015	North	
7066	2018-051-		2815.09	No	S851	Concretion	Concretion			Concretion	4		Inventoried - Ready to Process	18WB04															FALSE	5/9/2018					2375	ERICA	1005603.0428	759789.52297	10/15/2015	North	
7067	2018-051-		2815.10	No	S851	Architecture	Mortar			Mortar	1		Complete	C7															FALSE	5/9/2018					2381	ERICA	1005603.0428	759789.52297	10/15/2015	North	
7068	2018-051-		2815.11	No	S851	Organic	Coal/Charcoal			Coal	1		Complete	C7															FALSE	5/9/2018					2381	ERICA	1005603.0428	759789.52297	10/15/2015	North	
7069	2018-051-		2815.12	No	S851	Concretion	Concretion			Concretion Fragment	1		Deaccessioned	DA															FALSE	5/11/2018					2381	ERICA	1005603.0428	759789.52297	10/15/2015	North	
7070	2018-051-		2815.13	No	S851	Stone	Natural Stone			Stone	1		Complete	BOX 7	2														FALSE	5/9/2018					2381	ERICA	1005603.0428	759789.52297	10/15/2015	North	
7071	2018-051-		2816.01	No	S852	Ceramic	Coarse Earthenware			Prehistoric Ceramic	7		Complete	PX BOX 4	PX1	2 Cord marked													FALSE	12/18/2017					2384	ERICA	1005595.3669	759786.02617	10/15/2015	North	
7072	2018-051-		2816.02	No	S852	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Brown, Green/Olive												FALSE	10/6/2016					2384	ERICA	1005595.3669	759786.02617	10/15/2015	North	
7073	2018-051-		2816.03	No	S852	Organic	Bone			Bone	1		Complete	C5															FALSE	3/6/2019					2384	ERICA	1005595.3669	759786.02617	10/15/2015	North	
7074	2018-051-		2816.04	No	S852	Organic	Coal/Charcoal			Coal	9		Complete	NHHC - Pallet 6 Small Tote 22	1			14.2g		2.193in		0.64in		0.459in				FALSE	01/30/2018					2384	ERICA	1005595.3669	759786.02617	10/15/2015	North		
7075	2018-051-		2816.05	No	S852	Metal	Iron			Nails	3		Inventoried - Ready to Process	18WB14															FALSE	06/19/2017					2384	ERICA	1005595.3669	759786.02617	10/15/2015	North	
7076	2018-051-		2816.06	Yes	S852	Ceramic	Pearlware	Stoneware		Historic Ceramic	2		Complete	NHHC - Pallet 4 Small Tote 12	1														FALSE	06/19/2017					2384	ERICA	1005595.3669	759786.02617	10/15/2015	North	
7077	2018-051-		2817.01	No	S853	Ceramic	Coarse Earthenware			Prehistoric Ceramic	11		Complete	PX BOX 3	PX1	7 Cord marked													FALSE	11/8/2017					7016	KAREN	1005601.772	759800.80091	10/15/2015	North	
7078	2018-051-		2817.02	No	S853	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 10	1		Green/Olive												FALSE	10/18/2016					7016	KAREN	1005601.772	759800.80091	10/15/2015	North	
7079	2018-051-		2817.03	No	S853	Organic	Bone			Bone	2		Complete	C5															FALSE	7/24/2018					7016	KAREN	1005601.772	759800.80091	10/15/2015	North	
7080	2018-051-		2817.04	No	S853	Organic	Coal/Charcoal			Coal	1		Complete	C7															FALSE	5/10/2018					7016	KAREN	1005601.772	759800.80091	10/15/2015	North	
7081	2018-051-		2818	No	S854	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1	Possibly Simple stamped													FALSE	9/13/2017					7011	KAREN	1005608.1784	759800.27937	10/15/2015	North	
7082	2018-051-		2819.01	No	S855	Ceramic	Coarse Earthenware			Prehistoric Ceramic	19		Complete	PX BOX 2	PX1	7 Cord marked, 1 Complicated stamped, 1 crescent shaped stamp													FALSE	10/4/2017					7009	KAREN	1005616.9146	759808.94111	10/15/2015	North	
7083	2018-051-		2819.02	No	S855	Organic	Coal/Charcoal			Coal	5		Complete	C7														FALSE	5/3/2018					7009	KAREN	1005616.9146	759808.94111	10/15/2015	North		
7084	2018-051-		2819.03	No	S855	Organic	Bone			Bone	1		Complete	C5														FALSE	6/14/2018					7009	KAREN	1005616.9146	759808.94111	10/15/2015	North		
7085	2018-051-		2819.04	Yes	S855	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 21	1													FALSE	01/11/2018					7009	KAREN	1005616.9146	759808.94111	10/15/2015	North		
7086	2018-051-		2819.05	No	S855	Stone	Natural Stone			Stone	1		Complete	BOX 7	2													FALSE	05/13/2018					7009	KAREN	1005616.9146	759808.94111	10/15/2015	North		
7087	2018-051-		2820.01	No	S856	Organic	Coal/Charcoal			Coal	1		Complete	C7														FALSE	6/14/2018					7006	KAREN	1005616.4894	759802.73264	10/15/2015	North		
7088	2018-051-		2820.02	No	S856	Organic	Bone			Bone	1		Complete	C5														FALSE	7/23/2018					7006	KAREN	1005616.4894	759802.73264	10/15/2015	North		
7089	2018-051-		2820.03	No	S856	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 8	PX1													FALSE	5/9/2018					7006	KAREN	1005616.4894	759802.73264	10/15/2015	North		
7090	2018-051-		2821	No	S858	Ceramic	Coarse Earthenware			Prehistoric Ceramic	3		Complete	PX BOX 1	PX1	2 Simple stamped (faint)													FALSE	10/27/2016					7028	KAREN	1005609.0434	759805.27808	10/15/2015	North	
7091	2018-051-		2822.01	No	S860	Organic	Coal/Charcoal			Coal	4		Complete	NHHC - Pallet 6 Small Tote 22	1													FALSE	10/19/2017					2397	ERICA	1005606.9141	759786.67627	10/15/2015	North		
7092	2018-051-		2822.02	No	S860	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 4	PX1	1 Simple stamped													FALSE	12/15/2017					2397	ERICA	1005606.9141	759786.67627	10/15/2015	North	
7093	2018-051-		2822.03	No	S860	Metal	Iron			Nails	2		Inventoried - Ready to Process	18WB14														FALSE	12/15/2017					2397	ERICA	1005606.9141	759786.67627	10/15/2015	North		
7094	2018-051-		2822.04																																						

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square	
7129	2018-051-		2836.02	No	S875	Metal	Iron			Modern Wire Spring?	1		Inventoried - Ready to Process	18WB10																FALSE						2458	ERICA	1005650.6476	759816.00224	10/15/2015	North	
7130	2018-051-		2836.03	No	S875	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 12	PX1	Large indent					3	in	2.1	in	0.38	in					FALSE	9/4/2018					2458	ERICA	1005650.6476	759816.00224	10/15/2015	North
7131	2018-051-		2836.04	No	S875	Organic	Coal/Charcoal			Coal	1		Complete	C7						1.25	in	1.08	in	0.37	in					FALSE	9/14/2018					2458	ERICA	1005650.6476	759816.00224	10/15/2015	North	
7132	2018-051-		2837	No	S878	Ceramic	Coarse Earthenware			Prehistoric Ceramic	3		Complete	PX BOX 1	PX1	1 Cord marked														FALSE	7/5/2017					2467	ERICA	1005652.3821	759822.55311	10/15/2015	North	
7133	2018-051-		2838.01	No	S879	Ceramic	Coarse Earthenware			Prehistoric Ceramic	3		Complete	PX BOX 2	PX1	Cord marked					10/26/2017								FALSE	10/26/2017					7105	KAREN	1005657.1245	759824.14717	10/15/2015	North		
7134	2018-051-		2838.02	No	S879	Organic	Bone			Bone	2		Complete	C5				62.9	g	2.576	in	1.552	in	1.594	in				TRUE	3/6/2019					7105	KAREN	1005657.1245	759824.14717	10/15/2015	North		
7135	2018-051-		2838.03	No	S879	Organic	Coal/Charcoal			Coal	2		Complete	NHHC - Pallet 6 Medium Divided Tote 12	1														FALSE	10/17/2017					7105	KAREN	1005657.1245	759824.14717	10/15/2015	North		
7136	2018-051-		2838.04	No	S879	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Green/Olive ,Clear												FALSE	12/17/2018					7105	KAREN	1005657.1245	759824.14717	10/15/2015	North		
7137	2018-051-		2838.05	Yes	S879	Ceramic	Stoneware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1														FALSE	12/15/2017					7105	KAREN	1005657.1245	759824.14717	10/15/2015	North		
7138	2018-051-		2839.01	No	S880	Ceramic	Coarse Earthenware			Prehistoric Ceramic	7		Complete	PX BOX 1	PX1														FALSE	10/27/2016					7103	KAREN	1005660.0239	759820.10827	10/15/2015	North		
7139	2018-051-		2839.02	No	S880	Organic	Bone			Bone	2		Complete	C5															FALSE	7/23/2018					7103	KAREN	1005660.0239	759820.10827	10/15/2015	North		
7140	2018-051-		2839.03	No	S880	Organic	Coal/Charcoal			Coal	2		Complete	NHHC - Pallet 6 Small Tote 22	1														FALSE	03/07/2018					7103	KAREN	1005660.0239	759820.10827	10/15/2015	North		
7141	2018-051-		2839.04	No	S880	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Green/Olive ,Clear												FALSE	11/26/2018					7103	KAREN	1005660.0239	759820.10827	10/15/2015	North		
7142	2018-051-		2840.01	No	S881	Organic	Bone			Bone	2		Complete	C5															FALSE	7/23/2018					7120	KAREN	1005703.7604	759830.95397	10/15/2015	North		
7143	2018-051-		2840.02	No	S881	Ceramic	Coarse Earthenware			Prehistoric Ceramic	5		Complete	PX BOX 11	PX1	2 Cord marked, 1 with punctates													FALSE	1/10/2018					7120	KAREN	1005703.7604	759830.95397	10/15/2015	North		
7144	2018-051-		2840.03	No	S881	Organic	Coal/Charcoal			Coal	5		Complete	NHHC - Pallet 6 Medium Divided Tote 12	1														FALSE	10/11/2017					7120	KAREN	1005703.7604	759830.95397	10/15/2015	North		
7145	2018-051-		2841.01	No	S882	Ceramic	Coarse Earthenware			Prehistoric Ceramic	6		Complete	PX BOX 11	PX1	2 Cord marked, 2 with lines/scratches													FALSE	1/9/2018					7122	KAREN	1005699.6033	759826.83874	10/15/2015	North		
7146	2018-051-		2841.02	No	S882	Concretion	Concretion			Concretion Fragment	1		Deaccessioned	DA															FALSE	01/09/2018					7122	KAREN	1005699.6033	759826.83874	10/15/2015	North		
7147	2018-051-		2842	No	S884	Ceramic	Coarse Earthenware			Prehistoric Ceramic	4		Complete	PX BOX 9	PX1	Cord marked													FALSE	5/31/2018					2484	ERICA	1005694.1852	759836.13517	10/15/2015	North		
7148	2018-051-		2843.01	No	S885	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 9	PX1	Cord marked													FALSE	5/31/2018					2506	ERICA	1005701.8172	759837.62919	10/15/2015	North		
7149	2018-051-		2843.02	No	S885	Metal	Copper or Copper Alloy			Copper Wire	1		Complete	BOX 5	2														FALSE	5/1/2018					2506	ERICA	1005701.8172	759837.62919	10/15/2015	North		
7150	2018-051-		2844	No	S886	Metal	Lead			Enfield Bullet	1		Complete	DISPLAY, HELEN'S OFFICE															FALSE	5/26/2017					2502	ERICA	1005707.391	759838.21468	10/15/2015	North		
7151	2018-051-		2845.01	No	S888	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1	Cord marked													FALSE	10/26/2017					7134	KAREN	1005712.4758	759832.42688	10/15/2015	North		
7152	2018-051-		2845.02	No	S888	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Green/Olive ,Clear											FALSE	01/03/2019					7134	KAREN	1005712.4758	759832.42688	10/15/2015	North			
7153	2018-051-		2845.03	No	S888	Organic	Coal/Charcoal			Coal	2		Complete	C7															FALSE	5/2/2018					7134	KAREN	1005712.4758	759832.42688	10/15/2015	North		
7154	2018-051-		2845.04	No	S888	Organic	Ethnobotany			Peach Pit	1	Intact	Complete	C5				7.6	g	1.477	in	0.98	in	0.734	in				FALSE	3/20/2019					7134	KAREN	1005712.4758	759832.42688	10/15/2015	North		
7155	2018-051-		2845.05	No	S888	Concretion	Concretion			Concretion	1		Complete	C7															FALSE	5/2/2018							1005712.4758	759832.42688	10/15/2015	North		
7156	2018-051-		2846.01	No	S889	Organic	Coal/Charcoal			Coal	5		Complete	NHHC - Pallet 6 Small Tote 23	1														FALSE	10/11/2017					7148	KAREN	1005704.0416	759820.12487	10/15/2015	10M		
7157	2018-051-		2846.02	No	S889	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear												FALSE	01/11/2019					7148	KAREN	1005704.0416	759820.12487	10/15/2015	10M		
7158	2018-051-		2847.01	No	S890	Stone	Chipped Stone			Worked Stone	1		Complete	BOX 7	2														FALSE	6/19/2018					7150	KAREN	1005697.2255	759819.0664	10/15/2015	9M		
7159	2018-051-		2847.02	No	S890	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 8	PX1	Too faint to determine													FALSE	6/20/2018					7150	KAREN	1005697.2255	759819.0664	10/15/2015	9M		
7160	2018-051-		2848.01	No	S891	Ceramic	Coarse Earthenware			Prehistoric Ceramic	3		Complete	PX BOX 10	PX1	2 Cord marked													FALSE	1/11/2018					2524	ERICA	1005717.0462	759834.74123	10/15/2015	North		
7161	2018-051-		2848.02	No	S891	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Clear, Brown											FALSE	01/16/2018					2524	ERICA	1005717.0462	759834.74123	10/15/2015	North			
7162	2018-051-		2848.03	No	S891	Organic	Bone			Bone	7		Complete	NHHC - Pallet 6 Medium Divided Tote 13				18.2	g	1.459	in			0.338	in				FALSE	10/26/2018					2526	ERICA	1005717.0462	759834.74123	10/15/2015	North		
7163	2018-051-		2849.01	No	S892	Ceramic	Coarse Earthenware			Prehistoric Ceramic	3		Complete	PX BOX 3	PX1	1 Simple stamped, 2 unknown decoration													FALSE	12/14/2017					2526	ERICA	1005712.2314	759824.67762	10/15/2015	11M		
7164	2018-051-		2849.02	Yes	S892	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	BOX 1	2														FALSE	6/19/2018					2526	ERICA	1005712.2314	759824.67762	10/15/2015	11M		
7165	2018-051-		2849.03	No	S892	Glass	Unidentified			Glass	2		Complete	GLASS BOX 3, PR-S9	1														FALSE	10/17/2016					2526	ERICA	1005712.2314	759824.67762	10/15/2015	11M		
7166	2018-051-		2849.04	No	S892	Organic	Bone			Bone	1		Complete	C5						2	in	0.67	in	0.32	in				FALSE	9/4/2018					2526	ERICA	1005712.2314	759824.67762	10/15/2015	11M		
7167	2018-051-		2849.05	No	S892	Composite	Wood	Copper or Copper Alloy		Sheave	1		Inventoried - Ready to Process	2018P7															FALSE							2526	ERICA	1005712.2314	759824.67762	10/15/2015	11M	
																1 Check stamped rim fragment, 1 cord stamped rim fragment with indent pattern 7 Cord marked body fragments													FALSE													
7168	2018-051-		2850.01	No	S893	Ceramic	Coarse Earthenware			Prehistoric Ceramic	16		Complete	PX BOX 11	PX1	Partial EDWARDS & SONS makers mark													FALSE	8/28/2018					7162, 7165	KAREN	1005645.8415	759768.71553	10/15/2015	3J		
7169	2018-051-		2850.02	Yes	S893	Ceramic	Refined Earthenware			Historic Ceramic	2		Complete	NHHC - Pallet 4 Small Tote 12	1														FALSE	10/27/2016					7162	KAREN	1005645.8415	759768.71553	10/15/2015	3J		
7170	2018-051-		2850.03	No	S893	Organic	Coal/Charcoal			Coal	2		Complete	NHHC - Pallet 6 Medium Divided Tote 12	1													FALSE	10/17/2017													

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square
7202	2018-051-		2857.01	No	S900	Ceramic	Coarse Earthenware			Prehistoric Ceramic	4		Complete	PX BOX 10	PX1	Cord marked Complicated stamped														FALSE	12/14/2017					7186	KAREN	1005653.0048	759771.05792	10/15/2015	3J
7203	2018-051-		2857.02	No	S900	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear												FALSE	09/05/2017					7186	KAREN	1005653.0048	759771.05792	10/15/2015	3J	
7204	2018-051-		2858.01	No	S901	Ceramic	Coarse Earthenware			Prehistoric Ceramic	9		Complete	PX BOX 3	PX1	1 Cord marked, 1 possible mark unidentifiable													FALSE	12/14/2017					7212	KAREN	1005644.0324	759775.1296	10/15/2015	3K	
7205	2018-051-		2858.02	No	S901	Recent/Synthetic	Unidentified			Long Rectangular Object	1		Inventoried - Ready to Process	PRIORITY														FALSE						7212	KAREN	1005644.0324	759775.1296	10/15/2015	3K		
7206	2018-051-		2858.03	No	S901	Stone	Stone Tool			Core	1		Complete	PX BOX 13	PX1													FALSE	8/1/2017					7212	KAREN	1005644.0324	759775.1296	10/15/2015	3K		
7207	2018-051-		2859.01	No	S902	Ceramic	Coarse Earthenware			Prehistoric Ceramic	21		Complete	PX BOX 7	PX1	1 Simple stamped, 10 Cord marked, 2 possibly cord marked													FALSE	1/9/2018					7214	KAREN	1005640.2557	759778.33839	10/15/2015	2K	
7208	2018-051-		2859.02	Yes	S902	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1													FALSE	10/27/2016					7214	KAREN	1005640.2557	759778.33839	10/15/2015	2K		
7209	2018-051-		2859.03	No	S902	Organic	Ethnobotany			Peach Pit	1		Complete	C5				3.8g		1.08in		0.74in		0.64in				FALSE	10/24/2018					7214	KAREN	1005640.2557	759778.33839	10/15/2015	2K		
7210	2018-051-		2859.04	No	S902	Organic	Bone			Bone	2		Complete	C5														FALSE	7/23/2018					7214	KAREN	1005640.2557	759778.33839	10/15/2015	2K		
7211	2018-051-		2859.05	No	S902	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Small Tote 23	1													FALSE	10/17/2017					7214	KAREN	1005640.2557	759778.33839	10/15/2015	2K		
7212	2018-051-		2859.06	No	S902	Stone	Unidentified			Small Stone/Flake	1		Complete	BOX 7	2													FALSE	6/20/2018							1005640.2557	759778.33839	10/15/2015	2K		
7213	2018-051-		2860.01	No	S903	Ceramic	Coarse Earthenware			Prehistoric Ceramic	4		Complete	PX BOX 9	PX1	1 Cord marked													FALSE	5/31/2018					2575	ERICA	1005639.4599	759773.01218	10/15/2015	2K	
7214	2018-051-		2860.02	Yes	S903	Ceramic	Whiteware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 21	1													FALSE	1/11/2018					2575	ERICA	1005639.4599	759773.01218	10/15/2015	2K		
7215	2018-051-		2860.03	No	S903	Organic	Bone			Bone	1		Complete	C5														FALSE	7/24/2018					2575	ERICA	1005639.4599	759773.01218	10/15/2015	2K		
7216	2018-051-		2861	Yes	S904	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 21	1													FALSE	10/31/2017					2571	ERICA	1005648.1645	759772.44984	10/15/2015	3J		
7217	2018-051-		2862.01	No	S905	Glass	Unidentified			Pepsi Bottle	1	Intact	Complete	NHHC - Pallet 6 Large Tote 28	1													FALSE	01/10/2019					2596	ERICA	1005654.9712	759771.34178	10/15/2015	4J		
7218	2018-051-		2862.02	No	S905	Ceramic	Coarse Earthenware			Prehistoric Ceramic	12		Complete	PX BOX 4	PX1	Diagonal lines on rim edge, 6 Cord marked, 1 possibly cord marked, 1 with thin lines													FALSE	12/15/2017					2596	ERICA	1005654.9712	759771.34178	10/15/2015	4J	
7219	2018-051-		2862.03	No	S905	Organic	Bone			Bone	4		Inventoried - Ready to Process	WB151														FALSE						2596	ERICA	1005654.9712	759771.34178	10/15/2015	4J		
7220	2018-051-		2862.04	Yes	S905	Ceramic	Refined Earthenware	Pearlware		Historic Ceramic	2		Complete	BOX 2	2														FALSE	4/17/2018					2596	ERICA	1005654.9712	759771.34178	10/15/2015	4J	
7221	2018-051-		2862.05	No	S905	Metal	Iron			Nail	1		Inventoried - Ready to Process	18WB10														FALSE								1005654.9712	759771.34178	10/15/2015	4J		
7222	2018-051-		2863.01	No	S906	Metal	Iron			Articulated Rail	1		Unknown															FALSE								2587-2589	ERICA	1005665.1362	759775.35788	10/15/2015	5J
7223	2018-051-		2863.02	No	S906	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 1	PX1	Cord marked													FALSE	9/7/2017					2590	ERICA	1005665.1362	759775.35788	10/15/2015	5J	
7224	2018-051-		2864	Yes	S907	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1													FALSE	10/27/2016					7230	KAREN	1005669.4039	759772.28569	10/15/2015	5J		
7225	2018-051-		2865.01	No	S908	Ceramic	Coarse Earthenware			Prehistoric Ceramic	6		Complete	PX BOX 3	PX1	Simple stamped													FALSE	12/14/2017					7228	KAREN	1005667.0869	759774.06599	10/15/2015	5J	
7226	2018-051-		2865.02	No	S908	Organic	Coal/Charcoal			Coal	1		Inventoried - Ready to Process	WB150														FALSE						7228	KAREN	1005667.0869	759774.06599	10/15/2015	5J		
7227	2018-051-		2865.03	No	S908	Organic	Bone			Bone	1		Inventoried - Ready to Process	WB151														FALSE						7228	KAREN	1005667.0869	759774.06599	10/15/2015	5J		
7228	2018-051-		2865.04	No	S908	Metal	Copper or Copper Alloy			Brass Object	1		Inventoried - Ready to Process	Brass ER bucket														FALSE						7234	KAREN	1005667.0869	759774.06599	10/15/2015	5J		
7229	2018-051-		2865.05	No	S908	Organic	Ethnobotany			Peach pit?	1		Complete	C5														FALSE	7/6/2018							1005667.0869	759774.06599	10/15/2015	5J		
7230	2018-051-		2866.01	No	S909	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 9	PX1													FALSE	5/31/2018					7260	KAREN	1005661.5923	759769.18133	10/15/2015	4J		
7231	2018-051-		2866.02	Yes	S909	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1													FALSE	10/27/2016					7260	KAREN	1005661.5923	759769.18133	10/15/2015	4J		
7232	2018-051-		2867	No	S910	Organic	Ethnobotany			Peach Pit	1		Unknown															FALSE								7258	KAREN	1005669.5756	759768.54554	10/15/2015	5I
7233	2018-051-		2868	No	S913	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1													FALSE	12/15/2017					2614	CORINNA	1005661.5739	759770.88801	10/16/2015	4J		
7234	2018-051-		2869	No	S914	Ceramic	Coarse Earthenware			Prehistoric Ceramic	4		Complete	PX BOX 6	PX1	1 Cord marked												FALSE	4/10/2018					2620	CORINNA	1005655.7881	759762.58643	10/16/2015	3I		
7235	2018-051-		2870.01	No	S915	Ceramic	Coarse Earthenware			Prehistoric Ceramic	3		Complete	PX BOX 11	PX1													FALSE	4/10/2018					7276	KAREN	1005658.749	759761.96196	10/16/2015	4I		
7236	2018-051-		2870.02	No	S915	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 15	1		Clear											FALSE	01/03/2019					7276	KAREN	1005658.749	759761.96196	10/16/2015	4I		
7237	2018-051-		2870.03	No	S915	Metal	Iron			Fastener	1		Inventoried - Ready to Process	WB108														FALSE						7276	KAREN	1005658.749	759761.96196	10/16/2015	4I		
7238	2018-051-		2871	No	S916	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 10	PX1	Possibly Cord marked												FALSE	1/10/2018					7274	KAREN	1005660.4036	759760.73252	10/16/2015	4I		
7239	2018-051-		2872.01	No	S917	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Inventoried - Ready to Process	WB14														FALSE						7291	KAREN	1005666.7071	759763.65646	10/16/2015	4I		
7240	2018-051-		2872.02	No	S917	Recent/Synthetic	Other			Graphite Stick	1		Complete	NHHC - Pallet 5 Small Divided Tote 16	1													FALSE	01/30/2017					7291	KAREN	1005666.7071	759763.65646	10/16/2015	4I		
7241	2018-051-		2873	No	S923	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 3	PX1	1 Cord marked												FALSE	12/14/2017					7307	KAREN	1005653.0166	759757.82969	10/16/2015	3I		
7242	2018-051-		2874	No	S924	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 12	PX1	Possibly Cord marked		22.5g		1.63in		1.38in		0.32in				FALSE	9/25/2018					7309	KAREN	1005648.6825	759757.94694	10/16/2015	2I		
7243	2018-051-		2875.01	Yes	S925	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	BOX 1	2													FALSE	5/3/2018					7321	KAREN	1005651.203	759767.69031	10/16/2015	3J		
7244	2018-051-		2875.02	No	S925	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 7	PX1	Simple stamped												FALSE	1/10/2018					7321	KAREN	1005651.203	759767.69031	10/16/2015	3J		
7245	2018-051-		2876	Yes	S926	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	BOX 1	2																										

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square
7288	2018-051-		2893.03	No	S945	Metal	Copper or Copper Alloy			Brass Clip	2		Complete	C2					28 g		2.26 in		1.07 in		0.47 in					FALSE	1/10/2019				142739	CORINNA	1005654.0141	759744.51366	10/16/2015	3H	
7289	2018-051-		2894	No	S946	Metal	Iron			Nail	1		Inventoried - Ready to Process	WB50																FALSE					2737	CORINNA	1005647.2265	759743.8494	10/16/2015	2H	
7290	2018-051-		2895	No	S949	Ceramic	Coarse Earthenware			Prehistoric Ceramic	5		Complete	PX BOX 4	PX1	1 Complicated stamped														FALSE	12/15/2017				7417	KAREN	1005660.4867	759746.97988	10/16/2015	3H	
7291	2018-051-		2896	No	S950	Ceramic	Coarse Earthenware			Prehistoric Ceramic	3		Complete	PX BOX 13	PX1	Largest fragment may be incised														FALSE	10/2/2018				7422	KAREN	1005666.7774	759751.08536	10/16/2015	4H	
7292	2018-051-		2897.01	No	S952	Organic	Coal/Charcoal			Coal	2		Complete	NHHC - Pallet 6 Small Tote 23	1														FALSE	01/30/2018				2753	CORINNA	1005667.0215	759737.62988	10/16/2015	4G		
7293	2018-051-		2897.02	Yes	S952	Ceramic	Stoneware			Historic Ceramic	2		Complete	NHHC - Pallet 4 Small Tote 12	1														FALSE	12/14/2017				2753	CORINNA	1005667.0215	759737.62988	10/16/2015	4G		
7294	2018-051-		2897.03	No	S952	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 9	PX1	Cord marked													FALSE	5/31/2018				2753	CORINNA	1005667.0215	759737.62988	10/16/2015	4G		
7295	2018-051-		2897.04	No	S952	Metal	Iron			Cast Iron Plate	1		Complete	C1				8.3 lb		8.0 in		4.560 in		0.858 in					FALSE	4/15/2019				212753	CORINNA	1005667.0215	759737.62988	10/16/2015	4G		
7296	2018-051-		2897.05	No	S952	Metal	Copper or Copper Alloy			Small Sheathing?	3		Complete	BOX 5	2														FALSE	8/7/2018				322753	CORINNA	1005667.0215	759737.62988	10/16/2015	4G		
7297	2018-051-		2898.01	No	S953	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 3	PX1	1 with faint marks													FALSE	10/3/2017				2772	CORINNA	1005669.6438	759734.93379	10/16/2015	4F		
7298	2018-051-		2898.02	No	S953	Organic	Coal/Charcoal			Coal	1		Inventoried - Ready to Process	WB150															FALSE					2772	CORINNA	1005669.6438	759734.93379	10/16/2015	4F		
7299	2018-051-		2898.03	No	S953	Metal	Iron			Iron Fragment	1		Inventoried - Ready to Process	18WB10															FALSE					2772	CORINNA	1005669.6438	759734.93379	10/16/2015	4F		
7300	2018-051-		2898.04	No	S953	Metal	Iron			Lock Fragment	1		Complete	BOX 10	2			20.1 g		1.855 in		0.387 in		0.150 in					FALSE	4/15/2019				252772	CORINNA	1005669.6438	759734.93379	10/16/2015	4F		
7301	2018-051-		2898.05	Yes	S953	Ceramic	Stoneware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1														FALSE	10/03/2017					2772	CORINNA	1005669.6438	759734.93379	10/16/2015	4F	
7302	2018-051-		2898.06	No	S953	Architecture	Mortar			Mortar	1		Complete	NHHC - Pallet 4 Small Tote 7	1														FALSE	10/03/2017						1005669.6438	759734.93379	10/16/2015	4F		
7303	2018-051-		2899.01	No	S954	Metal	Iron			Iron Spike	1		Complete	C3													0.8 cm	FALSE	7/13/2018		7/2/2019				2767	CORINNA	1005671.2659	759727.59861	10/16/2015	4E	
7304	2018-051-		2899.02	No	S954	Organic	Coal/Charcoal			Coal	2		Inventoried - Ready to Process	WB150															FALSE						2767	CORINNA	1005671.2659	759727.59861	10/16/2015	4E	
7305	2018-051-		2899.03	No	S954	Organic	Wood			Wedge	1		Inventoried - Ready to Process	WB151															FALSE						2767	CORINNA	1005671.2659	759727.59861	10/16/2015	4E	
7306	2018-051-		2899.04	No	S954	Organic	Bone			Bone	1		Complete	C5															FALSE	6/14/2018					2767	CORINNA	1005671.2659	759727.59861	10/16/2015	4E	
7307	2018-051-		2899.05	No	S954	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Green/Olive												FALSE	10/20/2016					2767	CORINNA	1005671.2659	759727.59861	10/16/2015	4E	
7308	2018-051-		2899.06	No	S954	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 13	PX1	Cord marked		31.3 g		1.97 in		1.88 in		0.36 in					FALSE	10/2/2018					2767	CORINNA	1005671.2659	759727.59861	10/16/2015	4E	
7309	2018-051-		2900.01	Yes	S955	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1														FALSE	10/27/2016					7437	KAREN	1005673.9831	759731.30437	10/16/2015	4F	
7310	2018-051-		2900.02	No	S955	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 14	1		Green/Olive												FALSE	10/04/2016					7437	KAREN	1005673.9831	759731.30437	10/16/2015	4F	
7311	2018-051-		2901.01	No	S956	Metal	Iron			Large Fastener	1		Inventoried - Ready to Process	BARREL 83															FALSE						7435	KAREN	1005672.5787	759727.61281	10/16/2015	4E	
7312	2018-051-		2901.02	No	S956	Organic	Coal/Charcoal			Coal	1		Inventoried - Ready to Process	WB150															FALSE						7435	KAREN	1005672.5787	759727.61281	10/16/2015	4E	
7313	2018-051-		2901.03	No	S956	Glass	Wine Bottle			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 14	1		Green/Olive												FALSE	06/15/2017					7435	KAREN	1005672.5787	759727.61281	10/16/2015	4E	
7314	2018-051-		2902.01	No	S958	Glass	Unidentified			Glass	1		Inventoried - Ready to Process	WB14															FALSE						7453	KAREN	1005679.8164	759747.35309	10/16/2015	5G	
7315	2018-051-		2902.02	No	S958	Metal	Iron			Pipe	1		Unknown																FALSE						7449	KAREN	1005679.8164	759747.35309	10/16/2015	5G	
7316	2018-051-		2903.01	No	S959	Organic	Coal/Charcoal			Coal	2		Complete	NHHC - Pallet 6 Small Tote 22	1														FALSE	10/12/2017					2787	CORINNA	1005682.2666	759748.42998	10/16/2015	5G	
7317	2018-051-		2903.02	No	S959	Metal	Iron			Cast Iron Engine Mount	1		Inventoried - Ready to Process	Jon's ready bin "that one over there"															FALSE						2786	CORINNA	1005682.2666	759748.42998	10/16/2015	5G	
7318	2018-051-		2904.01	No	S960	Metal	Iron			Iron Track	1		Inventoried - Ready to Process	YB33															FALSE						2789	CORINNA	1005680.9552	759748.2845	10/16/2015	5G	
7319	2018-051-		2904.02	No	S960	Metal	Iron			Nails	2		Inventoried - Ready to Process	18WB14															FALSE						2790	CORINNA	1005680.9552	759748.2845	10/16/2015	5G	
7320	2018-051-		2904.03	No	S960	Organic	Wood			Small wood fragment	1		Complete	C5				14.6 g		2.088 in					0.780 in				FALSE	10/26/2018					2790	CORINNA	1005680.9552	759748.2845	10/16/2015	5G	
7321	2018-051-		2904.04	No	S960	Organic	Bone			Vertebra	1		Complete	C5															FALSE	7/23/2018					2790	CORINNA	1005680.9552	759748.2845	10/16/2015	5G	
7322	2018-051-		2905.01	No	S961	Metal	Iron			Thick Plate Fragment	1		In Treatment	YB146															FALSE						2804	CORINNA	1005679.6563	759750.01016	10/16/2015	5G	
7323	2018-051-		2905.02	No	S961	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 14	1		Green/Olive												FALSE	09/29/2016					2803	CORINNA	1005679.6563	759750.01016	10/16/2015	5G	
7324	2018-051-		2905.03	No	S961	Organic	Coal/Charcoal			Coal	1		Inventoried - Ready to Process	WB150															FALSE						2803	CORINNA	1005679.6563	759750.01016	10/16/2015	5G	
7325	2018-051-		2905.04	No	S961	Metal	Iron			Nail/Spike	4		Inventoried - Ready to Process	18WB14															FALSE						2803	CORINNA	1005679.6563	759750.01016	10/16/2015	5G	
7326	2018-051-		2905.05	No	S961	Metal	Iron			Thin Sheathing	1		Unknown																FALSE						2803	CORINNA	1005679.6563	759750.01016	10/16/2015	5G	
7327	2018-051-		2906	No	S962	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 14	1		Amber												FALSE	09/29/2016					2808	CORINNA	1005678.0995	759757.37887	10/16/2015	5H	
7328	2018-051-		2907.01	No	S963	Organic	Coal/Charcoal			Coal	1		Inventoried - Ready to Process	WB150															FALSE						7471	KAREN	1005672.9736	759754.82875	10/16/2015	5H	
7329	2018-051-		2907.02	No	S963	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 9	PX1														FALSE	1/11/2018					7471	KAREN	1005672.9736	759754.82875	10/16/2015	5H	
7330	2018-051-		2907.03	Yes	S963	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 21	1														FALSE	01/11/2018					7471	KAREN	1005672.9736	759754.82875	10/16/2015	5H	
7331	2018-051-		2908	No	S964	Organic																																			

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM	Length	UOM	Width	UOM	Thickness	UOM	Thickness	Diameter	UOM	Height	UOM	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square		
7380	2018-051-		2923.02	No	S986	Metal	Copper or Copper Alloy			Brass Tack	1		Complete	BOX 5	2				4g		1.36in							0.42in				FALSE	10/23/2018				352907	CORINNA	1005685.8213	759729.33164	10/16/2015	5E		
7381	2018-051-		2923.03	No	S986	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 9	PX1																FALSE	1/10/2018					2907	CORINNA	1005685.8213	759729.33164	10/16/2015	5E		
7382	2018-051-		2923.04	No	S986	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 10	1		Clear, Green/Olive														FALSE	01/11/2019					2907	CORINNA	1005685.8213	759729.33164	10/16/2015	5E		
7383	2018-051-		2923.05	No	S986	Organic	Wood			Wedge	1		Inventoried - Ready to Process	WB151																FALSE						2907	CORINNA	1005685.8213	759729.33164	10/16/2015	5E			
7384	2018-051-		2923.06	No	S986	Metal	Iron			Spike	1		Inventoried - Ready to Process	YB24																FALSE							2906	CORINNA	1005685.8213	759729.33164	10/16/2015	5E		
7385	2018-051-		2923.07	No	S986	Metal	Iron			Fastener with Washer	1		Complete	NHHC - Pallet 5 Large Tote 21	1															FALSE	09/08/2017					352906	CORINNA	1005685.8213	759729.33164	10/16/2015	5E			
7386	2018-051-		2923.08	No	S986	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	WB125																FALSE							2906	CORINNA	1005685.8213	759729.33164	10/16/2015	5E		
7387	2018-051-		2923.09	No	S986	Metal	Iron			End Of Firegrate?	1		Inventoried - Ready to Process	YB141																FALSE							2906	CORINNA	1005685.8213	759729.33164	10/16/2015	5E		
7388	2018-051-		2923.10	No	S986	Metal	Iron			Chisel	1		Complete	C1				378.4g		7.75in		1.0in		0.79in						FALSE					6.4	2906	CORINNA	1005685.8213	759729.33164	10/16/2015	5E			
7389	2018-051-		2923.11	No	S986	Organic	Coal/Charcoal			Coal	3		Inventoried - Ready to Process	WB150																FALSE							2907	CORINNA	1005685.8213	759729.33164	10/16/2015	5E		
7390	2018-051-		2923.12	No	S986	Organic	Bone			Bone	1		Inventoried - Ready to Process	NB151																FALSE							2907	CORINNA	1005685.8213	759729.33164	10/16/2015	5E		
7391	2018-051-		2923.13	No	S986	Metal	Lead			Lead Patch	1		Complete	NHHC - Pallet 1 Small Divided Tote 2	1															FALSE	09/05/2017						2907	CORINNA	1005685.8213	759729.33164	10/16/2015	5E		
7392	2018-051-		2923.14	No	S986	Metal	Copper or Copper Alloy			Spring	2		Complete	C2																FALSE	5/30/2018						1062907	CORINNA	1005685.8213	759729.33164	10/16/2015	5E		
7393	2018-051-		2923.15	No	S986	Metal	Iron			Small Fasteners	2		Inventoried - Ready to Process	WB116																FALSE								352907	CORINNA	1005685.8213	759729.33164	10/16/2015	5E	
7394	2018-051-		2924.01	No	S987	Metal	Iron			Square Cast Iron (Stanchion support?)	5		Complete	PR-S6																FALSE	11/27/2018						357571	KAREN	1005686.6189	759728.42118	10/16/2015	5E		
7395	2018-051-		2924.02	No	S987	Organic	Coal/Charcoal			Coal	1		Inventoried - Ready to Process	WB150																FALSE							7578	KAREN	1005686.6189	759728.42118	10/16/2015	5E		
7396	2018-051-		2924.03	No	S987	Metal	Iron			Concreted Fastener	1		Inventoried - Ready to Process	BARREL 75																FALSE								352906	CORINNA	1005686.6189	759728.42118	10/16/2015	5E	
7397	2018-051-		2924.04	No	S987	Metal	Iron			Rail	1		Inventoried - Ready to Process	BARREL 83																FALSE								352906	CORINNA	1005686.6189	759728.42118	10/16/2015	5E	
7398	2018-051-		2925	Yes	S988	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	BOX 1	2															FALSE	4/17/2018							7575	KAREN	1005682.0428	759732.70454	10/16/2015	5F	
7399	2018-051-		2926.01	No	S990	Composite		Wood		Double Sheave With Hook	1		Inventoried - Ready to Process	2018P5																FALSE								7591	KAREN	1005694.8318	759724.768	10/16/2015	6D	
7400	2018-051-		2926.02	No	S990	Metal	Iron			Bent Iron Strap?	1		Inventoried - Ready to Process	18WB12																FALSE								7591	KAREN	1005694.8318	759724.768	10/16/2015	6D	
7401	2018-051-		2926.03	No	S990	Metal	Copper or Copper Alloy			Sabot	1		Complete	BOX 14	2										1.38in		6.25in			FALSE	9/4/2018						357590	KAREN	1005694.8318	759724.768	10/16/2015	6D		
7402	2018-051-		2926.04	No	S990	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear, Green/Olive													FALSE	01/10/2019						7590	KAREN	1005694.8318	759724.768	10/16/2015	6D		
7403	2018-051-		2926.05	No	S990	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Small Tote 23	1															FALSE	10/17/2017							7590	KAREN	1005694.8318	759724.768	10/16/2015	6D	
7404	2018-051-		2926.06	No	S990	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 1	PX1															FALSE	9/7/2017							7590	KAREN	1005694.8318	759724.768	10/16/2015	6D	
7405	2018-051-		2927.01	No	S991	Metal				Small Fastener With Square Washer	1		Inventoried - Ready to Process	18WB10																FALSE								2928	CORINNA	1005692.3984	759725.1684	10/16/2015	5D	
7406	2018-051-		2927.02	No	S991	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Deaccessioned	DA																FALSE								2928	CORINNA	1005692.3984	759725.1684	10/16/2015	5D	
7407	2018-051-		2927.03	No	S991	Organic	Pitch			Pitch?	2		Complete	C5																FALSE	6/20/2018								2928	CORINNA	1005692.3984	759725.1684	10/16/2015	5D
7408	2018-051-		2927.04	No	S991	Metal	Iron			Cast Iron Square	1		Inventoried - Ready to Process	18WB10																FALSE								2928	CORINNA	1005692.3984	759725.1684	10/16/2015	5D	
7409	2018-051-		2927.05	No	S991	Metal	Iron			Nail	1		Inventoried - Ready to Process	WB50																FALSE								2928	CORINNA	1005692.3984	759725.1684	10/16/2015	5D	
7410	2018-051-		2927.06	No	S991	Metal	Copper or Copper Alloy			Brass With Hole	1		Complete	BOX 5	2															FALSE	8/8/2018							352928	CORINNA	1005692.3984	759725.1684	10/16/2015	5D	
7411	2018-051-		2927.07	No	S991	Metal	Iron			Large Fastener	1		Inventoried - Ready to Process	YB153							>30in								FALSE								2924	CORINNA	1005692.3984	759725.1684	10/16/2015	5D		
7412	2018-051-		2927.08	No	S991	Metal	Iron			Connecting Rod/guncarriage eye bolt?	1		Inventoried - Ready to Process	YB155																FALSE								2924	CORINNA	1005692.3984	759725.1684	10/16/2015	5D	
7413	2018-051-		2927.09	No	S991	Metal	Iron			Half Disc With Hole	1		Inventoried - Ready to Process	18WB09																FALSE								2924	CORINNA	1005692.3984	759725.1684	10/16/2015	5D	
7414	2018-051-		2927.10	No	S991	Metal	Iron			Iron Triangles	4		Inventoried - Ready to Process	18WB09																FALSE								2924	CORINNA	1005692.3984	759725.1684	10/16/2015	5D	
7415	2018-051-		2927.11	No	S991	Metal	Iron			Hammer Head	1		Complete	C6				1.45kg		6.75in		2.8in		3in		3in			FALSE	5/7/2019						352924	CORINNA	1005692.3984	759725.1684	10/16/2015	5D			
7416	2018-051-		2927.12	No	S991	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Medium Divided Tote 12	1															FALSE	10/12/2017								352924	CORINNA	1005692.3984	759725.1684	10/16/2015	5D
7417	2018-051-		2928.01	No	S992	Metal	Iron			Fastener/Pole	1		Inventoried - Ready to Process	YB153							20in									FALSE								2920	CORINNA	1005698.457	759729.50115	10/16/2015	6E	
7418	2018-051-		2928.02	No	S992	Metal	Iron			Cut Plating	1		Inventoried - Ready to Process	BARREL 151																FALSE								2920	CORINNA	1005698.457	759729.50115	10/16/2015	6E	
7419	2018-051-		2928.03	No	S992	Organic	Wood			Wood	1		Complete	C5																FALSE	7/11/2018								2919	CORINNA	1005698.457	759729.50115	10/16/2015	6E
7420	2018-051-		2928.04	Yes	S992	Ceramic	Whiteware	Stoneware		Historic Ceramic	2		Complete	BOX 1	2															FALSE	5/9/2018								2919	CORINNA	1005698.457	759729.50115	10/16/2015	6E
7421	2018-051-		2929.01	No	S993	Glass	Unidentified			Glass Bottle	1		Complete	NHHC - Pallet 6 Medium Divided Tote 7	1	MOLD LINES	Green/Olive													FALSE	02/03/2016								2947	CORINNA	1005703.496	759721.87468	10/16/2015	6

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square
7472	2018-051-		2941.03	No	S1010	Organic	Wood			Wedge	3		Complete	C5															FALSE	7/11/2018				3021	CORINNA	1005712.3875	759761.68873	10/18/2015	9C		
7473	2018-051-		2941.04	No	S1010	Organic	Ethnobotany			Seed	1		Complete	C5				6.8	g	1.257	in	1.039	in	1.021	in				FALSE	10/31/2018				3021	CORINNA	1005712.3875	759761.68873	10/18/2015	9G		
7474	2018-051-		2941.05	No	S1010	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	WB110															FALSE				3021	CORINNA	1005712.3875	759761.68873	10/18/2015	9G			
7475	2018-051-		2942	No	S1011	Organic	Rosin			Rosin	1		Complete	C5															FALSE	5/2/2018				7678	KAREN	1005713.1452	759767.50689	10/18/2015	9H		
7476	2018-051-		2943.01	No	S1013	Organic	Coal/Charcoal			Coal	1		Complete	C7															FALSE	5/10/2018				7692	KAREN	1005731.6252	759761.4701	10/18/2015	10G		
7477	2018-051-		2943.02	No	S1013	Metal	Iron			Curved Hook	1		Inventoried - Ready to Process	Needs X-ray															FALSE				7696	KAREN	1005731.6252	759761.4701	10/18/2015	10G			
7478	2018-051-		2944.01	No	S1014	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear												FALSE	01/14/2019				7698	KAREN	1005721.2344	759760.11037	10/18/2015	9G		
7479	2018-051-		2944.02	No	S1014	Organic	Leather			Shoe Sole	5		Complete	NHHC - Pallet 6 Large Tote 24	1														FALSE	01/26/2018				7698	KAREN	1005721.2344	759760.11037	10/18/2015	9G		
7480	2018-051-		2944.03	No	S1014	Organic	Wood			Stave	1		Complete	C5															FALSE	7/12/2018				7698	KAREN	1005721.2344	759760.11037	10/18/2015	9G		
7481	2018-051-		2944.04	No	S1014	Organic	Wood			Carved Dowel/Handle	1		Complete	C5				84.6	g	8	in					1.22	in		FALSE	10/24/2018				7698	KAREN	1005721.2344	759760.11037	10/18/2015	9G		
7482	2018-051-		2944.05	No	S1014	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Small Tote 23	1														FALSE	10/17/2017				7698	KAREN	1005721.2344	759760.11037	10/18/2015	9G		
7483	2018-051-		2945.01	No	S1015	Metal	Iron			Iron Ring	1		Inventoried - Ready to Process	18WB11															FALSE				3036	CORINNA	1005722.3215	759753.68849	10/18/2015	9F			
7484	2018-051-		2945.02	No	S1015	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Small Tote 22	1														FALSE	10/12/2017				3036	CORINNA	1005722.3215	759753.68849	10/18/2015	9F		
7485	2018-051-		2945.03	Yes	S1015	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	BOX 1	2		Red, Brown	28.1	g	2.32	in	1.18	in	0.72	in				FALSE	10/18/2018				3036	CORINNA	1005722.3215	759753.68849	10/18/2015	9F		
7486	2018-051-		2946	No	S1016	Metal	Copper or Copper Alloy			Valve	1		Complete	C2															FALSE	8/22/2018				253038	CORINNA	1005717.6386	759749.63322	10/18/2015	9F		
7487	2018-051-		2947.01	No	S1017	Metal	Iron			Curved Strap	1		Inventoried - Ready to Process	YB143															FALSE				3060	CORINNA	1005721.1813	759746.81579	10/18/2015	9F			
7488	2018-051-		2947.02	No	S1017	Metal	Iron			Plate	1		Inventoried - Ready to Process	YB144						11.25	in	5.75	in					FALSE				3060	CORINNA	1005721.1813	759746.81579	10/18/2015	9F				
7489	2018-051-		2948	No	S1018	Metal	Iron			Connecting Rod End	10		Complete	BOX 19	2			.454	kg	15.38	in	2.503	in	1.537	in	1.79	in		FALSE	2/22/2019				253064	CORINNA	1005718.7194	759740.74942	10/18/2015	8E		
7490	2018-051-		2949.01	No	S1019	Ceramic	Pipe			Pipe Bowl	1		Deaccessioned	DA															FALSE							1005721.4595	759739.30195	10/18/2015	9E		
7491	2018-051-		2949.02	No	S1019	Metal	Lead			Lead Patch	1		Deaccessioned																FALSE							1005721.4595	759739.30195	10/18/2015	9E		
7492	2018-051-		2949.03	No	S1019	Organic	Coal/Charcoal			Coal	1		Deaccessioned	DA															FALSE							1005721.4595	759739.30195	10/18/2015	9E		
7493	2018-051-		2950	No	S1021	Organic	Leather			Shoe Sole	1		Complete	C5															FALSE	5/3/2018				7718	KAREN	1005729.2066	759751.39958	10/18/2015	10F		
7494	2018-051-		2951	No	S1024	Metal	Iron			Sheathing?	2		Inventoried - Ready to Process	18WB11															FALSE				3084	CORINNA	1005726.3995	759762.07007	10/18/2015	10G			
7495	2018-051-		2952	No	S1025	Metal	Iron			Cast Iron Triangle	1		Inventoried - Ready to Process	18WB13															FALSE				3081	CORINNA	1005735.5536	759753.33925	10/18/2015	10F			
7496	2018-051-		2953.01	No	S1026	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1	Check stamped		Green/Olive											FALSE	10/26/2017				7735	KAREN	1005732.4697	759750.15472	10/18/2015	10F		
7497	2018-051-		2953.02	No	S1026	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1													FALSE	02/17/2017				7735	KAREN	1005732.4697	759750.15472	10/18/2015	10F			
7498	2018-051-		2953.03	No	S1026	Metal	Iron			Large Cast Iron Machinery	1		Unknown	Blue 23															FALSE						SEE PREWAS II	KAREN	1005732.4697	759750.15472	10/18/2015	10F	
7499	2018-051-		2954.01	No	S1027	Metal	Iron			Fastener, 2 Ends	2		Inventoried - Ready to Process	Needs X-ray															FALSE						7732	KAREN	1005734.1379	759750.69796	10/18/2015	10E	
7500	2018-051-		2954.02	No	S1027	Metal	Iron			Square Washer	1		Inventoried - Ready to Process	18WB13															FALSE						7730	KAREN	1005734.1379	759750.69796	10/18/2015	10E	
7501	2018-051-		2954.03	No	S1027	Metal	Iron			Large Fastener/Machinery Part (piston leveling arm?)	1		Inventoried - Ready to Process	YB144															FALSE						7732	KAREN	1005734.1379	759750.69796	10/18/2015	10E	
7502	2018-051-		2954.04	No	S1027	Organic	Coal/Charcoal			Coal	1		Deaccessioned	DA															FALSE						7733	KAREN	1005734.1379	759750.69796	10/18/2015	10E	
7503	2018-051-		2954.05	No	S1027	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 11	PX1	Simple stamped													FALSE	4/10/2018				7733	KAREN	1005734.1379	759750.69796	10/18/2015	10E		
7504	2018-051-		2955.01	No	S1029	Metal	Iron			Hexagon Bolt Head	1		Inventoried - Ready to Process	18WB12															FALSE						7751	KAREN	1005743.2431	759755.58885	10/18/2015	11F	
7505	2018-051-		2955.02	No	S1029	Organic	Coal/Charcoal			Coal	3		Complete	C7															FALSE	5/14/2018				7751	KAREN	1005743.2431	759755.58885	10/18/2015	11F		
7506	2018-051-		2955.03	No	S1029	Glass	Unidentified			Glass Fragment	2		Inventoried - Ready to Process	WB111			Clear, Green/Olive												FALSE						7751	KAREN	1005743.2431	759755.58885	10/18/2015	11F	
7507	2018-051-		2955.04	No	S1029	Composite	Iron	Textile	Rubber	Cast Iron With Fabric Or Rubber	1		Inventoried - Ready to Process	18WB13															FALSE						7751	KAREN	1005743.2431	759755.58885	10/18/2015	11F	
7508	2018-051-		2956.01	No	S1030	Metal	Iron			Strap	1		Inventoried - Ready to Process	YB153															FALSE						3095	CORINNA	1005746.1222	759759.49331	10/18/2015	12F	
7509	2018-051-		2956.02	Yes	S1030	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 21	1														FALSE	6/2/2016				3096	CORINNA	1005746.1222	759759.49331	10/18/2015	12F		
7510	2018-051-		2956.03	No	S1030	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1														FALSE	1/4/2019				3095	CORINNA	1005746.1222	759759.49331	10/18/2015	12F		
7511	2018-051-		2956.04	No	S1030	Organic	Wood			Stave	1		Complete	C5						5	in	2.75	in	0.2	in				FALSE	7/1/2018				3096	CORINNA	1005746.1222	759759.49331	10/18/2015	12F		
7512	2018-051-		2956.05	No	S1030	Metal	Iron			Triangular Cast Iron	1		Inventoried - Ready to Process	YB26															FALSE						3095	CORINNA	1005746.1222	759759.49331	10/18/2015	12F	
7513	2018-051-		2956.06	No	S1030	Metal	Iron			Chain Link? Eye bolt?	1		Inventoried - Ready to Process	YB155															FALSE						3095	CORINNA	1005746.1222	759759.49331	10/18/2015	12F	
7514	2018-051-		2957.01	Yes	S1033	Ceramic	Refined Earthenware			Historic Ceramic	5		Complete	BOX 1	2					2.76	in	2.70	in	0.33	in				FALSE	9/4/2018				7773	KAREN	1005756.1867	759763.70526	10/18/2015	13F		
7515	2018-051-		2957.02	No	S1033	Glass	Unidentified			Glass Bottle Rim And Fragment	2		Complete	NHHC - Pallet 6 Medium Divided Tote 14	1		Green/Olive												FALSE	06/14/2017				7773	KAREN	1005756.1867	759763.70526				

Appendix C: Artifact Database

C-95
CSS Georgia Archeological Data Recovery and Mitigation

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square	
7647	2018-051-		2999.01	No	S1092	Architecture	Firebrick			Brick	1		Inventoried - Ready to Process	NHHC		"BROOKLYN FIRE-BRICK WORKS NO. 1"		5.45	lb		7.2	in	4.558	in	2.697	in				FALSE	3/26/19					3310	CORINNA	1005742.032	759743.1352	10/18/2015	11E	
7648	2018-051-		2999.02	Yes	S1092	Metal	Firegrate			Iron	1		Inventoried - Ready to Process	YB?															FALSE						3310	CORINNA	1005742.032	759743.1352	10/18/2015	11E		
7649	2018-051-		3000	No	S1093	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Small Tote 22	1														FALSE	10/12/2017					8055	KAREN	1005736.0373	759732.8947	10/19/2015	10D		
7650	2018-051-		3001.01	Yes	S1094	Ceramic	Refined Earthenware			Historic Ceramic	2		Complete	NHHC - Pallet 4 Small Tote 21	1														FALSE	4/13/2016					8061	KAREN	1005737.7534	759735.07969	10/19/2015	10D		
7651	2018-051-		3001.02	No	S1094	Organic	Coal/Charcoal			Charcoal	1		Complete	C7															FALSE	6/14/2018					8061	KAREN	1005737.7534	759735.07969	10/19/2015	10D		
7652	2018-051-		3001.03	No	S1094	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 1	PX1														FALSE	4/15/2016					8061	KAREN	1005737.7534	759735.07969	10/19/2015	10D		
7653	2018-051-		3001.04	No	S1094	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Green/Olive												FALSE	04/15/2016					8061	KAREN	1005737.7534	759735.07969	10/19/2015	10D		
7654	2018-051-		3002.01	Yes	S1095	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	BOX 1	2															FALSE	6/2/2016					3331	CORINNA	1005667.2416	759711.20839	10/19/2015	3D	
7655	2018-051-		3002.02	No	S1095	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 1	PX1															FALSE	10/27/2016					3331	CORINNA	1005667.2416	759711.20839	10/19/2015	3D	
7656	2018-051-		3002.03	No	S1095	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Small Tote 23	1														FALSE	10/17/2017					3331	CORINNA	1005667.2416	759711.20839	10/19/2015	3D		
7657	2018-051-		3003	No	S1096	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Green/Olive												FALSE	09/19/2017					3326	CORINNA	1005672.0673	759717.23468	10/19/2015	3D		
7658	2018-051-		3004.01	No	S1097	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear												FALSE	01/16/2019					3344	CORINNA	1005670.2336	759710.74838	10/19/2015	3D		
7659	2018-051-		3004.02	No	S1097	Organic	Bone			Bone	1		Complete	C5															FALSE	7/23/2018					3344	CORINNA	1005670.2336	759710.74838	10/19/2015	3D		
7660	2018-051-		3004.03	No	S1097	Metal	Copper or Copper Alloy			Brass Button	1		Complete	NHHC - Pallet 5 Small Divided Tote 7	1		"COL S. GA / H. DANIEL"												FALSE	03/29/2018					35	3344-3345	CORINNA	1005670.2336	759710.74838	10/19/2015	3D	
7661	2018-051-		3005.01	No	S1098	Organic	Wood			Wood Plank	1		Complete	C3				465.5	g		15	in	4.007	in	0.653	in				FALSE	8/7/2019					3347	CORINNA	1005664.1405	759712.65195	10/19/2015	2D	
7662	2018-051-		3005.02	No	S1098	Organic	Coal/Charcoal			Coal	2		Complete	C7															FALSE	4/24/2018					3347	CORINNA	1005664.1405	759712.65195	10/19/2015	2D		
7663	2018-051-		3005.03	No	S1098	Glass	Unidentified			Glass	4		Complete	NHHC - Pallet 6 Medium Divided Tote 10	1		Green/Olive , Light Blue												FALSE	09/19/2017					3347	CORINNA	1005664.1405	759712.65195	10/19/2015	2D		
7664	2018-051-		3005.04	No	S1098	Metal	Iron			U-Shaped Iron	1		Complete	NHHC - Pallet 2 Large Tote 16	1						9	cm	9.5	cm			2.5	cm		FALSE	04/11/2018					7	3347	CORINNA	1005664.1405	759712.65195	10/19/2015	2D
7665	2018-051-		3005.05	Yes	S1098	Ceramic	Whiteware			Historic Ceramic	1		Complete	BOX 1	2															FALSE	5/9/2018					3347	CORINNA	1005664.1405	759712.65195	10/19/2015	2D	
7666	2018-051-		3005.06	No	S1098	Organic	Ethnobotany			Seed/Nut	1		Complete	C5															FALSE	7/6/2018					3347	CORINNA	1005664.1405	759712.65195	10/19/2015	2D		
7667	2018-051-		3005.07	No	S1098	Ceramic	Coarse Earthenware			Prehistoric Ceramic	3		Complete	PX BOX 3	PX1		Cord marked												FALSE	9/13/2017					3347	CORINNA	1005664.1405	759712.65195	10/19/2015	2D		
7668	2018-051-		3006.01	No	S1099	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Small Tote 22	1														FALSE	10/12/2017					8085	KAREN	1005661.4534	759718.30156	10/19/2015	2E		
7669	2018-051-		3006.02	No	S1099	Organic	Bone			Bone	1		Complete	C5															FALSE	7/23/2018					8085	KAREN	1005661.4534	759718.30156	10/19/2015	2E		
7670	2018-051-		3006.03	No	S1099	Organic	Wood			Stave	1		Complete	C5				166.9	g		18.475	in	2.85	in	.264	in			FALSE	5/30/19					8085	KAREN	1005661.4534	759718.30156	10/19/2015	2E		
7671	2018-051-		3006.04	Yes	S1099	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 21	1														FALSE	01/31/2018					8085	KAREN	1005661.4534	759718.30156	10/19/2015	2E		
7672	2018-051-		3006.05	No	S1099	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Green/Olive												FALSE	09/27/2017					8085	KAREN	1005661.4534	759718.30156	10/19/2015	2E		
7673	2018-051-		3007	No	S1100	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 9	PX1		Complicated stamped													FALSE	1/11/2018					8083	KAREN	1005663.9846	759727.06031	10/19/2015	3F	
7674	2018-051-		3008	No	S1102	Glass	Liquor Bottle			Glass Bottle	1		Complete	NHHC - Pallet 6 Large Tote 28	1		"ONE PINT", "FEDERAL LAW FORBIDS SALE OR RE-USE OF THIS BOTTLE", "B3", "16LW", "73", "D9", "BALL", "45"	Brown											FALSE	01/18/2018					8109	KAREN	1005655.75	759717.98	10/19/2015	2E		
7675	2018-051-		3009.01	No	S1103	Metal	Iron			Screw fragment with threading	1		Inventoried - Ready to Process	18WB14															FALSE							3345	CORINNA	1005663.3891	759724.46071	10/19/2015	3E	
7676	2018-051-		3009.02	No	S1103	Organic	Wood			Wood Block	1		Inventoried - Ready to Process	WB18															FALSE							3345	CORINNA	1005663.3891	759724.46071	10/19/2015	3E	
7677	2018-051-		3009.03	No	S1103	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	YB155															FALSE							3345	CORINNA	1005663.3891	759724.46071	10/19/2015	3E	
7678	2018-051-		3009.04	No	S1103	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 4	PX1														FALSE	12/15/2017					3345	CORINNA	1005663.3891	759724.46071	10/19/2015	3E		
7679	2018-051-		3009.05	No	S1103	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear												FALSE	01/16/2019							1005663.3891	759724.46071	10/19/2015	3E		
7680	2018-051-		3010	No	S1104	Stone	Slate			Possible Retouch Slate	1		Complete	BOX 7	2														FALSE	4/19/2018					3356	CORINNA	1005668.2782	759715.51963	10/19/2015	3D		
7681	2018-051-		3011	No	S1105	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 9	PX1		Cord marked												FALSE	5/31/2018					3374	CORINNA	1005685.2611	759714.35752	10/19/2015	4D		
7682	2018-051-		3012.01	No	S1108	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1		Complicated stamped												FALSE	12/14/2017					8130	KAREN	1005694.8705	759715.11796	10/19/2015	5C		
7683	2018-051-		3012.02	No	S1108	Glass	Unidentified			Glass	4		Complete	NHHC - Pallet 6 Medium Divided Tote 14	1														FALSE	01/03/2019					8130	KAREN	1005694.8705	759715.11796	10/19/2015	5C		
7684	2018-051-		3012.03	No	S1108	Organic	Ethnobotany			Seed/Nut	8		Complete	C5															FALSE	7/6/2018					8130	KAREN	1005694.8705	759715.11796	10/19/2015	5C		
7685	2018-051-		3012.04	No	S1108	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Small Tote 22	1														FALSE	10/12/2017					8130	KAREN	1005694.8705	759715.11796	10/19/2015	5C		
7686	2018-051-		3012.05	No	S1108	Organic	Bone			Bone	1		Complete	NHHC - Pallet 6 Small Tote 24	1														FALSE	09/07/2017					8130	KAREN	1005694.8705	759715.11796	10/19/2015	5C		
7687	2018-051-		3012.06	Yes	S1108	Ceramic	Refined Earthenware			Historic Ceramic	1		Inventoried - Ready to Process	WB109															FALSE							8130	KAREN	1005694.8705	759715.11796	10/19/2015	5C	
7688	2018-051-		3012.07	No	S1108	Metal	Fastener Through Iron (Rail?)			Iron	2		Complete	NHHC - Pallet 5 Large Tote 19	1														FALSE	04/11/2018					32		1005694.8705	759715.11796	10/19/2015	5C		
7689	2018-																																									

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square
7724	2018-051-		3023.03	No	S1123	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1	Simple stamped														FALSE	4/10/2018					8188	KAREN	1005707.6495	759720.24555	10/19/2015	7D
7725	2018-051-		3024.01	No	S1124	Ceramic	Coarse Earthenware			Prehistoric Ceramic	3		Complete	PX BOX 9	PX1															FALSE	1/11/2018					8185	KAREN	1005716.018	759717.38184	10/19/2015	7C
7726	2018-051-		3024.02	No	S1124	Glass	Unidentified			Glass	3		Complete	NHHC - Pallet 6 Medium Divided Tote 14	1		Amber, Green/Olive, Clear												FALSE	01/03/2019					8185	KAREN	1005716.018	759717.38184	10/19/2015	7C	
7727	2018-051-		3024.03	No	S1124	Metal	Iron			Cast Iron Plate	1		Inventoried - Ready to Process	YB144															FALSE						8186	KAREN	1005716.018	759717.38184	10/19/2015	7C	
7728	2018-051-		3025.01	No	S1125	Metal	Iron			Wheel	1		Complete	PK12				21.32 kg								11.25 in		9.5 in	FALSE	6/6/2019					258196	KAREN	1005721.3362	759714.2882	10/19/2015	8C	
7729	2018-051-		3025.02	No	S1125	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 1	PX1	Possibly Complicated stamped, thick clay rim with impressions														FALSE	10/27/2016					8196	KAREN	1005721.3362	759714.2882	10/19/2015	8C
7730	2018-051-		3025.03	No	S1125	Organic	Coal/Charcoal			Coal	3		Complete	C7															FALSE	5/2/2018					8196	KAREN	1005721.3362	759714.2882	10/19/2015	8C	
7731	2018-051-		3025.04	Yes	S1125	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1														FALSE	04/22/2016					8196	KAREN	1005721.3362	759714.2882	10/19/2015	8C	
7732	2018-051-		3025.05	No	S1125	Glass	Unidentified			Glass	1		Unknown				Olive												FALSE						8196	KAREN	1005721.3362	759714.2882	10/19/2015	8C	
7733	2018-051-		3025.06	No	S1125	Stone	Chipped Stone			Stone	1		Complete	PX BOX 13	PX1														FALSE	5/2/2018							1005721.3362	759714.2882	10/19/2015	8C	
7734	2018-051-		3026.01	No	S1126	Metal	Iron			Pipe	1		Inventoried - Ready to Process	YB141															FALSE						8190	KAREN	1005719.8094	759715.84727	10/19/2015	8C	
7735	2018-051-		3026.02	No	S1126	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Clear												FALSE	01/16/2019					8194	KAREN	1005719.8094	759715.84727	10/19/2015	8C	
7736	2018-051-		3027	No	S1127	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 1	PX1	Cord marked (faint)														FALSE	1/4/2019					3484	CORINNA	1005722.8041	759712.10483	10/19/2015	8B
7737	2018-051-		3028.01	Yes	S1128	Ceramic	Refined Earthenware			Historic Ceramic	5		Complete	NHHC - Pallet 4 Small Tote 12	1														FALSE	1/23/2019					3486	CORINNA	1005714.5045	759714.67385	10/19/2015	7C	
7738	2018-051-		3028.02	No	S1128	Stone	Chipped Stone			Chipped Stone	2		Complete	BOX 7	2														FALSE	4/19/2018					3486	CORINNA	1005714.5045	759714.67385	10/19/2015	7C	
7739	2018-051-		3028.03	No	S1128	Metal	Lead			Bullet	1		Complete		1											45 in			FALSE	05/26/2017					3486	CORINNA	1005714.5045	759714.67385	10/19/2015	7C	
7740	2018-051-		3028.04	No	S1128	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Small Tote 23	1														FALSE	10/12/2017					3486	CORINNA	1005714.5045	759714.67385	10/19/2015	7C	
7741	2018-051-		3028.05	No	S1128	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1	Has curved pattern (may be part of Complicated stamped pattern)														FALSE	12/14/2017					3486	CORINNA	1005714.5045	759714.67385	10/19/2015	7C
7742	2018-051-		3029	No	S1129	Glass	Pane Glass/Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Green/Olive, Clear/Light Blue												FALSE	01/16/2019					3500	CORINNA	1005713.2362	759713.57692	10/19/2015	7C	
7743	2018-051-		3030.01	No	S1130	Metal	Iron			Small through bolt with nut	1		Complete	BOX 10	2														FALSE	7/13/2018			1/25/2016		3502	CORINNA	1005712.8135	759707.1387	10/19/2015	7B	
7744	2018-051-		3030.02	No	S1130	Organic	Coal/Charcoal			Coal	1		Complete	C7															FALSE	4/24/2018					3502	CORINNA	1005712.8135	759707.1387	10/19/2015	7B	
7745	2018-051-		3030.03	No	S1130	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Green/Olive												FALSE	01/11/2018					3502	CORINNA	1005712.8135	759707.1387	10/19/2015	7B	
7746	2018-051-		3031.01	Yes	S1131	Ceramic	Whiteware	Stoneware		Historic Ceramic	2		Complete	BOX 1	2														FALSE	5/9/2018					8212	KAREN	1005718.0831	759708.54152	10/19/2015	7B	
7747	2018-051-		3031.02	No	S1131	Glass	Unidentified			Glass	2		Inventoried - Ready to Process	Bagged Separately			Amber, Green/Olive												FALSE	6/15/2017					8212	KAREN	1005718.0831	759708.54152	10/19/2015	7B	
7748	2018-051-		3031.03	No	S1131	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 8	PX1														FALSE	6/21/2018					8212	KAREN	1005718.0831	759708.54152	10/19/2015	7B	
7749	2018-051-		3032.01	No	S1132	Glass	Unidentified			Part Of Bottle	2		Complete	NHHC - Pallet 6 Large Tote 28	1	"SALE...RE-USE OF THIS BOTTLE" "AA" in circle of flourishes on front; "HALF-PINT" and a lozenge-circle on back	Amber												FALSE	12/01/2016					8210	KAREN	1005708.1277	759703.346	10/19/2015	6B	
7750	2018-051-		3032.02	Yes	S1132	Ceramic	Stoneware			Historic Ceramic	2		Complete	NHHC - Pallet 4 Small Tote 12	1														FALSE	12/15/2017					8210	KAREN	1005708.1277	759703.346	10/19/2015	6B	
7751	2018-051-		3032.03	No	S1132	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 9	PX1	Check stamped													FALSE	1/11/2018					8210	KAREN	1005708.1277	759703.346	10/19/2015	6B	
7752	2018-051-		3033.01	No	S1134	Metal	Iron			Half Rail	1		Inventoried - Ready to Process	BARREL 83															FALSE						8232	KAREN	1005706.2095	759710.74363	10/19/2015	6C	
7753	2018-051-		3033.02	Yes	S1134	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1														FALSE	4/28/2016					8233	KAREN	1005706.2095	759710.74363	10/19/2015	6C	
7754	2018-051-		3033.03	No	S1134	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 10	1		Clear												FALSE	01/10/2019					8233	KAREN	1005706.2095	759710.74363	10/19/2015	6C	
7755	2018-051-		3034.01	No	S1135	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 10	1		Amber												FALSE	09/14/2017					3524	CORINNA	1005697.9842	759700.38053	10/19/2015	5B	
7756	2018-051-		3034.02	No	S1135	Metal	Iron			Small Fastener	1		Inventoried - Ready to Process	WB50															FALSE						3524	CORINNA	1005697.9842	759700.38053	10/19/2015	5B	
7757	2018-051-		3035.01	No	S1136	Organic	Wood			Wedge	2		Complete	C5															FALSE	7/11/2018					3521	CORINNA	1005701.4784	759705.07944	10/19/2015	6B	
7758	2018-051-		3035.02	No	S1136	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear												FALSE	01/16/2019					3522	CORINNA	1005701.4784	759705.07944	10/19/2015	6B	
7759	2018-051-		3035.03	No	S1136	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 8	PX1														FALSE	7/26/2018					3522	CORINNA	1005701.4784	759705.07944	10/19/2015	6B	
7760	2018-051-		3036.01	No	S1137	Organic	Paper			Paper	1		Complete	C5				6.4 g		5.337 in		2.104 in		0.040 in					FALSE	10/31/2018					3536	CORINNA	1005699.9236	759697.08622	10/19/2015	5B	
7761	2018-051-		3036.02	No	S1137	Glass	Pane Glass			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Clear/Yellow												FALSE	01/16/2019					3536	CORINNA	1005699.9236	759697.08622	10/19/2015	5B	
7762	2018-051-		3036.03	No	S1137	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Small Tote 22	1														FALSE	10/12/2018					3536	CORINNA	1005699.9236	759697.08622	10/19/2015	5B	
7763	2018-051-		3037.01	No	S1138	Metal	Iron			Nail	1		Inventoried - Ready to Process	18WB11															FALSE						3542	CORINNA	1005692.7048	759696.84401	10/19/2015	5B	
7764	2018-051-		3037.02	No	S1138	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Blue, Yellow/Amber												FALSE	01/17/2018					3542	CORINNA	1005692.7048	759696.84401	10/19/2015	5B	
7765	2018-051-		3037.03	No	S1138	Organic	Pitch			Pitch	1		Complete	C5															FALSE	6/19/2018					3542	CORINNA	1005692.7048	759696.84401	10/19/2015	5B	
7766	2018-051-		3038	No	S1139	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 14	1																										

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square	
7958	2018-051-		3095.02	No	SI225	Organic	Coal/Charcoal			Coal	2		Complete	C7																FALSE	5/10/2018					8659	KAREN	1005714.8986	759699.48028	10/20/2015	7A	
7959	2018-051-		3095.03	No	SI225	Glass	Unidentified			Glass	5		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1	8580 5, 41, 16 (Anchor Hocking logo?) on brown fragment	Brown, Green/Olive Clear/Yellow, Clear/Blue, Light Blue													FALSE	01/16/2019					8659	KAREN	1005714.8986	759699.48028	10/20/2015	7A	
7960	2018-051-		3095.04	No	SI225	Concretion	Concretion			Slag	1		Unknown																	FALSE						8659	KAREN	1005714.8986	759699.48028	10/20/2015	7A	
7961	2018-051-		3095.05	No	SI225	Ceramic	Coarse Earthenware			Prehistoric Ceramic	3		Complete	PX BOX 4	PX1	1 Cord marked, 1 possibly decorated with small square-shaped indentations (Check stamped?)															FALSE	12/15/2017					8659	KAREN	1005714.8986	759699.48028	10/20/2015	7A
7962	2018-051-		3096.01	No	SI226	Organic	Rosin				1		Complete	NHHC - Pallet 4 Small Tote 16	1															FALSE	01/30/2018					8663	KAREN	1005719.5548	759684.75954	10/20/2015	7AA	
7963	2018-051-		3096.02	No	SI226	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Clear													FALSE	2/17/2017					8663	KAREN	1005719.5548	759684.75954	10/20/2015	7AA	
7964	2018-051-		3097.01	No	SI227	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 14	1		Blue													FALSE	09/29/2016					3906	CORINNA	1005726.722	759707.97847	10/20/2015	8B	
7965	2018-051-		3097.02	No	SI227	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Medium Divided Tote 12	1															FALSE	10/17/2017					3906	CORINNA	1005726.722	759707.97847	10/20/2015	8B	
7966	2018-051-		3097.03	No	SI227	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 4	PX1	1 incised, 1 cheek marked (?) with triangles															FALSE	6/2/2016					3906	CORINNA	1005726.722	759707.97847	10/20/2015	8B
7967	2018-051-		3097.04	No	SI227	Metal	Iron			Small Fastener	1		Inventoried - Ready to Process	WB50																FALSE					3906	CORINNA	1005726.722	759707.97847	10/20/2015	8B		
7968	2018-051-		3097.05	No	SI227	Metal	Iron			Plate	1		Inventoried - Ready to Process	18WB11																FALSE					3906	CORINNA	1005726.722	759707.97847	10/20/2015	8B		
7969	2018-051-		3097.06	No	SI227	Metal	Copper or Copper Alloy			Brass? Patch	1		Inventoried - Ready to Process	Brass ER bucket																FALSE					3906	CORINNA	1005726.722	759707.97847	10/20/2015	8B		
7970	2018-051-		3098.01	No	SI228	Metal	Iron			Engine Crank	1		Inventoried - Ready to Process	YB135																FALSE					3902	CORINNA	1005730.1027	759689.79734	10/20/2015	8AA		
7971	2018-051-		3098.02	No	SI228	Concretion	Concretion			Concretion	3		Inventoried - Ready to Process	18WB11																FALSE					3902	CORINNA	1005730.1027	759689.79734	10/20/2015	8AA		
7972	2018-051-		3098.03	No	SI228	Architecture	Mortar			Mortar	1		Complete	NHHC - Pallet 4 Small Tote 7	1															FALSE	02/17/2017					3901	CORINNA	1005730.1027	759689.79734	10/20/2015	8AA	
7973	2018-051-		3099	No	SI229	Organic	Bone			Concreted Bone?	2		Complete	C5							2 in									FALSE	7/24/2018					3920	CORINNA	1005723.5896	759691.0727	10/20/2015	7AA	
7974	2018-051-		3100.01	No	SI233	Metal	Copper or Copper Alloy			Sheathing	2		Inventoried - Ready to Process	Brass chem bucket																FALSE					8690	KAREN	1005737.0124	759706.48137	10/20/2015	9A		
7975	2018-051-		3100.02	No	SI233	Metal	Iron			Slag	1		Complete	NHHC - Pallet 5 Large Tote 23	1															FALSE	04/12/2018					8690	KAREN	1005737.0124	759706.48137	10/20/2015	9A	
7976	2018-051-		3100.03	Yes	SI233	Ceramic	Refined Earthenware			Historic Ceramic	10		Complete - Needs Final Images	Problem Cart																FALSE					8690, 8693	KAREN	1005737.0124	759706.48137	10/20/2015	9A		
7977	2018-051-		3100.04	No	SI233	Ceramic	Coarse Earthenware			Prehistoric Ceramic	4		Complete	PX BOX 4	PX1	1 Simple stamped															FALSE	11/7/2017					8690, 8693	KAREN	1005737.0124	759706.48137	10/20/2015	9A
7978	2018-051-		3100.05	No	SI233	Glass	Unidentified			Glass	3		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Blue, Yellow/Amber, Green/Olive													FALSE	01/17/2018					8690	KAREN	1005737.0124	759706.48137	10/20/2015	9A	
7979	2018-051-		3100.06	No	SI233	Metal	Copper or Copper Alloy			Brass Object, Twisted Wire	1		Complete	C2				20.5 g			4.98 in					0.3 in				FALSE	9/19/2018				28	8690	KAREN	1005737.0124	759706.48137	10/20/2015	9A	
7980	2018-051-		3101.01	Yes	SI234	Ceramic	Whiteware	Stoneware		Historic Ceramic	5		Complete	NHHC - Pallet 4 Small Tote 12	1															FALSE	10/17/2018					8697	KAREN	1005737.665	759709.86937	10/20/2015	9B	
7981	2018-051-		3101.02	No	SI234	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 14	1		Green/Olive													FALSE	04/12/2017					8697	KAREN	1005737.665	759709.86937	10/20/2015	9B	
7982	2018-051-		3102.01	No	SI235	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 1	PX1																FALSE	1/4/2019					3936-3937	CORINNA	1005735.396	759713.29142	10/20/2015	9B
7983	2018-051-		3102.02	No	SI235	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Blue													FALSE	06/23/2016					3936	CORINNA	1005735.396	759713.29142	10/20/2015	9B	
7984	2018-051-		3102.03	No	SI235	Organic	Coal/Charcoal			Coal	1		Inventoried - Ready to Process	WB150																FALSE					3936	CORINNA	1005735.396	759713.29142	10/20/2015	9B		
7985	2018-051-		3102.04	Yes	SI235	Ceramic	Refined Earthenware			Historic Ceramic	2		Complete	NHHC - Pallet 4 Small Tote 12	1															FALSE	4/13/2016					3937	CORINNA	1005735.396	759713.29142	10/20/2015	9B	
7986	2018-051-		3103.01	Yes	SI236	Ceramic	Stoneware			Historic Ceramic	2		Complete	NHHC - Pallet 4 Small Tote 12	1		Brown Light Blue, Clear													FALSE	10/17/2018					3941	CORINNA	1005743.7358	759716.10608	10/20/2015	10B	
7987	2018-051-		3103.02	No	SI236	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 10	1															FALSE	1/14/2019					3941	CORINNA	1005743.7358	759716.10608	10/20/2015	10B	
7988	2018-051-		3103.03	No	SI236	Metal	Iron			Plate With Hole	1		Inventoried - Ready to Process	18WB11																FALSE					3941	CORINNA	1005743.7358	759716.10608	10/20/2015	10B		
7989	2018-051-		3103.04	No	SI236	Organic	Wood			Wedge	1		Inventoried - Ready to Process	WB151																FALSE					3941	CORINNA	1005743.7358	759716.10608	10/20/2015	10B		
7990	2018-051-		3103.05	No	SI236	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 4	PX1	1 Simple stamped	Black, Red														FALSE	1/4/2019					3941	CORINNA	1005743.7358	759716.10608	10/20/2015	10B
7991	2018-051-		3104.01	No	SI237	Metal	Copper or Copper Alloy			Sheathing	1		Unknown																	FALSE					3966	CORINNA	1005747.6135	759712.66861	10/20/2015	10A		
7992	2018-051-		3104.02	No	SI237	Metal	Copper or Copper Alloy			Powder Canister Base	1		Complete	NHHC - Pallet 1 Large Tote 3	1						18 in								FALSE	10/10/2017				25	3965	CORINNA	1005747.6135	759712.66861	10/20/2015	10A		
7993	2018-051-		3104.03	No	SI237	Metal	Copper or Copper Alloy			Sheathing	2		Complete	BOX 5	2															FALSE	4/25/2018					3966	CORINNA	1005747.6135	759712.66861	10/20/2015	10A	
7994	2018-051-		3104.04	No	SI237	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1	Possibly Cord marked														FALSE	12/15/2017					3966	CORINNA	1005747.6135	759712.66861	10/20/2015	10A	
7995	2018-051-		3104.05	No	SI237	Architecture	Mortar			Mortar	1		Complete	NHHC - Pallet 4 Small Tote 7	1															FALSE	12/15/2017					3966	CORINNA	1005747.6135	759712.66861	10/20/2015	10A	
7996	2018-051-		3105.01	No	SI240	Metal	Copper or Copper Alloy			Large Curved Brass Band	1		Complete	NHHC - Pallet 2	1															FALSE	01/30/2019				25	8702	KAREN	1005747.8592	759705.12159	10/20/2015	10A	
7997	2018-051-		3105.02	No	SI240	Organic	Wood			Wood	1		Complete	C5				4.7 g			1.446 in		0.825 in		0.864 in					FALSE	10/26/2018					8706	KAREN	1005747.8592	759705.12159	10/20/2015	10A	
7998	2018-051-		3105.03	Yes	SI240	Ceramic	Stoneware	Refined Earthenware		Historic Ceramic	2		Complete	NHHC - Pallet 4 Small Tote 12	1															FALSE	10/26/2017					8706	KAREN	1005747.8592	759705.12159	10/20/2015	10A	
7999	2018-051-		3105.04	No	SI240	Glass	Unidentified			Glass	4		Inventoried - Ready to Process	BAGGED SEPARATELY		Mold seam on 1 clear fragment	Clear, Green/Olive														FALSE	6/28/2017					8706	KAREN	1005747.8592			

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square
8031	2018-051-		3115.01	No	SI253	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1															FALSE	12/15/2017				4034	CORINNA	1005641.4623	759724.4533	10/20/2015	1F	
8032	2018-051-		3115.02	No	SI253	Organic	Coal/Charcoal			Coal	3		Complete	NHHC - Pallet 6 Small Tote 22	1															FALSE	10/17/2017				4034	CORINNA	1005641.4623	759724.4533	10/20/2015	1F	
8033	2018-051-		3115.03	Yes	SI253	Ceramic	Stoneware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1															FALSE	10/26/2017				4034	CORINNA	1005641.4623	759724.4533	10/20/2015	1F	
8034	2018-051-		3116.01	No	SI254	Metal	Unidentified			Stamped Metal	1		Did Not Survive	DNS		"HEIDSIECK AND Co .MS"														FALSE					4027-4028	CORINNA	1005644.8652	759716.34959	10/20/2015	1E	
8035	2018-051-		3116.02	Yes	SI254	Ceramic	Stoneware			Historic Ceramic	1		Complete	BOX 1	2															FALSE	5/9/2018				4027	CORINNA	1005644.8652	759716.34959	10/20/2015	1E	
8036	2018-051-		3116.03	No	SI254	Metal	Copper or Copper Alloy			Brass Tack	1		Complete	BOX 5	2															FALSE	5/30/2018				10.64027	CORINNA	1005644.8652	759716.34959	10/20/2015	1E	
8037	2018-051-		3116.04	No	SI254	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Green/Olive/Amber													FALSE	01/17/2018				4027	CORINNA	1005644.8652	759716.34959	10/20/2015	1E	
8038	2018-051-		3116.05	No	SI254	Organic	Coal/Charcoal			Charcoal	1		Deaccessioned	C7																FALSE	4/24/2018						1005644.8652	759716.34959	10/20/2015	1E	
8039	2018-051-		3116.06	No	SI254	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Deaccessioned	DA																FALSE								759716.34959	10/20/2015	1E	
8040	2018-051-		3117.01	No	SI255	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Green/Olive													FALSE	09/27/2017				8772	KAREN	1005647.4763	759723.79621	10/20/2015	1F	
8041	2018-051-		3117.02	No	SI255	Organic	Wood			Part of Barrel Head	1		Complete	C5																FALSE	7/11/2018				8772	KAREN	1005647.4763	759723.79621	10/20/2015	1F	
8042	2018-051-		3117.03	No	SI255	Organic	Coal/Charcoal			Coal	2		Complete	NHHC - Pallet 6 Small Tote 23	1															FALSE	04/12/2018				8772	KAREN	1005647.4763	759723.79621	10/20/2015	1F	
8043	2018-051-		3118	Yes	SI258	Ceramic	Creamware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1															FALSE	10/31/2017				8786	KAREN	1005676.8484	759703.10613	10/20/2015	3C	
8044	2018-051-		3119.01	No	SI259	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Green/Olive													FALSE	09/21/2017				8790	KAREN	1005673.4219	759704.28358	10/20/2015	3C	
8045	2018-051-		3119.02	Yes	SI259	Ceramic	Pearlware			Historic Ceramic	1		Complete	BOX 1	2															FALSE	4/26/2018				8790	KAREN	1005673.4219	759704.28358	10/20/2015	3C	
8046	2018-051-		3120	No	SI263	Organic	Ethnobotany			Seed	1		Unknown																	FALSE				4060	CORINNA	1005686.4946	759691.36076	10/20/2015	4B		
8047	2018-051-		3121.01	No	SI264	Recent/Synthetic	Plastic			Plastic Tableware Fragment	1		Complete	NHHC - Pallet 5 Small Divided Tote 16	1															FALSE	10/31/2017				8809	KAREN	1005692.2066	759679.17894	10/20/2015	4AA	
8048	2018-051-		3121.02	No	SI264	Organic	Coal/Charcoal			Coal	3		Complete	NHHC - Pallet 6 Small Tote 22	1															FALSE	01/11/2018				8809	KAREN	1005692.2066	759679.17894	10/20/2015	4AA	
8049	2018-051-		3122.01	No	SI265	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 14	1		Clear													FALSE	06/12/2017				8807	KAREN	1005684.2036	759678.6	10/20/2015	3AA	
8050	2018-051-		3122.02	No	SI265	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Small Tote 23	1															FALSE	10/18/2017				8807	KAREN	1005684.2036	759678.6	10/20/2015	3AA	
8051	2018-051-		3123	No	SI266	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 5 Small Divided Tote 16	1															FALSE	04/24/2018				8827	KAREN	1005689.9549	759674.9202	10/20/2015	4AA	
8052	2018-051-		3124	No	SI267	Organic	Rosin			Rosin	1		Did Not Survive	DNS																FALSE				8823	KAREN	1005711.9243	759683.13424	10/20/2015	6AA		
8053	2018-051-		3125.01	Yes	SI270	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1		Green/Olive													FALSE	10/31/2017				8841	KAREN	1005664.9382	759693.52379	10/21/2015	2B	
8054	2018-051-		3125.02	No	SI270	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1															FALSE	10/31/2017				8841	KAREN	1005664.9382	759693.52379	10/21/2015	2B	
8055	2018-051-		3125.03	No	SI270	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Clear													FALSE	01/11/2018				8841	KAREN	1005664.9382	759693.52379	10/21/2015	2B	
8056	2018-051-		3126.01	No	SI274	Glass	Unidentified			Glass	1		Complete	BOX 4	2		Green/Olive														FALSE	9/6/2018				4102	CORINNA	1005658.537	759684.46058	10/21/2015	1B
8057	2018-051-		3126.02	No	SI274	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1																FALSE	10/31/2017				4102	CORINNA	1005658.537	759684.46058	10/21/2015	1B
8058	2018-051-		3127.01	No	SI275	Organic	Coal/Charcoal			Coal	2		Complete	NHHC - Pallet 6 Small Tote 23	1															FALSE	01/30/2018				4098	CORINNA	1005657.937	759679.23497	10/21/2015	1A	
8059	2018-051-		3127.02	No	SI275	Organic	Ethnobotany			Seed/Nut	1		Complete	C5																FALSE	7/6/2018				4098	CORINNA	1005657.937	759679.23497	10/21/2015	1A	
8060	2018-051-		3128.01	No	SI277	Recent/Synthetic	Rubber			Rubber Ring	1		Complete	NHHC - Pallet 5 Small Divided Tote 16	1									0.3 in		2.9 in				FALSE	10/05/2017				8855	KAREN	1005664.3441	759684.72035	10/21/2015	1B	
8061	2018-051-		3128.02	No	SI277	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Small Tote 22	1															FALSE	10/12/2017				8855	KAREN	1005664.3441	759684.72035	10/21/2015	1B	
8062	2018-051-		3129.01	No	SI280	Composite	Brass	Lead		Watercap Fuze with Lead Seal	2		Complete	NHHC - Pallet 5 Small Divided Tote 14	1		"I0" on lead seal (too worn to see "SEC")													FALSE	05/26/2016				74114	CORINNA	1005674.7829	759684.66914	10/21/2015	2A	
8063	2018-051-		3129.02	No	SI280	Metal	Copper or Copper Alloy			Thin Brass Ring	1		Inventoried - Ready to Process	Brass chem bucket																FALSE				4114	CORINNA	1005674.7829	759684.66914	10/21/2015	2A		
8064	2018-051-		3130	No	SI281	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear													FALSE	01/14/2019				4118	CORINNA	1005678.0031	759687.3956	10/21/2015	3A	
8065	2018-051-		3131	No	SI283	Metal	Lead			Fired Bullet	1		Complete	DISPLAY, HELEN'S OFFICE												0.60 in				FALSE	5/24/2017				4136	CORINNA	1005668.2963	759680.46307	10/21/2015	2A	
8066	2018-051-		3132.01	No	SI287	Metal	Iron			Nail	1		Inventoried - Ready to Process	WB50																FALSE				8897	KAREN	1005674.0861	759676.25848	10/21/2015	2A		
8067	2018-051-		3132.02	No	SI287	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 14	1		Amber													FALSE	06/07/2017				8897	KAREN	1005674.0861	759676.25848	10/21/2015	2A	
8068	2018-051-		3133	No	SI291	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1															FALSE	12/15/2017				4166	CORINNA	1005674.0916	759678.78604	10/21/2015	2A	
8069	2018-051-		3134	No	SI294	Metal	Iron			Railroad Iron	2		Unknown																	FALSE				8923	KAREN	1005680.1378	759672.12238	10/21/2015	3AA		
8070	2018-051-		3135	Yes	SI295	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1															FALSE	10/31/2017				8927	KAREN	1005688.4895	759670.80126	10/21/2015	3AA	
8071	2018-051-		3136.01	No	SI296	Composite	Iron	Wood		Fastener Through Wood	1		Inventoried - Ready to Process	YB?							18 in									FALSE				4184	CORINNA	1005691.7276	759674.90655	10/21/2015	4AA		
8072	2018-051-		3136.02	No	SI296	Recent/Synthetic	Rubber			Rubber	1		Inventoried - Ready to Process	WB150																FALSE				4185	CORINNA	1005691.7276	759674.90655	10/21/2015	4AA		
8073	2018-051-		3136.03	No	SI296	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 1	PX1															FALSE	9/6/2017				4185	CORINNA	1005691.7276	759674.90655	10/21/20		

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square		
8108	2018-051-		3149.03	No	SI321	Composite	Lead	Wood		Enfield Bullet	2		Complete	NHHC - Pallet 1 Small Divided Tote 3	1	Mold seam														FALSE	06/26/2017					4261	CORINNA	1005758.8022	759707.01249	10/21/2015	11A		
8109	2018-051-		3150.01	Yes	SI322	Ceramic	Refined Earthenware			Historic Ceramic	2		Complete	NHHC - Pallet 4 Small Tote 21	1															FALSE	11/21/2016					4277	CORINNA	1005751.3609	759687.89368	10/21/2015	10BB		
8110	2018-051-		3150.02	No	SI322	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Clear													FALSE	01/11/2018					4277	CORINNA	1005751.3609	759687.89368	10/21/2015	10BB		
8111	2018-051-		3150.03	No	SI322	Ceramic	Coarse Earthenware			Prehistoric Ceramic	3		Complete	PX BOX 2	PX1	1 Cord marked, 1 possibly Cord marked (faint)														FALSE	9/7/2017					4277	CORINNA	1005751.3609	759687.89368	10/21/2015	10BB		
8112	2018-051-		3151	No	SI323	Metal	Iron			Fastener	1		Inventoried - Ready to Process	WB50															FALSE						4275	CORINNA	1005745.4284	759693.14711	10/21/2015	9AA			
8113	2018-051-		3152	No	SI325	Metal	Copper or Copper Alloy			Sheathing	1		Inventoried - Ready to Process	Brass chem bucket																FALSE						9048	KAREN	1005755.0456	759699.25806	10/21/2015	10AA		
8114	2018-051-		3153	No	SI326	Metal	Iron			Fastener (?)	1		Inventoried - Ready to Process	18WB12															FALSE							9060	KAREN	1005744.3871	759707.48024	10/21/2015	10A		
8115	2018-051-		3154	No	SI327	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear													FALSE	04/15/2016						9064	KAREN	1005752.8063	759705.99572	10/21/2015	10A	
8116	2018-051-		3155.01	No	SI328	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear													FALSE	01/10/2019						4294-4295	CORINNA	1005762.3394	759707.74007	10/21/2015	11A	
8117	2018-051-		3155.02	No	SI328	Ceramic	Coarse Earthenware			Prehistoric Ceramic	3		Complete	PX BOX 4	PX1	Cord marked														FALSE	9/6/2017						4294-4295	CORINNA	1005762.3394	759707.74007	10/21/2015	11A	
8118	2018-051-		3155.03	No	SI328	Metal	Copper or Copper Alloy			Sheathing	1		Inventoried - Ready to Process	Brass chem bucket							1 in		0.75 in							FALSE							4294-4295	CORINNA	1005762.3394	759707.74007	10/21/2015	11A	
8119	2018-051-		3156	No	SI329	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 1	PX1	Simple stamped														FALSE	2/17/2017						4292	CORINNA	1005757.0956	759700.92147	10/21/2015	11AA	
8120	2018-051-		3157	No	SI330	Glass	Unidentified			Glass	5		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Clear/Light Blue, Blue, Green/Olive													FALSE	01/17/2018						4313	CORINNA	1005736.624	759681.69453	10/21/2015	8BB	
8121	2018-051-		3158.01	Yes	SI331	Ceramic	Stoneware			Historic Ceramic	1		Complete	BOX 1	2															FALSE	5/9/2018						4311	CORINNA	1005743.6091	759688.36785	10/21/2015	9BB	
8122	2018-051-		3158.02	No	SI331	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Amber													FALSE	01/11/2018						4311	CORINNA	1005743.6091	759688.36785	10/21/2015	9BB	
8123	2018-051-		3158.03	No	SI331	Metal	Copper or Copper Alloy			Sheathing	2		Complete	BOX 5	2															FALSE	5/1/2018						4311	CORINNA	1005743.6091	759688.36785	10/21/2015	9BB	
8124	2018-051-		3158.04	No	SI331	Organic	Wood			Wedge	1		Complete	C5				42.8 g		3.341 in		2.219 in		0.792 in					FALSE	10/30/2018						4311	CORINNA	1005743.6091	759688.36785	10/21/2015	9BB		
8125	2018-051-		3158.05	No	SI331	Metal	Iron			Hammer Head	1		Complete	C6				1.45 kg		5.5 in		2.25 in		1.75 in		1 in			FALSE	5/7/2019						35-4311	CORINNA	1005743.6091	759688.36785	10/21/2015	9BB		
8126	2018-051-		3159.01	No	SI333	Composite	Brass	Iron		Chain? - need to x-ray	1		Inventoried - Ready to Process	YB135																FALSE							9076	KAREN	1005733.6089	759684.28789	10/21/2015	8BB	
8127	2018-051-		3159.02	No	SI333	Metal	Copper or Copper Alloy			Powder Canister Base	1		Complete	NHHC - Pallet 4	1															FALSE	01/24/2018						21-9077	KAREN	1005733.6089	759684.28789	10/21/2015	8BB	
8128	2018-051-		3159.03	No	SI333	Metal	Iron			Bar	1		Inventoried - Ready to Process	YB158																FALSE							9077	KAREN	1005733.6089	759684.28789	10/21/2015	8BB	
8129	2018-051-		3159.04	No	SI333	Metal	Copper or Copper Alloy			Sheathing	1		Inventoried - Ready to Process	Brass chem bucket																FALSE							9083	KAREN	1005733.6089	759684.28789	10/21/2015	8BB	
8130	2018-051-		3159.05	No	SI333	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Green/Olive													FALSE	09/27/2017						9083	KAREN	1005733.6089	759684.28789	10/21/2015	8BB	
8131	2018-051-		3160.01	No	SI334	Glass	Wine Bottle			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 14	1		Green/Olive													FALSE	06/07/2017						9094	KAREN	1005732.9072	759691.50173	10/21/2015	8AA	
8132	2018-051-		3160.02	No	SI334	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Small Tote 23	1															FALSE	10/12/2017						9094	KAREN	1005732.9072	759691.50173	10/21/2015	8AA	
8133	2018-051-		3161.01	No	SI335	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Amber													FALSE	01/17/2018						9098	KAREN	1005736.7893	759684.61772	10/21/2015	8BB	
8134	2018-051-		3161.02	No	SI335	Metal	Iron			Cog wheel	1		Complete	BOX 19	2			1176.5 g							1.732 in		4.751 in			FALSE	4/15/2019						25-9098	KAREN	1005736.7893	759684.61772	10/21/2015	8BB	
8135	2018-051-		3162	No	SI338	Organic	Bone			Bone	1		Complete	C5																FALSE	7/23/2018						4353	CORINNA	1005744.0803	759741.91002	10/21/2015	11D	
8136	2018-051-		3163.01	No	SI339	Organic	Ethnobotany			Half of a Nut	2		Complete	C5																FALSE	7/6/2018						4355	CORINNA	1005749.7501	759733.63387	10/21/2015	11C	
8137	2018-051-		3163.02	No	SI339	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1															FALSE	6/27/2017						4356	CORINNA	1005749.7501	759733.63387	10/21/2015	11C	
8138	2018-051-		3164.01	No	SI340	Metal	Copper or Copper Alloy			Sheathing	1		Inventoried - Ready to Process	Brass chem bucket																FALSE							9112	KAREN	1005753.6914	759733.41391	10/21/2015	12C	
8139	2018-051-		3164.02	No	SI340	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Amber													FALSE	09/27/2017						9112	KAREN	1005753.6914	759733.41391	10/21/2015	12C	
8140	2018-051-		3165.01	No	SI342	Metal	Copper or Copper Alloy			Small Flat Hoop	1		Inventoried - Ready to Process	Brass ER bucket																FALSE							9124	KAREN	1005750.3923	759741.02637	10/21/2015	11D	
8141	2018-051-		3165.02	No	SI342	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 4	PX1	1 Cord marked														FALSE	12/15/2017						9124	KAREN	1005750.3923	759741.02637	10/21/2015	11D	
8142	2018-051-		3165.03	No	SI342	Organic	Coal/Charcoal			Coal	3		Complete	C7																FALSE	4/24/2018						9124	KAREN	1005750.3923	759741.02637	10/21/2015	11D	
8143	2018-051-		3166	No	SI343	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 1	PX1	Simple stamped? (faint)															FALSE	6/27/2017						9128	KAREN	1005759.8641	759751.46861	10/21/2015	13E
8144	2018-051-		3167	No	SI344	Metal	Lead			Shot	1		Complete	NHHC - Pallet 5 Small Divided Tote 15	1															FALSE	05/26/2017						4393	CORINNA	1005762.4484	759752.28436	10/21/2015	13E	
8145	2018-051-		3168	Yes	SI345	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1															FALSE	6/2/2016						4370	CORINNA	1005767.2445	759751.94234	10/21/2015	13D	
8146	2018-051-		3169.01	No	SI348	Ceramic	Coarse Earthenware			Prehistoric Ceramic	3		Complete	PX BOX 10	PX1																FALSE	1/11/2018						9149, 9145	KAREN	1005751.971	759749.84047	10/21/2015	12E
8147	2018-051-		3169.02	No	SI348	Organic	Ethnobotany			Seed/Pit/Nut	1		Complete	NHHC - Pallet 5 Small Divided Tote 16	1															FALSE	12/15/2017						9149	KAREN	1005751.971	759749.84047	10/21/2015	12E	
8148	2018-051-		3170.01	Yes	SI349	Ceramic	Stoneware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 21	1															FALSE	1215/2017						9143	KAREN	1005744.4179	759750.15266	10/21/2015	11E	
8149	2018-051-		3170.02	No	SI349	Glass	Wine Bottle			Bottle Base	1																																

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square
8191	2018-051-		3187.03	No	S1373	Glass	Pane Glass/Unidentified			Glass	3		Complete	NHHC - Pallet 6 Medium Divided Tote 14	1	Stamping "U" and "O"	Clear, Green/Olive													FALSE	01/03/2019				9223	KAREN	1005792.9263	759708.26788	10/22/2015	14AA	
8192	2018-051-		3188.01	No	S1374	Glass	Unidentified			Glass	3		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Clear, Light Blue, Green/Olive												FALSE	01/14/2019				9239	KAREN	1005800.0023	759706.53906	10/22/2015	15BB		
8193	2018-051-		3188.02	No	S1374	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 4	PX1														FALSE	9/12/2017				9239	KAREN	1005800.0023	759706.53906	10/22/2015	15BB		
8194	2018-051-		3188.03	No	S1374	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	WB110														FALSE					9239	KAREN	1005800.0023	759706.53906	10/22/2015	15BB			
8195	2018-051-		3188.04	No	S1374	Organic	Coal/Charcoal			Coal	1		Complete	C7														FALSE	4/24/2018				9239	KAREN	1005800.0023	759706.53906	10/22/2015	15BB			
8196	2018-051-		3189.01	No	S1375	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1	Cord marked												FALSE	12/15/2017				9241	KAREN	1005800.1462	759714.48419	10/22/2015	15AA			
8197	2018-051-		3189.02	Yes	S1375	Ceramic	Whiteware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1													FALSE	10/31/2017				9241	KAREN	1005800.1462	759714.48419	10/22/2015	15AA			
8198	2018-051-		3190.01	No	S1376	Metal	Iron			Grapeshot Stand	1		Inventoried - Ready to Process	GRAPESHOT3														FALSE					4502	CORINNA	1005803.8034	759719.28333	10/22/2015	16AA			
8199	2018-051-		3190.02	No	S1376	Metal	Iron			Loose Grapeshot	4		Inventoried - Ready to Process	GRAPESHOT3														FALSE					4502	CORINNA	1005803.8034	759719.28333	10/22/2015	16AA			
8200	2018-051-		3190.03	No	S1376	Concretion	Concretion			Concretion	1		Inventoried - Ready to Process	IN OWN BUCKET (IF CONCRETION IS FE HANDLE)														FALSE					4502	CORINNA	1005803.8034	759719.28333	10/22/2015	16AA			
8201	2018-051-		3191	Yes	S1379	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1													FALSE	01/23/2019				4516	CORINNA	1005808.6797	759723.66894	10/22/2015	16AA			
8202	2018-051-		3192.01	No	S1381	Metal	Iron			Grapeshot	3		Inventoried - Ready to Process	GRAPESHOT2														FALSE					9257	KAREN	1005831.2758	759710.35676	10/22/2015	18CC			
8203	2018-051-		3192.02	No	S1381	Ceramic	Coarse Earthenware			Prehistoric Ceramic	4		Complete	PX BOX 3	PX1	1 Simple stamped													FALSE	12/14/2017				9257	KAREN	1005831.2758	759710.35676	10/22/2015	18CC		
8204	2018-051-		3192.03	No	S1381	DMM - Discarded Military Munitions	DMM - Brooke Bolt			6.4" Tennessee TII Long Flat Top Bolt	1		Complete	NHHC - AFA Crate 5	1													FALSE	05/24/2018					35		1005831.2758	759710.35676	10/22/2015	18CC		
8205	2018-051-		3192.04	No	S1381	DMM - Discarded Military Munitions	DMM - Brooke Bolt			6.4" Brooke Bolt	1		Inventoried - Ready to Process															FALSE							1005831.2758	759710.35676	10/22/2015	18CC			
8206	2018-051-		3192.05	No	S1381	DMM - Discarded Military Munitions	DMM - Brooke Bolt			6.4" Brooke Bolt	1		Complete	Brooke Pallet 2	2													FALSE	9/24/2018					35		1005831.2758	759710.35676	10/22/2015	18CC		
8207	2018-051-		3192.05.01	No	S1381	Metal	Copper or Copper Alloy			Sabot	1		Complete	Brooke Pallet 2	2													FALSE	5/17/2018					35		1005831.2758	759710.35676	10/22/2015	18CC		
8208	2018-051-		3192.06	No	S1381	DMM - Discarded Military Munitions	DMM - Brooke Bolt			6.4" Brooke Bolt	1		Inventoried - Ready to Process															FALSE								1005831.2758	759710.35676	10/22/2015	18CC		
8209	2018-051-		3192.07	No	S1381	DMM - Discarded Military Munitions	DMM - Brooke Bolt			6.4" Brooke Bolt	1		Inventoried - Ready to Process															FALSE								1005831.2758	759710.35676	10/22/2015	18CC		
8210	2018-051-		3192.08	No	S1381	DMM - Discarded Military Munitions	DMM - Brooke Bolt			6.4" Brooke Bolt	1		Inventoried - Ready to Process															FALSE								1005831.2758	759710.35676	10/22/2015	18CC		
8211	2018-051-		3193.01	No	S1383	Metal	Iron			Machinery	1		Inventoried - Ready to Process	YB135														FALSE						9274	KAREN	1005834.8193	759722.6387	10/22/2015	19BB		
8212	2018-051-		3193.02	No	S1383	Glass	Unidentified			Bottle Neck/Rim	1		Complete	NHHC - Pallet 6 Medium Divided Tote 10	1		Green/Olive											FALSE	11/07/2016					9276	KAREN	1005834.8193	759722.6387	10/22/2015	19BB		
8213	2018-051-		3193.03	No	S1383	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 9	PX1	1 has lines incised												FALSE	5/1/2018					9276	KAREN	1005834.8193	759722.6387	10/22/2015	19BB		
8214	2018-051-		3194.01	No	S1384	Metal	Iron			Grapeshot	23		Inventoried - Ready to Process	IN OWN BUCKET														FALSE							4535-4536	CORINNA	1005831.3038	759713.83648	10/22/2015	18BB	
8215	2018-051-		3194.02	No	S1384	Glass	Unidentified			Glass Bottle Neck/Rim And Two Fragments	3		Complete	NHHC - Pallet 6 Medium Divided Tote 10	1		Green/Olive											FALSE	09/19/2017					4537	CORINNA	1005831.3038	759713.83648	10/22/2015	18BB		
8216	2018-051-		3194.03	No	S1384	Ceramic	Coarse Earthenware			Prehistoric Ceramic	5		Complete	PX BOX 1	PX1	Possible stamping on 2 pieces												FALSE	2/17/2017					4537	CORINNA	1005831.3038	759713.83648	10/22/2015	18BB		
8217	2018-051-		3194.04	No	S1384	Metal	Iron			Plate	1		Inventoried - Ready to Process	BARREL 31														FALSE						4535-4536	CORINNA	1005831.3038	759713.83648	10/22/2015	18BB		
8218	2018-051-		3194.05	No	S1384	Glass	Unidentified			Glass	2		Deaccessioned	DA			Green/Olive											FALSE						4537	CORINNA	1005831.3038	759713.83648	10/22/2015	18BB		
8219	2018-051-		3194.06	No	S1384	Metal	Iron			Iron Arc and Fastener	3		Complete	PR-S7				7.053 kg			14 in		3.22 in		1.90 in		1.10 in	FALSE	5/16/2019					35	4535-4536	CORINNA	1005831.3038	759713.83648	10/22/2015	18BB	
8220	2018-051-		3194.07	No	S1384	Metal	Iron			Possible Grapeshot Base	1		Inventoried - Ready to Process	YB155														FALSE						4535-4536	CORINNA	1005831.3038	759713.83648	10/22/2015	18BB		
8221	2018-051-		3194.08	No	S1384	Metal	Iron			Iron "Hook"	1		Inventoried - Ready to Process	YB158														FALSE						4535-4536	CORINNA	1005831.3038	759713.83648	10/22/2015	18BB		
8222	2018-051-		3194.09	No	S1384	Organic	Bone			Bone	2		Inventoried - Ready to Process	WB151														FALSE						4537	CORINNA	1005831.3038	759713.83648	10/22/2015	18BB		
8223	2018-051-		3194.10	No	S1384	Metal	Copper or Copper Alloy			Sheathing	1		Complete	NHHC - Pallet 2 Small Divided Tote 4	1													FALSE	07/03/2017					32	4537	CORINNA	1005831.3038	759713.83648	10/22/2015	18BB	
8224	2018-051-		3194.11	No	S1384	Stone	Chipped Stone			Flake	1		Complete	PX BOX 13	PX1													FALSE	4/19/2018					4537	CORINNA	1005831.3038	759713.83648	10/22/2015	18BB		
8225	2018-051-		3194.12	Yes	S1384	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1													FALSE	5/2/2016					4537	CORINNA	1005831.3038	759713.83648	10/22/2015	18BB		
8226	2018-051-		3194.13	No	S1384	DMM - Discarded Military Munitions	DMM - Brooke Bolt	Copper or Copper Alloy		6.4" Tennessee Tii Long Flat Top Bolt with Sabot	1		Complete	NHHC - AFA Crate 5	1													FALSE	05/24/2018					35		1005831.3038	759713.83648	10/22/2015	18BB		
8227	2018-051-		3194.14	No	S1384	DMM - Discarded Military Munitions	DMM - Brooke Bolt	Copper or Copper Alloy		Bolt	1		Complete	NHHC - AFA Crate 5	1													FALSE	05/24/2018					35		1005831.3038	759713.83648	10/22/2015	18BB		
8228	2018-051-		3194.15	No	S1384	DMM - Discarded Military Munitions	DMM - Brooke Bolt	Copper or Copper Alloy		Bolt with Sabot	1		Complete	NHHC - AFA Crate 5	1													FALSE	05/24/2018					35		1005831.3038	759713.83648	10/22/2015	18BB		
8229	2018-051-		3195	No	S1385	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 9	PX1													FALSE	4/13/2016					4530	CORINNA	1005823.7728	759712.11378	10/22/2015	17BB		
8230	2018-051-		3196.01	No	S1386	Metal	Iron			Plate	1		Inventoried - Ready to Process	YB28														FALSE						4550	CORINNA	1005828.5558	759706.91357	10/22/2015	18CC		
8231	2018-051-		3196.02	No	S1386	Metal	Iron			Grapeshot	2		Inventoried - Ready to Process	GRAPESHOT4														FALSE						4550	CORINNA	1005828.5558	759706.91357	10/22/2015	18CC		
8232	2018-051-		3196.03	No	S1386	Metal	Copper or Copper Alloy			Sheathing	2		Complete	BOX 5	2													FALSE	5/1/2018					4599	CORINNA	1005828.5558	759706.91357	10/22/2015	18CC		
8233	2018-051-		3196.04	No	S1386	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 4	PX1	Simple stamped												FALSE	12/15/2017					4599, 4551	CORINNA	1005828.5558	759706.91357	10/22/2015	18CC		
8234	2018-051-		3196.05	Yes	S1386	Ceramic	Refined Earthenware			Historic Ceramic	1																														

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square					
8353	2018-051-		3255.02	No	G599	Metal	Iron			Iron Nail	1		Inventoried - Ready to Process	18WB12																FALSE						1138	ERICA	1005736.773	759807.51317	10/9/2015	12K					
8354	2018-051-		3256.01	No	G601	Organic	Bone			Bone	1		Complete	C5				2.7	g		2.681	in	0.259	in	0.750	in				FALSE	10/26/2018						1145	ERICA	1005726.5564	759808.2561	10/9/2015	11K				
8355	2018-051-		3256.02	No	G601	Metal	Iron			Ring	1		Inventoried - Ready to Process	18WB10																FALSE						1150	ERICA	1005726.5564	759808.2561	10/9/2015	11K					
8356	2018-051-		3257.01	No	G603	Metal	Iron			Rail	1		Inventoried - Ready to Process	YB																FALSE								1005732.5558	759799.85223	10/9/2015	12J					
8357	2018-051-		3257.02	No	G603	Metal	Iron			Half Rail	1		Inventoried - Ready to Process	YB																FALSE								1005732.5558	759799.85223	10/9/2015	12J					
8358	2018-051-		3258.01	No	G608	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 1	PX1															FALSE	4/15/2016							1162	ERICA	1005743.7603	759807.917	10/9/2015	13K			
8359	2018-051-		3258.02	No	G608	Concretion	Concretion			Shackle Concretion	1		Inventoried - Ready to Process	YB155																FALSE								1163	ERICA	1005743.7603	759807.917	10/9/2015	13K			
8360	2018-051-		3259	No	G610	Metal	Iron			Railroad Iron	2		Unknown																	FALSE								6064	KAREN	1005803.1072	759844.33787	10/12/2015	20L			
8361	2018-051-		3260	No	G612	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 11	PX1	Check stamped/pitting															FALSE	3/15/2016							6068	KAREN	1005810.846	759848.09795	10/12/2015	21L		
8362	2018-051-		3261	No	G616	Metal	Iron			Half Rail	3		Inventoried - Ready to Process																										1502-1503	ERICA	1005798.6278	759848.7864	10/12/2015	20M		
8363	2018-051-		3262.01	No	G618	Metal	Iron			Grapeshot/Canister	1		Inventoried - Ready to Process																	FALSE										6084	KAREN	1005819.7704	759854.52965	10/12/2015	22L	
8364	2018-051-		3262.02	No	G618	Concretion	Concretion			Associated Concretions	8		Inventoried - Ready to Process																	FALSE										6084	KAREN	1005819.7704	759854.52965	10/12/2015	22L	
8365	2018-051-		3262.03	No	G618	Metal	Iron			Half-Rail	1		Inventoried - Ready to Process																	FALSE										6086	KAREN	1005819.7704	759854.52965	10/12/2015	22L	
8366	2018-051-		3263.01	No	G619	Composite	Brass	Wood		Pistol	1		Complete																	FALSE	7/24/2017		4/4/2016							14	6082	KAREN	1005808.2762	759853.00911	10/12/2015	21M
8367	2018-051-		3263.02	No	G619	Concretion	Concretion			Concretions from pistol	4		Complete																	FALSE	7/24/2017									6082	KAREN	1005808.2762	759853.00911	10/12/2015	21M	
8368	2018-051-		3263.03	No	G619	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 13	PX1	Possibly incised		11.7	g		2.0	in	0.5	in	0.51	in				FALSE	10/2/2018									6082	KAREN	1005808.2762	759852.00911	10/12/2015	21M	
8369	2018-051-		3264.01	No	G620	Composite	Wood	Iron		Box of Grapeshot ("Shot Locker")	1		Complete					4.71	kg		22.6	in	10.5	in					4.88	in	FALSE	4/24/2019									6098	KAREN	1005797.9149	759847.92525	10/12/2015	20L
8370	2018-051-		3264.01.02A	No	G620	Organic	Wood			Sabot	1		Complete													3.465	in		1.589	in	FALSE	4/24/2019									6098	KAREN	1005797.9149	759847.92525	10/12/2015	20L
8371	2018-051-		3264.01.02B	No	G620	Metal	Iron			Cannon Ball	1		Complete												3.5	in				FALSE	4/24/2019									35	6098	KAREN	1005797.9149	759847.92525	10/12/2015	20L
8372	2018-051-		3264.01.03A	No	G620	Organic	Wood			Sabot	1		Complete												3.195	in		2.581	in	FALSE	4/24/2019									6098	KAREN	1005797.9149	759847.92525	10/12/2015	20L	
8373	2018-051-		3264.01.03B	No	G620	Metal	Iron			Cannon Ball	1		Complete												3.5	in				FALSE	4/24/2019									35	6098	KAREN	1005797.9149	759847.92525	10/12/2015	20L
8374	2018-051-		3264.01.04A	No	G620	Organic	Wood			Sabot	1		Complete												3.342	in		2.374	in	FALSE	4/24/2019									6098	KAREN	1005797.9149	759847.92525	10/12/2015	20L	
8375	2018-051-		3264.01.04B	No	G620	Metal	Iron			Cannon Ball	1		Complete												3.5	in				FALSE	4/24/2019									32	6098	KAREN	1005797.9149	759847.92525	10/12/2015	20L
8376	2018-051-		3264.01.05A	No	G620	Organic	Wood			Sabot	1		Complete												3.152	in		2.533	in	FALSE	4/24/2019									6098	KAREN	1005797.9149	759847.92525	10/12/2015	20L	
8377	2018-051-		3264.01.05B	No	G620	Metal	Iron			Cannon Ball	1		Complete												3.5	in				FALSE	4/24/2019									35	6098	KAREN	1005797.9149	759847.92525	10/12/2015	20L
8378	2018-051-		3264.01.06A	No	G620	Organic	Wood			Sabot	1		Complete												3.226	in		2.291	in	FALSE	4/24/2019									6098	KAREN	1005797.9149	759847.92525	10/12/2015	20L	
8379	2018-051-		3264.01.06B	No	G620	Metal	Iron			Cannon Ball	1		Complete												3.5	in				FALSE	4/24/2019									28	6098	KAREN	1005797.9149	759847.92525	10/12/2015	20L
8380	2018-051-		3264.01.07A	No	G620	Organic	Wood			Sabot	1		Complete												3.412	in		1.577	in	FALSE	4/24/2019									6098	KAREN	1005797.9149	759847.92525	10/12/2015	20L	
8381	2018-051-		3264.01.07B	No	G620	Metal	Iron			Cannon Ball	1		Complete												3.5	in				FALSE	4/24/2019									28	6098	KAREN	1005797.9149	759847.92525	10/12/2015	20L
8382	2018-051-		3264.01.08A	No	G620	Organic	Wood			Sabot	1		Complete												3.216	in		2.153	in	FALSE	4/24/2019									6098	KAREN	1005797.9149	759847.92525	10/12/2015	20L	
8383	2018-051-		3264.01.08B	No	G620	Metal	Iron			Cannon Ball	1		Complete												3.5	in				FALSE	4/24/2019									32	6098	KAREN	1005797.9149	759847.92525	10/12/2015	20L
8384	2018-051-		3264.01.09A	No	G620	Organic	Wood			Sabot	1		Complete												3.152	in		2.344	in	FALSE	4/24/2019									6098	KAREN	1005797.9149	759847.92525	10/12/2015	20L	
8385	2018-051-		3264.01.09B	No	G620	Metal	Iron			Cannon Ball	1		Complete												3.5	in				FALSE	4/24/2019									28	6098	KAREN	1005797.9149	759847.92525	10/12/2015	20L
8386	2018-051-		3264.01.10A	No	G620	Organic	Wood			Sabot	1		Complete												3.540	in		2.388	in	FALSE	4/24/2019									6098	KAREN	1005797.9149	759847.92525	10/12/2015	20L	
8387	2018-051-		3264.01.10B	No	G620	Metal	Iron			Cannon Ball	1		Complete												3.5	in				FALSE	4/24/2019									28	6098	KAREN	1005797.9149	759847.92525	10/12/2015	20L
8388	2018-051-		3264.01.11A	No	G620	Organic	Wood			Sabot	1		Complete												3.391	in		2.322	in	FALSE	4/24/2019									6098	KAREN	1005797.9149	759847.92525	10/12/2015	20L	
8389	2018-051-		3264.01.11B	No	G620	Metal	Iron			Cannon Ball	1		Complete												3.5	in				FALSE	4/24/2019									28	6098	KAREN	1005797.9149	759847.92525	10/12/2015	20L
8390	2018-051-		3264.01.12A	No	G620	Organic	Wood			Sabot	1		Complete												3.435	in		1.545	in	FALSE	4/24/2019									6098	KAREN	1005797.9149	759847.92525	10/12/2015	20L	
8391	2018-051-		3264.01.12B	No	G620	Metal	Iron			Cannon Ball	1		Complete												3.5	in				FALSE	4/24/2019									35	6098	KAREN	1005797.9149	759847.92525	10/12/2015	20L
8392	2018-051-		3264.01.13A	No	G620	Organic	Wood			Sabot	1		Complete												3.378	in		2.497	in	FALSE	4/24/2019									6098	KAREN	1005797.9149	759847.92525	10/12/2015	20L	
8393	2018-051-		3264.01.13B	No	G620	Metal	Iron			Cannon Ball	1		Complete					</																												

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square
8438	2018-051-		3278.02	No	G638	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 9	PX1															FALSE	5/1/2018				9500	KAREN	1005727.997	759706.06048	10/23/2015	7BB	
8439	2018-051-		3279.01	Yes	G639	Ceramic	Unidentified			Historic Ceramic	2		Complete	NHHC - Pallet 4 Small Tote 21	1	Stamped impression, possibly part of "MADDOCK'S PATENT IRONSTONE CHINA"?														FALSE	12/15/2017				9504	KAREN	1005719.6382	759705.60917	10/23/2015	6AA	
8440	2018-051-		3279.02	No	G639	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Small Tote 23	1														FALSE	10/17/2017				9504	KAREN	1005719.6382	759705.60917	10/23/2015	6AA		
8441	2018-051-		3279.03	No	G639	Metal	Iron			Piece Of Track	2		Inventoried - Ready to Process	18WB12															FALSE				9505	KAREN	1005719.6382	759705.60917	10/23/2015	6AA			
8442	2018-051-		3280	No	G640	Metal	Lead			Lead Fragment	1		Complete	NHHC - Pallet 1 Small Divided Tote 2	1														FALSE	09/05/2017				4786	CORINNA	1005725.2894	759698.3915	10/23/2015	7BB		
8443	2018-051-		3281.01	No	G641	Architecture	Brick			Brick	1		Complete	C7			Red	5.95	lbs	8.75	in	4.125	in	2.75	in				FALSE	2/20/2019				4780	CORINNA	1005716.7592	759714.31121	10/23/2015	6A		
8444	2018-051-		3281.02	No	G641	Metal	Iron			Nail	1		Inventoried - Ready to Process	18WB10															FALSE				4779	CORINNA	1005716.7592	759714.31121	10/23/2015	6A			
8445	2018-051-		3281.03	No	G641	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear												FALSE	01/23/2019				4779	CORINNA	1005716.7592	759714.31121	10/23/2015	6A		
8446	2018-051-		3282	No	G644	Organic	Ethnobotany			Pit/Seed/Nut Fragment	1		Complete	C5															FALSE	7/6/2018				9519	KAREN	1005707.9255	759700.029	10/23/2015	5AA		
8447	2018-051-		3283.01	No	G646	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 9	PX1														FALSE	5/1/2018				9531	KAREN	1005716.0432	759693.92866	10/23/2015	6BB		
8448	2018-051-		3283.02	No	G646	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Medium Divided Tote 12	1														FALSE	10/12/2017				9531	KAREN	1005716.0432	759693.92866	10/23/2015	6BB		
8449	2018-051-		3284.01	Yes	G647	Ceramic	Whiteware	Stoneware		Historic Ceramic	10		Complete	BOX 2	2														FALSE	5/3/2018				9537	KAREN	1005730.8036	759704.27065	10/23/2015	7BB		
8450	2018-051-		3284.02	No	G647	Composite	Brass	Lead		Watercap Fuze with Lead Stamp	2		Complete	NHHC - Pallet 5 Small Divided Tote 14	1	"10 SEC" on lead seal													FALSE	07/06/2016			10.6	9537	KAREN	1005730.8036	759704.27065	10/23/2015	7BB		
8451	2018-051-		3284.03	No	G647	Metal	Copper or Copper Alloy			Sheathing	1		Inventoried - Ready to Process	Brass chem bucket															FALSE					9537	KAREN	1005730.8036	759704.27065	10/23/2015	7BB		
8452	2018-051-		3284.04	No	G647	Glass	Unidentified			Glass	4		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1	Molded "R," on green/blue fragment	Green/Olive, Clear, Blue, Amber													FALSE	01/11/2018				9537	KAREN	1005730.8036	759704.27065	10/23/2015	7BB	
8453	2018-051-		3284.05	No	G647	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 4	PX1	1 Cord marked														FALSE	12/15/2017				9537	KAREN	1005730.8036	759704.27065	10/23/2015	7BB	
8454	2018-051-		3284.06	No	G647	Organic	Bone			Bone	1		Complete	C5															FALSE	8/21/2018				9537	KAREN	1005730.8036	759704.27065	10/23/2015	7BB		
8455	2018-051-		3284.07	No	G647	Composite	Brass	Lead		Part of Breast Plate	1		Complete	NHHC - Pallet 5 Small Divided Tote 7	1														FALSE	03/08/2016			28	9538	KAREN	1005730.8036	759704.27065	10/23/2015	7BB		
8456	2018-051-		3284.08	No	G647	Metal	Copper or Copper Alloy			Rim	1		Inventoried - Ready to Process	WB106															FALSE					9537	KAREN	1005730.8036	759704.27065	10/23/2015	7BB		
8457	2018-051-		3285	No	G648	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 11	1		Clear												FALSE	01/16/2019				4814	CORINNA	1005698.8292	759710.84903	10/23/2015	5A		
8458	2018-051-		3286	No	G649	Metal	Iron			Large Spike	1		Inventoried - Ready to Process	YB156							24	in							FALSE					4810	CORINNA	1005699.7926	759707.58455	10/23/2015	5A		
8459	2018-051-		3287	No	G661	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 1	PX1	1 Cord marked														FALSE	4/22/2016					4852-4853	CORINNA	1005564.985	759654.14507	10/23/2015	West
8460	2018-051-		3288	No	UNIT 9A	Metal	Copper or Copper Alloy			Powder Canister Lid And Cover	2		Complete	BAGGED SEPERATELY															FALSE	11/22/2016					CSSG Field Methods Photos/Field 2015/Reburial and Final Dive Photos/10-26 Dive onsite, POWDER CANNIST LID					9A	
8461	2018-051-		3288.01	No	UNIT 9A	Recent/Synthetic	Rubber			Gasket	1		Complete	C5															FALSE	2/20/2019									9A		
8462	2018-051-		3289	No	UNIT 22 AA	Metal	Copper or Copper Alloy			Sabot	1		Unknown																FALSE						NO PHOTO					22A	
8463	2018-051-		3290.01	No	G302	Glass	Unidentified			Glass	3		Complete	NHHC - Pallet 6 Medium Divided Tote 14	1	"CANADIAN" Stamped on outer surface of largest fragment	Clear												FALSE	01/03/2019				2418	ERICA	1005688.0738	759654.61419	9/26/2015	3CC		
8464	2018-051-		3291.01	No	G287	Glass	Unidentified			Glass Fragments	2		Complete	NHHC - Pallet 6 Medium Divided Tote 10	1		Clear												FALSE	01/11/2019				2218	KAREN	1005689.0011	759662.96169	9/26/2015	3BB		
8465	2018-051-		3291.02	No	G287	Organic	Wood			Stave	1		Complete	NHHC - Pallet 6 Medium Tote 5	1														FALSE	10/31/2017				2218	KAREN	1005689.0011	759662.96169	9/26/2015	3BB		
8466	2018-051-		3291.03	No	G287	Organic	Coal/Charcoal			Coal	1		Complete	NHHC - Pallet 6 Small Tote 23	1														FALSE	02/02/2016				2218	KAREN	1005689.0011	759662.96169	9/26/2015	3BB		
8468	2018-051-		3294.01	No	S539	Architecture	Mortar			Mortar	1		Complete	NHHC - Pallet 4 Small Tote 7	1														FALSE	4/15/2016				0889	ERICA	1005767.735	759824.94975	10/8/2015	16K		
8469	2018-051-		3294.02	No	S539	Ceramic	Coarse Earthenware			Prehistoric Ceramic	9		Complete	PX BOX 7	PX1	4 possible rims (1 Simple stamped and 2 Cord marked); 1 cord marked fragment; 1 cord marked or incised fragment; 2 have reddish outer surface														FALSE	4/13/2016				0889	ERICA	1005767.735	759824.94975	10/8/2015	16K	
8470	2018-051-		3294.03	Yes	S539	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	BOX 7	2															FALSE	4/15/2016				0889	ERICA	1005767.735	759824.94975	10/8/2015	16K	
8471	2018-051-		3294.04	No	S539	Glass	Unidentified			Glass	2		Complete - Needs Final Images	Problem Cart			Light Blue, Green/Olive													FALSE				0889	ERICA	1005767.735	759824.94975	10/8/2015	16K		
8472	2018-051-		3294.05	No	S539	Metal	Copper or Copper Alloy			Brass Tack	1		Complete	BOX 5	2														FALSE	5/2/2018				35	0889	ERICA	1005767.735	759824.94975	10/8/2015	16K	
8473	2018-051-		3294.06	No	S539	Organic	Bone			Bone Fragment	2		Complete	C5				10.4	g	1.515	in	0.668	in	0.553	in				FALSE	10/26/2018				0889	ERICA	1005767.735	759824.94975	10/8/2015	16K		
8474	2018-051-		3294.07	No	S539	Organic	Coal/Charcoal			Charcoal	1		Unknown																FALSE					0889	ERICA	1005767.735	759824.94975	10/8/2015	16K		
8475	2018-051-		3294.08	No	S539	Recent/Synthetic	Epoxy			Chain Fragments Casts	2		Complete - Cast	NHHC - Pallet 6 Medium Divided Tote 4	1														FALSE	6/2/2016		10/24/2018		0893	ERICA	1005767.735	759824.94975	10/8/2015	16K		
8476	2018-051-		3294.09	No	S539	Metal	Iron			Concreted Nail/Chain Frags	2		Inventoried - Ready to Process	WB125															FALSE						1005767.735	759824.94975	10/8/2015	16K			
8477	2018-051-		3295.01	No	S540	Ceramic	Coarse Earthenware			Prehistoric Ceramic	12		Complete	PX BOX 2	PX1	3 Check stamped; 3 Cord marked; 3 too faint to determine														FALSE	5/2/2016				0883	ERICA	1005763.4096	759821.2266	10/8/2015	15K	
8478	2018-051-		3295.02	No	S540	Metal	Copper or Copper Alloy			Brass Fragment	2		Complete	BOX 5	2														FALSE	8/8/2018				35	0883	ERICA	1005763.4096	759821.2266	10/8/2015	15K	
8479	2018-051-		3295.03	No	S540	Metal	Iron			Iron Fasteners	2		Inventoried - Ready to Process	18WB13															FALSE					0883	ERICA	1005763.4096	759821.2266	10/8/2015	15K		
8480	2018-051-		3295.04	No	S540	Metal	Copper or Copper Alloy			Keypate	1		Complete	NHHC - Pallet 5 Small Divided Tote 8	1														FALSE	08/10/2017				35	0884	ERICA	1005763.4096	759821.2266	10/8/2015	15K	
8481	2018-051-		3295.05	No	S540	Metal	Copper or Copper Alloy			Friction Primer Wire?	1		Complete	C2															FALSE	5/2/2018				0884	ERICA	1005763.4096	759821.2266	10/8/2015	15K		
8482	2018-051-		3296.01	No	S788	Ceramic	Coarse Earthenware			Prehistoric Ceramic	7		Complete	PX BOX 5	PX1	2 Check stamped, 1 Cord marked																									

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square	
8502	2018-051-		3301.03	No	S516	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1															FALSE	12/14/2017				0797	ERICA	1005741.881	759796.53933	10/8/2015	13J		
8503	2018-051-		3301.04	No	S516	Organic	Bone			Bone	1		Complete	C5				9.7	g	2.040	in	0.638	in	0.375	in					FALSE	10/26/2018				0797	ERICA	1005741.881	759796.53933	10/8/2015	13J		
8504	2018-051-		3302.01	No	S525	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1	Simple stamped														FALSE	3/24/2016				0831	ERICA	1005767.9608	759798.00313	10/8/2015	15I		
8505	2018-051-		3302.02	No	S525	Organic	Coal/Charcoal			Charcoal	1		Complete	NHHC - Pallet 6 Small Tote 22	1														FALSE	10/17/2017				0831	ERICA	1005767.9608	759798.00313	10/8/2015	15I			
8506	2018-051-		3302.03	No	S525	Architecture	Mortar			Mortar Fragment	1		Complete	NHHC - Pallet 4 Small Tote 7	1														FALSE	11/7/2017				0831	ERICA	1005767.9608	759798.00313	10/8/2015	15I			
8507	2018-051-		3303.01	No	G573	Metal	Iron			Railroad Iron	1		Unknown																FALSE					5513	KAREN	1005808.4057	759824.86449	10/9/2015	20J			
8508	2018-051-		3303.02	No	G573	Ceramic	Coarse Earthenware			Prehistoric Ceramic	9		Complete	PX BOX 6	PX1	1 Cord/Simple stamped, 3 too faint to determine markings														FALSE	3/24/2016					5515	KAREN	1005808.4057	759824.86449	10/9/2015	20J	
8509	2018-051-		3303.03	No	G573	Organic	Bone			Bone	1		Complete	C5				8.7	g	2.918	in	0.813	in	0.6	in					FALSE	3/6/2019					5515	KAREN	1005808.4057	759824.86449	10/9/2015	20J	
8510	2018-051-		3303.04	Yes	G573	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 21	1															FALSE	03/24/2016					5515	KAREN	1005808.4057	759824.86449	10/9/2015	20J	
8511	2018-051-		3303.05	No	G573	Organic	Ethnobotany			Pit	1		In treatment	7064																FALSE						5515	KAREN	1005808.4057	759824.86449	10/9/2015	20J	
8512	2018-051-		3303.06	No	G573	Glass	Unidentified			Glass Fragment	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Olive													FALSE	04/15/2016					5515	KAREN	1005808.4057	759824.86449	10/9/2015	20J	
8513	2018-051-		3303.07	No	G573	Metal	Iron			Chain Link?	1		Inventoried - Ready to Process	18WB10																FALSE						5515	KAREN	1005808.4057	759824.86449	10/9/2015	20J	
8514	2018-051-		3303.08	No	G573	Organic	Wood			Wood Sample	2		Inventoried - Ready to Process	18WB01																FALSE												
8515	2018-051-		3304.01	No	S526	Ceramic	Coarse Earthenware			Prehistoric Ceramic	3		Complete	PX BOX 1	PX1															FALSE	4/22/2016					0829	ERICA	1005762.8462	759800.4753	10/8/2015	15I	
8516	2018-051-		3304.02	No	S526	Metal	Iron			Fastener Fragment	1		Inventoried - Ready to Process	18WB10												1	in			FALSE					0829	ERICA	1005762.8462	759800.4753	10/8/2015	15I		
8517	2018-051-		3305.01	No	G574	Ceramic	Coarse Earthenware			Prehistoric Ceramic	4		Complete	PX BOX 7	PX1	1 incised; 3 too faint to determine															FALSE	4/22/2016					5503	KAREN	1005812.7822	759829.93401	10/9/2015	20J
8518	2018-051-		3305.02	No	G574	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Olive													FALSE	04/15/2016					5503	KAREN	1005812.7822	759829.93401	10/9/2015	20J	
8519	2018-051-		3306.01	No	S541	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 10	1		Clear													FALSE	01/11/2019					0895	ERICA	1005773.5721	759825.47244	10/8/2015	16K	
8520	2018-051-		3306.02	No	S541	Metal	Iron			Flat Iron Ring	1		Inventoried - Ready to Process	WB125																FALSE						0895	ERICA	1005773.5721	759825.47244	10/8/2015	16K	
8521	2018-051-		3306.03	No	S541	Architecture	Concrete			Concrete	1		Inventoried - Ready to Process	WB153																FALSE						0895	ERICA	1005773.5721	759825.47244	10/8/2015	16K	
8522	2018-051-		3306.04	No	S541	Concretion	Concretion			Chain Concretion	1		Unknown																	FALSE						0895	ERICA	1005773.5721	759825.47244	10/8/2015	16K	
8523	2018-051-		3306.05	No	S541	Metal	Iron			Iron Nail Fragment	1		Inventoried - Ready to Process	18WB10																FALSE						0895	ERICA	1005773.5721	759825.47244	10/8/2015	16K	
8524	2018-051-		3307	No	S498	Glass	Unidentified			Glass Base	1		Complete	NHHC - Pallet 6 Medium Divided Tote 10	1		Green/Olive													FALSE	06/23/2016					0714	ERICA	1005752.2907	759771.86929	10/8/2015	13G	
8525	2018-051-		3308.01	No	G655	Ceramic	Coarse Earthenware			Prehistoric Ceramic	11		Complete	PX BOX 6	PX1	7 Cord/Simple stamped (1 has red coloration on outside not removed by oxalic acid), 1 simple stamped with deep groove on outside															FALSE	3/24/2016					1005697.3933	759670.44773	10/23/2015	3BB		
8526	2018-051-		3308.02	No	G655	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear													FALSE	01/11/2019					1005697.3933	759670.44773	10/23/2015	3BB			
8527	2018-051-		3308.03	No	G655	Stone	Chipped Stone			Stone	1		Complete	BOX 7	2															FALSE	4/13/2016					1005697.3933	759670.44773	10/23/2015	3BB			
8528	2018-051-		3308.04	No	G655	Metal	Iron			Grapeshot	8		Inventoried - Ready to Process	IN OWN BUCKET																FALSE					1005697.3933	759670.44773	10/23/2015	3BB				
8529	2018-051-		3308.05	No	G655	Composite	Concretion	Wood		Concretion with Wood	1		Inventoried - Ready to Process	YB155																FALSE					1005697.3933	759670.44773	10/23/2015	3BB				
8530	2018-051-		3309.01	No	S505	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear, Green/Olive													FALSE	01/11/2018					0733	ERICA	1005770.8647	759790.51768	10/8/2015	15H	
8531	2018-051-		3309.02	Yes	S505	Ceramic	Stoneware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 21	1															FALSE	12/15/2017					0733	ERICA	1005770.8647	759790.51768	10/8/2015	15H	
8532	2018-051-		3309.03	No	S505	Architecture	Mortar			Mortar	3		Complete	NHHC - Pallet 4 Small Tote 7	1															FALSE	03/15/2016					0733	ERICA	1005770.8647	759790.51768	10/8/2015	15H	
8533	2018-051-		3309.04	No	S505	Recent/Synthetic	Epoxy			Cast chain links	2		Complete - Cast	NHHC - Pallet 6 Medium Divided Tote 4	1															FALSE	6/2/2016	10/24/2018				0734	ERICA	1005770.8647	759790.51768	10/8/2015	15H	
8534	2018-051-		3309.04.01	No	S505	Metal	Chain Link Fragments			Chain Link Fragments	2		Complete	BOX 10	2			920.6		5.8	in	3.05	in	1.07	in					FALSE	1/15/2019				35	0734	ERICA	1005770.8647	759790.51768	10/8/2015	15H	
8535	2018-051-		3309.05	No	S505	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 11	PX1	Cord marked														FALSE	4/10/2018					0733	ERICA	1005770.8647	759790.51768	10/8/2015	15H	
8536	2018-051-		3309.06	No	S505	Metal	Iron			Iron Fragment	1		Inventoried - Ready to Process	18WB10																FALSE						1005770.8647	759790.51768	10/8/2015	15H			
8537	2018-051-		3310.01	No	S496	Glass	Unidentified			Glass	2		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear, Brown													FALSE	01/16/2019					0709	ERICA	1005751.8372	759783.4515	10/8/2015	13H	
8538	2018-051-		3310.02	No	S496	Metal	Iron			Iron Plate Fragment	1		Inventoried - Ready to Process	18WB13																FALSE						0709	ERICA	1005751.8372	759783.4515	10/8/2015	13H	
8539	2018-051-		3310.03	No	S496	Organic	Coal/Charcoal			Coal	1		Complete	C7																FALSE	4/24/2018					0709	ERICA	1005751.8372	759783.4515	10/8/2015	13H	
8540	2018-051-		3310.04	No	S496	Architecture	Mortar			Mortar	1		Complete	C7																FALSE	5/9/2018					0709	ERICA	1005751.8372	759783.4515	10/8/2015	13H	
8541	2018-051-		3311.01	No	S504	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 1	PX1	Incised with zigzag pattern and dots															FALSE	6/27/2017					0739	ERICA	1005770.8983	759784.37983	10/8/2015	15G
8542	2018-051-		3311.02	No	S504	Stone	Ballast			Ballast Stone?	1		Complete	C7																FALSE	6/20/2018					0740	ERICA	1005770.8983	759784.37983	10/8/2015	15G	
8543	2018-051-		3312	No	S515	Organic	Coal/Charcoal			Coal	1		Complete	C7																FALSE	6/14/2018					0793	ERICA	1005737.2006	759798.32688	10/8/2015	12J	
8544	2018-051-		3313.01	No	S489	Glass	Unidentified			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 13	1		Clear													FALSE	01/16/2019					0677	ERICA	1005794.2758	759774.68682	10/8/2015	17F	
8545	2																																									

Appendix C: Artifact Database

C-108

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square		
8675	2018-051-		3397.01	No	SEC 1-11	Metal	Iron			Fasteners	11		Inventoried - Ready to Process	YB97																FALSE						2903-2904	ERICA				SEC		
8676	2018-051-		3397.02	No	SEC 1-11	Stone	Ballast			Ballast Stone	1		Inventoried - Ready to Process	18WB0																FALSE						2903-2904	ERICA				SEC		
8677	2018-051-		3397.03	No	SEC 1-11	Metal	Iron			Railroad Iron - Articulated?	2		Unknown																	FALSE						2903-2904	ERICA				SEC		
8678	2018-051-		3397.04	No	SEC 1-11	Ceramic	Coarse Earthenware			Prehistoric Ceramic	4		Complete	PX BOX 12	PX1	Simple stamped														FALSE	6/14/2018						2906	ERICA				SEC	
8679	2018-051-		3397.05	No	SEC 1-11	Glass	Unidentified			Glass	1		Complete	BOX 4	2		Green/Olive													FALSE	12/5/2018						2906	ERICA				SEC	
8680	2018-051-		3397.06	No	SEC 1-11	Organic	Coal/Charcoal			Coal	1		Inventoried - Ready to Process	WB150																FALSE						2906	ERICA				SEC		
8681	2018-051-		3397.07	No	SEC 1-11	Metal	Iron			Railroad Iron - Articulated?	2		Unknown																	FALSE						2903-2904	ERICA				SEC		
8682	2018-051-		3397.08	No	SEC 1-11	Metal	Iron			Concreted Iron Ring	1		Inventoried - Ready to Process	18WB12																FALSE											SEC		
8683	2018-051-		3397.09	No	SEC 1-11	Organic	Ethnobotany			Pit/Seed/Nut	1		Inventoried - Ready to Process																	FALSE											SEC		
8684	2018-051-		3398.01	No	SEC 13	Metal	Iron			Railroad Iron - Articulated?	1		Unknown																	FALSE						2642	CORINNA	1005875.771	759793.68759	9/29/2015	25E		
8685	2018-051-		3398.02	No	SEC 13	Metal	Iron			Railroad Iron - Articulated?	8		Unknown																	FALSE						2643	CORINNA	1005875.771	759793.68759	9/29/2015	25E		
8686	2018-051-		3398.03	No	SEC 13	Metal	Iron			Railroad Iron - Articulated?	12		Unknown																	FALSE						2644-2645	CORINNA	1005875.771	759793.68759	9/29/2015	25E		
8687	2018-051-		3398.04	No	SEC 13	Metal	Iron			Broken Iron Globe	2		Inventoried - Ready to Process	R3												24 in				FALSE						2668		1005875.771	759793.68759	9/29/2015	25E		
8688	2018-051-		3399.01	No	SEC 16	Metal	Iron			Railroad Iron - Articulated?	1		Unknown																	FALSE						2649	KAREN/CORINNA	1005866.8599	759789.06139	9/29/2015	24E		
8689	2018-051-		3399.02	No	SEC 16	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 4	PX1	Cord marked														FALSE	12/15/2017					2661	KAREN/CORINNA	1005866.8599	759789.06139	9/29/2015	24E		
8690	2018-051-		3400	No	SEC 17	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 3	PX1															FALSE	12/14/2017					2950-2951	ERICA/CORINNA	1005870.1714	759792.44533	9/29/2015	24E		
8691	2018-051-		3401.01	No	SEC 18	Metal	Iron			Railroad Iron - Articulated?	2		Unknown																	FALSE						2654	KAREN/CORINNA					SEC	
8692	2018-051-		3401.02	No	SEC 18	Metal	Iron			Fasteners	3		Inventoried - Ready to Process	18WB12																FALSE						2660	KAREN/CORINNA					SEC	
8693	2018-051-		3401.03	No	SEC 18	Metal	Iron			Chain	2		Inventoried - Ready to Process	18WB11																FALSE						2660	KAREN/CORINNA					SEC	
8694	2018-051-		3410	No	SEC 20	Metal	Iron			Railroad Iron - Articulated?	1		Unknown																	FALSE						2647	KAREN/CORINNA					SEC	
8695	2018-051-		3411.01	No	SEC 24	Glass	Pane Glass			Glass	1		Complete	NHHC - Pallet 6 Medium Divided Tote 14	1		Clear													FALSE	01/03/2019					2664	KAREN/CORINNA					SEC	
8696	2018-051-		3411.02	No	SEC 24	Metal	Iron			Small Strap	1		Inventoried - Ready to Process	18WB11							4 in									FALSE						2662	KAREN/CORINNA					SEC	
8697	2018-051-		3411.03	No	SEC 24	Ceramic	Coarse Earthenware			Prehistoric Ceramic	8		Complete	PX BOX 12	PX1	1 Simple stamped, 1 cord marked, 1 incised lines															FALSE	6/11/2018					2663	KAREN/CORINNA					SEC
8698	2018-051-		3411.04	Yes	SEC 24	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 21	1															FALSE	01/03/2019					2663	KAREN					SEC	
8699	2018-051-		3412	No	SEC 25	Metal	Iron			Railroad Iron - Articulated?	2		Unknown																	FALSE						2640, 2656	KAREN/CORINNA					SEC	
8700	2018-051-		3413	No	SEC 27	Metal	Iron			Railroad Iron - Articulated?	1		Unknown																	FALSE						2651	KAREN/CORINNA					SEC	
8701	2018-051-		3414	No	SEC S15	Metal	Iron			Drill/Impact Chisel?	1		Inventoried - Ready to Process	2018P2																FALSE											SEC		
8702	2018-051-		3415	No	SEC S12	Metal	Iron			Spikes	2		Inventoried - Ready to Process	YB97																FALSE											SEC		
8703	2018-051-		3416.01	No	SEC	Ceramic	Coarse Earthenware			Prehistoric Ceramic	4		Deaccessioned	DA		Simple stamped														FALSE											SEC		
8704	2018-051-		3416.02	No	SEC	Glass	Unidentified			Glass	1		Deaccessioned	DA																FALSE											SEC		
8705	2018-051-		3417	No	NA	Organic	Wood			Round Wood Box	1		Inventoried - Ready to Process	7064		Nail holes on side														FALSE											9C		
8706	2018-051-		3417	No	NA	Organic	Wood			Wooden Container, Curved Sides, Flat Bottom. Wooded Handle?	1		Inventoried - Ready to Process	DEHYDRATION (ETHANOL/DI H2O)																FALSE											9C		
8707	2018-051-		3417.01	Yes	S1183	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	NHHC - Pallet 4 Small Tote 12	1															FALSE	01/23/2019					3717	CORINNA	1005727.8168	759719.05223	10/19/2015	9C		
8708	2018-051-		3418.01	Yes	S1170	Ceramic	Refined Earthenware			Ceramic? Half Disc	1		Complete	NHHC - Pallet 4 Small Tote 21	1															FALSE	09/06/2017					3670	CORINNA	1005711.8268	759695.17985	10/19/2015	6A		
8709	2018-051-		3418.02	No	S1170	Metal	Copper or Copper Alloy			Brass Sheathing	1		Complete	BOX 5	2															FALSE	8/7/2018					323670	CORINNA	1005711.8268	759695.17985	10/19/2015	6A		
8710	2018-051-		3999	No	NA	Metal	Iron			Guncarriage Wheel	1		Complete	NHHC - Pallet 5	1															FALSE	05/24/2018					25							
8711	2018-051-		4000	No	NA	Metal	Iron			Guncarriage Wheel	1		Complete	NHHC - Pallet 5	1															FALSE	05/24/2018					25							
8712	2018-051-		4001	No	NA	DMM - Discarded Military Munitions	Unidentified			6 Lb Solid Shot	1		Unknown																	FALSE													
8713	2018-051-		4002	No	NA	DMM - Discarded Military Munitions	DMM - Brooke Shell		Copper or Copper Alloy	6.4" Brooke Shell with Archer Fuze (Removed)	1		Complete	Brooke Pallet 1	2						13.3 in					6 in				FALSE	5/8/2019					32							
8714	2018-051-		4002.01	No	NA	Metal	Brooke Sabot			Brooke Sabot	1		Complete	NHHC - Pallet 5 Large Tote 20	1	Rifled bottom														FALSE	03/27/2017					35							
8715	2018-051-		4002.02	No	NA	Metal	Iron			Bolt	1		Complete	X																FALSE	3/17/2017					35							
8717	2018-051-		4003	No	NA	DMM - Discarded Military Munitions	DMM - Dahlgren Ball		Copper or Copper Alloy	9" Dahlgren Shell with Watercap Fuze	2		Complete	NHHC - AFA Crate 1, NHHC - Pallet 5 Small Divided Tote 13	1											9 in				FALSE	11/02/2017					35, 25							
8718	2018-051-		4004	No	NA	DMM - Discarded Military Munitions	DMM - Brooke Shell		Copper or Copper Alloy	6.4" Brooke Shell	1		Complete	Brooke Pallet 1	2						13.5 in					6.25 in				FALSE	12/11/2018					35							
8719	2018-051-		4004.01	No	NA	Metal	Brooke Sabot			Brooke Sabot	2		Complete	BOX 14	2															FALSE	5/17/2018					35							
8720	2018-051-		4004.02	No	NA	Metal	Archer Fuze			Archer Fuze	2		Complete	BOX 6	2															FALSE	5/22/2018					35							
8721	2018-051-		4005	No	NA	DMM - Discarded Military Munitions	DMM - Brooke Shell		Copper or Copper Alloy	6.4" Brooke Shell with Archer Fuze	1		Inventoried - Ready to Process																	FALSE													
8722	2018-051-		4006	No	NA	DMM - Discarded Military Munitions	DMM - Dahlgren Ball			9" Dahlgren Shell with Watercap Fuze	1		Inventoried - Ready to Process																	FALSE													
8723	2018-051-		4007	No	NA	DMM - Discarded Military Munitions	DMM - Brooke Shell		Brass	6.4" Brooke Shell with Archer Fuze (Removed) and Sabot (Removed)	4		Complete	NHHC - AFA Crate 4, NHHC - Pallet 5 Large Tote 20, NHHC - Pallet 5 Small Divided Tote 13	1															FALSE	01/03/2019					35, 32							
8724	20																																										

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square
8745	2018-051-		4023	No	NA	DMM - Discarded Military Munitions	DMM - Dahlgren Ball	Brass	Lead/Organic	9" Dahlgren Shell with Watercap Fuze	4		Complete	NHHHC - AFA Crate 3, NHHHC - Pallet 5 Small Divided Tote 11, NHHHC - Pallet 5 Small Divided Tote 11	1														FALSE	11/14/2017					35, 18						
8746	2018-051-		4024	No	NA	DMM - Discarded Military Munitions	DMM - Dahlgren Ball			9" Dahlgren Shell with Watercap Fuze (Removed)	1		Complete	Dahlgren Pallet												8.75 in			FALSE	6/18/2019					32						
8747	2018-051-		4024.01	No	NA	Metal	Copper or Copper Alloy			Watercap Fuze	1	Intact	Complete	BOX 6	2			95.4 g		2.358 in						1.274 in			FALSE	3/21/2019					32						
8748	2018-051-		4025	No	NA	DMM - Discarded Military Munitions	DMM - Brooke Shell			6.4" Brooke Shell with Archer Fuze (Removed)	1		Inventoried - Ready to Process																FALSE												
8749	2018-051-		4026	No	NA	DMM - Discarded Military Munitions	DMM - Dahlgren Ball	Copper or Copper Alloy		9" Dahlgren Shell with Watercap Fuze (Removed)	1		Complete													8.75 in			FALSE	12/18/2018					35						
8750	2018-051-		4026.01	No	NA	Metal	Copper or Copper Alloy			Watercap Fuze	1		Complete	BOX 6	2					1.98 in						1.29 in			FALSE	10/23/2018					25						
8751	2018-051-		4027	No	NA	DMM - Discarded Military Munitions	DMM - Brooke Shell	Copper or Copper Alloy		6.4" Brooke Shell with Archer Fuze (Removed) and Sabot	3		Complete	NHHHC - AFA Crate 4, NHHHC - Pallet 5 Large Tote 20	1														FALSE	10/11/2017					35						
8752	2018-051-		4027.01	No	NA	Metal	Copper or Copper Alloy			Archer Fuze	1		Complete	NHHHC - Pallet 5 Small Divided Tote 14	1														FALSE	01/31/2018					14						
8753	2018-051-		4028	No	NA	DMM - Discarded Military Munitions	DMM - Dahlgren Ball	Copper or Copper Alloy		9" Dahlgren Shell with Watercap Fuze	1		Complete	HELENS OFFICE												8.75 in			FALSE	12/18/2018					35						
8754	2018-051-		4029	No	NA	DMM - Discarded Military Munitions	DMM - Dahlgren Ball			9" Dahlgren Shell with Watercap Fuze	1		Inventoried - Ready to Process																FALSE												
8755	2018-051-		4030	No	NA	DMM - Discarded Military Munitions	DMM - Dahlgren Ball			9" Dahlgren Shell with Watercap Fuze	1		Inventoried - Ready to Process																FALSE												
8756	2018-051-		4031	No	NA	DMM - Discarded Military Munitions	DMM - Brooke Shell	Copper or Copper Alloy		6.4" Brooke Shell with Archer Fuze (Removed) and Sabot	1		Complete	NHHHC - AFA Crate 4	1														FALSE	09/14/2017					35						
8757	2018-051-		4031.01	No	NA	Metal	Copper or Copper Alloy			Archer Fuze	1		Complete	NHHHC - Pallet 5 Small Divided Tote 14	1														FALSE	01/31/2018					14						
8758	2018-051-		4032	No	NA	DMM - Discarded Military Munitions	DMM - Brooke Shell			6.4" Brooke Shell with Archer Fuze	1		Inventoried - Ready to Process																FALSE												
8759	2018-051-		4033	No	NA	DMM - Discarded Military Munitions	DMM - Brooke Shell	Copper or Copper Alloy		6.4" Brooke Shell with Archer Fuze (Removed)	1		Complete	NHHHC - AFA Crate 4	1														FALSE	09/14/2017					35						
8760	2018-051-		4033.02	No	NA	Metal	Copper or Copper Alloy			Archer Fuze	1		Complete	NHHHC - Pallet 5 Small Divided Tote 14	1														FALSE	01/31/2018					14						
8761	2018-051-		4034	No	NA	DMM - Discarded Military Munitions	DMM - Brooke Shell			6.4" Brooke Shell with Archer Fuze	1		Inventoried - Ready to Process																FALSE												
8762	2018-051-		4035	No	NA	DMM - Discarded Military Munitions	DMM - Brooke Shell			6.4" Brooke Shell with Archer Fuze (Removed)	1		Complete	Brooke Pallet 1	2						14 in					6.25 in			FALSE	12/11/2018					35						
8763	2018-051-		4035.01	No	NA	Metal	Copper or Copper Alloy			Brooke Sabot	1		Complete	BOX 15	2														FALSE	5/17/2018					35						
8764	2018-051-		4035.02	No	NA	Metal	Copper or Copper Alloy			Archer Fuze	2		Complete	BOX 6	2														FALSE	5/22/2018					25						
8765	2018-051-		4036	No	NA	DMM - Discarded Military Munitions	DMM - Brooke Shell	Copper or Copper Alloy		6.4" Brooke Shell with Archer Fuze (Removed)	1		Complete	Brooke Pallet 2	2					13.4 in					6.3 in				FALSE	5/7/2019					32						
8766	2018-051-		4036.02	No	NA	Metal	Copper or Copper Alloy			Archer Fuze	1	Intact	Complete	BOX 6	2		144.3 g		2.932 in						1.25 in				FALSE	3/21/2019					32						
8767	2018-051-		4037	No	NA	DMM - Discarded Military Munitions	DMM - Dahlgren Ball	Copper or Copper Alloy		9" Dahlgren Shell with Watercap Fuze (Removed)	1		Complete																FALSE	12/18/2018					14						
8768	2018-051-		4037.01	No	NA	Metal	Copper or Copper Alloy			Watercap Fuze	1		Complete	BOX 6	2														FALSE	5/21/2018					35						
8769	2018-051-		4038	No	NA	DMM - Discarded Military Munitions	DMM - Brooke Shell			6.4" Brooke Shell with Archer Fuze	1		Inventoried - Ready to Process																FALSE												
8770	2018-051-		4039	No	NA	DMM - Discarded Military Munitions	DMM - Dahlgren Ball	Copper or Copper Alloy		9" Dahlgren Ball with Watercap Fuze (Removed)	1		Complete	NHHHC - AFA Crate 1, NHHHC - Pallet 5 Small Divided Tote 13, NHHHC - Pallet 5 Small Divided Tote 13	1														FALSE	01/07/2019					32, 18						
8771	2018-051-		4040	No	NA	DMM - Discarded Military Munitions	DMM - Dahlgren Ball	Copper or Copper Alloy		9" Dahlgren Shell with Watercap Fuze (Removed)	1		Complete	Dahlgren Pallet												8.75 in			FALSE	6/20/2019					32						
8772	2018-051-		4041	No	NA	DMM - Discarded Military Munitions	DMM - Brooke Shell			6.4" Brooke Shell	1		Inventoried - Ready to Process																FALSE												
8773	2018-051-		4042	No	NA	DMM - Discarded Military Munitions	DMM - Brooke Shell			6.4" Brooke Shell with Archer Fuze	1		Inventoried - Ready to Process																FALSE												
8774	2018-051-		4043	No	NA	DMM - Discarded Military Munitions	DMM - Brooke Shell	Copper or Copper Alloy		6.4" Brooke Shell with Archer Fuze	1		Complete	Brooke Pallet 1	2					14.9 in					6 in				FALSE	5/8/2019					32						
8775	2018-051-		4043.01	No	NA	Metal	Copper or Copper Alloy			Sabot	1		Complete	BOX 16	2		3.42 kg								6.312 in	1.45		TRUE	3/20/2019					18							
8776	2018-051-		4043.02	No	NA	Metal	Copper or Copper Alloy			Fuze	3		Complete	BOX 6	2		192.9 g		2.99 in		1.21 in				0.84 in				FALSE	2/28/2019					18						
8777	2018-051-		4044	No	NA	DMM - Discarded Military Munitions	DMM - Brooke Shell			6.4" Brooke Shell with Archer Fuze	1		Inventoried - Ready to Process																FALSE												
8778	2018-051-		4045	No	NA	DMM - Discarded Military Munitions	DMM - Dahlgren Ball			9" Dahlgren Shell with Watercap Fuze	1		Inventoried - Ready to Process																FALSE												
8779	2018-051-		4046	No	NA	DMM - Discarded Military Munitions	DMM - Brooke Shell			6.4" Brooke Shell with Archer Fuze	1		Inventoried - Ready to Process																FALSE												
8780	2018-051-		4047	No	NA	DMM - Discarded Military Munitions	DMM - Dahlgren Ball	Copper or Copper Alloy		9" Dahlgren Shell with Watercap Fuze (Removed)	1		Complete	HELENS OFFICE											8.75 in				FALSE	12/18/2018					35						
8781	2018-051-		4047.01	No	NA	Metal	Copper or Copper Alloy			Watercap Fuze	1		Complete	BOX 6	2		114.5 g		2.42 in						1.26 in				FALSE	10/23/2018					25						
8782	2018-051-		4048	No	NA	DMM - Discarded Military Munitions	DMM - Brooke Bolt	Copper or Copper Alloy		6.4" Brooke Bolt	1		Complete	NHHHC - AFA Crate 2	1														FALSE	02/08/2018					25						
8783	2018-051-		4048.01	No	NA	Metal	Copper or Copper Alloy			Sabot	1		Complete	NHHHC - Pallet 5 Large Tote 20	1														FALSE	10/10/2017											
8784	2018-051-		4049	No	NA	DMM - Discarded Military Munitions	DMM - Brooke Shell	Copper or Copper Alloy		6.4" Brooke Shell with Archer Fuze (Removed) and Sabot (Removed)	1		Complete	Brooke Pallet 1	2		58 lb		14 in					6.25 in				FALSE	7/29/2019				6.4	32							
8785	2018-051-		4049.01	No	NA	Metal	Copper or Copper Alloy			Brooke Sabot	1		Complete	BOX 14	2		6.75 lb							6.3 in	1.4 in			FALSE	1/25/2019					28							
8786	2018-051-		4049.02	No	NA	Metal	Copper or Copper Alloy			Archer Fuze	4		Complete	BOX 6	2		168.4 g		2.636 in						1.254 in				FALSE	3/21/2019					35						
8787	2018-051-		4050	No	NA	DMM - Discarded Military Munitions	DMM - Dahlgren Ball	Brass	Organic	9" Dahlgren Shell with Watercap Fuze (Removed)	3		Complete	NHHHC - AFA Crate 1, NHHHC - Pallet 5 Small Divided Tote 13, NHHHC - Pallet 5 Small Divided Tote 13	1														FALSE	07/05/2017					35, 18						
8788	2018-051-		4051	No	NA	DMM - Discarded Military Munitions	DMM - Dahlgren Ball			6.4" Brooke Shell with Archer Fuze (Removed)	1		Inventoried - Ready to Process																FALSE												
8789	2018-051-		4052	No	NA	DMM - Discarded Military Munitions	DMM - Dahlgren Ball	Copper or Copper Alloy		9" Dahlgren Shell with Watercap Fuze	1		Complete	NHHHC - AFA Crate 3	1														FALSE	11/14/2017					35						
8790	2018-051-		4053	No	NA	DMM - Discarded Military Munitions	DMM - Dahlgren Ball			9" Dahlgren Shell with Watercap Fuze (Removed)	1		Complete	Dahlgren Pallet												8.75 in			FALSE	6/18/2019					32						
8791	2018-051-		4053.01	No	NA	Metal	Copper or Copper Alloy			Watercap Fuze	1		Complete	BOX 6	2		113.4 g		2.44 in							1.247 in			FALSE	3/21/2019					32						
8792	2018-051-		4054	No	NA	DMM - Discarded Military Munitions	DMM - Brooke Shell	Copper or Copper Alloy		6.4" Brooke Shell with Archer Fuze (Removed) and Sabot (Removed)	6		Complete	NHHHC - AFA Crate 4, NHHHC - Pallet 5 Large Tote 20, NHHHC - Pallet 5 Small Divided Tote 13	1														FALSE	11/14/2017					35, 32						
8793																																									

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square		
8879	2018-051-		4116	No	NA	DMM - Discarded Military Munitions	DMM - Dahlgren Ball			9" Dahlgren Shell with Watercap Fuze	1		Inventoried - Ready to Process																FALSE														
8880	2018-051-		4117	No	NA	DMM - Discarded Military Munitions	DMM - Dahlgren Ball			9" Dahlgren Shell with Watercap Fuze	1		Inventoried - Ready to Process																FALSE														
8881	2018-051-		4118	No	NA	DMM - Discarded Military Munitions	DMM - Brooke Shell	Copper or Copper Alloy		6.4" Brooke Shell with Archer Fuze (Removed) and Sabot (Removed)	1		Complete	Brooke Pallet 1	2			23587 g		6.25 in				6.25 in			12.5 in	FALSE	7/10/2019				6.4	32									
8882	2018-051-		4118.01	No	NA	Metal	Copper or Copper Alloy			Brooke Sabot	1		Complete	BOX 14	2			7.6 lb							6.25 in		1.4 in	FALSE	1/25/2019														
8883	2018-051-		4118.02	No	NA	Metal	Copper or Copper Alloy			Archer Fuze	1		Complete	BOX 6	2			149.9 g		2.913 in						1.264 in			FALSE	3/21/2019													
8884	2018-051-		4119	No	NA	DMM - Discarded Military Munitions	DMM - Dahlgren Ball	Copper or Copper Alloy		9" Dahlgren Shell with Watercap Fuze (Removed)	1		Complete	Dahlgren Pallet															FALSE	6/19/2019													
8885	2018-051-		4119.01	No	NA	Metal	Copper or Copper Alloy			Watercap Fuze	1		Complete	BOX 6	2			103.7 g		2.422 in						1.272 in			FALSE	3/21/2019													
8886	2018-051-		4120	No	NA	DMM - Discarded Military Munitions	DMM - Brooke Shell	Copper or Copper Alloy		6.4" Brooke Shell with Archer Fuze (Removed)	1		Inventoried - Ready to Process															FALSE															
8887	2018-051-		4121	No	NA	DMM - Discarded Military Munitions	DMM - Brooke Shell			6.4" Brooke Bolt	1		Inventoried - Ready to Process															FALSE															
8888	2018-051-		4122	No	NA	DMM - Discarded Military Munitions	DMM - Brooke Shell			6.4" Brooke Shell with Archer Fuze	1		Inventoried - Ready to Process															FALSE															
8889	2018-051-		4123	No	NA	DMM - Discarded Military Munitions	DMM - Dahlgren Ball			9" Dahlgren Shell with Watercap Fuze	1		Complete																FALSE	12/18/2018													
8890	2018-051-		4124	No	NA	DMM - Discarded Military Munitions	DMM - Brooke Shell			6.4" Brooke Shell with Archer Fuze	1		Inventoried - Ready to Process																FALSE														
8891	2018-051-		4125	No	NA	DMM - Discarded Military Munitions	DMM - Dahlgren Ball	Copper or Copper Alloy		9" Dahlgren Shell with Watercap Fuze (Removed)	1		Complete	Dahlgren Pallet												8.75 in			FALSE	6/20/2019													
8892	2018-051-		4126	No	NA	DMM - Discarded Military Munitions	DMM - Dahlgren Ball			9" Dahlgren Shell with Watercap Fuze	1		Unknown																FALSE														
8893	2018-051-		4127	No	NA	DMM - Discarded Military Munitions	DMM - Brooke Shell			6.4" Brooke Shell with Archer Fuze	1		Inventoried - Ready to Process																FALSE														
8894	2018-051-		4128	No	NA	DMM - Discarded Military Munitions	DMM - Brooke Shell			6.4" Brooke Shell with Archer Fuze	1		Unknown																FALSE														
8895	2018-051-		4129	No	NA	DMM - Discarded Military Munitions	DMM - Brooke Bolt			6.4" Brooke Bolt	1		Complete	NHHC - AFA Crate 2	1														FALSE	02/08/2018													
8896	2018-051-		4130	No	NA	DMM - Discarded Military Munitions	DMM - Brooke Bolt			6.4" Brooke Bolt	1		Inventoried - Ready to Process	OWN BUCKET															FALSE														
8897	2018-051-		4131	No	NA	DMM - Discarded Military Munitions	DMM - Brooke Shell			6.4" Brooke Shell with Archer Fuze	1		Inventoried - Ready to Process																FALSE														
8898	2018-051-		4132	No	NA	DMM - Discarded Military Munitions	DMM - Dahlgren Ball			9" Dahlgren Shell with Watercap Fuze (Removed)	1		Complete	NHHC - AFA Crate 1	1														FALSE	02/20/2017													
8899	2018-051-		4132.02	No	NA	Metal	Copper or Copper Alloy			Watercap Fuze	1		Complete	NHHC - Pallet 5 Small Divided Tote 14	1														FALSE	07/05/2017													
8900	2018-051-		4132.03	No	NA	Organic	Wood			Misc Wood (?) Fragments	16		Complete	C5															FALSE	6/26/2018													
8901	2018-051-		4133	No	NA	DMM - Discarded Military Munitions	DMM - Brooke Bolt			6.4" Brooke Bolt	1		Complete	Brooke Pallet 2	2														FALSE	3/5/2019													
8902	2018-051-		4134	No	NA	DMM - Discarded Military Munitions	DMM - Brooke Shell			6.4" Brooke Shell with Archer Fuze	1		Inventoried - Ready to Process																FALSE														
8903	2018-051-		4135	No	NA	DMM - Discarded Military Munitions	DMM - Brooke Shell			6.4" Brooke Shell with Archer Fuze	1		Inventoried - Ready to Process																FALSE														
8904	2018-051-		4136	No	NA	DMM - Discarded Military Munitions	DMM - Brooke Shell			6.4" Brooke Shell with Archer Fuze	1		Inventoried - Ready to Process																FALSE														
8905	2018-051-		4137	No	NA	DMM - Discarded Military Munitions	DMM - Brooke Shell	Copper or Copper Alloy		6.4" Brooke Shell with Archer Fuze (Removed?) and Sabot	1		Complete	NHHC - AFA Crate 5	1														FALSE	11/14/2017													
8906	2018-051-		4151	No	NA	DMM - Discarded Military Munitions	DMM - Dahlgren Ball			Counterweight with Handle	1		Inventoried - Ready to Process																FALSE														
8907	2018-051-		4152	No	NA	Metal	Copper or Copper Alloy			Fuze	4	Fragment(s) of a single artifact	Complete	NHHC	1														FALSE	04/10/2018													
8908	2018-051-		4153	No	NA	Metal	Copper or Copper Alloy			Fuze	3	Fragment(s) of a single artifact	Complete	NHHC - Pallet 5 Small Divided Tote 14	1														FALSE	01/26/2018													
8909	2018-051-		4154	No	NA	Metal	Copper or Copper Alloy			Fuze	2	Fragment(s) of a single artifact	Complete	NHHC	1														FALSE	04/10/2018													
8910	2018-051-		4155	No	NA	Metal	Copper or Copper Alloy			Archer Fuze	3	Fragment(s) of a single artifact	Complete	BOX 6	2														FALSE	05/21/2018													
8911	2018-051-		4156	No	NA	Metal	Copper or Copper Alloy			Fuze	4	Fragment(s) of a single artifact	Complete	NHHC	1														FALSE	04/09/2018													
8912	2018-051-		4157	No	NA	Metal	Copper or Copper Alloy			Fuze	3	Fragment(s) of a single artifact	Complete	NHHC	1														FALSE	04/09/2018													
8913	2018-051-		4158	No	NA	Metal	Copper or Copper Alloy			Fuze	3	Fragment(s) of a single artifact	Complete	NHHC - Pallet 5 Small Divided Tote 14	1														FALSE	01/26/2018													
8914	2018-051-		4159	No	NA	Metal	Copper or Copper Alloy			Fuze	3	Fragment(s) of a single artifact	Complete	NHHC	1														FALSE	04/09/2018													
8915	2018-051-		4160	No	NA	Metal	Copper or Copper Alloy			Archer Fuze	3	Fragment(s) of a single artifact	Complete	BOX 6	2														FALSE	05/22/2018													
8916	2018-051-		4161	No	NA	Metal	Copper or Copper Alloy			Fuze	3	Fragment(s) of a single artifact	Complete	NHHC	1														FALSE	04/09/2018													
8917	2018-051-		4162	No	NA	Metal	Copper or Copper Alloy			Archer Fuze	2	Fragment(s) of a single artifact	Complete	BOX 6	2														FALSE	05/24/2018													
8918	2018-051-		4163	No	NA	Metal	Copper or Copper Alloy			Fuze	3	Fragment(s) of a single artifact	Inventoried - Ready to Process	IN BUCKET															FALSE														
8919	2018-051-		4164	No	NA	Metal	Copper or Copper Alloy			Fuze	3	Fragment(s) of a single artifact	Complete	NHHC	1														FALSE	04/10/2018													
8920	2018-051-		4165	No	NA	Metal	Copper or Copper Alloy			Archer Fuze	3	Fragment(s) of a single artifact	Complete	BOX 6	2														FALSE	05/22/2018													
8921	2018-051-		4166	No	NA	Metal	Copper or Copper Alloy			Fuze	1	Fragment(s) of a single artifact	Inventoried - Ready to Process	IN BUCKET															FALSE														
8922	2018-051-		4167	No	NA	Metal	Copper or Copper Alloy			Fuze	3	Fragment(s) of a single artifact	Complete	NHHC	1														FALSE	04/10/2018													
8923	2018-051-		4168	No	NA	Metal	Copper or Copper Alloy			Archer Fuze	3	Fragment(s) of a single artifact	Complete	BOX 6	2														FALSE	05/22/2018													
8924	2018-051-		4169	No	NA	Metal	Copper or Copper Alloy			Fuze	3	Fragment(s) of a single artifact	Complete	NHHC - Pallet 5 Small Divided Tote 14	1														FALSE	01/26/2018													
8925	2018-051-		4170	No	NA	Metal	Copper or Copper Alloy			Fuze	3	Fragment(s) of a single artifact	Complete	NHHC	1														FALSE	04/10/2018													
8926	2018-051-		4171	No	NA	Metal	Copper or Copper Alloy			Fuze	3	Fragment(s) of a single artifact	Complete	NHHC - Pallet 5 Small Divided Tote 14	1														FALSE	01/26/2018													
8927	2018-051-		4172	No	NA	Metal	Copper or Copper Alloy			Fuze	4	Fragment(s) of a single artifact	Complete	NHHC	1														FALSE	04/09/2018													
8928	2018-051-		4173	No	NA	Metal	Copper or Copper Alloy			Fuze																																	

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square
8946	2018-051-		4191	No	NA	Metal	Copper or Copper Alloy			Archer Fuze	2	Fragment(s) of a single artifact	Complete	BOX 6	2															FALSE	05/22/2018				35						
8947	2018-051-		4192	No	NA	Metal	Copper or Copper Alloy			Fuze	3		Complete	NHHC	1															FALSE	04/09/2018				35						
8948	2018-051-		4193	No	NA	Metal	Copper or Copper Alloy			Fuze	3	Fragment(s) of a single artifact	Complete	NHHC - Pallet 5 Small Divided Tote 14	1														FALSE	01/26/2018				7							
8949	2018-051-		4194	No	NA	Metal	Copper or Copper Alloy			Fuze	3	Fragment(s) of a single artifact	Complete	NHHC - Pallet 5 Small Divided Tote 14	1														FALSE	01/26/2018				7							
8950	2018-051-		4195	No	NA	Metal	Copper or Copper Alloy			Fuze	3	Fragment(s) of a single artifact	Complete	NHHC - Pallet 5 Small Divided Tote 14	1														FALSE	01/26/2018				7							
8951	2018-051-		4196	No	NA	Metal	Copper or Copper Alloy			Fuze	3	Fragment(s) of a single artifact	Complete	NHHC - Pallet 5 Small Divided Tote 14	1														FALSE	01/26/2018				7							
8952	2018-051-		5001.01	No	2G15	Metal	Iron			Canister	1		Inventoried - Ready to Process	63X												2 in			FALSE						7804	JJ	1005816.6402	759797.97167	7/4/2017	20G	
8953	2018-051-		5001.02	No	2G15	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 9	PX1	Cord marked, Simple stamped														FALSE	5/29/2018				7804	JJ	1005816.6402	759797.97167	7/4/2017	20G	
8954	2018-051-		5002	No	2G17	Glass	Unidentified			Glass Shard	1		Complete	BOX 4	2		Green/Olive	17 g		1.539 in		1.567 in		0.23 in		1.5 in			FALSE	3/7/2019				7818	JJ	1005754.9878	759759.22814	7/5/2017	13E		
8955	2018-051-		5003.01	No	2G32	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 12	PX1	Cord marked				2 in		2 in							FALSE	8/31/2017				7903	JJ	1005804.6195	759810.74175	7/5/2017	19I		
8956	2018-051-		5003.02	No	2G32	Metal	Iron			Pipe	1		Inventoried - Ready to Process	63X											1 in			FALSE						7903	JJ	1005804.6195	759810.74175	7/5/2017	19I		
8957	2018-051-		5004	No	2G37	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 10	PX1	Crimped rim decoration				4 in		4 in							FALSE	6/11/2018				7930	JJ	1005794.6703	759814.08072	7/5/2017	18I		
8958	2018-051-		5005.01	No	2G45	Organic	Pitch			Solidified Pine Tar	1		Complete	C5				26.7 g		2.86 in		1.94 in		0.76 in				FALSE	02/19/2019				7966	JJ	1005793.5733	759806.25658	7/6/2017	18H			
8959	2018-051-		5005.02	No	2G45	Metal	Copper or Copper Alloy			Cog Wheel with Teeth	1		Complete	C2				3.4 g		1.11 in		1.04 in		0.39 in				FALSE	1/24/2019				357966	JJ	1005793.5733	759806.25658	7/6/2017	18H			
8960	2018-051-		5006	No	2G55	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 9	PX1	Cord marked				2 in		1.5 in						FALSE	5/29/2018				8019	JJ	1005817.6905	759791.91046	7/6/2017	20F			
8961	2018-051-		5007	Yes	2G60	Ceramic	Stoneware			Historic Ceramic	1		Complete	BOX 1	2					2.0 in		1.0 in						FALSE	6/28/2018				8210-8211	JJ	1005841.4873	759858.76918	7/7/2017	24L			
8962	2018-051-		5008	No	2G77	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 10	PX1					2 in		1.5 in						FALSE	6/20/2018				8293	JJ	1005667.7113	759777.02696	7/8/2017	5J			
8963	2018-051-		5009	No	2G81	Organic	Bone			Bone	1		Inventoried - Ready to Process	67X						2.25 in		1 in					FALSE						8310	JJ	1005664.6473	759778.07704	7/8/2017	5J			
8964	2018-051-		5010	No	2G88	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 10	PX1					1.5 in		1 in						FALSE	8/31/2017				8354	JJ	1005653.5667	759791.94049	7/8/2017	4L			
8965	2018-051-		5011	No	2G103	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 9	PX1	Simple indented stamped				2 in		1 in							FALSE	5/29/2018				8427	JJ	1005636.8124	759765.89341	7/8/2017	2J		
8966	2018-051-		5012	No	2G114	Ceramic	Coarse Earthenware			Prehistoric Ceramic	5		Complete	PX BOX 9	PX1	Check stamped, 2 Cord marked				8.5 in		5.5 in		0.5 in					FALSE	5/29/2018				0012	KAREN	1005624.05	759767.7	7/10/2017	1K		
8967	2018-051-		5013	No	2G116	Metal	Iron			Fastener	1		Inventoried - Ready to Process	63X														FALSE						0012	ERICA	1005623.91	759772.91	7/10/2017	1K		
8968	2018-051-		5014	No	2G124	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 9	PX1	Cord marked				2.25 in		2.0 in		0.5 in				FALSE	5/29/2018				0032	KAREN	1005661.4	759760.51	7/10/2017	4I			
8969	2018-051-		5015.01	No	2G126	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 10	PX1													FALSE	6/19/2018						0038	ERICA	1005667.65	759760.52	7/10/2017	4I	
8970	2018-051-		5015.02	No	2G126	Organic	Bone			Bone	1		Inventoried - Ready to Process	67X														FALSE						0038	ERICA	1005667.65	759760.52	7/10/2017	4I		
8971	2018-051-		5016.01	No	2G128	Metal	Copper or Copper Alloy			Copper Fragment	1		Complete	BOX 5	2			0.9 g		1.51 in		0.7 in		0.02 in				FALSE						0049	KAREN	1005673.67	759767.52	7/10/2017	4H		
8972	2018-051-		5016.02	No	2G128	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 8	PX1	Cord marked													FALSE	6/21/2018				0049	KAREN	1005673.67	759767.52	7/10/2017	4H		
8973	2018-051-		5016.03	No	2G128	Organic	Bone			Bone	1		Inventoried - Ready to Process	SS#2														FALSE						0049	KAREN	1005673.67	759767.52	7/10/2017	4H		
8974	2018-051-		5016.04	No	2G128	Metal	Iron			Cast Iron Fragment	1		Inventoried - Ready to Process	63X														FALSE						0049	KAREN	1005673.67	759767.52	7/10/2017	4H		
8975	2018-051-		5017	No	2G131	Glass	Unidentified			Glass Shard	1		Complete	BOX 4	2		Green/Olive	26.5 g		2.006 in		1.934 in		0.278 in				FALSE	3/6/2019				0067	ERICA	1005618.14	759793.5	7/10/2017	1M			
8976	2018-051-		5018	No	2G138	Glass	Unidentified			Glass Shard	1		Complete	BOX 4	2		Green/Olive	6.1 g		1.79 in		0.901 in		0.159 in				FALSE	3/7/2019				0087	ERICA	1005628.11	759764.47	7/11/2017	1J			
8977	2018-051-		5019.01	No	2G145	Metal	Iron			Compression Square	1		Inventoried - Ready to Process	51X														FALSE						0101	ERICA	1005690.11	759770.59	7/11/2017	7I		
8978	2018-051-		5019.02	No	2G145	Metal	Copper or Copper Alloy			Bearing	1		Inventoried - Ready to Process	80X														FALSE						0104	ERICA	1005690.11	759770.59	7/11/2017	7I		
8979	2018-051-		5020	No	2G162	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 10	PX1	Stamped at tip													FALSE	6/11/2018				0126	KAREN	1005718.88	759775.01	7/11/2017	10H		
8980	2018-051-		5021	No	2G170	Organic	Wood			Wedge	1		Inventoried - Ready to Process	IP														FALSE						0191	ERICA	1005694.77	759764.84	7/11/2017	7H		
8981	2018-051-		5022	No	2G174	Metal	Copper or Copper Alloy			Brass Tack	1		Complete	BOX 5	2			3.4 g		1.36 in		0.345 in						FALSE						0164	KAREN	1005699.96	759763.46	7/11/2017	7H		
8982	2018-051-		5023	No	2G175	Metal	Copper or Copper Alloy			Wire	1		Complete	BOX 5	2			18.1 g		6.013 in		2.47 in		0.5 in				FALSE	1/24/2019				250174	KAREN	1005683.39	759766.38	7/11/2017	6H			
8983	2018-051-		5024	No	2G177	Organic	Wood			Possible Barrel Stave	1		Inventoried - Ready to Process	IP														FALSE						0219	ERICA	1005679.36	759767.81	7/11/2017	6I		
8984	2018-051-		5025	No	2G178	Glass	Unidentified			Glass Shard	1		Complete	BOX 4	2		Amber	41.8 g		3.496 in		2.099 in		0.189 in				FALSE	3/6/2019				0223	ERICA	1005681.82	759761	7/11/2017	6H			
8985	2018-051-		5026	No	2G180	Composite	Brass	Concretion		Brass Safety Pin (?) In Concretion	1		Inventoried - Ready to Process	2018P7														FALSE						0189	KAREN	1005690.16	759755.35	7/11/2017	6G		
8986	2018-051-		5027	No	2G181	Organic	Wood			Stave Fragment	1		Inventoried - Ready to Process	IP														FALSE						0191	KAREN	1005694.34	759757.83	7/11/2017	7G		
8987	2018-051-		5028	No	2G183	Metal	Iron			Half Rail	1		Inventoried - Ready to Process	ROLLOFF 1 - Reburial														FALSE						0251	ERICA	1005686.25	759795.08	7/12/2017	7K		
8988	2018-051-		5029	No	2G198	Metal	Iron			Round Iron Piece	1		Inventoried - Ready to Process	72X														FALSE						0268	KAREN	1005708.72	759804.03	7/12/2017	10K		
8989	2018-051-		5030.01	No	2G199	Metal	Iron			Half Rail	1		Inventoried - Ready to Process	72X														FALSE						0280	KAREN	1005705.51	759804.27	7/12/2017	9K		
8990	2018-051-		5030.02	No	2G199	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 8	PX1	Check stamped												FALSE	7/26/2018						0279	KAREN	1005705.51				

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square
9030	2018-051-		5052.04.01	No	2G294	Metal	Iron			Bolts and Nuts	5		Complete	C1				2847.5 g		5.55 in									FALSE	9/9/2018					1220-1226, 1233, 1249	ERICA	1005769.6624	759695.31308	7/17/2017	12BB	
9031	2018-051-		5052.05	No	2G294	Metal	Iron			Fire Tube	1		Inventoried - Ready to Process	61X															FALSE					1228	ERICA	1005769.6624	759695.31308	7/17/2017	12BB		
9032	2018-051-		5052.06	No	2G294	Metal	Iron			Plate	1		Reburial	REBURIAL DRUM															FALSE					1228	ERICA	1005769.6624	759695.31308	7/17/2017	12BB		
9033	2018-051-		5052.07	No	2G294	Metal	Iron			Strap	1		Inventoried - Ready to Process	61X						3 ft		10 in							FALSE					1228	ERICA	1005769.6624	759695.31308	7/17/2017	12BB		
9034	2018-051-y	5053		Yes	2G297	Ceramic	Whiteware			Historic Ceramic	2		Complete	7064			WHITE	38.5 g		1.82 in		1.47 in		0.41 in					FALSE	9/20/2019				< 10	1251	ERICA	1005772.19	759695.3076	7/17/2017	12BB	
9035	2018-051-		5054.01	No	2G298	Metal	Iron			Machinery	1		Complete	Walk-through						23.75 in		19.25 in						TRUE	6/6/2019				35	1245	KAREN	1005766.8857	759684.97609	7/17/2017	11CC		
9036	2018-051-		5054.01.01	No	2G298	Recent/Synthetic	Rubber			Gaskets	2		Inventoried - Ready to Process	IP															FALSE												
9037	2018-051-		5054.02	No	2G298	Metal	Iron			Machinery Tube	1		Inventoried - Ready to Process	72X															FALSE						1245	KAREN	1005766.8857	759684.97609	7/17/2017	11CC	
9038	2018-051-		5055.01	No	2G299	Composite	Iron		Unidentified	Engine	1		Inventoried - Ready to Process	VAT 38															FALSE						1261-1262	KAREN	1005766.6746	759686.28679	7/17/2017	11CC	
9039	2018-051-		5055.02	No	2G299	Composite	Iron		Unidentified	Engine Cylinder	1		In Treatment	In Progress															FALSE						1261-1262	KAREN	1005766.6746	759686.28679	7/17/2017	11CC	
9040	2018-051-		5056.01	Yes	2G300	Ceramic	Unidentified			Historic Ceramic	1		Complete	BOX 1	2														FALSE	6/28/2018					1266	KAREN	1005771.4971	759686.53591	7/17/2017	11CC	
9041	2018-051-		5056.02	No	2G300	Metal	Iron			Thick Strap	1		Inventoried - Ready to Process	72X															FALSE						1267	KAREN	1005771.4971	759686.53591	7/17/2017	11CC	
9042	2018-051-		5056.03	No	2G300	Metal	Iron			Strap	1		Reburial	Reburial															FALSE	5/31/2019					1267	KAREN	1005771.4971	759686.53591	7/17/2017	11CC	
9043	2018-051-		5056.04	No	2G300	Metal	Iron			Strap?	1		Inventoried - Ready to Process	CONCRETE VAT															FALSE						1267	KAREN	1005771.4971	759686.53591	7/17/2017	11CC	
9044	2018-051-		5056.05	No	2G300	Metal	Iron			Bent Strap	1		Inventoried - Ready to Process	72X		BENT													FALSE						1267	KAREN	1005771.4971	759686.53591	7/17/2017	11CC	
9045	2018-051-		5057.01	No	2G305	Glass	Unidentified			Glass Shard	1		Complete	BOX 4	2		Olive	6.6 g		1.703 in		1.187 in		0.141 in					FALSE	3/7/2019					1279	KAREN	1005759.322	759680.20035	7/18/2017	10CC	
9046	2018-051-		5057.02	No	2G305	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 7	PX1														FALSE	8/14/2018					1279	KAREN	1005759.322	759680.20035	7/18/2017	10CC	
9047	2018-051-		5058.01	Yes	2G306	Ceramic	Unidentified			Historic Ceramic	1		Complete	BOX 1	2														FALSE	7/6/2018					1281	ANDY	1005764.705	759686.29831	7/18/2017	11CC	
9048	2018-051-		5058.02	No	2G306	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 10	PX1														FALSE	6/11/2018					1279	ANDY	1005764.705	759686.29831	7/18/2017	11CC	
9049	2018-051-		5059	Yes	2G308	Ceramic	Stoneware			Historic Ceramic	1		Complete	BOX 1	2			6 g		1.34 in		0.91 in		0.27 in					FALSE	9/19/2018					1286	KAREN	1005751.3742	759677.55405	7/18/2017	10CC	
9050	2018-051-		5060	No	2G313	Stone	Slate			Slate	1		Complete	BOX 7	2			8.3 g		1.98 in		1.13 in		0.19 in				FALSE	2/20/2019					1307	KAREN	1005763.45	759659.69674	7/18/2017	10EE		
9051	2018-051-		5061	No	2G314	Glass	Unidentified			Intact Bottle	1		Complete	BOX 4	2		Aqua	360 g		9.867 in						2.649 in		FALSE	3/7/2019					1299	ANDY	1005767.3611	759668.33911	7/18/2017	11EE		
9052	2018-051-		5062	No	2G315	Organic	Rosin			Rosin Fragment	1		Complete	CS				10.2 g		1.81 in		1.07 in		0.74 in				FALSE	2/19/2019					1307	ANDY	1005770.526	759673.13293	7/18/2017	11DD		
9053	2018-051-		5063.01	No	2G316	Metal	Iron			Strap	1		Inventoried - Ready to Process	ST														FALSE						1316	KAREN	1005779.4291	759666.36887	7/18/2017	12EE		
9054	2018-051-		5063.02	Yes	2G316	Ceramic	Stoneware			Historic Ceramic	1		Complete	BOX 1	2														FALSE	7/6/2018					1323	KAREN	1005779.4291	759666.36887	7/18/2017	12EE	
9055	2018-051-		5064.01	No	2G317	Glass	Wine Bottle			Window Glass	2		Complete	BOX 4	2		Clear	12.2 g		1.808 in		1.552 in		0.071 in				FALSE	3/7/2019					1325	KAREN	1005781.3197	759670.62371	7/18/2017	12EE		
9056	2018-051-		5064.02	No	2G317	Metal	Iron			Strap With Two Rivets	1		Inventoried - Ready to Process	ST														FALSE						1326	KAREN	1005781.3197	759670.62371	7/18/2017	12EE		
9057	2018-051-		5065	No	2G318	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 10	PX1														FALSE	7/18/2018					1313	ANDY	1005779.938	759676.97675	7/18/2017	12DD	
9058	2018-051-		5066	No	2G321	Glass	Unidentified			Glass Shard	2		Complete	BOX 4	2		Olive	50.7 g		1.515 in		1.866 in		1.72 in				FALSE	3/6/2019					1340	KAREN	1005788.1846	759685.3706	7/18/2017	13DD		
9059	2018-051-		5067	No	2G322	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 10	PX1	Indent pattern on rim													FALSE	6/11/2018					1327	ANDY	1005784.6228	759689.96036	7/18/2017	13CC	
9060	2018-051-		5068.01	No	2G323	Metal	Copper or Copper Alloy			Copper Flange?	1		Complete	BOX 5	2			0.95 lbs		9.2 in		7.5 in					2.0 in	FALSE	3/4/2019				28	1333	ANDY	1005787.5384	759696.55683	7/18/2017	13CC		
9061	2018-051-		5068.02	No	2G323	Glass	Unidentified			Glass Shard	1		Complete	BOX 4	2		Clear	1.5 g		1.088 in		0.9855 in		0.051 in				FALSE	3/7/2019					1334	ANDY	1005787.5384	759696.55683	7/18/2017	13CC		
9062	2018-051-		5069	No	2G325	Metal	Iron			Strap With Fastener	1		Inventoried - Ready to Process	51X														FALSE						1356	KAREN	1005788.994	759704.61463	7/18/2017	14BB		
9063	2018-051-		5070	No	2G326	Glass	Unidentified			Glass Shard	1		Complete	BOX 4	2		Olive	0.9 g		0.562 in		0.555 in		0.198 in				FALSE	3/7/2019					1347	ANDY	1005792.9646	759710.79579	7/18/2017	14AA		
9064	2018-051-		5071	No	2G328	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 10	PX1	Cord marked/Possibly Complicated stamped													FALSE	6/11/2018					1363	KAREN	1005783.951	759709.58225	7/18/2017	14AA	
9065	2018-051-		5072.01	No	2G330	Metal	Iron			Iron Strap	1		Inventoried - Ready to Process	51X														FALSE						1357	ANDY	1005794.9226	759699.72223	7/18/2017	14CC		
9066	2018-051-		5072.02	No	2G330	Glass	Unidentified			Glass Shard	1		Complete	BOX 4	2		Clear	20.4 g		2.56 in		0.769 in		0.527 in				FALSE	3/7/2019					1355	ANDY	1005794.9226	759699.72223	7/18/2017	14CC		
9067	2018-051-		5072.03	Yes	2G330	Ceramic	Stoneware			Historic Ceramic	1		Complete	BOX 3	2			22.5 g		3.193 in		1.274 in		0.408 in				FALSE	9/19/2018					1355	ANDY	1005794.9226	759699.72223	7/18/2017	14CC		
9068	2018-051-		5072.04	No	2G330	Discarded Military Munitions	DMM - Brooke Shell	Copper or Copper Alloy		6.4" Brooke Shell with Archer Fuze (Removed?) and Sabot	1		Complete	Brooke Pallet 1	2													FALSE	06/07/2019				35	1338	ANDY	1005794.9226	759699.72223	7/18/2017	14CC		
9069	2018-051-		5072.05	No	2G330	Metal	Iron			Iron Strap	1		Inventoried - Ready to Process	51X				76 lb		13.5 in						6.5 in		FALSE								1005794.9226	759699.72223	7/18/2017	14CC		
9070	2018-051-		5072.06	No	2G330	Metal	Copper or Copper Alloy			Archer Fuze	3		Complete	BOX 6	2													FALSE	5/22/2018				25	1338	ANDY	1005794.9226	759699.72223	7/18/2017	14CC		
9071	2018-051-		5073.01	Yes	2G332	Ceramic	Creamware			Historic Ceramic	1		Complete	BOX 1	2														FALSE	6/19/2018					1381	KAREN	1005799.8315	759707.16088	7/18/2017	15BB	
9072	2018-051-		5073.02	No	2G332	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 8	PX1														FALSE	6/21/2018					1381	KAREN	1005799.8315	759707.16088	7/18/		

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square
9120	2018-051-		5109	No	2S18	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 7	PX1	Cord marked														FALSE	7/12/2018					8161	JJ	1005800.9717	759789.89144	7/7/2017	18G
9121	2018-051-		5110.01	No	2S19	Glass	Unidentified			Glass Shard	3		Complete	BOX 4	2		Olive	9.9 g		0.774 in		1.056 in		0.11 in						FALSE	3/7/2019					8174	JJ	1005795.6862	759777.82043	7/7/2017	17F
9122	2018-051-		5110.02	No	2S19	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 12	PX1	Simple stamped, Indent pattern on rim														FALSE	7/13/2018					8174	JJ	1005795.6862	759777.82043	7/7/2017	17F
9123	2018-051-		5111	No	2S20	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 7	PX1	Cord marked														FALSE	8/14/2018					8179	JJ	1005804.1188	759781.16129	7/7/2017	18F
9124	2018-051-		5112	No	2S22	Glass	Unidentified			Glass Shard	1		Complete	BOX 4	2		Olive	22.7 g		2.087 in		0.88 in		0.57 in						FALSE	3/7/2019					0412	KAREN	1005717.64	759787.28	7/13/2017	10J
9125	2018-051-		5113	No	2S24	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 8	PX1	Complicated stamped														FALSE	7/26/2018					0414	KAREN	1005709.68	759796.76	7/13/2017	10J
9126	2018-051-		5114	No	2S28	Composite	Wood	Concretion		Wood With Square Concretion	1		Inventoryied - Ready to Process	53X															FALSE	7/26/2018					0422	ERICA	1005722.18	759775.44	7/13/2017	10H	
9127	2018-051-		5115	No	2S29	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	63X															FALSE					0443	ERICA	1005721.86	759788.97	7/13/2017	10I		
9128	2018-051-		5116	No	2S32	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 10	PX1	Cord marked														FALSE	6/11/2018					0442	KAREN	1005713.71	759785.32	7/13/2017	10I
9129	2018-051-		5117.01	No	2S35	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	63X															FALSE					0458	ERICA	1005703.2	759776.49	7/13/2017	8I		
9130	2018-051-		5117.02	No	2S35	Glass	Unidentified			Glass Shard	1		Complete	BOX 4	2	HER	Green/Olive	110.7 g		5.557 in				0.193 in		2.569 in				FALSE	3/7/2019					0460	ERICA	1005703.2	759776.49	7/13/2017	8I
9131	2018-051-		5118	No	2S36	Stone	Natural Stone			Stone	1		Complete	BOX 7	2															FALSE	5/29/2018					0479	ERICA	1005703.65	759772.84	7/13/2017	8H
9132	2018-051-		5119	No	2S39	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 10	PX1	Cord marked														FALSE	6/11/2018					0472	KAREN	1005686.63	759779.27	7/13/2017	7J
9133	2018-051-		5120	No	2S48	Metal	Copper or Copper Alloy			Folded Copper	1		Complete	BOX 5	2			8.7 g		2.96 in		0.6 in		0.34 in					FALSE	1/24/2019					250508	KAREN	1005697.09	759778.41	7/13/2017	8I	
9134	2018-051-		5121	No	2S60	Organic	Ethnobotany			Seed	1		Inventoryied - Ready to Process	IP															FALSE					0537	ERICA	1005704.77	759786.69	7/13/2017	9J		
9135	2018-051-		5122	No	2S64	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	72X															FALSE					0569	KAREN	1005709.3	759776.31	7/13/2017	9I		
9136	2018-051-		5122.02	No	2S64	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	72X															FALSE								1005709.3	759776.31	7/13/2017	9I	
9137	2018-051-		5123	No	2S72	Glass	Unidentified			Glass Shard	1		Complete	BOX 4	2		Olive	2 g		1.055 in		0.482 in		0.234 in						FALSE	3/7/2019					0563	ERICA	1005726.99	759780.42	7/13/2017	11H
9138	2018-051-		5124.01	No	2S74	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	51X															FALSE					0571	ERICA	1005689.08	759771.9	7/13/2017	7I		
9139	2018-051-		5124.02	No	2S74	Organic	Other			Coal	1		Inventoryied - Ready to Process	IP															FALSE					0575	ERICA	1005689.08	759771.9	7/13/2017	7I		
9140	2018-051-		5125	No	2S80	Stone	Natural Stone			Stone	1		Complete	BOX 7	2														FALSE	5/29/2018					0594	ERICA	1005677.65	759779.43	7/13/2017	6J	
9141	2018-051-		5126.01	No	2S97	Glass	Unidentified			Glass Shard	1		Complete	BOX 4	2		Clear	4.5 g		1.58 in		0.793 in		0.267 in					FALSE	3/7/2019					0662	ERICA	1005690.36	759800.46	7/14/2017	8K	
9142	2018-051-		5126.02	No	2S97	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 8	PX1	Possibly Simple stamped or cord marked														FALSE	7/26/2018					0667	ERICA	1005690.36	759800.46	7/14/2017	8K
9143	2018-051-		5126.03	No	2S97	Concretion	Concretion			Concreted Chain Links	1		Inventoryied - Ready to Process	63X															FALSE					0680	ERICA	1005690.36	759800.46	7/14/2017	8K		
9144	2018-051-		5127.01	No	2S98	Ceramic	Coarse Earthenware			Prehistoric Ceramic	3		Complete	PX BOX 8	PX1	Possibly incised, Possibly Cord marked														FALSE	7/26/2018					0681	ERICA	1005684.3	759797.88	7/14/2017	7K
9145	2018-051-		5127.02	Yes	2S98	Ceramic	Stoneware			Historic Ceramic	1		Complete	BOX 1	2															FALSE	7/13/2018					0681	ERICA	1005684.3	759797.88	7/14/2017	7K
9146	2018-051-		5128	No	2S103	Concretion	Concretion			Encrustation	1		Deaccessioned	DA															FALSE	8/10/2017					0703	KAREN	1005684.78	759767.99	7/14/2017	6I	
9147	2018-051-		5129.01	No	2S104	Organic	Pitch			Pitch	1		Complete	C5															FALSE	6/19/2018					0691	ERICA	1005694.55	759769.72	7/14/2017	7H	
9148	2018-051-		5129.02	Yes	2S104	Ceramic	Creamware			Historic Ceramic	1		Complete	BOX 1	2			5.4 g		1.61 in		1.28 in		0.16 in					FALSE	10/18/2018					0691	ERICA	1005694.55	759769.72	7/14/2017	7H	
9149	2018-051-		5130	No	2S110	Metal	Copper or Copper Alloy			Copper Fastener	1		Complete	BOX 5	2			34.7 g		3.52 in		0.51 in		0.36 in					FALSE	2/28/19					210703	ERICA	1005709.52	759770.52	7/14/2017	9H	
9150	2018-051-		5131.01	No	2S111	Organic	Ethnobotany			Seed	1		Inventoryied - Ready to Process	IP															FALSE					0704	ERICA	1005712.11	759768.82	7/14/2017	9H		
9151	2018-051-		5131.02	No	2S111	Organic	Bone			Bone	1		Inventoryied - Ready to Process	SS#2															FALSE					0704	ERICA	1005712.11	759768.82	7/14/2017	9H		
9152	2018-051-		5132	No	2S115	Glass	Unidentified			Glass Shard	2		Complete	BOX 4	2		Olive	64.7 g		3.693 in		1.15 in		0.253 in					FALSE	3/7/2019					0751	KAREN	1005716.97	759762.39	7/14/2017	9G	
9153	2018-051-		5133	No	2S119	Organic	Ethnobotany			Seed fragment	1		Inventoryied - Ready to Process	IP															FALSE					0729	ERICA	1005726.62	759771.87	7/14/2017	10H		
9154	2018-051-		5134	Yes	2S123	Ceramic	Refined Earthenware			Historic Ceramic	1		Complete	BOX 1	2			10.5 g		1.36 in		1.34 in		0.2 in					FALSE	9/19/2018					0775	KAREN	1005678.64	759770.79	7/14/2017	6I	
9155	2018-051-		5135.01	No	2S126	Glass	Unidentified			Glass Shard	1		Complete	BOX 4	2		Clear	95.5 g		3.544 in		2.134 in					3.229 in		FALSE	3/7/2019					0740	ERICA	1005674.63	759771.05	7/14/2017	5I	
9156	2018-051-		5135.02	No	2S126	Organic	Other			Coal	1		Inventoryied - Ready to Process	IP															FALSE					0740	ERICA	1005674.63	759771.05	7/14/2017	5I		
9157	2018-051-		5136	No	2S127	Concretion	Concretion			Possible Chain Concretion	1		Inventoryied - Ready to Process	51X															FALSE					0755	ERICA	1005682.14	759775.03	7/14/2017	6I		
9158	2018-051-		5137	No	2S133	Organic	Bone			Rib Bone	1		Inventoryied - Ready to Process	SS#2		cut mark													FALSE					0772	ERICA	1005673.22	759779.42	7/14/2017	6J		
9159	2018-051-		5138	No	2S134	Metal	Iron			Half Rail	1		Complete	PR-S7				39 lb		37.2 in		3.5 in		1.6 in					FALSE	6/26/2019					140782	ERICA	1005671.23	759782.78	7/14/2017	5J	
9160	2018-051-		5139.01	No	2S136	Organic	Ethnobotany			Peach Pit	1		Inventoryied - Ready to Process	IP															FALSE					0793	ERICA	1005668.27	759779.95	7/14/2017	5J		
9161	2018-051-		5139.02	No	2S136	Concretion	Concretion			Concretion Of Chain	1		Inventoryied - Ready to Process	63X															FALSE					0796	ERICA	1005668.27	759779.95	7/14/2017	5J		
9162	2018-051-		5140.01	No	2S138	Glass	Unidentified			Bottle Base	1		Complete	BOX 4	2	AB P 2	Aqua	239.1 g		4.311 in				0.141 in		2.639 in			FALSE	3/7/2019					0813	KAREN	1005672.8	759774.23	7/14/2017	5J	
9163	2018-051-		5140.02	No	2S138	Organic	Bone			Bone	2		Inventoryied - Ready to Process	79X															FALSE					0813	KAREN	1005672.8	759774.2				

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square
9211	2018-051-		5169	No	2S203	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 9	PX1	1 Simple stamped														FALSE	5/29/2018					1443	KAREN	1005783.7445	759731.70386	7/19/2017	14B
9212	2018-051-		5170.01	No	2S204	Organic	Other			Coal	1		Inventoried - Ready to Process	IP															FALSE						1402	ANDY	1005783.2481	759735.11226	7/19/2017	14B	
9213	2018-051-		5170.02	No	2S204	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 8	PX1														FALSE	7/26/2018					1402	ANDY	1005783.2481	759735.11226	7/19/2017	14B	
9214	2018-051-		5171	Yes	2S206	Ceramic	Whiteware			Historic Ceramic	2		Complete	BOX 2	2	Annular - brown and blue; end of handle has leaf motif	Blue, Brown													FALSE	6/13/2018					1404	ANDY	1005778.4149	759729.7752	7/19/2017	14B
9215	2018-051-		5172	No	2S208	Glass	Unidentified			Glass Shard	1		Complete	BOX 4	2		Clear	2.3 g		1.22 in		0.782 in		0.084 in					FALSE	3/7/2019					1461	KAREN	1005685.1567	759642.07644	7/19/2017	2DD	
9216	2018-051-		5173.01	No	2S216	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 13	PX1	Broken in transit, Cord marked		35.0 g		2.482 in		2.016 in		0.314 in						FALSE	10/2/2018					1475	KAREN	1005716.647	759644.0583	7/19/2017	5EE
9217	2018-051-		5173.02	Yes	2S216	Ceramic	Stoneware			Historic Ceramic	1		Complete	BOX 1	2															FALSE	8/14/2018					1476	KAREN	1005716.647	759644.0583	7/19/2017	5EE
9218	2018-051-		5174.01	Yes	2S218	Ceramic	Whiteware			Historic Ceramic	1		Complete	BOX 1	2															FALSE	7/26/2018					1492	KAREN	1005723.7824	759645.94084	7/19/2017	6EE
9219	2018-051-		5174.02	No	2S218	Metal	Copper or Copper Alloy			Brass Nail	1		Complete	BOX 5	2			6.0 g		2.04 in		0.36 in							FALSE	1/24/2019					251492	KAREN	1005723.7824	759645.94084	7/19/2017	6EE	
9220	2018-051-		5175	No	2S219	Glass	Unidentified			Glass Shard	1		Complete	BOX 4	2		Olive	11.1 g		1.806 in		1.384 in		0.165 in					FALSE	3/6/2019					1496	KAREN	1005719.0474	759655.80268	7/19/2017	6DD	
9221	2018-051-		5176	No	2S222	Glass	Unidentified			Glass Shard	1		Complete	BOX 4	2		Dark Olive	21.9 g		1.838 in		1.622 in		0.301 in					FALSE	3/6/2019					1463	ANDY	1005741.956	759662.15587	7/19/2017	8DD	
9222	2018-051-		5177	Yes	2S223	Ceramic	Unidentified			Historic Ceramic Bottle	1		Complete	BOX 7	2															FALSE	7/10/2018					1519	KAREN	1005728.8555	759668.54627	7/19/2017	7CC
9223	2018-051-		5178	No	2S224	Metal	Copper or Copper Alloy			Plating	1		Complete	BOX 5	2			15.4 g		4.01 in		0.97 in		0.2 in					FALSE	2/28/2019					211517	KAREN	1005738.327	759672.94876	7/19/2017	8CC	
9224	2018-051-		5179	No	2S225	Glass	Unidentified			Glass Shard	1		Complete	BOX 4	2		Clear	2.3 g		1.064 in		0.546 in		0.122 in					FALSE	3/7/2019					1521	KAREN	1005736.5351	759680.8073	7/19/2017	8BB	
9225	2018-051-		5180.01	No	2S226	Organic	Wood			Wedge	1		Inventoried - Ready to Process	IP															FALSE						1475	ANDY	1005743.6728	759685.51279	7/19/2017	9BB	
9226	2018-051-		5180.02	No	2S226	Concretion	Concretion	Copper or Copper Alloy		Concretion	1		Inventoried - Ready to Process	63X															FALSE							1475	ANDY	1005743.6728	759685.51279	7/19/2017	9BB
9227	2018-051-		5181	Yes	2S228	Ceramic	Whiteware			Historic Ceramic	1		Complete	BOX 1	2															FALSE	6/11/2018					1488	ANDY	1005747.681	759666.97737	7/19/2017	9DD
9228	2018-051-		5182.01	No	2S230	Composite	Iron	Copper or Copper Alloy		U-Shaped Piece	1		Inventoried - Ready to Process	ST															FALSE							1534	KAREN	1005752.6599	759655.80519	7/19/2017	9EE
9229	2018-051-		5182.02	No	2S230	Organic	Bone			Wood or bone	1		Inventoried - Ready to Process	79X															FALSE							1533	KAREN	1005752.6599	759655.80519	7/19/2017	9EE
9230	2018-051-		5183.01	No	2S231	Glass	Unidentified			Glass Shard	1		Complete	BOX 4	2		Clear	7.7 g		1.637 in		1.289 in		0.116 in					FALSE	3/7/2019					1545	KAREN	1005761.0059	759661.08177	7/19/2017	10EE	
9231	2018-051-		5183.02	Yes	2S231	Ceramic	Whiteware			Historic Ceramic	1		Complete	BOX 1	2															FALSE	6/28/2018					1545	KAREN	1005761.0059	759661.08177	7/19/2017	10EE
9232	2018-051-		5184	No	2S232	Organic	Bone			Bone	1		Inventoried - Ready to Process	79X															FALSE						1547	KAREN	1005666.6087	759663.50727	7/19/2017	1BB	
9233	2018-051-		5185	No	2S233	Organic	Other			Coal	1		Inventoried - Ready to Process	IP															FALSE						1496	ANDY	1005669.5435	759659.23898	7/19/2017	1BB	
9234	2018-051-		5186.01	No	2S236	Metal	Copper or Copper Alloy			Copper Fragment	1		Complete	BOX 5	2			7.5 g		5.19 in		0.44 in		0.17 in					FALSE	2/28/2019					211517	ANDY	1005750.8556	759686.05003	7/19/2017	10BB	
9235	2018-051-		5186.02	No	2S236	Glass	Unidentified			Glass Shard	1		Complete	BOX 4	2		Clear	6.3 g		1.493 in		1.195 in		0.123 in					FALSE	3/6/2019					1517	ANDY	1005750.8556	759686.05003	7/19/2017	10BB	
9236	2018-051-		5186.03	No	2S236	Metal	Iron			Plate/Strap Fragment	1		Complete	BOX 10	2			224.1 g		6.25 in		3.112 in		0.289 in		0.677 in			FALSE	4/15/2019					251517	ANDY	1005750.8556	759686.05003	7/19/2017	10BB	
9237	2018-051-		5187.01	Yes	2S237	Ceramic	Whiteware			Historic Ceramic	1		Complete	BOX 1	2															FALSE	6/13/2018					1561	KAREN	1005752.2481	759693.87737	7/19/2017	10BB
9238	2018-051-		5187.02	No	2S237	Organic	Bone			Bone	1		Inventoried - Ready to Process	79X															FALSE						1561	KAREN	1005752.2481	759693.87737	7/19/2017	10BB	
9239	2018-051-		5187.03	No	2S237	Glass	Unidentified			Glass Shard	1		Complete	BOX 4	2		Olive	13.8 g		2.304 in		1.07 in		0.147 in					FALSE	3/7/2019					1561	KAREN	1005752.2481	759693.87737	7/19/2017	10BB	
9240	2018-051-		5188.01	No	2S238	Metal	Iron			Strap With 3 Fasteners	1		Inventoried - Ready to Process	CONCRETE VAT															FALSE						1568	KAREN	1005757.9963	759699.5854	7/19/2017	11AA	
9241	2018-051-		5188.02	No	2S238	Metal	Iron			Plating With Rivet	1		Inventoried - Ready to Process	72X															FALSE						1568	KAREN	1005757.9963	759699.5854	7/19/2017	11AA	
9242	2018-051-		5188.03	No	2S238	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 8	PX1	Simple stamped														FALSE	7/26/2018					1567	KAREN	1005757.9963	759699.5854	7/19/2017	11AA
9243	2018-051-		5189.01	Yes	2S239	Ceramic	Creamware	Stoneware	Whiteware	Historic Ceramic	5		Complete	BOX 2	2			114.5 g		2.89 in		1.74 in		0.54					FALSE	9/19/2018					1577	KAREN	1005762.9271	759689.82415	7/19/2017	11BB	
9244	2018-051-		5189.02	No	2S239	Metal	Copper or Copper Alloy			Copper Fragment	1		Complete	BOX 5	2			0.9 g		1.28 in		0.76 in		0.01 in					FALSE	1/24/2019					251577	KAREN	1005762.9271	759689.82415	7/19/2017	11BB	
9245	2018-051-		5189.03	No	2S239	Glass	Unidentified			Glass Shard	3		Complete	BOX 4	2		Aqua, Mirror	8.9 g		2.19 in		0.96 in		0.09 in					FALSE	3/6/2019					1577	KAREN	1005762.9271	759689.82415	7/19/2017	11BB	
9246	2018-051-		5189.04	No	2S239	Metal	Copper or Copper Alloy			Brass toggle	1		Complete	C2	2			1.6 g		2.54 in		0.57 in		0.015 in					FALSE	1/24/2019					251577	KAREN	1005762.9271	759689.82415	7/19/2017	11BB	
9247	2018-051-		5189.05	No	2S239	Organic	Bone			Bone	1		Inventoried - Ready to Process	79X															FALSE						1577	KAREN	1005762.9271	759689.82415	7/19/2017	11BB	
9248	2018-051-		5189.06	No	2S239	Ceramic	Coarse Earthenware			Prehistoric Ceramic	3		Complete	PX BOX 10	PX1														FALSE	6/11/2018					1577	KAREN	1005762.9271	759689.82415	7/19/2017	11BB	
9249	2018-051-		5190	No	2S241	Organic	Ethnobotany			Peach pit?	1		Inventoried - Ready to Process	IP															FALSE						1534	ANDY	1005769.9388	759672.79833	7/19/2017	11DD	
9250	2018-051-		5191	No	2S242	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 9	PX1	Possibly Cord marked														FALSE	7/12/2018					1540	ANDY	1005772.6483	759665.08101	7/19/2017	11EE
9251	2018-051-		5192.01	No	2S243	Composite	Iron	Copper or Copper Alloy		Iron Fragment	1		Inventoried - Ready to Process	63X															FALSE						1546	ANDY	1005781.0213	759667.86321	7/19/2017	12EE	
9252	2018-051-		5192.02	Yes	2S243	Ceramic	Stoneware			Historic Ceramic	4		Complete	BOX 1	2															FALSE	7/13/2018					1547	ANDY	1005781.0213	759667.86321	7/19/2017	12EE
9253	2018-																																								

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square	
9297	2018-051-		5216.02	Yes	2S291	Ceramic	Whiteware			Historic Ceramic	1		Complete	BOX 1	2															FALSE	6/28/2018					1946	ERICA	1005869.9035	759759.55209	7/21/2017	23B	
9298	2018-051-		5216.03	No	2S291	Stone	Stone Tool			Projectile Point	1		Complete	BOX 7	2			11.4	g	1.79	in	1.22	in	0.33	in					FALSE	2/20/2019					1947	ERICA	1005869.9035	759759.55209	7/21/2017	23B	
9299	2018-051-		5217.01	Yes	2S292	Ceramic	Slipware	Whiteware	Ironstone	Historic Ceramic	3		Complete	BOX 7	2	Part of James Edwards & Sons. aler's mark. Partial Lion & "JAME"	White, Yellow, Green/Olive .Brown														FALSE	7/13/2018					1948	ERICA	1005869.3463	759747.33527	7/21/2017	23AA
9300	2018-051-		5217.02	No	2S292	Concretion	Concretion			Concretion	1		Inventoryied - Ready to Process	51X																FALSE							1952	ERICA	1005869.3463	759747.33527	7/21/2017	23AA
9301	2018-051-		5218	No	2S294	Metal	Iron			Grapeshot	1		Inventoryied - Ready to Process	GRAPESHOT																FALSE							1996	KAREN	1005860.3958	759746.35219	7/21/2017	22A
9302	2018-051-		5219	No	2S298	Glass	Unidentified			Glass Shard	1		Complete	BOX 4	2		Clear	2.3	g	1.309	in	0.624	in	0.121	in					FALSE	3/6/2019					1966	ERICA	1005877.8571	759731.31041	7/21/2017	23BB	
9303	2018-051-		5220	No	2S303	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 9	PX1															FALSE	5/29/2018					2030	KAREN	1005877.8571	759731.31041	7/21/2017	22A	
9304	2018-051-		5221	No	2S304	Composite	Concretion	Glass		DNS	1		DNS																	FALSE					2045	KAREN	1005858.3728	759748.26696	7/21/2017	22A		
9305	2018-051-		5222	Yes	2S310	Ceramic	Whiteware			Historic Ceramic	1		Complete	BOX 1	2			4.0	g	1.44	in	1.07	in	0.15	in					FALSE	9/19/2018					2067	RITA	1005881.9068	759775.70038	7/22/2017	25C	
9306	2018-051-		5223.01	No	2S311	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 9	PX1															FALSE	5/29/2018					2070	RITA	1005882.0327	759782.26668	7/22/2017	25C	
9307	2018-051-		5223.02	No	2S311	Stone	Stone Tool			Chert Core	1		Complete	BOX 7	2			55.2	g	2.44	in	1.46	in	0.84	in					FALSE	2/20/2019					7071	RITA	1005882.0327	759782.26668	7/22/2017	25C	
9308	2018-051-		5224.01	No	2S312	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 9	PX1	Check stamped (faint)															FALSE	5/29/2018					2079	RITA	1005874.3744	759783.2014	7/22/2017	25D
9309	2018-051-		5224.02	No	2S312	Concretion	Concretion			Curved Concretion	1		Inventoryied - Ready to Process	18WB09																FALSE					2079	RITA	1005874.3744	759783.2014	7/22/2017	25D		
9310	2018-051-		5225	No	2S314	Ceramic	Coarse Earthenware			Prehistoric Ceramic	3		Complete	PX BOX 10	PX1	Cord marked														FALSE	6/11/2018					2020	ANDY	1005867.1441	759787.06216	7/22/2017	24D	
9311	2018-051-		5226.01	No	2S315	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 9	PX1	Possibly cord marked														FALSE	5/29/2018					2022	ANDY	1005869.2471	759780.78256	7/22/2017	24D	
9312	2018-051-		5226.02	No	2S315	Metal	Iron			Fastener	1		Inventoryied - Ready to Process	63X																FALSE					2022	ANDY	1005869.2471	759780.78256	7/22/2017	24D		
9313	2018-051-		5227	No	2S317	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 8	PX1	1 cord marked, 1 plain One cord marked, one may be stippled/punctated														FALSE	6/21/2018					2093	RITA	1005871.914	759798.24132	7/22/2017	25E	
9314	2018-051-		5228	No	2S320	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 9	PX1															FALSE	5/29/2018					2107	RITA	1005860.086	759784.09724	7/22/2017	23D	
9315	2018-051-		5229.01	No	2S321	Ceramic	Coarse Earthenware			Prehistoric Ceramic	4		Complete	PX BOX 10	PX1															FALSE	8/14/2018					2051	ANDY	1005858.7723	759775.05624	7/22/2017	23C	
9316	2018-051-		5229.02	No	2S321	Organic	Bone			Bone	1		Inventoryied - Ready to Process	79X OR 67X																FALSE					2051	ANDY	1005858.7723	759775.05624	7/22/2017	23C		
9317	2018-051-		5230	No	2S323	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 8	PX1															FALSE	6/21/2018					2054	ANDY	1005855.0374	759765.29973	7/22/2017	22C	
9318	2018-051-		5231	Yes	2S325	Ceramic	Stoneware			Historic Ceramic	1		Complete	BOX 1	2			14.5	g	1.37	in	1.01	in	0.45	in					FALSE	9/19/2018					2117	RITA	1005846.9587	759768.69176	7/22/2017	22C	
9319	2018-051-		5232	No	2S326	Metal	Iron			Grapeshot	1		Inventoryied - Ready to Process	63X																FALSE					2161	ANDY	1005850.9446	759727.93378	7/26/2017	20BB		
9320	2018-051-		5233.01	No	2S327	Metal	Iron			Grapeshot	5		Inventoryied - Ready to Process	63X																FALSE					2162	ANDY	1005856.9912	759730.32974	7/26/2017	21BB		
9321	2018-051-		5233.02	No	2S327	Metal	Iron			Bayonet	1		Inventoryied - Ready to Process	63X																FALSE					2162	ANDY	1005856.9912	759730.32974	7/26/2017	21BB		
9322	2018-051-		5233.03	No	2S327	Organic	Bone			Bone	1		Inventoryied - Ready to Process	IP																FALSE					2162	ANDY	1005856.9912	759730.32974	7/26/2017	21BB		
9323	2018-051-		5234.01	No	2S328	Metal	Iron			Shackle	1		Inventoryied - Ready to Process	72X																FALSE					2137-2138	RITA	1005839.219	759713.42973	7/26/2017	19CC		
9324	2018-051-		5234.02	No	2S328	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 9	PX1															FALSE	5/29/2018					2139	RITA	1005839.219	759713.42973	7/26/2017	19CC	
9325	2018-051-		5234.03	No	2S328	Stone	Stone Tool			Spearpoint/Knife Tip	1		Complete	BOX 7	2			14.4	g	1.83	in	1.39	in	0.39	in					FALSE	2/20/2019					2139	RITA	1005839.219	759713.42973	7/26/2017	19CC	
9326	2018-051-		5235	No	2S329	Metal	Iron			Grapeshot	5		Inventoryied - Ready to Process	GRAPESHOT																FALSE					2129	RITA	1005848.4039	759729.15363	7/26/2017	20BB		
9327	2018-051-		5236.01	No	2S333	Ceramic	Coarse Earthenware			Prehistoric Ceramic	3		Complete	PX BOX 10	PX1	1 Cord marked														FALSE	6/11/2018					2177	ANDY	1005848.2754	759741.03478	7/26/2017	21AA	
9328	2018-051-		5236.02	No	2S333	Glass	Unidentified			Glass Shard	4		Complete	BOX 4	2		Clear, Olive	77.2	g	2.174	in	1.933	in	0.165	in					FALSE	3/7/2019					2177	ANDY	1005848.2754	759741.03478	7/26/2017	21AA	
9329	2018-051-		5236.03	No	2S333	Metal	Iron			Grapeshot	2		Inventoryied - Ready to Process	63X																FALSE					2176	ANDY	1005848.2754	759741.03478	7/26/2017	21AA		
9330	2018-051-		5237.01	No	2S335	Metal	Iron			Grapeshot	1		Inventoryied - Ready to Process	63X																FALSE					2185	ANDY	1005846.0094	759722.92387	7/26/2017	20BB		
9331	2018-051-		5237.02	No	2S335	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 9	PX1	Cord marked														FALSE	5/29/2018					2185	ANDY	1005846.0094	759722.92387	7/26/2017	20BB	
9332	2018-051-		5237.03	No	2S335	Glass	Unidentified			Glass Shard	1		Complete	BOX 4	2		Olive	12.8	g	3.005	in	1.863	in	0.121	in					FALSE	3/7/2019					2185	ANDY	1005846.0094	759722.92387	7/26/2017	20BB	
9333	2018-051-		5238.01	No	2S336	Metal	Iron			Camister Shot	4		Inventoryied - Ready to Process	83X																FALSE					2147	RITA	1005850.0664	759724.14944	7/26/2017	20BB		
9334	2018-051-		5238.02	No	2S336	Organic	Bone			Bone	1		Inventoryied - Ready to Process	IP																FALSE					2147	RITA	1005850.0664	759724.14944	7/26/2017	20BB		
9335	2018-051-		5239.01	No	2S337	Metal	Iron			Camister Shot	2		Inventoryied - Ready to Process	63X																FALSE					2153	RITA	1005857.9793	759720.91974	7/26/2017	21CC		
9336	2018-051-		5239.02	No	2S337	Metal	Iron			Grapeshot	1		Inventoryied - Ready to Process	63X																FALSE					2153	RITA	1005857.9793	759720.91974	7/26/2017	21CC		
9337	2018-051-		5239.03	No	2S337	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 12	PX1															FALSE	6/11/2018					2153	RITA	1005857.9793	759720.91974	7/26/2017	21CC	
9338	2018-051-		5240.01	No	2S338	Metal	Iron			Bolt	1		Inventoryied - Ready to Process	84X							12	in	8	in					FALSE					2193	ANDY	1005847.6647	759715.55622	7/26/2017	20CC			
9339	2018-051-		5240.02	No	2S338	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 8	PX1	Incised																										

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square			
9383	2018-051-		5264.01	No	2S393	Composite	Wood	Copper or Copper Alloy		Wood With Brass Hinge	1		Inventoried - Ready to Process	65X																FALSE						2344	ANDY	1005801.2574	759699.75793	7/27/2017	15CC			
9384	2018-051-		5264.01.01	No	2S393	Metal	Copper or Copper Alloy			Brass Hinge And Three Screws	4		Complete	C2				44.9	g		2.6	in	1.6	in	0.2	in				FALSE	1/24/2019					35	2344	ANDY	1005801.2574	759699.75793	7/27/2017	15CC		
9385	2018-051-		5265.01	No	2S394	Metal	Iron			Iron Eye Bolt	1		Inventoried - Ready to Process	63X															FALSE						2353	RITA	1005782.4432	759700.27656	7/27/2017	13BB				
9386	2018-051-		5265.02	No	2S394	Metal	Iron			Unidentified Plate Concretion	1		Inventoried - Ready to Process	51X															FALSE						2353	RITA	1005782.4432	759700.27656	7/27/2017	13BB				
9387	2018-051-		5265.03	Yes	2S394	Ceramic	Unidentified			Historic Ceramic	1		Complete	BOX 1	2														FALSE	7/10/2018						2354	RITA	1005782.4432	759700.27656	7/27/2017	13BB			
9388	2018-051-		5266.01	No	2S395	Metal	Iron			Gun Carriage Wheel	1		Inventoried - Ready to Process	1N OWN BUCKET								10	in			6	in		FALSE							JJ	1005747.6196	759699.96552	7/29/2017	10AA				
9389	2018-051-		5266.02	No	2S395	DMM - Discarded Military Munitions	DMM - Brooke Shell			Brooke Shell With Fuze	1		Artifact card only, artifact not at CRL	NOT AT LAB				170.6	g	65.59	mm	31.74	mm	20.8	mm				FALSE						21	JJ	1005747.6196	759699.96552	7/29/2017	10AA				
9390	2018-051-		5266.02.01	No	2S395	Metal	Copper or Copper Alloy			Archer Fuze	5		Complete	C3				126	g	2.598	in					1.26	in		FALSE	8/7/2019														
9391	2018-051-		5266.03	No	2S395	DMM - Discarded Military Munitions	DMM - Brooke Shell			Brooke Shell	1		Artifact card only, artifact not at CRL	NOT AT LAB															FALSE							JJ	1005747.6196	759699.96552	7/29/2017	10AA				
9392	2018-051-		5266.03.01	No	2S395	Metal	Copper or Copper Alloy			Fuze	3		Complete	BOX 6	2			174.1	g	2.69	in	1.24	in	1.26	in				FALSE	1/24/2019						25								
9393	2018-051-		5266.04	No	2S395	Metal	Iron			Square Washer	1		Complete	BOX 10	2			433.9	g	4.45	in	4.25	in	0.52	in				FALSE	1/28/2019						35	JJ	1005747.6196	759699.96552	7/29/2017	10AA			
9394	2018-051-		5267	No	2S400	Metal	Iron			Steam Pipe	1		Complete	PR-S6				28.9	lbs	16.4	in	7.7	in					6.5	in	FALSE	2/22/2019					35	3064	JJ	1005749.4781	759698.08179	7/29/2017	10AA		
9395	2018-051-		5268.01	No	2S401	DMM - Discarded Military Munitions	DMM - Brooke Shell	Copper or Copper Alloy		6.4" Brooke Shell with Archer Fuze (Removed?) and Sabot	1		Complete	Brooke Pallet 1	2			77	lb	13.75	in					6.5	in		FALSE	06/07/2019					35	JJ	1005749.6831	759694.30917	7/29/2017	10BB				
9396	2018-051-		5268.02	No	2S401	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 7		PX1													FALSE	8/14/2018						8653	JJ	1005749.6831	759694.30917	7/29/2017	10BB			
9397	2018-051-		5269	No	2S402	Glass	Unidentified			Glass Shard	1		Complete	BOX 4	2			4.9	g	1.282	in	0.762	in	0.243	in				FALSE	3/7/2019							JJ	1005747.8298	759695.70059	7/29/2017	10AA			
9398	2018-051-		5270	Yes	NA	Ceramic	Stoneware			Historic Ceramic	1		Complete	BOX 2	2		Blue												FALSE	6/28/2018							JJ7					7/29/2017	A10	
9399	2018-051-		5271	No	NA	Metal	Iron			Casemate	1		Inventoried - Ready to Process	CONCRETE VAT															FALSE													CRANE		
9400	2018-051-		5272	No	NA	Metal	Iron			Casemate	1		Inventoried - Ready to Process	CONCRETE VAT															FALSE													CRANE		
9401	2018-051-		5273	No	NA	Metal	Iron			Casemate	1		Inventoried - Ready to Process	CONCRETE VAT															FALSE													CRANE		
9403	2018-051-		5274	No	NA	Architecture	Concrete			Concrete	1		Inventoried - Ready to Process	18WB08		2 finger marks													FALSE														DIVER	
9404	2018-051-		5275	No	NA	Metal	Copper or Copper Alloy			Possible Powder Canmister Lid	1		Inventoried - Ready to Process	DIVER RECOVERY BUCKET X															FALSE															
9405	2018-051-		5276	No	East Casemate	Organic	Wood			Treenails	2		Inventoried - Ready to Process	SS#2															FALSE														42909	
9406	2018-051-		5277	No	East Casemate	Organic	Wood			Treenails	2		Inventoried - Ready to Process	SS#2																FALSE													42909	
9407	2018-051-		5278	No	East Casemate	Organic	Wood			Treenail	1		Inventoried - Ready to Process	SS#2																FALSE													42909	
9408	2018-051-		5279	No	West Casemate	Organic	Wood			Wood Fragment	1		Reburial	R															FALSE	9/5/2017													42913	
9409	2018-051-		5280	No	East Casemate	Organic	Wood			Wood Fragment	1		Reburial	R															FALSE	9/5/2017													42909	
9410	2018-051-		5281	No	West Casemate	Concretion	Concretion			Concretion	1		Reburial	R															FALSE	9/5/2017													42913	
9411	2018-051-		5282	No	East Casemate	Organic	Wood			Wood Fragment	2		Reburial	R															FALSE	9/5/2017													42909	
9412	2018-051-		5283	No	East Casemate	Metal	Iron			Iron Spike	1		Reburial	R															FALSE	9/5/2017														
9413	2018-051-		5284	No	2S293	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 7		PX1													FALSE	8/14/2018													22B	
9414	2018-051-		5285	Yes	2S232	Ceramic	Whiteware			Historic Ceramic	1		Deaccessioned	DA															FALSE														1BB	
9415	2018-051-		5286.01	No	2S195	Organic	Wood			Wood Sample	1		Inventoried - Ready to Process	72X															FALSE														9L	
9416	2018-051-		5286.02	No	2S195	Organic	Wood			Wood Sample	1		Inventoried - Ready to Process	72X															FALSE														9L	
9417	2018-051-		5287	No	NA	Metal	Iron			Fastener	1		Inventoried - Ready to Process	ROLLOFF 1 - Reburial															FALSE														A10	
9418	2018-051-		5288	No	2S263	Metal	Iron			Gun Carriage Fastener	1		Inventoried - Ready to Process	51X															FALSE														11CC	
9419	2018-051-		5289	No	NA	Metal	Copper or Copper Alloy			Powder Canmister Lid	1		Complete	PR-S3		"12"													FALSE	5/21/2018						25							A10	
9420	2018-051-		5290	No	NA	Metal	Copper or Copper Alloy			Powder Canmister Lid	1	Fragment(s) of a 2-single artifact	Complete	PR-S5															FALSE	6/22/2018						25							A10	
9421	2018-051-		5291	No	NA	Metal	Copper or Copper Alloy			Compression Square	1		Complete	PR-S12				28.6	kg			13.87	in	1.75	in			16	in	FALSE	5/7/2019						25							A10
9422	2018-051-		5292	No	NA	Recent/Synthetic	Epoxy			Cast of Original Cable	1		Complete	BOX 8	2														FALSE	9/2/2019														DIVER
9423	2018-051-		5293.01	No	NA	Composite	Iron	Concretion		Wheel	1		Inventoried - Ready to Process	55X															FALSE														DIVER	
9424	2018-051-		5293.02	No	NA	Composite	Iron	Concretion		Wheel	1		Inventoried - Ready to Process	55X															FALSE														DIVER	
9425	2018-051-		5294	No	NA	Metal	Iron			Concreted Iron	1		Inventoried - Ready to Process	P1															FALSE														DIVER	
9426	2018-051-		5295	No	NA	Metal	Iron			Gun Carriage Fragment	1		Inventoried - Ready to Process	72X															FALSE														DIVER	
9427	2018-051-		5296	No	NA	Composite	Wood	Iron		Wood With Concreted Washer	1		Inventoried - Ready to Process																FALSE														DIVER	
9428	2018-051-		Cattle Tag 1 (Red/Orange)	No	NA	Metal	Iron			Cannon Ball	1		Inventoried - Ready to Process																FALSE															
9429	2018-051-		NP 001	No	NP 001	Glass	Unidentified			Glass	1		Complete	PROBLEM CART			Green/Olive	21.2	g	3.595	in	1.475	in	0.329	in				FALSE	7/7/2016							NO PHOTO	-	-	-	-			NP
9430	2018-051-		NP 002	No	NP 002	Metal	Copper or Copper Alloy			Brass Wire	1		Complete	C8															FALSE	8/8/2018						32	NONE	-	-	-	-			NP
9431	2018-051-		NP 003	No	NP 003	Ceramic	Coarse Earthenware			Prehistoric																																		

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square	
9552	2018-051-		NP 121	No	NP 121	Metal	Iron			Fastener head (rivet?)	1		Deaccessioned	DA				41.1 g								1.06 in		0.84 in		FALSE	3/5/2019					25			NP	NP		NP
9553	2018-051-		NP 122	No	NP 122	Organic	Bone			Bone	1		Deaccessioned	DA																FALSE							NP	NP		NP		
9554	2018-051-		NP 123	No	NP 123	Metal	Iron			Small Hollow Tube With Threading on Exterior	1		Deaccessioned	DA																FALSE							NP	NP		NP		
9555	2018-051-		NP 124	No	NP 124	Metal	Iron			Hooks	2		Complete	X-RAY COMPUTER ROOM SHELVES																FALSE	5/17/2018					35			NP	NP		NP
9556	2018-051-		NP 125	No	NP 125	Metal	Copper or Copper Alloy			Brass Rivet	1		Complete	C8				11.0 g		1.1 in		0.7 in		0.37 in						FALSE	10/23/2018					25			NP	NP		NP
9557	2018-051-		NP 126	No	NP 126	Metal	Iron			Wheel With Six Spokes, Broken	1		Inventoried - Ready to Process	WHITE BUCKET																FALSE								NP	NP		NP	
9558	2018-051-		NP 127	No	NP 127	Metal	Iron			Plate	1		Inventoried - Ready to Process																	FALSE								NP	NP		NP	
9559	2018-051-		NP 128	No	NP 128	Metal	Iron			Rails	2		Inventoried - Ready to Process																	FALSE								NP	NP		NP	
9560	2018-051-		NP 129	No	NP 129	Metal	Iron			Curved Iron Plate	1		Inventoried - Ready to Process																	FALSE								NP	NP		NP	
9561	2018-051-		NP 130	No	NP 130	Metal	Iron			Curved Pipe	1		Inventoried - Ready to Process																	FALSE								NP	NP		NP	
9562	2018-051-		NP 131	No	NP 131	Metal	Iron			Iron Plate With Flange	1		Inventoried - Ready to Process																	FALSE								NP	NP		NP	
9563	2018-051-		NP 132	No	NP 132	Metal	Iron			Rail	1		Inventoried - Ready to Process																	FALSE								NP	NP		NP	
9564	2018-051-		NP 133	No	NP 133	Metal	Iron			Concretion	1		Inventoried - Ready to Process																	FALSE								NP	NP		NP	
9565	2018-051-		NP 134	No	NP 134	Metal	Iron			(Support?) Beam With Eye	1		Inventoried - Ready to Process																	FALSE								NP	NP		NP	
9566	2018-051-		NP 135	No	NP 135	Metal	Iron			Chain Concretion	1		Inventoried - Ready to Process																	FALSE								NP	NP		NP	
9567	2018-051-		NP 136	No	NP 136	Metal	Iron			Plate	1		Inventoried - Ready to Process																	FALSE								NP	NP		NP	
9568	2018-051-		NP 137	No	NP 137	Metal	Iron			Round Concretion	1		Inventoried - Ready to Process																	FALSE								NP	NP		NP	
9569	2018-051-		NP 138	No	NP 138	Metal	Iron			Pipe Fragment	1		Inventoried - Ready to Process																	FALSE								NP	NP		NP	
9570	2018-051-		NP 139	No	NP 139	Metal	Iron			Plate	1		Inventoried - Ready to Process																	FALSE								NP	NP		NP	
9571	2018-051-		NP 140	No	NP 140	Ceramic	Pipe			Pipe Bowl Fragment	1		Deaccessioned	DA																FALSE								NP	NP		NP	
9572	2018-051-		NP 141	No	NP 141	Recent/Synthetic	Rubber			Gasket	1		Complete - Needs Final Images	GASKET NP TRAY																FALSE								NP	NP		NP	
9573	2018-051-		NP 142	No	NP 142	Recent/Synthetic	Rubber			Gasket	1		Deaccessioned	DA																FALSE								NP	NP		NP	
9574	2018-051-		NP 143	No	NP 143	Metal	Copper or Copper Alloy			Cylindrical Fragment	1		Complete	C8																FALSE	8/22/2018					32			NP	NP		NP
9575	2018-051-		NP 144	No	NP 144	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 13	PX1	possible faint cord markings		144.5 g		4.4 in		3.51 in		0.53 in						FALSE	10/2/2018					10			NP	NP		NP
9576	2018-051-		NP 145	No	NP 145	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 13	PX1	Rows of small circular indents		59.7 g		4.06 in		3.07 in		0.36 in						FALSE	10/2/2018							NP	NP		NP	
9577	2018-051-		NP 146	No	NP 146	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Deaccessioned	DA		Possibly incised		11.7 g		2 in		0.5 in		0.51 in						FALSE								NP	NP		NP	
9578	2018-051-		NP 147	No	NP 147	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 13	PX1	Check stamped		14.5 g		1.57 in		1.38 in		0.31 in						FALSE	10/2/2018							NP	NP		NP	
9579	2018-051-		NP 148	No	NP 148	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 13	PX1	Cord marked		20.5 g		2 in		1.64 in		0.36 in						FALSE	10/2/2018					10			NP	NP		NP
9580	2018-051-		NP 149	No	NP 149	Ceramic	Coarse Earthenware			Prehistoric Ceramic	2		Complete	PX BOX 13	PX1	Deep indentations		25.5 g		3.06 in		1.29 in		0.38 in						FALSE	10/2/2018					10			NP	NP		NP
9581	2018-051-		NP 150	No	NP 150	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 13	PX1	possibly incised		20.3 g		2.34 in		1.46 in		0.34 in						FALSE	10/2/2018					10			NP	NP		NP
9582	2018-051-		NP 151	No	NP 151	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 13	PX1	Possibly cord marked		27.9 g		2.11 in		1.73 in		0.48 in						FALSE	10/2/2018							NP	NP		NP	
9583	2018-051-		NP 152	No	NP 152	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Deaccessioned	DA		Faint markings		22.7 g		1.89 in		1.78 in		0.45 in						FALSE								NP	NP		NP	
9584	2018-051-		NP 153	No	NP 153	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 13	PX1	Faint markings		8 g		1.27 in		1.05 in		0.34 in						FALSE	10/2/2018					10			NP	NP		NP
9585	2018-051-		NP 154	No	NP 154	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 13	PX1			12.3 g		1.57 in		1.19 in		0.4 in						FALSE	10/2/2018							NP	NP		NP	
9586	2018-051-		NP 155	No	NP 155	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 13	PX1			5.9 g		0.97 in		0.94 in		0.35 in						FALSE	10/2/2018							NP	NP		NP	
9587	2018-051-		NP 156	No	NP 156	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Complete	PX BOX 13	PX1	Cord marked		24.3 g		2.22 in		1.65 in		0.43 in						FALSE	10/2/2018					10			NP	NP		NP
9588	2018-051-		NP 157	No	NP 157	Ceramic	Coarse Earthenware			Prehistoric Ceramic	1		Deaccessioned	DA		Cord marked		9.1 g		1.82 in		1.27 in		0.27 in						FALSE								NP	NP		NP	
9589	2018-051-		NP 158	No	NP 158	Metal	Copper or Copper Alloy			Watercap Fuze	1		Complete	BOX 6	2															FALSE	10/16/2018					35						
9590	2018-051-		NP 159	No	NP 159	Organic	Ethnobotany			Seed	1		Complete	Problem Cart			4.5 g		1.147 in		1.05 in		0.558 in							FALSE	10/31/2018											
9591	2018-051-		NP 160	Yes	NP 160	Ceramic	Whiteware	Stoneware		Historic Ceramic	4		Complete	C8			35.2 g		1.708 in		1.165 in		0.280 in							FALSE	9/3/2019					<10			NP	NP		NP
9592	2018-051-		NP 161	No	NP 161	Concretion	Concretion			Concreted Grapeshot	1		Inventoried - Ready to Process	NP161 BUCKET																FALSE												
9593	2018-051-		NP 162	No	NP 162	Unidentified	Unidentified			Tallow	1		Inventoried - Ready to Process	2018P4																FALSE												
9594	2018-051-		NP 163	No	NP 163	Metal	Iron			Cast Iron Lid/Rim	6		Inventoried - Ready to Process	WB50																FALSE												
9595	2018-051-		NP 164	Yes	NP 164	Ceramic	Unidentified			Historic Ceramic?	1		Complete - Needs Final Images	Photo shelf			White, Black	2.0 g		1.018 in		0.803 in		0.160 in						FALSE												
9596	2018-051-		NP 165	No	NP 165	Metal	Iron			Grapeshot	1		Inventoried - Ready to Process	GRAPESHOT3																FALSE												
9597	2018-051-		NP 166	No	NP 166	Metal	Iron			Large Iron Fastener	1		Inventoried - Ready to Process	18WB14																FALSE												
9598	2018-051-		NP 167	No	NP 167	Metal	Iron			Fastener	1		Complete	np tray																FALSE	10/18/2018						14					
9599	2018-051-		NP 168	No	NP 168	Metal	Copper or Copper Alloy			Archer Fuze	4		Complete	Problem Cart			190.3 g		2.6 in					1.25 in						FALSE	1/24/2019					35			NP	NP		NP
9600	2018-051-		NP 169	No	NP 169	Metal	Copper or Copper Alloy			Archer Fuze	4		Complete	C6			190.3 g		2.74 in					1.26 in						FALSE	1/24/2019					35			NP	NP		NP
9601	2018-051-		NP 170	No	NP 170	Metal	Copper or Copper																																			

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square				
9677			NP 177	No	NP 177	Metal	Iron			Angled, Square Plate with Hole in Center	1			NP Shelf																FALSE	9/17/2019				6	28									
9679	2018-051-		NP 178	No	NP 178	Metal	Iron			Pipe Flange	1		In treatment	Bay 3																FALSE						N/A	N/A	N/A	N/A	N/A	N/A				
9680	2018-051-		1994.02.01	No	G223	Recent/Synthetic	Rubber			Rubber gasket	1		Complete - Needs Final Images	To be photographed																FALSE						1395	KAREN	1005657.9568	759716.85227	9/21/2015	2E				
9681	2018-051-		0116	No	NA	Metal	Iron			Chain	1		Inventoried - Ready to Process	YB40							18.5	in	4.5	in					FALSE							NA	NA	NA	NA	NA	16I				
9682	2018-051-		1679.01	No	NA	Metal	Iron			Iron Pieces	6		Complete	PR-S6															FALSE	12/12/2018					35	NA	NA	NA	NA	NA	5C				
9683	2018-051-		1679.01	No	NA	Metal	Iron			Iron Pieces	6		Complete	PR-S12															FALSE						NA	NA	NA	NA	NA	5C					
9685			NP 179	No	NP 179	Metal	Iron			Cast iron plate with lip on one side, triangular, boiler?	1		Inventoried - Ready to Process	Rolloff 2															FALSE																
9686			NP 180	No	NP 180	Metal	Iron			Piston? Long iron rod with attachment at end	1		Deaccessioned	DA															FALSE																
9687	2018-051-		1856.19		G58	Metal	Iron			Gun carriage Wrench	1		Inventoried - Ready to Process	Rolloff 2															FALSE								1005724.4732	759736.83987	9/16/2015	9E					
9688	2018-051-		1856.20		G58	Metal	Iron			Gun carriage Wrench	1		Inventoried - Ready to Process	Rolloff 2															FALSE								1005724.4732	759736.83987	9/16/2015	9E					
9689	2018-051-		NP 181		NP 181	Composite	Wood	Iron		Large timber with fastener through middle	1		Inventoried - Ready to Process	Rolloff 1															FALSE																
9690	2018-051-		1904.03.01		G119	Metal	Iron			Iron Bushing	1		Complete	Bagged separately				461.6	g							3.45	in	1.43	in	FALSE	6/4/2019					18		1005685.9693	759715.64535	9/17/2015	5D				
9691	2018-051-		1904.03.01.01		G119	Recent/Synthetic	Epoxy	Silicone Rubber		Cast & Mold of Iron Bushing	3		Complete	C1				87.5	g							3.75	in	1.43	in	FALSE	6/4/2019							1005685.9693	759715.64535	9/17/2015	5D				
9692	2018-051-		4064.03		NA	Organic	Wood			Wadding	4		Complete	C5				1.9	g		1.5	in	.5	in	.5	in			FALSE	5/30/19															
9693	2018-051-		1928.02.04		G143	Metal	Copper or Copper Alloy			Base of airpump	4	Fragment(s) of a single artifact	Complete	C2, 7064							20.4	in	20.2	in	6.7	in			FALSE	6/14/2019					35		1005668.6449	759714.99841	9/18/2015	3D					
9696	2018-051-		3335.01		S341	Metal	Copper or Copper Alloy			Sabot	1		Complete	BOX 12	2			6.7	lb						6.2	in			FALSE	6/6/2019					35		1005782.3816	759730.24483	10/4/2015	14B					
9699	2018-051-		4075.02		NA	Metal	Copper or Copper Alloy			Sabot	1		Complete	BOX 16	2			8	lb						6.5	in			FALSE	06/12/2019															
9700	2018-051-		1852.11		G54	Metal	Iron			Caulking Tool	1	Intact	Complete	C1				534.8	g	9.5	in			0.133	in	1.259	in		FALSE	9/2/2019				6.4	14		1005718.3053	759742.61595	9/16/2015	8E					
9701	2018-051-		1852.12		G54	Metal	Iron			Caulking tool	1		Inventoried - Ready to Process	ST															FALSE																
9703	2018-051-		4041.01		NA	Metal	Copper or Copper Alloy			Archer Fuze	1		Complete	BOX 6	2			0.3	lb	2.87	in				1.23	in			FALSE	06/12/2019					32		1005718.3053	759742.61595	9/16/2015	8E					
9704	2018-051-		4041.02		NA	Metal	Copper or Copper Alloy			Sabot	1		Complete	BOX 16	2			8	lb						6.2	in			FALSE	06/12/2019															
9705	2018-051-		4021.01		NA	Metal	Copper or Copper Alloy			Archer Fuze	1		Complete	BOX 6	2			0.4	lb	2.7	in				1.25	in			FALSE	06/12/2019															
9706	2018-051-		4068.01		NA	Metal	Copper or Copper Alloy			Archer Fuze	1		Complete	BOX 6	2			0.35	lb	2.6	in				1.22	in			FALSE	06/12/2019															
9707	2018-051-		4087.01		NA	Metal	Copper or Copper Alloy			Archer Fuze	1		Complete	BOX 6	2			0.35	lb	2.56	in				1.26	in			FALSE	06/12/2019					32										
9709	2018-051-		2299		S208	Organic	Wood			Wood	4		Complete	Cart 6				178.3	g	3.64	in	4	in	1.4	in			FALSE	7/24/2019							2964	KAREN	1005832.2762	759793.8736	9/29/2015	21F				
9710	2018-051-		2192		S73	Organic	Wood			Wood	3		Complete	Cart 6				43.1	g	8.5	in	1.49	in	0.26	in			FALSE	7/24/2019							1829	KAREN	1005711.9254	759704.27335	9/23/2015	7B				
9711	2018-051-		1881.45		G89	Metal	Iron			Crows foot/fastener/pipe	1		In treatment	YB134															FALSE																
9712	2018-051-		1881.46		G89	Metal	Iron			Crows foot/fastener/pipe	1		In treatment	YB134															FALSE																
9713	2018-051-		1881.47		G89	Metal	Iron			Crows foot/fastener/pipe	1		Inventoried - Ready to Process	YB134															FALSE																
9714	2018-051-		1881.48		G89	Metal	Iron			Crows foot/fastener/pipe	1		Inventoried - Ready to Process	YB134															FALSE																
9716	2018-051-		1861.27.1		G65	Metal	Iron			Fastener (spike)	1		In treatment																FALSE																
9717	2018-051-		1861.27.2		G65	Metal	Copper or Copper Alloy			Threaded cupreous ring.	1		In treatment																FALSE																
9718	2018-051-		1861.28		G65	Metal	Iron			Fastener/pipe	1		In treatment	YB44 or YB134															FALSE																
9719	2018-051-		1861.29		G65	Metal	Iron			Fastener	1		Inventoried - Ready to Process	YB44 or YB134															FALSE																
9720	2018-051-		1861.30		G65	Metal	Iron			Fastener	1		Inventoried - Ready to Process	YB44 or YB134															FALSE																
9721	2018-051-		1823.28		G23	Metal	Iron			Fastener	1		Inventoried - Ready to Process	YB134															FALSE																
9722	2018-051-		1902.01.02		G116	Organic	Rope			Rope "Gasket" Seal	1	Fragment(s) of a single artifact	Complete	C6				18.2	g	5	in	0.5	in	0.5	in			FALSE	7/12/2019							12/1/15	Karen	1005694.757	759719.54807	9/17/2015	6D				
9724	2018-051-		NP 182		NP 182	Composite	Iron	Leather		Leather with Iron rivets	1	Fragment(s) of a 3 single artifact	Complete	Cart 6				52.6	g	5.4	in	4.17	in					FALSE	7/24/2019																
9725	2018-051-		1806.02.01		S2	Organic	Wood			Wood fragments	3	Fragment(s) of a single artifact	In treatment	7064															FALSE																
9726	2018-051-		2160.10.01		S37	Organic	Wood			Wood rack	1		Complete - Needs Final Images	Photo Shelf				185.6	g	2.1	in	1.5	in				0.93	in	FALSE								1787-1792, 1796-1797	ERICA	1005716.7248	759746.11109	9/22/2015	8F			
9727	2018-051-		1884.26		G92	Metal	Iron			Firegrate Fragment	1		Inventoried - Ready to Process	Rolloff 1															FALSE																
9728	2018-051-		1884.27		G92	Metal	Iron			Firegrate fragment	1		Inventoried - Ready to Process	Rolloff 1															FALSE																
9729	2018-051-		1884.28		G92	Metal	Iron			Firegrate fragment	1		Inventoried - Ready to Process	Rolloff 1															FALSE																
9730	2018-051-		1884.29		G92	Metal	Iron			Firegrate fragment	1		Inventoried - Ready to Process	Rolloff 1															FALSE																
9731	2018-051-		2033.02.01		G290	Organic	Wood			Wedges	5		Complete	C6															FALSE	7/12/2019															
9732	2018-051-		4089.01		NA	Metal	Iron			Eye bolt	1		Complete	BOX 10	2			196.4	g	4.5	in	2.2	in	0.65	in	1.2x1.4	in		FALSE	7/24/2019				6.4	32		2376-2377	ERICA	1005690.6853	759655.95543	9/26/2015	3CC			
9733	2018-051-		4086.01		NA	Metal	Copper or Copper Alloy			Archer Fuze	1	Fragment(s) of a single artifact	Complete	Helen's Office															FALSE	11/2/2017															
9734	2018-051-		4013.01		NA	Metal	Copper or Copper Alloy			Brooke Sabot	1		Complete	BOX 16	2			6.2	lb																										

Primary Key	Accession No.	Tag	Art No.	Historic Ceramic	Grab No.	Category	Subcat 1	Subcat 2	Subcat 3	Description	Quantity	Quantity Detail	Status	Location	Shipment	Marks	Color	Weight	UOM Weight	Length	UOM Length	Width	UOM Width	Thickness	UOM Thickness	Diameter	UOM Diameter	Height	UOM Height	Add'l Measurements	Final Image	Illustration	X-Ray	Final pH	Final Chlorides	Field Photo	Field Camera	X Coord	Y Coord	Exc Date	Grid Square			
9779	2018-051-		NP 195	Yes	NP 195	Ceramic	Unknown/Unidentified			Historic Ceramic		Fragment(s) of a single artifact	Complete - Needs Final Images	Problem Cart																FALSE					< 10							NA		
9780	2018-051-		NP 196	Yes	NP 196	Ceramic	Unknown/Unidentified			Historic Ceramic		Fragment(s) of a single artifact	Complete - Needs Final Images	Problem Cart																FALSE					< 10							NA		
9781	2018-051-		NP 197	Yes	NP 197	Ceramic	Unknown/Unidentified			Ceramic Fragment		Fragment(s) of a single artifact	Complete - Needs Final Images	Problem Cart																FALSE					< 10							NA		
9782	2018-051-		NP 198	Yes	NP 198	Ceramic	Unknown/Unidentified			Prehistoric Ceramic		Fragment(s) of a single artifact	Complete - Needs Final Images	Problem Cart																FALSE					< 10							NA		
9783	2018-051-		NP 199	Yes	NP 199	Ceramic	Unknown/Unidentified			Ceramic Fragment		Fragment(s) of a single artifact	Complete - Needs Final Images	Problem Cart																FALSE					< 10							NA		
9784	2018-051-		NP 200	Yes	NP 200	Ceramic	Unknown/Unidentified			Historic Ceramic		Fragment(s) of a single artifact	Complete - Needs Final Images	Problem Cart																FALSE					< 10									
9785	2018-051-		NP 201	Yes	NP 201	Ceramic	Unknown/Unidentified			Historic Ceramic		Fragment(s) of a single artifact	Complete - Needs Final Images	Problem Cart																FALSE					< 10							NA		
9786	2018-051-		NP 202	Yes	NP 202	Ceramic	Unknown/Unidentified			Historic Ceramic		Fragment(s) of a single artifact	Complete - Needs Final Images	Problem Cart																FALSE					< 10							NA		
9787	2018-051-		NP 203	Yes	NP 203	Ceramic	Unknown/Unidentified			Historic Ceramic		Fragment(s) of a single artifact	Complete - Needs Final Images	Problem Cart																FALSE					< 10							NA		
9788	2018-051-		NP 204	Yes	NP 204	Ceramic	Unknown/Unidentified			Historic Ceramic		Fragment(s) of a single artifact	Complete - Needs Final Images	Problem Cart																FALSE					< 10							NA		
9789	2018-051-		NP 205	Yes	NP 205	Ceramic	Unknown/Unidentified			Historic Ceramic		Fragment(s) of a single artifact	Complete - Needs Final Images	Problem Cart																FALSE					< 10							NA		
9790	2018-051-		NP 206	Yes	NP 206	Ceramic	Unknown/Unidentified			Historic Ceramic		Fragment(s) of a single artifact	Complete - Needs Final Images	Problem Cart																FALSE					< 10							NA		
9791	2018-051-		NP 207	Yes	NP 207	Ceramic	Unknown/Unidentified			Historic Ceramic		Fragment(s) of a single artifact	Complete - Needs Final Images	Problem Cart		Black Stipled Depiction of Architecture and Decorative Elements															FALSE					< 10							NA	
9792	2018-051-		NP 208	Yes	NP 208	Ceramic	Unknown/Unidentified			Historic Ceramic		Fragment(s) of a single artifact	Complete - Needs Final Images	Problem Cart																	FALSE					< 10							NA	
9793	2018-051-		NP 209	Yes	NP 209	Ceramic	Unknown/Unidentified			Historic Ceramic		Fragment(s) of a single artifact	Complete - Needs Final Images	Problem Cart																	FALSE					< 10							NA	
9794	2018-051-		NP 210		NP 210	Organic	Wood			Wood Fragment		Fragment(s) of a single artifact	Complete - Needs Final Images	Problem Cart																FALSE													NA	
9795	2018-051-		NP 211		NP 211	Organic	Coal/Charcoal			Coal	2	Fragment(s)	Complete - Needs Final Images	Problem Cart																FALSE													NA	
9796	2018-051-		NP 212		NP 212	Organic	Bone			Bone Fragment		Fragment(s) of a single artifact	Complete - Needs Final Images	Problem Cart																FALSE													NA	
9798	2018-051-		NP 213		SEC S9	Glass	Case Bottle			Glass Fragment		Fragment(s) of a single artifact	Complete - Needs Final Images	Problem Cart			Olive													FALSE													NA	
9799	2018-051-		NP 214		NP 214	Glass	Unknown/Unidentified			Glass Fragment		Fragment(s) of a single artifact	Complete - Needs Final Images	Problem Cart			Olive													FALSE													NA	
9800	2018-051-		NP 215		NP 215	Glass	Unknown/Unidentified			Glass Fragments	3	artifacts of multiple	Complete - Needs Final Images	Problem Cart			Clear, Olive													FALSE														NA
9801	2018-051-		NP 216		NP 216	Glass	Unknown/Unidentified			Glass Fragment		Fragment(s) of a single artifact	Complete - Needs Final Images	Problem Cart			Clear													FALSE													NA	
9802	2018-051-		NP 217		NP 217	Glass	Unknown/Unidentified			Glass Fragment		Fragment(s) of a single artifact	Complete - Needs Final Images	Problem Cart			Green/Olive													FALSE													NA	
9803	2018-051-		NP 218		NP 218	Glass	Unknown/Unidentified			Glass Fragment		Fragment(s) of a single artifact	Complete - Needs Final Images	Problem Cart			Green/Olive													FALSE													NA	
9804	2018-051-		NP 219		NP 219	Glass	Unknown/Unidentified			Glass Fragment		Fragment(s) of a single artifact	Complete - Needs Final Images	Problem Cart			Clear													FALSE													NA	
9805	2018-051-		NP 220		NP 220	Glass	Unknown/Unidentified			Glass Fragments	3	Fragment(s)	Complete - Needs Final Images	Problem Cart			Green/Olive													FALSE													NA	
9806	2018-051-	y	2953.04		S1026	Glass	Unknown/Unidentified			Glass Fragments		Fragment(s) of multiple 2 artifacts	Complete	7064			Clear, Olive	9.1 g		1.573 in	1.144 in		0.149 in						FALSE	9/20/2019						7735	KAREN	1005732.4697	759750.15472	10/18/2015	10F			
9807	2018-051-		2827.01		S865	Organic	Bone			Bone		Fragment(s) of multiple 4 artifacts	Complete - Needs Final Images	PS				89 g		4.71 in	1.074 in		0.399 in						FALSE							7058	KAREN	1005626.6897		10/15/2015	North			
9808	2018-051-		1829.15.02		G29	Metal	Iron	Epoxy	Silicone Rubber	Small iron fastener, curved at end.	4		Complete	C1				3.6 g		2.22 in	0.56 in		0.13 in						FALSE	9/17/2019					28		1005687.5946	759741.39748	9/15/2015	6F				
9827	2018-051-		3293.01			Organic	Wood			Wood, teredo worm damaged, may have been meant for reburial	1		Complete - Needs Final Images	Photo Shelf				437.1 g		10.4 in		3.75 in					1.66 in	FALSE																
9828	2018-051-		1800.04.01		G1	Organic	Wood			Wood removed from 1800.04	1		Complete - Needs Final Images	Photo Shelf				440.8 g		6.03 in		4.09 in					1.63 in	FALSE										1005713.0005	759756.60753	8/12/2015	8G			