# **APPENDIX E**

Technical database of beads outside of Panama (Group 3)



Museum/Object Info	
Object/Catalogue #	007035.000 Owner NMAI Count Curation Location
Object Class	Bead Object Sub-Class
Country	Colombia Province Magdalena Area
Site	Santa Marta Geographic Zone Style Style
Provenience Documentation	
Accession	¥         Name in Records
Collecto	
Dono	Santa Marto
Cultural IE	Period Period
Catalogue Info	Accession Info
Research Note	s References
Technical Examination	🛿 Examination 🖾 Visual 🖾 Microscopy 🖾 MicroPhoto 🗌 Other Exam Operator ACH 🛛 Exam date 5/24/2011 🔝
Description	Biconical cast bead with openwork spiral designs.
Measurements	15.5mm (long) x 9.5mm (diam.)
Le	ngth: Width: Height: Diam.: Thickness Weight:
Condition/Treatment Notes	residual adhesive and paper from past mounting method
Corrosion	None Green-Surface Green-Core Black-Surface Black-Core Red-Surface Red-Core Other
Corrosion notes	
L Primary Fabrication	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown
	Cast- Closed Core Hammered-Sheet Wire/Rod
Fabrication Notes	Little to no core material present
Material	□ Copper 🛛 Gold Alloy □ Organic □ Resin □ Stone □ Shell □ Composite □ Unknown □ Not present □ Oth
Material Notes	
l	
F	Coppery 🛛 Gold 🔲 Reddish 🔲 Pinkish 🗌 Mixed 🗍 Other
Coloration Notes Finishing	Surface Enrichment Polished None Other
Finishing Notes	
T IT ISTILLY NOTES	
Decorative details	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
Joinery	All cast Dechanical Solder Other/Unknown
Joinery Notes	
Usewear/toolmarks Usewear/toolmarks Usewear/toolmarks Notes	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
ا Pseudomorphs	Pseudomorph Organics None Other Notes
	XRF X-ray radiograph ESEM-EDS PIXE LA-ICPMS Metallography Other
Analysis Rec Notes	
	Special 🔲 Followup 🔲 Re-do 🔲 Conservation required 🔲 Re-packaging required 🔲 Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/1/201 IIII Reliability
Location of analysis See	
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 36.3 54.7	
Analysis #2	Type Analysis Operator Analysis Date Reliability
Location of analysis	Analysis location notes
	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements	



Museum/Object Info	
Object/Catalogue #	# 012414.000 Owner NMAI Count Curation Location
Object Class	Bead Object Sub-Class
Country	/ Colombia Province Pampa Area
Site	Calaca Geographic Zone Style
Provenience Documentation	
Accession	# Name in Records
Collecto	Date Collected Date Collected Ditation Date Collected Colombia Acy
Donc	
Cultural II	D Period Period
Catalogue Inf	Accession Info
Research Note	s References
Technical Examination	n Examination 🛛 Visual 🖾 Microscopy 🖾 MicroPhoto 🗖 Other Exam Operator ACH 🛛 Exam date 5/16/2011 📺
Description	Large cast openwork bead, biconical in shape.
Measurements	50mm long x 13mm diam (max)
Le	ngth: 50mm Width: Height: Diam.:13mm Thickness Weight:
Condition/Treatment Notes	Good
Corrosion	X None ☐ Green-Surface ☐ Green-Core ☐ Black-Surface ☐ Black-Core ☐ Red-Surface ☐ Red-Core ☐ Other
Corrosion notes	
Drimon, Echricotion	
	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown Cast- Closed Core Hammered-Sheet Wire/Rod
	cast bead with openwork. Interior appears rough in texture from casting and there is one casting flaw in the side where the metal is discontinuous
Material	🗌 Copper 🛛 Gold Alloy 🔲 Organic 🔲 Resin 🔲 Stone 🔲 Shell 🔲 Composite 🔲 Unknown 🔲 Not present 🔲 Otr
Material Notes	
Surface Coloration	Coppery 🛛 Gold 🔲 Reddish 🔲 Pinkish 🗌 Mixed 🗌 Other
Coloration Notes	
Finishing	Surface Enrichment 🛛 Polished 🗌 None 🔲 Other
Finishing Notes	
Decorative details	🛛 All cast 🔲 Embossed 🔲 Incised 🔲 Chased 🔲 Filigree 🔲 Granulation 🔲 Punched 🔲 Other
Decorative detail notes	
Joinery	All cast Dechanical Solder Other/Unknown
Joinery Notes	
Usewear/toolmarks Usewear/toolmarks Notes	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Pseudomorphs	Pseudomorph  Organics  None  Other Notes
Analysis rec's	XRF X-ray radiograph ESEM-EDS PIXE LA-ICPMS Metallography Other
Analysis Rec Notes	
	Special 🔲 Followup 🔲 Re-do 🔲 Conservation required 📄 Re-packaging required 📄 Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/1/201 📰 Reliability
Location of analysis See	photo or .evt file Analysis location notes
Cu Au Elements 16.7 68.9	Ag    Zn    Cd    As    Ni    Fe    Sn    Sb    Hg    Pb    Bi    Trace    Removed      14.4    Image: Comparison of the second of t
Analysis #2	Type Analysis Operator Analysis Date Reliability
Location of analysis	Analysis Date Reliability
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements	



Museum/Object Info	
Object/Catalogue #	012416.000 Owner NMAI Count Curation Location
Object Class	Bead Object Sub-Class Zoomorphic
Country	Colombia Province Cauca Area
Site	Geographic Zone Style
Provenience Documentation	Field Notes       Accession docs/letters       Stylistic       Other         Publication       Inferred       None
Accession #	Name in Records
Collector	Date Collected     Colombia Province of La Pampa     Acy
Donor	Date Accessioned Bead Bird Form
Cultural ID	Period
Catalogue Info	Accession Info
Research Notes	References
Technical Examination	Examination 🛛 Visual 🖾 Microscopy 🖾 MicroPhoto 🗌 Other Exam Operator ACH 🛛 Exam date 5/18/2011 🛄
Description S	olid cast gold bead in the shape of a bird. Round globular eyes and a simplified flat body
Measurements 3	5mm long x 8 mm high x 8mm wide
Len	gth: Width: Height: Diam.: Thickness Weight:
Condition/Treatment Notes E	xcellent condition
Corrosion	None Green-Surface Green-Core Black-Surface Black-Core Red-Surface Red-Core Other
Corrosion notes	
Primary Fabrication	Cast- Open Back 🛛 Cast- Solid 🛛 Hammered-Sheathing 🗋 Other/Unknown
Ē	Cast- Closed Core Hammered-Sheet Wire/Rod
Fabrication Notes C	ast solid with possibly some hammering and finished by polishing
Material	] Copper
Material Notes	
Surface Coloration	Coppery 🛛 Gold 🔲 Reddish 🔲 Pinkish 🗌 Mixed 🗍 Other
Coloration Notes	
	Surface Enrichment 🛛 Polished 🗌 None 🔲 Other
Finishing Notes	
_	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
· · -	All cast Mechanical Solder Other/Unknown
Joinery Notes	
Usewear/toolmarks D Usewear/toolmarks Notes	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Pseudomorphs	Pseudomorph  Organics  None  Other Notes
Analysis rec's	XRF X-ray radiograph ESEM-EDS PIXE A-ICPMS Metallography Other
Analysis Rec Notes	
Ľ	Special 🔲 Followup 🔲 Re-do 🔲 Conservation required 🔲 Re-packaging required 🔲 Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/2/201 💷 Reliability
Location of analysis See p	
	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 0.1 88.5	
Analysis #2	Type Analysis Operator Analysis Date Reliability
Location of analysis	Analysis location notes
Cu Au A	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements	



Museum/Object Info	
Object/Catalogue	# 017434.000 Owner NMAI Count Curation Location
Object Clas	
Country	y Ecuador Province Esmeraldas Area
Site	e La Tolita Geographic Zone Style
Provenienc Documentatio	
Accession	# Name in Records
Collecto	Date Collected
Dono	Date Accessioned
Cultural I	D Period Period
Catalogue Inf	fo Accession Info
Research Note	References
Technical Examination	n Examination 🛛 Visual 🖾 Microscopy 🖾 MicroPhoto 🗌 Other Exam Operator ACH 🛛 Exam date 5/25/2011 🛄
	38 Beads. 25 adhered to a card. 13 loose. The 25 beads adhered to the card are round beads with a join around the circumference. The loose beads are a variety of types including sheet beads rolled and joined and round beads joined around
Measurements	(25 round beads) 6-8mm long x ~ 7mm diam.
Le	ength: Width: Height: Diam.: Thickness Weight:
Condition/Treatment Notes	Good condition. Some dents in the round beads. The loose beads have burial soil accretions at the interior
Corrosion	L J ☑ None □ Green-Surface □ Green-Core □ Black-Surface □ Black-Core □ Red-Surface □ Red-Core □ Other
Corrosion notes	
Primary Fabrication	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown
	Round beads are sheet construction with soldered join at center? Extensive scratch marks at the central join, likely from finishing/abrading at the solder join.
	Copper 🛛 Gold Alloy 🗌 Organic 🔲 Resin 🔲 Stone 🗌 Shell 🗌 Composite 🔲 Unknown 🗌 Not present 🗍 Otr
Material Notes	
Surface Coloration	Coppery 🛛 Gold 🗌 Reddish 🗋 Pinkish 🗌 Mixed 🗋 Other
Coloration Notes	
Finishing	Surface Enrichment Z Polished None C Other
Finishing Notes	
Decorative details	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
Joinery	All cast Mechanical Solder Other/Unknown
Joinery Notes	Possibly soldered at the center
Usewear/toolmarks	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Usewear/toolmarks Notes	Repetitive striations along the joins of the 25 round beads from finishing along the join line.
Pseudomorphs	Pseudomorph Organics None Other Notes
	XRF X-ray radiograph ESEM-EDS PIXE LA-ICPMS Metallography Other
Analysis Rec Notes	Examination of one of the loose beads revealed that the burial soil at the interior included tiny grains of gold (?) and other
	Special Followup Re-do Conservation required Re-packaging required Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/1/201 📰 Reliability
Location of analysis See	e photo or .evt file Analysis location notes Bead 1
CuAuElements1.482.5	Ag    Zn    Cd    As    Ni    Fe    Sn    Sb    Hg    Pb    Bi    Trace    Removed      16.1    Image: Signal And Signal A
Analysis #2	Type XRF Analysis Operator ACH Analysis Date 2/1/201 Reliability
Location of analysis See	
CuAu	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 1.3 83.5	15.2 Results



Museum/Object Info	
Object/Catalogue #	017440.000 Owner NMAI Count Curation Location
Object Class	Bead Object Sub-Class
Country	Ecuador Province Esmeraldas Area
Site	La Tolita Geographic Zone Style Style
Provenience Documentation	
Accession	# Name in Records
Collecto	
Dono	Date Accessioned Date Accessioned Control Date Accessioned Accessioned Control Date Accessioned
Cultural IE	Period Period
Catalogue Info	Accession Info
Research Note	s References
Technical Examination	🛿 Examination 🖾 Visual 🖾 Microscopy 🖾 MicroPhoto 🔲 Other Exam Operator ACH 🛛 Exam date 5/24/2011 🔝
Description	Sheet bead. Doubled over and rolled with no join.
Measurements	6.5mm diam. x 3mm long
Le	ngth: Width: Height: Diam.: Thickness Weight:
Condition/Treatment Notes	appears squished and torn with break edges present
Corrosion	X None 🔲 Green-Surface 🗌 Green-Core 🗌 Black-Surface 🗌 Black-Core 🗌 Red-Surface 🗌 Red-Core 🔲 Other
Corrosion notes	
Primary Fabrication	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown
_	Cast- Closed Core X Hammered-Sheet Wire/Rod
Fabrication Notes	
Material	□ Copper 🛛 Gold Alloy □ Organic □ Resin □ Stone □ Shell □ Composite □ Unknown □ Not present □ Otr
Material Notes	
L Surface Coloration	Coppery 🛛 Gold 🔲 Reddish 🔲 Pinkish 🗌 Mixed 🗌 Other
Coloration Notes	
Finishing	Surface Enrichment Polished None Other
Finishing Notes	
l	
	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
	All cast Mechanical Solder Other/Unknown
Joinery Notes	
Usewear/toolmarks Usewear/toolmarks Notes	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Pseudomorphs	Pseudomorph Organics None Other Notes
Analysis rec's	XRF X-ray radiograph ESEM-EDS PIXE LA-ICPMS Metallography Other
Analysis Rec Notes	
	Special 🔲 Followup 🔲 Re-do 🔲 Conservation required 🔲 Re-packaging required 🔲 Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/4/201 📖 Reliability
Location of analysis See	
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 2.7 87.8	9.5 . Results
Analysis #2	Type Analysis Operator Analysis Date Reliability
Location of analysis	Analysis location notes
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements	



Museum/Object Info	
Object/Catalogue	# 017441.000 Owner NMAI Count Curation Location
Object Class	s Bead Object Sub-Class
Country	y Ecuador Province La Tolita Area
Site	La Tolita Geographic Zone Style
Provenienc Documentatio	
Accession	# Name in Records
Collecto	Date Collected Date Collected
Dono	Date Accessioned
Cultural I	D Period
Catalogue Inf	Accession Info
Research Note	References
Technical Examination	🛚 Examination 🛛 Visual 🖾 Microscopy 🖾 MicroPhoto 🗋 Other Exam Operator ACH 🛛 Exam date 5/24/2011 🔝
Description	50 beads of different shapes and colors. Rolled and joined beads(beads 1+2). Rolled tubular beads not joined (beads 5 +6)
Measurements	See images
Le	ength: Width: Height: Diam.: Thickness Weight:
Condition/Treatment Notes	Some beads are squashed and torn. Many of the beads have residual burial soil at their interiors.
Corrosion	X None  ☐ Green-Surface  ☐ Green-Core  ☐ Black-Surface  ☐ Black-Core  ☐ Red-Surface  ☐ Red-Core  ☐ Other
Corrosion notes	
Primary Fabrication	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown
-	Cast- Closed Core Hammered-Sheet Wire/Rod
Fabrication Notes	
Material	🛛 Copper 🖾 Gold Alloy 🗌 Organic 🔲 Resin 🔲 Stone 🔲 Shell 🔲 Composite 🔲 Unknown 🔲 Not present 🖾 Oth
Material Notes	
Surface Coloration	🛛 Coppery 🖾 Gold 🔲 Reddish 🔲 Pinkish 🖾 Mixed 🖾 Other
	Some beads are copper colored while some are gold colored and others are silver or platinum colored
Finishing	□ Surface Enrichment
Finishing Notes	
·	
	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
•	All cast Mechanical Solder Other/Unknown
Joinery Notes	Some beads appear to be joined and others are not joined.
Usewear/toolmarks Usewear/toolmarks Notes	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Pseudomorphs	Pseudomorph  Organics  None  Other Notes
Analysis rec's	XRF X-ray radiograph ESEM-EDS PIXE LA-ICPMS Metallography Other
Analysis Rec Notes	
	Special Followup Re-do Conservation required Re-packaging required Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/4/201 📖 Reliability
Location of analysis See	
Cu Au Elements 40.3 55.2	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Analysis #2	Type  XRF   Analysis Operator ACH Analysis Date 2/4/201 Reliability
Location of analysis See	
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 6.7 83.5	9.9 Results



Museum/Object Info	
Object/Catalogue #	# 039199.000 Owner NMAI Count Curation Location
Object Class	Bead Object Sub-Class Wire
Country	s Bead Object Sub-Class Wire Colombia Province Narino Area
Site	Geographic Zone Style
Provenienc Documentation	
Accession	# Name in Records
Collecto	r Date Collected December 2010
Donc	Date Accessioned
Cultural II	D Period Period
Catalogue Inf	Accession Info
Research Note	
Technical Examination	1 Examination 🛛 Visual 🖾 Microscopy 🖾 MicroPhoto 🗋 Other Exam Operator ACH 🛛 Exam date 5/18/2011 🔃
Description	Six small sections of wire bent into a C shape
Measurements	2mm - 3.5mm wide, 0.35-0.45 mm diam.
Le	ingth: Width: Height: Diam.: Thickness Weight:
Condition/Treatment Notes	Good condition. Two of the wires are bent out of shape
Corrosion	None Green-Surface Green-Core Black-Surface Black-Core Red-Surface Red-Core Other
Corrosion notes	
Primary Fabrication	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown
· ······	Cast- Closed Core Hammered-Sheet Wire/Rod
Fabrication Notes	Striations on wire indicate that it was drawn.
Material	Copper 🛛 Gold Alloy 🗌 Organic 🔲 Resin 🔲 Stone 🔲 Shell 🔲 Composite 🔲 Unknown 📄 Not present 🗍 Oth
Material Notes	
	Coppery 🛛 Gold 🔲 Reddish 🔲 Pinkish 🗋 Mixed 🗋 Other
Coloration Notes Finishing	Surface Enrichment Polished None Other
Finishing Notes	
Decorative details	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
Joinery	All cast Mechanical Solder Other/Unknown
Joinery Notes	
Usewear/toolmarks	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Usewear/toolmarks Notes	uniform striations from a draw plate
Pseudomorphs	Pseudomorph Organics None Other Notes
Analysis rec's	XRF X-ray radiograph ESEM-EDS PIXE LA-ICPMS Metallography Other
Analysis Rec Notes	
	Special 🔲 Followup 🔲 Re-do 🔲 Conservation required 📄 Re-packaging required 📄 Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/3/201 📖 Reliability
Location of analysis See	photo or .evt file Analysis location notes
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 8.7 83.2	
Analysis #2	Type Analysis Operator Analysis Date Reliability
Location of analysis	Analysis location notes
	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements	



Museum/Object Info		
Object/Catalogue #	# 039205.000 Owner NMAI Count Curation Location	SID OF
Object Class		A CARLEN PARK OF
Country		
Site		
Provenience		#1
Documentation	n Publication Inferred None	
Accession	# Name in Records	
Collecto	039205.000 It	ems: 3 Eth
Dono		-
Cultural II		Contraction Contraction
Catalogue Info		
Research Note	References	
Research note		
Technical Examination	n Examination ⊠ Visual ⊠ Microscopy ⊠ MicroPhoto □ Other Exam Operator ACH Exam date	5/24/2011
Description	Small cast wire chain fragment.	
Measurements	6mm x 2.5mm (diameter of wire 0.3-0.4mm)	
	ength: 6mm Width: 2.5mm Height: Diam.: Thickness Weight:	
Condition/Treatment Notes		
Condition/ realment Notes		
l		
	☑ None □ Green-Surface □ Green-Core □ Black-Surface □ Black-Core □ Red-Surface □ Red-Cor	re 🔲 Other
Corrosion notes		
Primary Fabrication	Cast- Open Back 🛛 Cast- Solid 🔄 Hammered-Sheathing 🖾 Other/Unknown	
	Cast- Closed Core Hammered-Sheet Wire/Rod	
Fabrication Notes		
Material	□ Copper	oresent 🔲 Otr
Material Notes		
I Surface Coloration	Coppery 🛛 Gold 🔲 Reddish 🔲 Pinkish 🗌 Mixed 🗌 Other	
Coloration Notes		
	Surface Enrichment Polished None Other	
· · ·		
Finishing Notes		
Decorative details	All cast Embossed Incised Chased Filigree Granulation Punched Other	
Decorative detail notes		
Joinery	All cast Mechanical Solder Other/Unknown	
Joinery Notes		
- I	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other	
Usewear/toolmarks Usewear/toolmarks Notes	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other	
l		
	Pseudomorph      Organics      None      Other Notes	
	XRF       X-ray radiograph       ESEM-EDS       PIXE       LA-ICPMS       Metallography       Other	
Analysis Rec Notes		
	Special Followup Re-do Conservation required Re-packaging required Other	
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/2/201 📰 Reliability	
Location of analysis See	e photo or .evt file Analysis location notes	
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed	]
Elements 9.3 82.3	8.4 Bit Results	
Analysis #2		
	Type Analysis Operator Analysis Date Reliability	
Location of analysis	Analysis location notes Analysis location notes	
Cu Au Elements	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed Results	



Museum/Object Info	
Object/Catalogue #	051971.000 Owner NMAI Count Curation Location
Object Class	bead Object Sub-Class
Country	Colombia Province Area
Site	Sinu River Geographic Zone Style
Provenience Documentation	
Accession #	#     Name in Records
Collector	Date Collected
Dono	Date Accessioned
Cultural IE	Period Period
Catalogue Info	Accession Info
Research Notes	References
Technical Examination	🛿 Examination 🛛 Visual 🖾 Microscopy 🖾 MicroPhoto 🔲 Other Exam Operator ACH 🛛 Exam date 5/13/2011 🔛
Description	Small cast bird shaped beads with a spangle suspended from the beak.
	Spangle diameter:16mm, Spangle thickness: 0.075mm
r	ngth: 30mm Width: Height: Diam.: 16mm Thickness Weight:
Condition/Treatment Notes	Good condition
Corrosion	X None 🔲 Green-Surface 🗌 Green-Core 🗌 Black-Surface 📄 Black-Core 🔲 Red-Surface 🔲 Red-Core 🔲 Other
Corrosion notes	
	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown
Fabrication Notes	The beads have residual core material at their interior. The spangles are hammered.
L Material	☐ Copper 🛛 Gold Alloy 🗍 Organic 🗍 Resin 🗍 Stone 🗍 Shell 🗍 Composite 🗍 Unknown 🗍 Not present 🗍 Oth
Material Notes	
L Surface Coloration	Coppery 🛛 Gold 🔲 Reddish 🔲 Pinkish 🗋 Mixed 🗍 Other
Coloration Notes	
Finishing	Surface Enrichment Polished None Other
Finishing Notes	
Decorative details	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
Joinery	All cast Dechanical Solder Other/Unknown
Joinery Notes	
Usewear/toolmarks	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Pseudomorphs	Pseudomorph Organics None Other Notes
	XRF X-ray radiograph ESEM-EDS PIXE LA-ICPMS Metallography Other
Analysis Rec Notes	
	Special 🔲 Followup 🔲 Re-do 🔲 Conservation required 🔲 Re-packaging required 🔲 Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 1/25/20 💷 Reliability
Location of analysis See	
Cu Au	Ag   Zn   Cd   As   Ni   Fe   Sn   Sb   Hg   Pb   Bi   Trace   Removed     12.9
Analysis #2	Type XRF Analysis Operator ACH Analysis Date 1/26/20 III Reliability
Location of analysis See	
	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed



Museum/Object Info	
Object/Catalogue #	# 052851.000 Owner NMAI Count Curation Location
Object Class	s Bead Object Sub-Class
Country	
Site	Sinu river Geographic Zone Style
Provenienc Documentation	
Accession	# Name in Records
Collecto	Date Collected
Donc	
Cultural II	D Period Period
Catalogue Inf	Accession Info
Research Note	References
Technical Examination	🛿 Examination 🖾 Visual 🖾 Microscopy 🖾 MicroPhoto 🔲 Other Exam Operator ACH 🛛 Exam date 5/13/2011 🔛
Description	Two biconical beads with a cast braided wire around both ends
Measurements	
Le	ength: 24.5mm Width: Height: Diam.: 21mm Thickness Weight:
Condition/Treatment Notes	good condition
Corrosion	None Green-Surface Green-Core Black-Surface Black-Core Red-Surface Red-Core Other
Corrosion notes	
Primary Fabrication	Cast- Open Back 🛛 Cast- Solid 🛛 🗌 Hammered-Sheathing 🔲 Other/Unknown
	Cast- Closed Core Hammered-Sheet Wire/Rod
Fabrication Notes	Some core material possibly remaining
Material	Copper 🛛 Gold Alloy 🗋 Organic 📄 Resin 📄 Stone 📄 Shell 📄 Composite 📄 Unknown 📄 Not present 📄 Otr
Material Notes	
Surface Coloration	Coppery 🛛 Gold 🗌 Reddish 🗋 Pinkish 🗋 Mixed 🗋 Other
Coloration Notes	
Finishing	Surface Enrichment Polished None Other
Finishing Notes	
	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
· .	All cast Mechanical Solder Other/Unknown
Joinery Notes	Possibly soldered around the center
Usewear/toolmarks Usewear/toolmarks Notes	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Pseudomorphs	Pseudomorph  Organics  None  Other Notes
Analysis rec's	XRF X-ray radiograph ESEM-EDS PIXE LA-ICPMS Metallography Other
Analysis Rec Notes	
	Special Followup Re-do Conservation required Re-packaging required Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 1/25/20 💷 Reliability
Location of analysis See	
Cu Au Elements 2.3 82.0	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Analysis #2	Type XRF Analysis Operator ACH Analysis Date 1/25/20 📖 Reliability
Location of analysis See	photo or .evt file Analysis location notes bead 2
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 0.4 82.3	17.3 Results



Museum/Object Info		-
Object/Catalogue	O53960.000 Owner NMAI Count Curation Location	
Object Class	bead Object Sub-Class zoomorphic bead	
Country	Colombia Province Area	
Site	Sinu River Geographic Zone Style	
Provenienc Documentation		d and
Accession	# Name in Records	j.
Collecto	r Date Collected Os3960.000 Items: 1 Acy	
Donc	r Date Accessioned Date Accessioned	
Cultural II	Period Period	
Catalogue Inf	Accession Info	
Research Note	s References	
Technical Examination	🛿 Examination 🖾 Visual 🖾 Microscopy 🖾 MicroPhoto 🔲 Other Exam Operator ACH 🛛 Exam date 5/16/2011 📗	3
Description	Cast gold bead representing a bird with a spangle suspended from its beak	
	29mm long x 13 mm wide x 15 mm high	
	ngth: 29mm Width: 13mm Height: 15mm Diam.: Thickness Weight:	
Condition/Treatment Notes	Good condition. some burial soil in crevices. likely coated	
Corrosion	X None Green-Surface Green-Core Black-Surface Black-Core Red-Surface Red-Core Other	
Corrosion notes		
Primary Fabrication	□ Cast- Open Back	
Fabrication Notes	Dendrites visible in crevices of cast bead. spangle made from hammered sheet	
Material	□ Copper ⊠ Gold Alloy □ Organic □ Resin □ Stone □ Shell □ Composite □ Unknown □ Not present □ Otr	
Material Notes		
Surface Coloration	Coppery 🛛 Gold 🔲 Reddish 🗋 Pinkish 🗍 Mixed 🗋 Other	
Coloration Notes		
	Surface Enrichment 🛛 Polished 🗋 None 🗋 Other	
Finishing Notes		
Decorative details	All cast Embossed Incised Chased Filigree Granulation Punched Other	
Decorative detail notes		
Joinery	All cast 🔲 Mechanical 🔲 Solder 🔲 Other/Unknown	
Joinery Notes		
Usewear/toolmarks Usewear/toolmarks Notes	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other	
	Pseudomorph      Organics      None      Other Notes	
	□ XRF □ X-ray radiograph □ ESEM-EDS □ PIXE □ LA-ICPMS □ Metallography □ Other	
Analysis Rec Notes		
, , , , , , , , , , , , , , , , , , ,	Special Followup Re-do Conservation required Re-packaging required Other	
Analysis #1	Type XRF     Analysis Operator ACH     Analysis Date     2/1/201     Reliability	
Location of analysis See		
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed	
Elements 11.7 76.0		
Analysis #2	Type XRF Analysis Operator ACH Analysis Date 2/1/201 📰 Reliability	
Location of analysis See	photo or .evt file Analysis location notes	
	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed	
Elements 7.1 79.1	13.8 Results	



Museum/Object Info	
Object/Catalogue #	053961.000 Owner NMAI Count Curation Location
Object Class	Bead Object Sub-Class zoomorphic
Country	Colombia Province Area
Site	Sinu River Geographic Zone Style
Provenience Documentation	
Accession #	Name in Records
Collector	Date Collected Date Collected Colombia Acy
Donor	Date Accessioned Date Accessioned
Cultural ID	Period
Catalogue Info	Accession Info
Research Notes	References
Technical Examination	Examination 🛛 Visual 🖾 Microscopy 🖾 MicroPhoto 🗌 Other Exam Operator ACH 🛛 Exam date 5/16/2011 🔝
Description 2	cast beads in the shape of birds
Measurements	3mm long x 11.7mm high x 16.3mm wide
Ler	ngth: 23mm Width: 16.3mm Height: 11.7mm Diam.: Thickness Weight:
Condition/Treatment Notes	Good condition
Corrosion Corrosion notes	None 🗌 Green-Surface 🗋 Green-Core 🗋 Black-Surface 🗋 Black-Core 📄 Red-Surface 📄 Red-Core 🗋 Other
L	
	□ Cast- Open Back
Fabrication Notes	Cast with some casting flaws and dendrites in crevices
L Material	Copper ⊠ Gold Alloy □ Organic □ Resin □ Stone □ Shell □ Composite □ Unknown □ Not present □ Otr
Material Notes	
L Surface Coloration	Coppery 🛛 Gold 🔲 Reddish 🗍 Pinkish 🗍 Mixed 🗍 Other
Coloration Notes	
Finishing	Surface Enrichment 🛛 Polished 🗋 None 🗋 Other
Finishing Notes	Raised surfaces are polished
Decorative details	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
, ,	All cast Mechanical Solder Other/Unknown
Joinery Notes	
Usewear/toolmarks	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Pseudomorphs	Pseudomorph  Organics  None  Other Notes
Analysis rec's	□ XRF □ X-ray radiograph □ ESEM-EDS □ PIXE □ LA-ICPMS □ Metallography □ Other
Analysis Rec Notes	
[	Special Followup Re-do Conservation required Re-packaging required Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/1/201 IIII Reliability
Location of analysis See	
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 2.9 82.8	14.3 . Results
Analysis #2	Type XRF Analysis Operator ACH Analysis Date 2/1/201 📰 Reliability
Location of analysis See	
	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 1.7 85.3	



Museum/Object Info	
Object/Catalogue #	053982.000 Owner NMAI Count Curation Location
Object Class	Bead Object Sub-Class
Country	Colombia Province Sinu Area
Site	Sinu River Geographic Zone Style
Provenience Documentation	
Accession #	
Collector	
Donor	Date Accessioned Date Accessioned Wi
Cultural ID	Period
Catalogue Info	Accession Info
Research Notes	References
Technical Examination	🛛 Examination 🛛 Visual 🖾 Microscopy 🖾 MicroPhoto 🔲 Other Exam Operator ACH 🛛 Exam date 5/24/2011 🔝
	5 cast tubular beads with cast wire spiral decoration along the body and a raised cast wire rim on each opening. One of the beads has a cast wire braided rim
Measurements	12.5-13.5mm long x 5.6mm diam.
Ler	ngth: Width: Height: Diam.: Thickness Weight:
Condition/Treatment Notes	Residual adhesive present from past mounting method.
Corrosion	None 🔲 Green-Surface 🗌 Green-Core 🗌 Black-Surface 🔲 Black-Core 🗌 Red-Surface 🔲 Red-Core 🗌 Other
Corrosion notes	
	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown
Fabrication Notes	No core material present at interior
Material	☐ Copper 🛛 Gold Alloy  ☐ Organic  ☐ Resin  ☐ Stone  ☐ Shell  ☐ Composite  ☐ Unknown  ☐ Not present  ☐ Otr
Material Notes	
Surface Coloration	
Coloration Notes	Coppery 🛛 Gold 🔲 Reddish 📋 Pinkish 🗋 Mixed 🗍 Other
Finishing	Surface Enrichment Polished None Other
Finishing Notes	
L	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
Joinery	All cast 🔲 Mechanical 🔲 Solder 🔲 Other/Unknown
Joinery Notes	
Usewear/toolmarks Usewear/toolmarks	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Pseudomorphs	Pseudomorph Organics None Other Notes
	□ XRF □ X-ray radiograph □ ESEM-EDS □ PIXE □ LA-ICPMS □ Metallography □ Other
Analysis Rec Notes	
[	Special Followup Re-do Conservation required Re-packaging required Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/2/201 💷 Reliability
Location of analysis See	
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed 15.5 Results
Analysis #2	Type XRF Analysis Operator ACH Analysis Date 2/2/201 Reliability
Location of analysis See	
	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed



Museum/Object Info	
Object/Catalogue #	053983.000 Owner NMAI Count Curation Location
Object Class	Bead Object Sub-Class
Country	Colombia Province Area
Site	Sinu River Geographic Zone Style
Provenience Documentation	
Accession	# Name in Records
Collecto	Sinu River, 140 Miles Above Mou
Dono	r Date Accessioned Cylindrical Gold Bead Ends Tu
Cultural IE	Period
Catalogue Info	Accession Info
Research Notes	s References
Technical Examination	🛿 Examination 🖾 Visual 🖾 Microscopy 🖾 MicroPhoto 🗋 Other Exam Operator ACH 🛛 Exam date 🗌 📰
Description	Two tubular beads with visible joins down one side.
Measurements	Bead 1) Diam. 6.7mm x Length 28.5mm
Le	ngth: Width: Height: Diam.: Thickness 0.7 Weight:
Condition/Treatment Notes	good
Corrosion	X None Green-Surface Green-Core Black-Surface Black-Core Red-Surface Red-Core Other
Corrosion notes	
Primary Fabrication	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown
	Cast- Closed Core Hammered-Sheet Wire/Rod
Fabrication Notes	rolled and joined sheet. Raised rim with flange at the interior.
Material	🗌 Copper 🛛 Gold Alloy 🔲 Organic 🔲 Resin 🔲 Stone 🔲 Shell 🔲 Composite 🔲 Unknown 🔲 Not present 🔲 Otr
Material Notes	
L Surface Coloration	Coppery 🛛 Gold 🔲 Reddish 🔲 Pinkish 🗌 Mixed 🗌 Other
Coloration Notes	
Finishing	Surface Enrichment 🛛 Polished 🗌 None 🔲 Other
Finishing Notes	Polished on exterior, matte on interior.
L Decorative details	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
L	All cast 🔲 Mechanical 🔲 Solder 🛛 Other/Unknown
Joinery Notes	
Usewear/toolmarks	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Usewear/toolmarks Notes	
L Pseudomorphs	Pseudomorph Organics None Other Notes
	XRF X-ray radiograph ESEM-EDS PIXE LA-ICPMS Metallography Other
Analysis Rec Notes	
-	Special Followup Re-do Conservation required Re-packaging required Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/1/201 📖 Reliability
Location of analysis See	
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 3.1 82.7	14.2 . Results
Analysis #2	Type XRF Analysis Operator ACH Analysis Date 2/1/201 📖 Reliability
Location of analysis See	
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 1.7 82.2	



Museum/Object Info	
Object/Catalogue #	# 053985.000 Owner NMAI Count Curation Location
Object Class	Bead Object Sub-Class
Country	/ Colombia Province Sinu River Area
Site	
Provenience Documentation	
Accession	# Name in Records
Collecto	r Date Collected Descent Acy
Dono	Date Accessioned Circular Gold Bead
Cultural II	Period Period
Catalogue Info	o Accession Info
Research Note	s References
Technical Examination	n Examination 🛛 Visual 🖾 Microscopy 🖾 MicroPhoto 🗋 Other Exam Operator ACH 🛛 Exam date 5/16/2011 📰
	Six circular beads Hollow sheet construction bead
Measurements	bead 1)5.6mm diam x 1.7mm long
Le	ingth: Width: Height: Diam.: Thickness Weight:
Condition/Treatment Notes	Overall condition good.
L Corrosion	None Green-Surface Green-Core Black-Surface Black-Core Red-Surface Red-Core Other
Corrosion notes	
	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown
	thick sheet with overlap and seam visible on interior of beads. Join not visible on exterior. No solder visible.
	Bead 6 is curved (slight bevel at edges) and smaller.
Material	Copper 🛛 Gold Alloy Drganic Resin Stone Stone Composite Unknown Not present Otr
Material Notes	
Surface Coloration	🗌 Coppery 🖾 Gold 🔲 Reddish 🔲 Pinkish 🔲 Mixed 🔲 Other
Coloration Notes	
Finishing	Surface Enrichment 🛛 Polished 🔲 None 🔲 Other
Finishing Notes	
Decorative details	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
Joinery	All cast 🛛 Mechanical 🔲 Solder 🖾 Other/Unknown
Joinery Notes	Seam visible on all of the beads
Usewear/toolmarks Usewear/toolmarks	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
ا Pseudomorphs	Pseudomorph     Organics     None     Other Notes
	□ XRF □ X-ray radiograph □ ESEM-EDS □ PIXE □ LA-ICPMS □ Metallography □ Other
Analysis Rec Notes	
	Special Followup Re-do Conservation required Re-packaging required Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/1/201 💷 Reliability
Location of analysis See	
Cu Au Elements 1.5 83.1	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Analysis #2	Type XRF Analysis Operator ACH Analysis Date 2/1/201 📰 Reliability
Location of analysis See	
Cu Au	Analysis location notes bead 2
Elements 0.9 81.6	



Museum/Object Info	
Object/Catalogue #	# 053988.000 Owner Count Curation Location
Object Class	Bead Object Sub-Class
Country	/ Colombia Province Area
Site	Sinu River Geographic Zone Style
Provenience Documentation	
Accession	# Name in Records
Collecto	
Dono	Date Accessioned Gold Bead Cylindrical Reinforc
Cultural II	D Period Period
Catalogue Inf	o Accession Info
Research Note	s References
Technical Examination	🛿 Examination 🖾 Visual 🖾 Microscopy 🖾 MicroPhoto 🗋 Other Exam Operator ACH 🛛 Exam date 5/16/2011 [[[]]
	Three rolled and joined beads with raised rims and visible seams. The first bead is gold colored and smaller than the other two, which are copper colored
Measurements	1) length 14.9mm x 3.9mm diameter
	ngth: Width: Height: Diam.: Thickness Weight:
Condition/Treatment Notes	Good condition
Corrosion	🛛 None 🔲 Green-Surface 🔲 Green-Core 🔲 Black-Surface 📄 Black-Core 📄 Red-Surface 📄 Red-Core 📄 Other
Corrosion notes	
	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown
Fabrication Notes	Hammered sheet, rolled into a tube. Appears joined but the seams are visible and raised.
	Overlap on copper beads ~1.7mm
	Copper Gold Alloy Organic Resin Stone Shell Composite Unknown Not present Otr
Material Notes	Bead 1 is higher in gold. Beads 2-3 are higher in Copper
Surface Coloration	🛛 Coppery 🖾 Gold 🔲 Reddish 🔲 Pinkish 🔲 Mixed 🔲 Other
Coloration Notes	Bead 1= copper
Finishing	Surface Enrichment Delished None Other
Finishing Notes	
Decorative details	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
Joinery	All cast Mechanical Solder Other/Unknown
Joinery Notes	
Usewear/toolmarks Usewear/toolmarks Notes	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
ا Pseudomorphs	Pseudomorph     Organics     None     Other Notes
	□ XRF □ X-ray radiograph □ ESEM-EDS □ PIXE □ LA-ICPMS □ Metallography □ Other
Analysis Rec Notes	
•	Special Followup Re-do Conservation required Re-packaging required Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/1/201 IIII Reliability
Location of analysis See	
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 0.1 88.3	
Analysis #2	Type XRF Analysis Operator ACH Analysis Date 2/1/201 📰 Reliability
Location of analysis See	
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 42.2 49.2	



Museum/Object Info	
Object/Catalogue #	# 053989.000 Owner NMAI Count Curation Location
Object Class	
Country	
Site	Sinu River Geographic Zone Style
Provenience	e Field Notes Accession docs/letters Stylistic Other
Documentation	<sup>n</sup> □ Publication □ Inferred □ None
Accession	# Name in Records
Collecto	053989.000 Items: 1
Dono	Sinu River, 140 Miles Above Mor
Cultural II	
Catalogue Inf	
Research Note	s References
Technical Examination	🛿 Examination 🖾 Visual 🖾 Microscopy 🖾 MicroPhoto 🗋 Other Exam Operator ACH 🛛 Exam date 5/16/2011 📗
Description	Rolled tubular bead. no join
Measurements	28mm long x 4.8mm diam.
	ength: 28mm Width: Height: Diam.: 4.8mm Thickness Weight:
	good
Condition/ realment Notes	
	🛛 None 🔲 Green-Surface 🔲 Green-Core 🗌 Black-Surface 🔲 Black-Core 🔲 Red-Surface 🔲 Red-Core 🔲 Other
Corrosion notes	
Primary Fabrication	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown
·	Cast- Closed Core Hammered-Sheet Wire/Rod
Fabrication Notes	
Material	Copper 🛛 Gold Alloy 🗋 Organic 🗋 Resin 🗋 Stone 📄 Shell 📄 Composite 📄 Unknown 📄 Not present 📄 Otr
Material Notes	
Surface Coloration	
	Coppery 🛛 Gold 🗌 Reddish 🗋 Pinkish 🗋 Mixed 🗋 Other
Coloration Notes	
Finishing	Surface Enrichment Polished None Other
Finishing Notes	
Decorative details	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
· · · ·	All cast Mechanical Solder Other/Unknown
Joinery Notes	
Usewear/toolmarks	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Usewear/toolmarks Notes	
Pseudomorphs	Pseudomorph Organics None Other Notes
Analysis rec's	XRF X-ray radiograph ESEM-EDS PIXE LA-ICPMS Metallography Other
Analysis Rec Notes	
	Special Followup Re-do Conservation required Re-packaging required Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/1/201 💷 Reliability
Location of analysis See	
Cu Au	Analysis location notes
Elements 5.3 81.2	
Analysis #2	Type Analysis Operator Analysis Date Reliability
Location of analysis	Analysis location notes
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements	



Museum/Object Info	
Object/Catalogue #	058080.000 Owner NMAI Count Curation Location
Object Class	Bead Object Sub-Class
Country	Colombia Province Rio Mira Area
Site	Geographic Zone Style Style
Provenience Documentation	Field Notes       Accession docs/letters       Stylistic       Other         Publication       Inferred       None
Accession #	Name in Records
Collector	Date Collected Date C
Donor	Date Accessioned Cold Bead
Cultural ID	Period Period
Catalogue Info	Accession Info
Research Notes	References
Technical Examination	Examination 🛛 Visual 🖾 Microscopy 🖾 MicroPhoto 🗌 Other Exam Operator ACH Exam date 5/24/2011 📺
	hree beads, two small circular beads round in cross section and profile with a closed join and one rolled tubular bead with no in.
Measurements 7.	8mm long (tubular) x 2.5mm diam (tubular)
Len	
Condition/Treatment Notes	
Corrosion 🔽	None Green-Surface Green-Core Black-Surface Black-Core Red-Surface Red-Core Other
Corrosion notes	
Primary Fabrication	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown
	Cast- Closed Core Hammered-Sheet Wire/Rod
Fabrication Notes A	Il fabricated from hammered sheet. The two circular beads have bonded joins that are visible on the exterior.
Material	] Copper 🖾 Gold Alloy □ Organic □ Resin □ Stone □ Shell □ Composite □ Unknown □ Not present □ Otr
Material Notes	
Surface Coloration	Coppery 🛛 Gold 🔲 Reddish 🔲 Pinkish 🗌 Mixed 🗋 Other
Coloration Notes	
Finishing	Surface Enrichment 🛛 Polished 🔲 None 🔲 Other
Finishing Notes	
_	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
· _	All cast Dechanical Solder A Other/Unknown
Joinery Notes	
Usewear/toolmarks Usewear/toolmarks Usewear/toolmarks Notes	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Pseudomorphs	Pseudomorph  Organics  None  Other Notes
Analysis rec's	] XRF 🔲 X-ray radiograph 🔲 ESEM-EDS 🔲 PIXE 🔲 LA-ICPMS 🔲 Metallography 🔲 Other
Analysis Rec Notes	
C	Special 🔲 Followup 🔲 Re-do 🔲 Conservation required 🔲 Re-packaging required 🔲 Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/1/201 🛄 Reliability
Location of analysis See p	hoto or .evt file Analysis location notes Bead 1
	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed 17.1
Analysis #2	Type XRF Analysis Operator ACH Analysis Date 2/1/201 📰 Reliability
Location of analysis See p	
	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed



Museum/Object Info	
Object/Catalogue #	058132.000 Owner Count Curation Location
Object Class	Bead Object Sub-Class
Country	Colombia Province Area
Site	Sinu River Geographic Zone Style
Provenience Documentation	Field Notes       Accession docs/letters       Stylistic       Other         Publication       Inferred       None
Accession #	Name in Records
Collector	Date Collected Date Collected Colombia Acy
Donor	Hollow Gold Bead
Cultural ID	
Catalogue Info	Accession Info
Research Notes	References
Technical Examination	Examination 🛛 Visual 🖾 Microscopy 🖾 MicroPhoto 🔲 Other Exam Operator ACH 🛛 Exam date 5/16/2011 🔝
	tollow biconical bead. Round in cross-section
Measurements	
	ngth: Width: Height: Diam.: Thickness Weight:
F	Good
Corregion	
Corrosion Corrosion notes	None Green-Surface Green-Core Black-Surface Black-Core Red-Surface Red-Core Other
L	
	☐ Cast- Open Back ☐ Cast- Solid ☐ Hammered-Sheathing ☐ Other/Unknown ☐ Cast- Closed Core ☑ Hammered-Sheet ☐ Wire/Rod
_	wo sides made from hammered sheet cut into a circle and perforated at the center. Two sides joined at the outside edges
(	solder?)
Material	Copper Gold Alloy Organic Resin Stone Shell Composite Unknown Not present Ot
Material Notes	
Surface Coloration	Coppery Gold Reddish Pinkish Mixed Other
Coloration Notes	
Finishing	Surface Enrichment 🛛 Polished 🗌 None 🔲 Other
Finishing Notes	
Decorative details	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
Joinery	All cast 🔲 Mechanical 🖾 Solder 🖾 Other/Unknown
Joinery Notes	
Usewear/toolmarks	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
L Pseudomorphs	Pseudomorph Organics None Other Notes
	XRF X-ray radiograph ESEM-EDS PIXE LA-ICPMS Metallography Other
Analysis Rec Notes	
[	☐ Special  ☐ Followup  ☐ Re-do  ☐ Conservation required  ☐ Re-packaging required  ☐ Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/1/201 📖 Reliability
Location of analysis See	
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 0.1 83.0	
Analysis #2	Type Analysis Operator Analysis Date Reliability
Location of analysis	Analysis location notes
	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements	



Museum/Object Info	
Object/Catalogue	# 058148.000 Owner NMAI Count Curation Location
Object Clas	s bead Object Sub-Class
Country	/ Colombia Province Area
Site	
Provenienc Documentatio	
Accession	# Name in Records
Collecto	Date Collected 058148.000 Items: 1 Colombia Acy
Dono	Date Accessioned Gold Bead
Cultural I	Period
Catalogue Inf	Accession Info
Research Note	s References
Technical Examination	🛿 Examination 🖾 Visual 🖾 Microscopy 🖾 MicroPhoto 🗋 Other Exam Operator ACH 🛛 Exam date 5/16/2011 📗
Description	Profile: round
	Cross section: round
Measurements	2.9mm long, 3mm diam., 0.32mm wide
Le	ength: Width: Height: Diam.: Thickness Weight:
Condition/Treatment Notes	good.
Corrosion	None Green-Surface Green-Core Black-Surface Black-Core Red-Surface Red-Core Other
Corrosion notes	
Primary Fabrication	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown
,	Cast- Closed Core Hammered-Sheet Wire/Rod
Fabrication Notes	
Material	Copper 🛛 Gold Alloy 🗌 Organic 🔲 Resin 🔲 Stone 🔲 Shell 🔲 Composite 🔲 Unknown 📄 Not present 🗍 Oth
Material Notes	
	Coppery 🖾 Gold 🗌 Reddish 🗋 Pinkish 🗋 Mixed 🗋 Other
Coloration Notes Finishing	Surface Enrichment 🛛 Polished 🗌 None 🔲 Other
5	Surface Enrichment Polished None Other
Finishing Notes	
Decorative details	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
Joinery	All cast Mechanical Solder Other/Unknown
Joinery Notes	Joined seam. seam visible and overlap on interior
Usewear/toolmarks Usewear/toolmarks Notes	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Pseudomorphs	Pseudomorph      Organics      None      Other Notes
	□ XRF □ X-ray radiograph □ ESEM-EDS □ PIXE □ LA-ICPMS □ Metallography □ Other
Analysis Rec Notes	
	Special Followup Re-do Conservation required Re-packaging required Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/1/201 IIII Reliability
Location of analysis See	
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 0.2 85.4	
Analysis #2	Type Analysis Operator Analysis Date Reliability
Location of analysis	Analysis location notes
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements	



Museum/Object Info	
Object/Catalogue #	061293.000 Owner NMAI Count Curation Location
Object Class	bead Object Sub-Class
Country	Honduras Province Area
Site	Geographic Zone Style
Provenience Documentation	
Accession	# Name in Records
Collecto	r Date Collected Determined Date Collected Determined D
Donc	r Date Accessioned Bead
Cultural II	Period Period
Catalogue Inf	Accession Info
Research Note	s References
Technical Examination	n Examination 🖾 Visual 🖾 Microscopy 🖾 MicroPhoto 🗋 Other Exam Operator ACH 🛛 Exam date 5/16/2011 🔝
Description	Round beads of ceramic/clay (?) substrate with a thin shell of gold on the surface and a hole drilled through the center
Measurements	15.3mm diam.
	ngth: Width: Height: Diam.: 15.3mm Thickness Weight:
	fair condition. The gold surface layer has been abraded away from the surface in several areas, revealing the substrate and several areas have thin areas of gold peeling back.
Corrosion	None 🔲 Green-Surface 🔲 Green-Core 🔲 Black-Surface 🗌 Black-Core 🔲 Red-Surface 🔲 Red-Core 🗌 Other
Corrosion notes	
	□ Cast- Open Back □ Cast- Solid □ Hammered-Sheathing ⊠ Other/Unknown ⊠ Cast- Closed Core □ Hammered-Sheet □ Wire/Rod
Fabrication Notes	thin gold possibly cast over clay core
Material	Copper 🛛 Gold Alloy 🗌 Organic 🔲 Resin 🔲 Stone 🔲 Shell 🔲 Composite 🔲 Unknown 📄 Not present 🔲 Oth
Material Notes	
	Coppery 🛛 Gold 🔲 Reddish 🔲 Pinkish 🗌 Mixed 🗍 Other
Coloration Notes Finishing	Surface Enrichment 🛛 Polished 🔲 None 🔲 Other
Finishing Notes	Surface Enrichment 🛛 Polished 🔲 None 🔲 Other
I mishing notes	
Decorative details	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
Joinery	All cast Mechanical Solder Other/Unknown
Joinery Notes	
Usewear/toolmarks Usewear/toolmarks Notes	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Pseudomorphs	Pseudomorph     Organics     None     Other Notes
	XRF XRF X-ray radiograph ESEM-EDS PIXE LA-ICPMS Metallography Other
Analysis Rec Notes	Analysis of substrate material?
	Special Followup Re-do Conservation required Re-packaging required Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/1/201 📖 Reliability
Location of analysis See	
Cu Au Elements 12.2 47.9	Ag     Zn     Cd     As     Ni     Fe     Sn     Sb     Hg     Pb     Bi     Trace     Removed       [39.9] <t< td=""></t<>
Analysis #2	Type XRF Analysis Operator ACH Analysis Date 2/1/201 Reliability
Location of analysis See	
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed



Museum/Object Info	
Object/Catalogue #	077107.000 Owner NMAI Count Curation Location
Object Class	Bead Object Sub-Class
Country	Colombia Province Santander Area
Site	Geographic Zone Style
Provenience Documentation	Field Notes       Accession docs/letters       Stylistic       Other         Publication       Inferred       None
Accession #	
Collector	Date Collected Date Collected Acy
Donor	Date Accessioned Bead
Cultural ID	Period
Catalogue Info	Accession Info
Research Notes	References
Technical Examination	Examination 🛛 Visual 🖾 Microscopy 🖾 MicroPhoto 🗋 Other Exam Operator ACH Exam date 5/16/2011
_	roken fragment of a long tubular bead. Hammered sheet
	4mm x 15mm (<0.1mm thickness)
	gth: Width: Height: Diam.: Thickness Weight:
Condition/Treatment Notes	
	None 🔲 Green-Surface 🗌 Green-Core 🗋 Black-Surface 📄 Black-Core 🔲 Red-Surface 📄 Red-Core 🗋 Other
Corrosion notes	
	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown
Fabrication Notes for	olds and layers of thin hammered sheet
L Material	Copper ⊠ Gold Alloy □ Organic □ Resin □ Stone □ Shell □ Composite □ Unknown □ Not present □ Otf
Material Notes	
L	
_	Coppery 🛛 Gold 🔲 Reddish 🗋 Pinkish 🗋 Mixed 🗋 Other
Coloration Notes	Surface Enrichment 🛛 Polished 🗋 None 🗋 Other
° -	Surface Enrichment X Polished None Other
Finishing Notes	
Decorative details	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
Joinery	All cast Mechanical Solder Other/Unknown
Joinery Notes	
Usewear/toolmarks Usewear/toolmarks Notes	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Pseudomorphs	Pseudomorph  Organics  None  Other Notes
Analysis rec's	XRF   X-ray radiograph   ESEM-EDS   PIXE   LA-ICPMS   Metallography   Other
Analysis Rec Notes	
[	Special Followup Re-do Conservation required Re-packaging required Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/1/201 📖 Reliability
Location of analysis See	
	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 0.1 82.1	
Analysis #2	Type XRF Analysis Operator ACH Analysis Date 2/1/201 📰 Reliability
Location of analysis See	
	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 82.2	



Museum/Object Info	
Object/Catalogue #	077108.000 Owner NMAI Count Curation Location
Object Class	bead Object Sub-Class
Country	Colombia Province Santander Area
Site	Geographic Zone Style
Provenience Documentation	
Accession #	# Name in Records
Collecto	077108,000 Items: 3
Dono	r Date Accessioned Bord
Cultural IE	Period Period
Catalogue Info	Accession Info
Research Notes	s References
Technical Examination	🛿 Examination 🖾 Visual 🖾 Microscopy 🖾 MicroPhoto 🔲 Other Exam Operator ACH 🛛 Exam date 5/16/2011 🔛
Description	Three rolled sheet beads not joined at the end. Possible example of stage in bead fabrication before joining.
Measurements	4.2mm long (diameter not possible because squished)
L	ngth: Width: Height: Diam.: Thickness Weight:
Condition/Treatment Notes	
L Corrosion	None Green-Surface Green-Core Black-Surface Black-Core Red-Surface Red-Core Other
Corrosion notes	
L Primary Fabrication	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown
r finary r abrication	Cast- Closed Core Hammered-Sheet Wire/Rod
Fabrication Notes	
L Material	□ Copper □ Gold Alloy □ Organic □ Resin □ Stone □ Shell □ Composite □ Unknown □ Not present □ Otr
Material Notes	
L	
Coloration Notes	Coppery Gold Reddish Pinkish Mixed Other
Finishing	Surface Enrichment Polished None Other
Finishing Notes	
r maning Notes	
Decorative details	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
· · ·	All cast Mechanical Solder Other/Unknown
Joinery Notes	
Usewear/toolmarks Usewear/toolmarks Notes	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Pseudomorphs	Pseudomorph Organics None Other Notes
Analysis rec's	XRF X-ray radiograph ESEM-EDS PIXE LA-ICPMS Metallography Other
Analysis Rec Notes	
-	Special Followup Re-do Conservation required Re-packaging required Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/1/201 📖 Reliability
Location of analysis See	
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 0.2 71.3	28.5
Analysis #2	Type XRF Analysis Operator ACH Analysis Date 2/1/201 📰 Reliability
Location of analysis See	
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 4.1 78.4	17.5 Results



Museum/Object Info	
Object/Catalogue	# 077109.000 Owner NMAI Count Curation Location
Object Class	Bead Object Sub-Class
Country	Colombia Province Santander Area
Site	
Provenienc Documentation	
Accession	
Collecto	Date Collected 077105.000 Herrs: 6
Donc	Date Accessioned Bead
Cultural II	D Period Period
Catalogue Inf	Accession Info
Research Note	s References
Technical Examination	🛿 Examination 🖾 Visual 🖾 Microscopy 🖾 MicroPhoto 🗋 Other Exam Operator ACH 🔤 Exam date 5/16/2011 🔝
Description	Hammered sheet bead fragments. Frag 1+4= gold Frags.2+3=copper colored
Measurements	
	ength: Width: Height: Diam.: Thickness Weight:
Condition/Treatment Notes	Broken into fragments
Corrosion	🛛 None 🔲 Green-Surface 🔲 Green-Core 🗌 Black-Surface 📄 Black-Core 🔲 Red-Surface 🔲 Red-Core 🔲 Other
Corrosion notes	
Primary Fabrication	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown
	Cast- Closed Core Hammered-Sheet Wire/Rod
Fabrication Notes	
Material	
Material Notes	Copper 🖾 Gold Alloy 🗋 Organic 🗋 Resin 🗋 Stone 🗋 Shell 📋 Composite 📋 Unknown 📄 Not present 🗋 Oth
	🛛 Coppery 🖾 Gold 🔲 Reddish 🔲 Pinkish 🔲 Mixed 🗍 Other
Coloration Notes	
Finishing	Surface Enrichment Delished None Other
Finishing Notes	
Decorative details	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
Joinery	All cast Mechanical Solder Other/Unknown
Joinery Notes	
Usewear/toolmarks	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Usewear/toolmarks Notes	
	Pseudomorph      Organics      None      Other Notes
	XRF X-ray radiograph ESEM-EDS PIXE LA-ICPMS Metallography Other
Analysis Rec Notes	
	Special Followup Conservation required Re-packaging required Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/1/201 💷 Reliability
Location of analysis See	
Cu Au Elements 0.4 91.7	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 0.4 91.7	
Analysis #2	Type Analysis Operator Analysis Date Reliability
Location of analysis	Analysis location notes
<u>Cu</u> Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements	



Museum/Object Info	
Object/Catalogue #	077130.00 Owner Count Curation Location
Object Class	Bead Object Sub-Class
Country	Colombia Province Santa Area
Site	Geographic Zone Style
Provenience Documentation	
Accession #	# Name in Records
Collector	Date Collected Date Collected
Dono	Prof.
Cultural IE	Period Period
Catalogue Info	Accession Info
Research Notes	References
Technical Examination	🛚 Examination 🛛 Visual 🖾 Microscopy 🖾 MicroPhoto 🔲 Other Exam Operator ACH 🛛 Exam date 5/16/2011 📗
Description	Rolled bead
Measurements	4mm diam. x 10mm long
Lei	ngth: 10mm Width: Height: Diam.:4mm Thickness Weight:
Condition/Treatment Notes	Good. Burial soil encrusted between the walls of the bead
Corrosion	🛛 None 🔲 Green-Surface 🔲 Green-Core 🗌 Black-Surface 🗌 Black-Core 🔲 Red-Surface 🔲 Red-Core 🔲 Other
Corrosion notes	
	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown
	Hammered sheet, cut and rolled
Material	Copper ⊠ Gold Alloy □ Organic □ Resin □ Stone □ Shell □ Composite □ Unknown □ Not present □ Otr
ŕ	Copper 🖾 Gold Alloy 🗋 Organic 🔲 Resin 📄 Stone 📄 Shell 📄 Composite 📄 Unknown 📄 Not present 📄 Oth
Material Notes	
-	Coppery 🛛 Gold 🔲 Reddish 🔲 Pinkish 🗌 Mixed 🗋 Other
Coloration Notes	
	Surface Enrichment 🛛 Polished 🗌 None 🗋 Other
Finishing Notes	
L Decorative details	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
Joinery	All cast 🔲 Mechanical 🔲 Solder 🔲 Other/Unknown
Joinery Notes	not joined
Usewear/toolmarks	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Usewear/toolmarks Notes	
Pseudomorphs	Pseudomorph Organics None Other Notes
	XRF X-ray radiograph ESEM-EDS PIXE LA-ICPMS Metallography Other
Analysis Rec Notes	
-	Special 🔲 Followup 🔲 Re-do 🔲 Conservation required 🔲 Re-packaging required 🔲 Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/1/201 📖 Reliability
Location of analysis See	
<u>Cu</u> Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 0.1 91.2	8.7 Results
Analysis #2	Type Analysis Operator Analysis Date Reliability
Location of analysis	Analysis location notes
Cu Au Elements	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed Results



Museum/Object Info	
Object/Catalogue #	102603.000 Owner NMAI Count Curation Location
Object Class	
Country	/ Mexico Province Area
Site	Valley of Mexico Geographic Zone Style Style
Provenience Documentation	
Accession	# Name in Records
Collecto	Date Collected Date Collected
Dono	Date Accessioned Date Accessioned
Cultural II	D Period Period
Catalogue Inf	o Accession Info
Research Note	s References
Technical Examination	🛿 Examination 🖾 Visual 🖾 Microscopy 🖾 MicroPhoto 🗋 Other Exam Operator ACH 🛛 Exam date 5/18/2011 [ 🏢
Description	Skull ? shaped beads cast over a black core with a hole drilled through the center
Measurements	
Le	ingth: Width: Height: Diam.: Thickness Weight:
Condition/Treatment Notes	Good
Corrosion	None Green-Surface Green-Core Black-Surface Black-Core Red-Surface Red-Core Other
Corrosion notes	
Primary Fabrication	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown
	Cast- Closed Core Hammered-Sheet Wire/Rod
Fabrication Notes	Black core present
Material	🗋 Copper 🖾 Gold Alloy 🗋 Organic 🗋 Resin 📄 Stone 📄 Shell 📄 Composite 📄 Unknown 📄 Not present 📄 Otr
Material Notes	
Surface Coloration	Coppery 🛛 Gold 🔲 Reddish 🔲 Pinkish 🗌 Mixed 🗌 Other
Coloration Notes	
Finishing	Surface Enrichment 🛛 Polished 🗌 None 🔲 Other
Finishing Notes	
	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
	All cast Mechanical Solder Other/Unknown
Joinery Notes	
Usewear/toolmarks Usewear/toolmarks Notes	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Pseudomorphs	Pseudomorph     Organics     None     Other Notes
Analysis rec's	XRF X-ray radiograph ESEM-EDS PIXE LA-ICPMS Metallography Other
Analysis Rec Notes	
	Special Followup Re-do Conservation required Re-packaging required Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/2/201 📖 Reliability
Location of analysis See	
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 19.4 73.8	6.8
Analysis #2	Type XRF Analysis Operator ACH Analysis Date 2/2/201 📰 Reliability
Location of analysis See	
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 21.5 70.9	7.6



Museum/Object Info	
Object/Catalogue #	# 109850.000 Owner NMAI Count Curation Location
Object Class	s Bead Object Sub-Class
Country	/ Ecuador Province Esmeraldas Area
Site	La Tolita Geographic Zone Style Style
Provenience	
Documentation	<sup>n</sup> □ Publication □ Inferred □ None
Accession	# Name in Records
Collecto	Date Collected
Dono	Province of Esmeralidas
Cultural II	
Catalogue Info	Accession Info
Catalogue III	
Research Note	s References
Technical Examination	n Examination 🛛 Visual 🖾 Microscopy 🖾 MicroPhoto 🗌 Other Exam Operator ACH 🔤 Exam date 5/25/2011 🛄
Description	Sheet bead rolled and unjoined with a hammered wire strung through it and bent
Measurements	rolled bead = 5.5mm long
Le	ength: Width: Height: Diam.: Thickness Weight:
Condition/Treatment Notes	Wire is bent and rolled bead is slightly squashed. There is burial soil present on the interior of the bead.
l Corrosion	X None  ☐ Green-Surface  ☐ Green-Core  ☐ Black-Surface  ☐ Black-Core  ☐ Red-Surface  ☐ Red-Core  ☐ Other
Corrosion notes	
l	
	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown Cast- Closed Core Hammered-Sheet Wire/Rod
-	
Fabrication Notes	the wire is entirely square in cross-section
I Material	Copper 🛛 Gold Alloy 🗌 Organic 🔲 Resin 🔲 Stone 🔲 Shell 🔲 Composite 🔲 Unknown 📄 Not present 🗍 Oth
Material Notes	
Surface Coloration	Coppery 🛛 Gold 🔲 Reddish 🗋 Pinkish 🗋 Mixed 🗋 Other
Coloration Notes	
Finishing	Surface Enrichment Polished None Other
Finishing Notes	
Decerative detaile	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
L L	All cast Mechanical Solder Other/Unknown
Joinery Notes	
Usewear/toolmarks	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Usewear/toolmarks Notes	
	Pseudomorph      Organics      None      Other Notes
	XRF X-ray radiograph ESEM-EDS PIXE LA-ICPMS Metallography Other
Analysis Rec Notes	
	Special Followup Re-do Conservation required Re-packaging required Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/4/201 📰 Reliability
Location of analysis See	photo or .evt file Analysis location notes
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 4.1 86.1	9.8 Results
Analysis #2	
	Type     Analysis Operator     Analysis Date     Image: Reliability
Location of analysis	Analysis location notes
Elements	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed



Museum/Object Info	
Object/Catalogue	# 109860.000 Owner NMAI Count Curation Location
Object Clas	s Bead Object Sub-Class
Countr	
Site	
Provenienc	
Documentatio	n Publication Inferred None
Accession	# Name in Records
Collecto	109860.000 Items: 1
Dono	
Cultural I	
Catalogue Int	
Catalogue III	
Research Note	References
Technical Examination	🛚 Examination 🛛 Visual 🖾 Microscopy 🖾 MicroPhoto 🔲 Other Exam Operator 🗚 🛛 Exam date 5/25/2011 🛛 🏢
Description	Drawn and cut wire with a rolled and joined tubular bead
Measurements	2.5mm diam. x 23.5mm long
Le	ength: Width: Height: Diam.: Thickness Weight:
Condition/Treatment Notes	Good
Corrector	
Corrosion Corrosion notes	X None Green-Surface Green-Core Black-Surface Black-Core Red-Surface Core Other
Conosion notes	
Primary Fabrication	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown
	Cast- Closed Core X Hammered-Sheet X Wire/Rod
Fabrication Notes	Drawn wire (striated pattern) and a rolled sheet bead
	Copper 🛛 Gold Alloy Crganic Resin Stone Shell Composite Unknown Not present Oth
Material Notes	
Surface Coloration	Coppery 🛛 Gold 🔲 Reddish 🔲 Pinkish 🔲 Mixed 🔲 Other
Coloration Notes	
Finishing	Surface Enrichment Polished None Other
Finishing Notes	
Decorative details	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
Joinery	All cast Mechanical Solder Other/Unknown
Joinery Notes	Sheet bead is joined
Usewear/toolmarks	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Usewear/toolmarks Notes	
Pseudomorphs	Pseudomorph     Organics     None     Other Notes
	□ XRF □ X-ray radiograph □ ESEM-EDS □ PIXE □ LA-ICPMS □ Metallography □ Other
Analysis Rec Notes	
-	Special Followup Re-do Conservation required Re-packaging required Other
Analysis #1	
	Type XRF Analysis Operator ACH Analysis Date 2/15/20 📰 Reliability
Location of analysis See	
Cu Au Elements 4.7 83.9	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Analysis #2	Type Analysis Operator Analysis Date Reliability
Location of analysis	Type Analysis Operator Analysis Date Reliability Analysis location notes
Cu Au	Analysis location notes
Elements	Ag Zil Cu As Ni re Sil Sb rig Fb Bi Hace Renioved Results



Museum/Object Info	
Object/Catalogue #	109925.000 Owner NMAI Count Curation Location
Object Class	Bead Object Sub-Class
Country	Ecuador Province Esmeraldas Area
Site	La Tolita Geographic Zone Style
Provenience Documentation	
Accession #	# Name in Records
Collecto	Date Collected Determination Date Collected Acy
Dono	
Cultural IE	Period
Catalogue Info	Accession Info
Research Notes	s References
Technical Examination	Examination 🛛 Visual 🖾 Microscopy 🖾 MicroPhoto 🗌 Other Exam Operator ACH Exam date 5/25/2011
-	Nine round beads with raised rims.
ļ	
-	range from 4.5 mm - 10,.5mm long
-	ngth: Width: Height: Diam.: Meight: Weight:
	Most of the beads are dented and partially squashed. There is burial dirt present and clear lacquer with paper fragments still attached from previous mounting methods.
Corrosion	X None 🔲 Green-Surface 🗌 Green-Core 🗌 Black-Surface 🗌 Black-Core 🔲 Red-Surface 🔲 Red-Core 🔲 Other
Corrosion notes	
	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown
Fabrication Notes	Core material not present. raised flange around the center of the interior of some beads.
L Material	□ Copper 🛛 Gold Alloy □ Organic □ Resin □ Stone □ Shell □ Composite □ Unknown □ Not present □ Oth
	There are white metal (PGE) inclusions visible in the surface of bead 3
L	🗙 Coppery 🛛 Gold 🔲 Reddish 🔲 Pinkish 🖾 Mixed 🖾 Other
-	Coppery Gold CReddish Pinkish Mixed Other Ranges from slightly reddish gold to gold with slightly silvery inclusions
L	Surface Enrichment Polished None Other
Finishing Notes	
Decorative details	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
Joinery	All cast Mechanical Solder Other/Unknown
Joinery Notes	
LUsewear/toolmarks	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
L Pseudomorphs	Pseudomorph Organics None Other Notes
	XRF X-ray radiograph ESEM-EDS PIXE LA-ICPMS Metallography Other
_	PGE inclusions?
-	Special 🔲 Followup 🔲 Re-do 🔲 Conservation required 🔲 Re-packaging required 🔲 Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/4/201 💷 Reliability
Location of analysis See	
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 6.4 86.2	7.5         Results
Analysis #2	Type XRF Analysis Operator ACH Analysis Date 2/4/201 📰 Reliability
Location of analysis See	
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 9.4 77.9	12.7 Results



Museum/Object Info	
Object/Catalogue	# 150903.000 Owner NMAI Count Curation Location
Object Class	s Bead Object Sub-Class
Country	y Peru Province Area
Site	
Provenienc Documentation	
Accession	# Name in Records
Collecto	
Dono	
Cultural II	D Period Period
Catalogue Inf	Accession Info
Research Note	References
Technical Examination	🛚 Examination 🛛 Visual 🖾 Microscopy 🖾 MicroPhoto 🗋 Other Exam Operator ACH 🛛 Exam date 5/25/2011 📖
Description	8 tubular beads with caps soldered onto the ends.
Measurements	14.5mm long x 3.2mm diam. All of the beads have the same diameter.
	ength:
Condition/Treatment Notes	Good condition.
Corrosion	X None Green-Surface Green-Core Black-Surface Black-Core Red-Surface Red-Core Other
Corrosion notes	
Primary Fabrication	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown
Fabrication Notes	Sheet joined into a tube and soldered. Caps soldered on the ends as well.
Material	└ └ └ └ └ └ └ └ └ └ └ └ └ └ └ └ └ └ └
Material Notes	
	Coppery 🛛 Gold 🗌 Reddish 🔲 Pinkish 🗌 Mixed 🗌 Other
Coloration Notes	
Finishing	Surface Enrichment 🖾 Polished 🗌 None 🗌 Other
Finishing Notes	
Decorative details	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
Joinery	All cast 🔲 Mechanical 🛛 Solder 🔲 Other/Unknown
Joinery Notes	Joins appear soldered and sanded down
Usewear/toolmarks	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
	Scratches from finishing along the joins
Pseudomorphs	Pseudomorph Organics None Other Notes
Analysis rec's	XRF X-ray radiograph ESEM-EDS PIXE LA-ICPMS Metallography Other
Analysis Rec Notes	
	Special Followup Re-do Conservation required Re-packaging required Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/15/20 💷 Reliability
Location of analysis See	photo or .evt file Analysis location notes bead 1
Cu Au Elements 5.3 80.5	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed 14.2 Results
Analysis #2	Type XRF Analysis Operator ACH Analysis Date 2/15/20 📰 Reliability
Location of analysis See	
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed



Museum/Object Info	
Object/Catalogue	# 150905.000 Owner NMAI Count Curation Location
Object Class	s Bead Object Sub-Class
Country	y Peru Province Area
Site	
Provenienc Documentation	
Accession	# Name in Records
Collecto	Date Collected 150905.000 Items: 2 Peru Acy
Dono	Date Accessioned Bead
Cultural II	D Period
Catalogue Inf	Accession Info
Research Note	References
Technical Examination	🛿 Examination 🖾 Visual 🖾 Microscopy 🖾 MicroPhoto 🔲 Other Exam Operator ACH 🛛 Exam date 5/25/2011 📗
Description	Two round globular beads with a seam around the center of the circumference of the bead, likely soldered.
Measurements	8mm long x 9mm diam.
Le	ength: Width: Height: Diam.: Thickness Weight:
Condition/Treatment Notes	Good condition
Corrosion	⊠ None □ Green-Surface □ Green-Core □ Black-Surface □ Black-Core □ Red-Surface □ Red-Core □ Other
Corrosion notes	
Primary Fabrication	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown
	Cast- Closed Core Hammered-Sheet Wire/Rod
	Two conical sides were formed from sheet metal mechanically (dapping block or similar), perforated at the center and and joined together around their edges to form a round bead
Material	Copper 🛛 Gold Alloy Dorganic Resin Stone Shell Composite Unknown Not present Otr
Material Notes	
Surface Coloration	Coppery 🛛 Gold 🗌 Reddish 🔲 Pinkish 🗌 Mixed 🗌 Other
Coloration Notes	
Finishing	Surface Enrichment 🛛 Polished 🗌 None 🔲 Other
Finishing Notes	
Decorative details	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
Joinery	All cast 🔲 Mechanical 🛛 Solder 🔲 Other/Unknown
Joinery Notes	likely soldered
Usewear/toolmarks Usewear/toolmarks Notes	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Pseudomorphs	Pseudomorph      Organics      None      Other Notes
	□ XRF □ X-ray radiograph □ ESEM-EDS □ PIXE □ LA-ICPMS □ Metallography □ Other
Analysis Rec Notes	
	Special Followup Re-do Conservation required Re-packaging required Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/15/20 📖 Reliability
Location of analysis See	
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 5.2 79.7	15.1 Results
Analysis #2	Type XRF Analysis Operator ACH Analysis Date 2/15/20 🛄 Reliability
Location of analysis See	
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 5.8 79.4	14.8 Results



Museum/Object Info	
Object/Catalogue #	
Object Class	s Bead Object Sub-Class
Country	Peru Province Area
Site	
Provenience Documentation	
Accession	# Name in Records 150910.000 Items: 8
Collecto	
Dono	
Cultural IE	Period
Catalogue Info	O Accession Info
Research Note	s References
Technical Examination	n Examination 🛛 Visual 🖾 Microscopy 🖾 MicroPhoto 🗖 Other Exam Operator ACH 🛛 Exam date 5/25/2011 📺
Description	8 Small cylindrical beads joined around the circumference.
Measurements	2.8mm long x 3.17mm
Le	ength: Width: Height: Diam.: Thickness Weight:
Condition/Treatment Notes	Good condition
Corrosion	None Green-Surface Green-Core Black-Surface Black-Core Red-Surface Red-Core Other
Corrosion notes	
Primary Fabrication	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown
,	Cast- Closed Core Hammered-Sheet Wire/Rod
Fabrication Notes	Two sides formed into a cup and crimped around the edges. Joined with solder?
Material	□ Copper 🛛 Gold Alloy □ Organic □ Resin □ Stone □ Shell □ Composite □ Unknown □ Not present □ Otr
Material Notes	
L Surface Coloration	Coppery 🛛 Gold 🔲 Reddish 🗍 Pinkish 🗋 Mixed 🗋 Other
Coloration Notes	
Finishing	Surface Enrichment Polished None Other
Finishing Notes	
l	
	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
	All cast Mechanical Solder Other/Unknown
Joinery Notes	Crimped edges joined around the edges with solder?
Usewear/toolmarks Usewear/toolmarks Notes	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Pseudomorphs	Pseudomorph     Organics     None     Other Notes
Analysis rec's	XRF X-ray radiograph ESEM-EDS PIXE LA-ICPMS Metallography Other
Analysis Rec Notes	
	Special Followup Re-do Conservation required Re-packaging required Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/15/20 📖 Reliability
Location of analysis See	
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 7.6 77.4	15.1 . Results
Analysis #2	Type XRF Analysis Operator ACH Analysis Date 2/15/20 📰 Reliability
Location of analysis See	photo or .evt file Analysis location notes bead 2
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 8.0 77.3	



Museum/Object Info	
Object/Catalogue	# 157245.000 Owner NMAI Count Curation Location
Object Class	s Bead Object Sub-Class
Country	y Peru Province La Libertad Area
Site	
Provenienc Documentation	
Accession	# Name in Records
Collecto	Date Collected
Dono	Date Accessioned
Cultural II	D Period
Catalogue Inf	Accession Info
Research Note	References
Technical Examination	🛚 Examination 🛛 Visual 🖾 Microscopy 🖾 MicroPhoto 🗋 Other Exam Operator ACH 🛛 Exam date 5/16/2011 🔛
Description	13 Small round globular beads with a seam around the center of the circumference of the bead, likely soldered.
Measurements	
Le	ength: Width: Height: Diam.: Thickness Weight:
Condition/Treatment Notes	Good
Corrosion	□ None □ Green-Surface □ Green-Core
Corrosion notes	Some corrosion at the seam around the center
Primary Fabrication	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown
	Cast- Closed Core Hammered-Sheet Wire/Rod
	Two conical sides were formed from sheet metal mechanically (dapping block or similar), perforated at the center and and joined
	together around their edges to form a round bead
	Copper Gold Alloy Organic Resin Stone Shell Composite Unknown Not present Oth
Material Notes	
	Coppery 🛛 Gold 🗌 Reddish 🗋 Pinkish 🗋 Mixed 🗋 Other
	Slightly silvery
Finishing	Surface Enrichment Delished None Other
Finishing Notes	
Decorative details	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
Joinery	All cast Mechanical Solder Other/Unknown
Joinery Notes	
Usewear/toolmarks	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Usewear/toolmarks Notes	
Pseudomorphs	Pseudomorph Organics None Other Notes
	XRF X-ray radiograph ESEM-EDS PIXE LA-ICPMS Metallography Other
Analysis Rec Notes	
	Special Followup Re-do Conservation required Re-packaging required Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/1/201 💷 Reliability
Location of analysis See	e photo or .evt file Analysis location notes Bead 1
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 1.4 84.8	13.8 Results
Analysis #2	Type XRF Analysis Operator ACH Analysis Date 2/1/201 📰 Reliability
Location of analysis See	
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 1.6 82.5	15.9 Results



Museum/Object Info	
Object/Catalogue #	160304.000 Owner NMAI Count Curation Location
Object Class	Bead Object Sub-Class
Country	Peru Province Dept. of Area
Site	Near Lima Geographic Zone Style
Provenience Documentation	
Accession #	
Collector	Date Collected
Donoi	n Date Accessioned Date CM
Cultural ID	Period Period
Catalogue Info	Accession Info
Research Notes	References
Technical Examination	Examination 🛛 Visual 🖾 Microscopy 🖾 MicroPhoto 🗋 Other Exam Operator ACH 🛛 Exam date 5/13/2011 📖
Description	Round globular beads with a thin raised rim around the perforation on both sides
Measurements	Measurement for bead 1.
Lei	ngth: 7.2mm Width: Height: Diam.: 7.7mm Thickness Weight:
Condition/Treatment Notes	good. tarnished
Corrosion	None 🔲 Green-Surface 🔲 Green-Core 🗌 Black-Surface 🗌 Black-Core 🔲 Red-Surface 🔲 Red-Core 🗌 Other
Corrosion notes	Darkening from surface tarnish
L	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown
	Cast- Closed Core Hammered-Sheet Wire/Rod
Fabrication Notes	
Matarial	
5	□ Copper
Material Notes	
-	Coppery 🔲 Gold 🔲 Reddish 🔲 Pinkish 🗋 Mixed 🖾 Other
	Silver
	Surface Enrichment Polished None Other
Finishing Notes	
Decorative details	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
Joinery	All cast 🔲 Mechanical 🛛 Solder 🔲 Other/Unknown
Joinery Notes	Seam around center of bead
Usewear/toolmarks	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Usewear/toolmarks Notes	
Pseudomorphs	Pseudomorph Organics None Other Notes
Analysis rec's	XRF X-ray radiograph ESEM-EDS PIXE LA-ICPMS Metallography Other
Analysis Rec Notes	
I	🗆 Special 🔲 Followup 🔲 Re-do 🔲 Conservation required 🔲 Re-packaging required 🔲 Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 1/25/20 💷 Reliability
Location of analysis See	photo or .evt file Analysis location notes bead 1
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 6.6 29.6	63.8
Analysis #2	Type XRF Analysis Operator ACH Analysis Date 1/25/20 📖 Reliability
Location of analysis See	
CuAu	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed



Museum/Object Info	
Object/Catalogue	# 163415.000 Owner NMAI Count Curation Location
Object Class	Bead Object Sub-Class
Country	/ Mexico Province Oaxaca Area
Site	
Provenienc Documentatio	
Accession	# Name in Records
Collecto	Date Collected Determined Determi
Dono	Date Accessioned Bead
Cultural I	Period Period
Catalogue Inf	Accession Info
Research Note	s References
Technical Examination	🛿 Examination 🖾 Visual 🖾 Microscopy 🖾 MicroPhoto 🗌 Other Exam Operator ACH 🛛 Exam date 5/18/2011 📗
Description	One round bead of thin gold cast over a black core material. A hole is drilled through the center and the surface is highly polished
Measurements	7.85mm long x 7.96mm diam.
	ength: Width: Height: Diam.: Thickness Weight:
Condition/Treatment Notes	Good condition.
Corrosion	X None  ☐ Green-Surface  ☐ Green-Core  ☐ Black-Surface  ☐ Black-Core  ☐ Red-Surface  ☐ Red-Core  ☐ Other
Corrosion notes	
Primary Fabrication	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown
Fabrication Notes	Black core material is present. There are some casting flaws in the surface where the gold does not completely cover the core
Material	Copper 🛛 Gold Alloy 🗌 Organic 🔲 Resin 🔲 Stone 🗌 Shell 🗍 Composite 🗍 Unknown 🗌 Not present 🗋 Otr
Material Notes	
Surface Coloration	Coppery Gold Reddish Pinkish Mixed Other
Coloration Notes	
Finishing	Surface Enrichment Z Polished None Other
Finishing Notes	
Decorative details	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
Joinery	All cast Mechanical Solder Other/Unknown
Joinery Notes	
Usewear/toolmarks Usewear/toolmarks Notes	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Pseudomorphs	Pseudomorph     Organics     None     Other Notes
Analysis rec's	XRF X-ray radiograph ESEM-EDS PIXE LA-ICPMS Metallography Other
Analysis Rec Notes	
	Special Followup Re-do Conservation required Re-packaging required Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/3/201 💷 Reliability
Location of analysis See	photo or .evt file Analysis location notes
Cu Au Elements 8.7 70.5	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Analysis #2	
	Type Analysis Operator Analysis Date Reliability
Location of analysis	Analysis location notes Analysis location notes
Cu Au Elements	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed


Museum/Object Info	
Object/Catalogue #	# 163614.000 Owner Count Curation Location
Object Class	s bead Object Sub-Class zoomorphic bead
Country	/ Columbia Province Santa Area
Site	
Provenience	
Documentation	Publication Inferred None
Accession	# Name in Records
Collecto	
Donc	Date Accessioned Bead
Cultural II	D Period Period
Catalogue Inf	o Accession Info
Research Note	s References
Technical Examination	n Examination ⊠ Visual ⊠ Microscopy ⊠ MicroPhoto □ Other Exam Operator ACH Exam date 5/16/2011
	Four cast beads in the shape of an animal with humanoid face. Perforation at the sides and an open bottom
Measurements	18.7mm long x 13.6mm high x 10mm wide
	ength: Width: Height: Diam.: Thickness Weight:
	good condition but they have adhesive on one side and the remnants of card or board
Corrector	
Corrosion Corrosion notes	X None Green-Surface Green-Core Black-Surface Black-Core Red-Surface Core Other
-	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown
	Cast- Closed Core Hammered-Sheet Wire/Rod
Fabrication Notes	Cast. dendrites visible in crevices and corners. There is a square opening on the bottom, possible to remove the core from.
Material	□ Copper 🛛 Gold Alloy □ Organic □ Resin □ Stone □ Shell □ Composite □ Unknown □ Not present □ Otr
Material Notes	
	Coppery 🛛 Gold 🗌 Reddish 🗋 Pinkish 🗋 Mixed 🗋 Other
Coloration Notes	
Finishing	Surface Enrichment Polished None Other
Finishing Notes	
Decorative details	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
Joinery	All cast 🔲 Mechanical 🔲 Solder 🔲 Other/Unknown
Joinery Notes	
Usewear/toolmarks	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Usewear/toolmarks Notes	
Pseudomorphs	Pseudomorph Organics None Other Notes
Analysis rec's	XRF X-ray radiograph ESEM-EDS PIXE LA-ICPMS Metallography Other
Analysis Rec Notes	
	Special Followup Re-do Conservation required Re-packaging required Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/1/201 📖 Reliability
Location of analysis See	
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 6.8 78.0	15.1 Results
Analysis #2	
	Type XRF Analysis Operator ACH Analysis Date 2/1/201 Reliability
Location of analysis See	
Cu Au Elements 7.1 77.4	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed



Museum/Object Info	
Object/Catalogue #	163615.000 Owner NMAI Count Curation Location
Object Class	Bead Object Sub-Class
Country	Colombia Province Santa Area
Site	Geographic Zone Style
Provenience	□ Field Notes □ Accession docs/letters □ Stylistic □ Other
Documentation	□ Publication □ Inferred □ None
Accession #	Name in Records
Collector	Date Collected Date Collected
	Santa Morto
Donor	Date Accessioned
Cultural ID	Period Period
Catalogue Info	Accession Info
Research Notes	References
Technical Examination	Examination 🛛 Visual 🖾 Microscopy 🖾 MicroPhoto 🗌 Other Exam Operator ACH Exam date 5/24/2011
Description Fo	our cast rectangular beads with three perforations in each side for stringing
	.2mm x 7.2mm x 4.5mm
	th: 17.2mm Width: 7.2mm Height: 4.5mm Diam.: Thickness Weight:
Condition/Treatment Notes Pa	aper and adhesive residue on one side from past adhesion to card
Corrosion 🔽	None Green-Surface Green-Core Black-Surface Black-Core Red-Surface Red-Core Other
Corrosion notes	
	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown
	Cast- Closed Core Hammered-Sheet Wire/Rod
Fabrication Notes Bla	ack, coarse grained core material present on interior. Holes drilled through core. Dendrites visible on surface
Material	Copper 🛛 Gold Alloy 🗋 Organic 🗋 Resin 📄 Stone 📄 Shell 📄 Composite 📄 Unknown 📄 Not present 📄 Otr
Material Notes	
Surface Coloration	Coppery 🔲 Gold 🔲 Reddish 🔲 Pinkish 🗌 Mixed 🔲 Other
Coloration Notes	
	Surface Enrichment 🛛 Polished 🗌 None 🔲 Other
Finishing Notes	
Decorative details	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
	All cast 🔲 Mechanical 🔲 Solder 🔲 Other/Unknown
Joinery Notes	
· _	
Usewear/toolmarks	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Usewear/toolmarks Notes	
Pseudomorphs	Pseudomorph  Organics  None  Other Notes
Analysis rec's 🛛	XRF 🔲 X-ray radiograph 🔲 ESEM-EDS 🔲 PIXE 🔛 LA-ICPMS 🔲 Metallography 🔲 Other
Analysis Rec Notes	
	Special 🔲 Followup 🔲 Re-do 🔲 Conservation required 🔲 Re-packaging required 🔲 Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/2/201 IIII Reliability
Location of analysis See pl	
	g Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Analysis #2	Type XRF Analysis Operator ACH Analysis Date 2/2/201 📰 Reliability
Location of analysis See pl	
	ng Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed



Museum/Object Info	
Object/Catalogue #	163616.000 Owner NMAI Count Curation Location
Object Class	Bead Object Sub-Class
Country	Colombia Province Santa Area
Site	Geographic Zone Style
Provenience Documentation	
Accession #	# Name in Records
Collector	
Dono	r Date Accessioned Bead
Cultural IE	Period Period
Catalogue Info	Accession Info
Research Notes	
Technical Examination	🛿 Examination 🛛 Visual 🖾 Microscopy 🖾 MicroPhoto 🔲 Other Exam Operator ACH 🛛 Exam date 5/24/2011 📰
Description	Four Long rectangular cast beads with openwork spiral designs on one side and perforations along both sides
	42.6mm long x 6.2 wide x 7.6 high
Lei	ngth: 42.6 Width: 6.2mm Height: 7.6mm Diam.: Thickness Weight:
Condition/Treatment Notes	Good condition. Adhesive and paper residues present from past mounting method
Corrosion	None Green-Surface Green-Core Black-Surface Black-Core Red-Surface Red-Core Other
Corrosion notes	
L Primary Fabrication	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown
	Cast- Closed Core Hammered-Sheet Wire/Rod
Fabrication Notes	No core material present
L Material	☐ Copper 🛛 Gold Alloy  ☐ Organic  ☐ Resin  ☐ Stone  ☐ Shell  ☐ Composite  ☐ Unknown  ☐ Not present  ☐ Otf
Material Notes	
L	
-	Coppery 🖾 Gold 🗌 Reddish 🗋 Pinkish 🖾 Mixed 🗋 Other
Coloration Notes Finishing	Mottled coppery and gold surface □ Surface Enrichment 🕅 Polished □ None □ Other
Ŭ I	Surface Enrichment 🛛 Polished 🔲 None 🔲 Other
Finishing Notes	
Decorative details	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
Joinery	All cast Dechanical Solder Other/Unknown
Joinery Notes	
Usewear/toolmarks   Usewear/toolmarks Notes	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
L Pseudomorphs	Pseudomorph Organics None Other Notes
	□ XRF □ X-ray radiograph □ ESEM-EDS □ PIXE □ LA-ICPMS □ Metallography □ Other
Analysis Rec Notes	
	Special 🔲 Followup 🔲 Re-do 🔲 Conservation required 🔲 Re-packaging required 🔲 Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/2/201 IIII Reliability
Location of analysis See	
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 50.7 43.3	
Analysis #2	Type XRF Analysis Operator ACH Analysis Date 2/2/201 📰 Reliability
Location of analysis See	
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 60.1 35.1	4.7 Results



Object/Catalogue #       5597/2000; Coverer, MMAI _ Count    Crusted to Loadson         Object/Catalogue #       Status _ Area         Documentation       Field Notes _ Cocegoing to Zone _ Note _ Style	Museum/Object Info	
Country       Colorbia       Area       Style         Ste       Provenenation       Prevaluesion       Style       Other         Documentation       Prevaluesion       Nome       Nome       Nome       Nome         Accession #       Collector       Date Accession docs/letters       Nome       <	Object/Catalogue #	163617.000 Owner NMAI Count Curation Location
State       Boographic Zane       Style         Documentation       Pried Nates       Accession 2         Accession 7       Diversion 10 Records         Accession 8       Diversion 10 Records         Cultural 10       Date Collector         Observed       References         Cultural 10       References         Research Notes       References         Technical Examination       Examination 20 Visual 20 Microscopy 20 MicroPhoto       Other         Examination       References       Exam Operator ACH _ Doam date p13/2011 (m)         Description       Restangular beads with spiral decoration on the front and six perforations on either side.         Measurements       Langth: Earn With: Emm _ Height: Emm _ Diam Thickness       Weight:         Condition/Treatment Notes       Good condition.       Good condition.       Corrosion _ None 20 Green-Surface _ Green-Core _ Black-Surface _ Bed-Surface _ Red-Sore _ Ditter         Corrosion _ None 20 Green Surface _ Green-Core _ Black-Surface _ Bed-Surface _ Red-Sore _ Ditter       Corrosion _ None 20 Green Surface _ Green-Core _ Black-Surface _ Bed-Surface _ Red-Sore _ Ditter         Corrosion _ None 20 Green Surface _ Green-Core _ Black-Surface _ Bed-Surface _ Red-Sore _ Ditter       Corrosion _ Corrosion _ Ditter         Corrosion _ None 20 Green Surface _ Green-Core _ Black-Surface _ Sheet _ Core posite _ Unknown _ Not present _ Ort       <	Object Class	bead Object Sub-Class
Dotor       Date Accessioned         Dotor       Cultural D         Period       Period         Research Notes       References         Technical Examination       Examination & Visual & Microscopy & MicroPhoto       Other         Description       Research Notes       References         Technical Examination       Examination & Visual & Microscopy & MicroPhoto       Other         Description       Rectangular beads with spiral decoration on the front and six perforations on either side.         Measurements       Length: Bimm       Weight: mm         Condition/Treatment Notes       Good condition.         Corrosion       None & Green-Surface       Green-Core         Primary Fabrication       Cast: Open Back       Cast: Solid       Hernmered Sheathing         Primary Fabrication Notes       Core material still present at Interior         Material Notes       Core material still present at Interior         Decorative detail note       Coloration         Usewear/Notinaris       Resid	Country	Colombia Province Santa Area
Dotor       Date Accessioned         Dotor       Cultural D         Period       Period         Research Notes       References         Technical Examination       Examination & Visual & Microscopy & MicroPhoto       Other         Description       Research Notes       References         Technical Examination       Examination & Visual & Microscopy & MicroPhoto       Other         Description       Rectangular beads with spiral decoration on the front and six perforations on either side.         Measurements       Length: Bimm       Weight: mm         Condition/Treatment Notes       Good condition.         Corrosion       None & Green-Surface       Green-Core         Primary Fabrication       Cast: Open Back       Cast: Solid       Hernmered Sheathing         Primary Fabrication Notes       Core material still present at Interior         Material Notes       Core material still present at Interior         Decorative detail note       Coloration         Usewear/Notinaris       Resid		Geographic Zone Style
Dotor       Date Accessioned         Dotor       Cultural D         Period       Period         Research Notes       References         Technical Examination       Examination & Visual & Microscopy & MicroPhoto       Other         Description       Research Notes       References         Technical Examination       Examination & Visual & Microscopy & MicroPhoto       Other         Description       Rectangular beads with spiral decoration on the front and six perforations on either side.         Measurements       Length: Bimm       Weight: mm         Condition/Treatment Notes       Good condition.         Corrosion       None & Green-Surface       Green-Core         Primary Fabrication       Cast: Open Back       Cast: Solid       Hernmered Sheathing         Primary Fabrication Notes       Core material still present at Interior         Material Notes       Core material still present at Interior         Decorative detail note       Coloration         Usewear/Notinaris       Resid		Field Notes       Accession docs/letters       Stylistic       Other         Publication       Inferred       None
Dotor       Date Accessioned         Dotor       Cultural D         Period       Period         Research Notes       References         Technical Examination       Examination & Visual & Microscopy & MicroPhoto       Other         Description       Research Notes       References         Technical Examination       Examination & Visual & Microscopy & MicroPhoto       Other         Description       Rectangular beads with spiral decoration on the front and six perforations on either side.         Measurements       Length: Bimm       Weight: mm         Condition/Treatment Notes       Good condition.         Corrosion       None & Green-Surface       Green-Core         Primary Fabrication       Cast: Open Back       Cast: Solid       Hernmered Sheathing         Primary Fabrication Notes       Core material still present at Interior         Material Notes       Core material still present at Interior         Decorative detail note       Coloration         Usewear/Notinaris       Resid	Accession	# Name in Records
Cutural ID       Period       Accession Info         Catalogue Info       References       References         Technical Examination       Examination & Visual & Microscopy & MicroPhoto       Other       Exam Operator ACH Exam date (\$13/2011)         Description       Rectangular beads with spiral decoration on the front and six perforations on either side.       Measurements         Measurements       Longit: Simm       Widt: Emm       Diam       Thickness       Weight:         Condition/Treatment Notes       Good condition.       Corrosion       None       Green-Surface       Green-Core       Black.Core       Red.Surface       Red.Core       Other         Corrosion       None       Cast-Open Back       Cast-Surface       Green-Core       Black.Surface       Black-Core       Red.Core       Other         Corrosion       None       Cast-Open Back       Cast-Surface       Weight:       Other	Collecto	Date Collected
Catalogue Info       Accession Info         References       References         Technical Examination       Examination & Visual & Microscopy & MicroPhoto D Other Exam Operator ACH Exam date §/13/2011 (m)         Description       Rectangular beads with spiral decoration on the front and six perforations on either side.         Measurements       Longit: Samm         Longit: Samm       Width: Bmm         Condition/Treatment Notes       Sodo condition.         Corrosion       None & Green-Surface       Green-Core         Primary Fabrication       Cast- Open Back       Cast- Solid         Primary Fabrication       Cast- Open Back       Cast- Solid         Primary Fabrication       Cast- Copen Back       Cast- Solid         Patheral Notes       Core material still present at interior       WikineRod         Material       Copper & Gold Alloy Organic       Resin       Stone       Shined       Other         Surface Caloration Notes       Surface Enrichment       Polished       Nined       Other         Decorative details       All cast       Embossed       Incleid       Chased       Filingree       Granulation       Punched       Other         Decorative details       All cast       Embossed       Incleid       Chased       Filingree       Gran	Dono	Date Accessioned
Research Notes       References         Technical Examination       Examination         Description       Rectangular beads with spiral decoration on the front and six perforations on either side.         Measurements	Cultural IE	Period
Technical Examination & Xminiation & Visual & Microscopy & MicroPholo       Other       Exam Operator ACH       Exam date       [/13/2011         Description       Rectangular beads with spiral decoration on the front and six perforations on either side.	Catalogue Info	Accession Info
Description       Rectangular beads with spiral decoration on the front and six perforations on either side.         Measurements		
Messurements         Corrosion         Corrosion rotes         Primary Fabrication         Cast. Coced Corre         Cast. Coced Corre         Hammered-Sheat         Black-Core         Red-Surface         Surface         Surface         Corration Notes         Finishing         Surface         Decorative details         All cast         Decorative details         All cast         Decorative details         Veswear/Roolmarks         Veswear/Roolmarks         Veswear/Roolmarks	Technical Examination	🛿 Examination 🛛 Visual 🖾 Microscopy 🖾 MicroPhoto 🗋 Other Exam Operator 🗚 🛛 Exam date 5/13/2011 📰
Length:       Samm       Width:       Bimm       Height:       Thickness       Weight:         Condition/Treatment Notes       Good condition.       Corrosion       None       Green-Surface       Green-Core       Black-Core       Red-Core       Other         Corrosion notes       Cast-Open Back       Cast-Solid       Hammered-Sheet       Wire/Rod         Primary Fabrication       Cast-Cogen Core       Hammered-Sheet       Wire/Rod         Fabrication Notes       Core material still present at interior         Material       Coppert Ø Gold Alloy       Organic       Resin       Store       Store       Other         Coloration Notes       Corpert Ø Gold Alloy       Organic       Resin       Store       Store       Other         Coloration Notes       Coppert Ø Gold Alloy       Organic       Resin       Store       Other         Coloration Notes       Decorative details       All cast       Embossed       Inicised       Chased       Filigree       Granulation       Punched       Other         Decorative detail notes       Joinery Notes       Analysis cet       All cast       Mechanical       Solder       Other/Unknown         Joinery Notes       Pseudomorph       Organics       None       Other Notes	Description	Rectangular beads with spiral decoration on the front and six perforations on either side.
Length:       Samm       Width:       Bimm       Height:       Thickness       Weight:         Condition/Treatment Notes       Good condition.       Corrosion       None       Green-Surface       Green-Core       Black-Core       Red-Core       Other         Corrosion notes       Cast-Open Back       Cast-Solid       Hammered-Sheet       Wire/Rod         Primary Fabrication       Cast-Cogen Core       Hammered-Sheet       Wire/Rod         Fabrication Notes       Core material still present at interior         Material       Coppert Ø Gold Alloy       Organic       Resin       Store       Store       Other         Coloration Notes       Corpert Ø Gold Alloy       Organic       Resin       Store       Store       Other         Coloration Notes       Coppert Ø Gold Alloy       Organic       Resin       Store       Other         Coloration Notes       Decorative details       All cast       Embossed       Inicised       Chased       Filigree       Granulation       Punched       Other         Decorative detail notes       Joinery Notes       Analysis cet       All cast       Mechanical       Solder       Other/Unknown         Joinery Notes       Pseudomorph       Organics       None       Other Notes	Magguramonta	
Condition/Treatment Notes       Good condition.         Corrosion       None & Green-Surface       Green-Core       Black-Surface       Red-Surface       Red-Core       Other         Corrosion notes	L	nath: 33mm Width: 0mm Height: 6mm Diam: Thickness Weight:
Corrosion       None       Green-Surface       Green-Core       Black-Surface       Red-Surface       Other         Corrosion notes	г	
Corrosion notes <pre>             Primary Fabrication</pre>	Condition/ rreatment Notes	
Corrosion notes <pre>             Primary Fabrication</pre>	Corregion	
Primary Fabrication       Cast- Open Back       Cast-Solid       Hammered-Sheathing       Other/Unknown         Stat- Closed Core       Hammered-Sheat       Wire/Rod         Fabrication Notes       Core material still present at interior         Material       Copper       Gold Alloy       Organic       Resin       Stone       Shell       Composite       Unknown       Not present       Other/Unknown         Material Notes		
Image: Cast- Closed Core       Hammered-Sheet       Wire/Rod         Fabrication Notes       Core material still present at interior         Material       Copper       Cold Alloy       Organic       Resin       Stone       Shell       Composite       Unknown       Not present       Other         Material Notes	L	
Material       Copper       Gold Alloy       Organic       Resin       Stone       Shell       Composite       Unknown       Not present       Ott         Material Notes		
Material Notes         Surface Coloration	Fabrication Notes	Core material still present at interior
Material Notes         Surface Coloration	L Material	Copper 🕅 Gold Allov 🗌 Organic 🔲 Resin 🔲 Stone 🔲 Shell 🔲 Composite 🔲 Unknown 🔲 Not present 🔲 Ott
Surface Coloration	Г	
Coloration Notes	L	
Finishing       Surface Enrichment       Polished       None       Other         Finishing Notes	-	X Coppery X Gold C Reddish C Pinkish X Mixed C Other
Finishing Notes	L	
Decorative details       All cast       Embossed       Incised       Chased       Filigree       Granulation       Punched       Other         Decorative detail notes       Joinery       All cast       Mechanical       Solder       Other/Unknown         Joinery Notes       Abrasion       Rubbed       Scratches       Burr(s)       Cracking       Incised       Core/Investment       Other         Usewear/toolmarks       Abrasion       Rubbed       Scratches       Burr(s)       Cracking       Incised       Core/Investment       Other         Pseudomorphs       Pseudomorph       Organics       None       Other Notes	, in the second s	
Decorative detail notes	Finishing Notes	
Joinery All cast Mechanical Solder Other/Unknown   Joinery Notes     Usewear/toolmarks Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other   Pseudomorphs   Pseudomorphs Pseudomorph Organics None Other Notes   Analysis rec's XRF X-ray radiograph ESEM-EDS PIXE LA-ICPMS Metallography Other   Analysis Rec Notes   Special Followup Re-do Conservation required Re-packaging required Other   Analysis #1   Type KRF Analysis Operator ACH Analysis location notes Dead 1   Location of analysis See photo or .evt file Analysis Operator ACH Analysis Date 1/25/20 Reliability   Analysis #2 Type KRF Analysis Operator ACH Analysis Date 1/25/20 Reliability Results   Location of analysis See photo or .evt file Analysis Operator ACH Analysis Date 1/25/20 Reliability Image: Conserved and CH   Location of analysis See photo or .evt file Analysis Operator ACH Analysis Iocation notes Reaults Image: Conserve   Location of analysis See photo or .evt file Analysis Iocation notes Reaults Image: Conserve Image: Conserve   Location of analysis See photo or .evt file Analysis Iocation notes Reaults Image: Conserve Image: Conserve	Decorative details	All cast Embossed Incised Chased Filigree Granulation Punched Other
Joinery Notes         Usewear/toolmarks         Abrasion       Rubbed       Scratches       Burr(s)       Cracking       Incised       Core/Investment       Other         Vsewear/toolmarks Notes	Decorative detail notes	
Usewear/toolmarks       Abrasion       Rubbed       Scratches       Burr(s)       Cracking       Incised       Core/Investment       Other         Usewear/toolmarks Notes	Joinery	All cast Mechanical Solder Other/Unknown
Usewear/toolmarks Notes  Pseudomorphs Pseudomorph Organics None Other Notes  Analysis rec's XRF X-ray radiograph ESEM-EDS PIXE LA-ICPMS Metallography Other  Analysis Rec Notes  Special Followup Re-do Conservation required Re-packaging required Other  Analysis #1 Type XRF Analysis Operator ACH Analysis location notes bead 1  Cu Au Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed Results  Analysis Bee photo or .evt file Analysis Operator ACH Analysis Date 1/25/20 Reliability Analysis #2 Type XRF Analysis Operator ACH Analysis location notes Elements 64.2 40.3 5.5  Type XRF Analysis Operator ACH Analysis Location notes Element F4.2 Cu Au Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed Cd	Joinery Notes	
Analysis rec's XRF X-ray radiograph ESEM-EDS PIXE LA-ICPMS Metallography Other     Analysis Rec Notes     Special Followup Re-do Conservation required Re-packaging required Other     Analysis #1 Type XRF Analysis Operator ACH Analysis Date 1/25/20 Reliability     Location of analysis See photo or .evt file Analysis location notes Dead 1   Cu Au Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Results     Analysis #2 Type XRF Analysis Operator ACH Analysis Date 1/25/20 Reliability Image: Cu Analysis   Location of analysis See photo or .evt file Analysis Operator ACH Analysis Date 1/25/20 Reliability Image: Cu   Location of analysis See photo or .evt file Analysis location notes Dead 2 Image: Cu Au Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed		Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Analysis Rec Notes	Pseudomorphs	Pseudomorph Crganics None Other Notes
Special       Followup       Re-do       Conservation required       Re-packaging required       Other         Analysis #1       Type       XRF       Analysis Operator       ACH       Analysis Date       1/25/20       Reliability       Image: Conservation required       Image	Analysis rec's	XRF X-ray radiograph ESEM-EDS PIXE LA-ICPMS Metallography Other
Analysis #1       Type XRF       Analysis Operator ACH       Analysis Date       1/25/20       Reliability         Location of analysis See photo or .evt file       Analysis location notes bead 1         Location of analysis See photo or .evt file       Analysis location notes bead 1         Elements       54.2       40.3       5.5       Results         Analysis #2       Type XRF       Analysis Operator ACH       Analysis Date       1/25/20       Reliability         Location of analysis See photo or .evt file       Analysis Operator ACH       Analysis Date       1/25/20       Reliability         Location of analysis See photo or .evt file       Analysis Iocation notes bead 2       Analysis Iocation notes       Decad 2         Cu       Au       Ag       Zn       Cd       As       Ni       Fe       Sn       Sb       Hg       Pb       Bi       Trace       Removed	Analysis Rec Notes	
Location of analysis See photo or .evt file       Analysis location notes       bead 1         Location of analysis See photo or .evt file       Analysis location notes       bead 1         Analysis #2       Type XRF       Analysis Operator ACH       Analysis Date       1/25/20       Reliability         Location of analysis See photo or .evt file       Analysis Operator ACH       Analysis Date       1/25/20       Reliability		Special 🔲 Followup 🔲 Re-do 🔲 Conservation required 📄 Re-packaging required 📄 Other
Location of analysis       See photo or .evt file       Analysis location notes bead 1         Cu       Au       Ag       Zn       Cd       As       Ni       Fe       Sn       Sb       Hg       Pb       Bi       Trace       Removed         Elements       54.2       40.3       5.5        Analysis Operator       ACH       Analysis Date       1/25/20       IIII       Reliability         Analysis       See photo or .evt file        Analysis location notes       bead 2         Location of analysis       Zn       Cd       As       Ni       Fe       Sn       Sb       Hg       Pb       Bi       Trace       Removed         Location of analysis       See photo or .evt file	Analysis #1	Type XRF Analysis Operator ACH Analysis Date 1/25/20 📖 Reliability
Elements       54.2       40.3       5.5       Results       Results         Analysis #2       Type       XRF       Analysis Operator       ACH       Analysis Date       1/25/20       Reliability         Location of analysis       See photo or .evt file       Analysis location notes       bead 2         Cu       Au       Ag       Zn       Cd       As       Ni       Fe       Sn       Sb       Hg       Pb       Bi       Trace       Removed	Location of analysis See	
Location of analysis See photo or .evt file       Analysis Operator return       Analysis Date       Interview       Interview <td></td> <td></td>		
Location of analysis See photo or .evt file       Analysis Operator return       Analysis Date       Interview       Interview <td>Analysis #2</td> <td></td>	Analysis #2	
Cu Au Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed		



Museum/Object Info	
Object/Catalogue	# 169835.000 Owner NMAI Count Curation Location
Object Clas	s Bead Object Sub-Class
Countr	y Peru Province Ica Area
Site	Nasca Geographic Zone Style
Provenienc	
Documentatio	n Publication Inferred None
Accession	# Name in Records
Collecto	160925 000 Items: 1
Dono	Dept of reactions and the second seco
Cultural II	
Catalogue Inf	fo Accession Info
Research Note	References
To shuised Fuencin stic.	
	n Examination 🛛 Visual 🖾 Microscopy 🖾 MicroPhoto 🗋 Other Exam Operator ACH Exam date 5/25/2011 📗
Description	Thin sheathing embossed with the representation of a man clasping his hands. There are four perforations in the corners.
	20.5mm x 10.15mm x 6mm
	ength: Width: Height: Diam.: Thickness Weight:
Condition/Treatment Notes	The thin metal is partially dented and squashed.
Corrosion	X None ☐ Green-Surface ☐ Green-Core ☐ Black-Surface ☐ Black-Core ☐ Red-Surface ☐ Red-Core ☐ Other
Corrosion notes	
Primary Fabrication	□ Cast- Open Back □ Cast- Solid
T finding T donoddon	Cast- Closed Core Hammered-Sheet Wire/Rod
Fabrication Notes	Thin sheathing embossed- likely over a carved substrate. A substrate is not present
Material	Copper 🛛 Gold Alloy 🗋 Organic 🗋 Resin 🗋 Stone 🗋 Shell 🗋 Composite 📋 Unknown 🗋 Not present 🗋 Oth
Material Notes	
Surface Coloration	L
Coloration Notes	
	Surface Enrichment Polished None Other
Finishing Notes	
Decorative details	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
Joinery	All cast Mechanical Solder Other/Unknown
Joinery Notes	
Usewear/toolmarks	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Usewear/toolmarks Notes	
Pseudomorphs	Pseudomorph      Organics      None      Other Notes
	XRF X-ray radiograph ESEM-EDS PIXE LA-ICPMS Metallography Other
Analysis Rec Notes	
	Special Followup Re-do Conservation required Re-packaging required Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/15/20 III Reliability
Location of analysis See	
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 3.4 62.6	
Analysis #2	Type Analysis Operator Analysis Date Reliability
Location of analysis	Analysis location notes
Elements	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed Results



Museum/Object Info	
Object/Catalogue #	169836.000 Owner NMAI Count Curation Location
Object Class	Bead Object Sub-Class
Country	Peru Province Ica Area
Site	Nasca Geographic Zone Style
Provenience Documentation	
Accession #	
Collecto	Date Collected
Dono	
Cultural IE	Period Period
Catalogue Info	Accession Info
Research Notes	References
Technical Examination	🛚 Examination 🛛 Visual 🖾 Microscopy 🖾 MicroPhoto 🗋 Other Exam Operator ACH 🛛 Exam date 5/13/2011 📗
Description	Rolled cones and soldered hollow disk beads
Measurements	Cones: ~27mm long x 8-9mm diam. at top
Le	ngth: Width: Height: Diam.: Thickness Weight:
Condition/Treatment Notes	mottled and darkened surface appearance
Compaier	
Corrosion Corrosion notes	□ None 🛛 Green-Surface □ Green-Core □ Black-Surface □ Black-Core □ Red-Surface □ Red-Core □ Other
L	
-	□ Cast- Open Back □ Cast- Solid □ Hammered-Sheathing □ Other/Unknown □ Cast- Closed Core ☑ Hammered-Sheet □ Wire/Rod
Fabrication Notes	
L Material	 ☐ Copper  ⊠ Gold Alloy  ☐ Organic   ☐ Resin   ☐ Stone   □ Shell   □ Composite   □ Unknown   □ Not present   □ Otr
	Appears silvery
L Surface Coloration	Coppery Gold Reddish Pinkish Mixed X Other
Coloration Notes	
Let a set	Surface Enrichment Polished None Other
-	Possible surface enrichment
Decorative details	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
Joinery	All cast 🔲 Mechanical 🛛 Solder 🔲 Other/Unknown
Joinery Notes	Disk beads appear to have a seam around the edge
LUsewear/toolmarks	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Usewear/toolmarks Notes	
Pseudomorphs	Pseudomorph Organics None Other Notes
	XRF X-ray radiograph ESEM-EDS PIXE LA-ICPMS Metallography Other
Analysis Rec Notes	
	Special Followup Re-do Conservation required Re-packaging required Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 1/27/20 🔝 Reliability
Location of analysis See	
Cu Au Elements 11.9 25.0	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed 63.1
Analysis #2	Type XRF Analysis Operator ACH Analysis Date 1/27/20 Reliability
Location of analysis See	
Cu Au	Analysis location notes bead 2 Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
	59.5 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8



Museum/Object Info	
Object/Catalogue	# 169857.000 Owner NMAI Count Curation Location
Object Class	s Bead Object Sub-Class
Country	y Peru Province Ica Area
Site	Nasca Geographic Zone Style Style
Provenienc Documentation	
Accession	# Name in Records
Collecto	
Donc	Date Accessioned
Cultural II	D Period Period
Catalogue Inf	Accession Info
Research Note	References
Technical Examination	🛚 Examination 🛛 Visual 🖾 Microscopy 🖾 MicroPhoto 🗌 Other Exam Operator ACH 🛛 Exam date 5/25/2011 📗
Description	Two beads with a rounded body and an open half hemispherical tail soldered to the round body.
Measurements	
Le	ength: Width: Height: Diam.: Thickness Weight:
Condition/Treatment Notes	Both beads appear partially crushed and one is torn on the back
Corrosion	None Green-Surface Green-Core Black-Surface Black-Core Red-Surface Red-Core Other
Corrosion notes	
Primary Fabrication	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown
	Cast- Closed Core Hammered-Sheet Wire/Rod
Fabrication Notes	
Material	Copper 🛛 Gold Alloy 🗌 Organic 🔲 Resin 🔲 Stone 🔲 Shell 🔲 Composite 🔲 Unknown 🔲 Not present 🔲 Oth
Material Notes	
Surface Coloration	Coppery 🛛 Gold 🗌 Reddish 🔲 Pinkish 🗌 Mixed 🗌 Other
Coloration Notes	
Finishing	Surface Enrichment 🖾 Polished 🗋 None 🗋 Other
Finishing Notes	
·	
	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
	All cast Mechanical Solder Other/Unknown
Joinery Notes	Solder present between body and tail
Usewear/toolmarks Usewear/toolmarks Notes	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Pseudomorphs	Pseudomorph      Organics      None      Other Notes
Analysis rec's	XRF X-ray radiograph ESEM-EDS PIXE LA-ICPMS Metallography Other
Analysis Rec Notes	
	Special Followup Re-do Conservation required Re-packaging required Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/15/20 💷 Reliability
Location of analysis See	
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 3.7 84.3	12.1 Results
Analysis #2	Type XRF Analysis Operator ACH Analysis Date 2/15/20 🛄 Reliability
Location of analysis See	
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 3.3 84.4	12.3 Results



Museum/Object Info	
Object/Catalogue #	178571.000 Owner NMAI Count Curation Location
Object Class	Bead Object Sub-Class
Country	Peru Province Lambayequ Area
Site	Geographic Zone Style
Provenience Documentation	
Accession #	Name in Records
Collector	Date Collected Date Collected Acy
Donor	Javanca
Cultural ID	Period
Catalogue Info	Accession Info
Research Notes	References
Technical Examination	Examination 🛛 Visual 🖾 Microscopy 🖾 MicroPhoto 🔲 Other Exam Operator ACH 🛛 Exam date 5/25/2011
Description F	Rolled bead with spiral wire decoration soldered to the front.
Measurements	
Ler	ngth: Width: Height: Diam.: Thickness Weight:
Condition/Treatment Notes	a gray accretion is present in the crevices
Corrosion	X None  ☐ Green-Surface  ☐ Green-Core  ☐ Black-Surface  ☐ Black-Core  ☐ Red-Surface  ☐ Red-Core  ☐ Other
Corrosion notes	
Drimon (Enhrication	
_	☐ Cast- Open Back   ☐ Cast- Solid
Fabrication Notes F	Rolled sheet bead with hammered wire soldered onto the front
L Material	☐ Copper 🛛 Gold Alloy  ☐ Organic  ☐ Resin  ☐ Stone  ☐ Shell  ☐ Composite  ☐ Unknown  ☐ Not present  ☐ Otr
Material Notes	
L Surface Coloration	Coppery 🛛 Gold 🔲 Reddish 🗍 Pinkish 🗋 Mixed 🗍 Other
Coloration Notes	
Finishing	Surface Enrichment Delished None Other
Finishing Notes	
L	
-	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
	All cast 🔲 Mechanical 🖾 Solder 🗋 Other/Unknown
Joinery Notes Usewear/toolmarks	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Usewear/toolmarks Notes	
	Pseudomorph Organics None Other Notes
	XRF X-ray radiograph ESEM-EDS PIXE LA-ICPMS Metallography Other
Analysis Rec Notes	
	Special Followup Re-do Conservation required Re-packaging required Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/15/20 💷 Reliability
Location of analysis See	
	Ag       Zn       Cd       As       Ni       Fe       Sn       Sb       Hg       Pb       Bi       Trace       Removed         33.5       Image: Comparison of the second of the s
Analysis #2	Type XRF Analysis Operator ACH Analysis Date 2/15/20 📖 Reliability
Location of analysis See	
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed



Museum/Object Info	
Object/Catalogue #	180758.000 Owner NMAI Count Curation Location CRC
Object Class	Bead Object Sub-Class Bead
Country	Mexico Province Oaxaca Area Ejutla
Site	Geographic Zone Mesoamerica Style
Provenience Documentation	
Accession #	Name in Records
Collector	Date Collected
Donor	Date Accessioned
Cultural ID	Period
Catalogue Info	Accession Info
Research Notes	
Technical Examination	Examination 🛛 Visual 🖾 Microscopy 🖾 MicroPhoto 🗋 Other Exam Operator ACH 🛛 Exam date 5/13/2011 📰
Description F	Round gold beads strung in a necklace. Thin gold exterior over a black core material.
	2-12.5mm diameter
-	ngth:Width:Height:Diam.: 12.4mm ThicknessWeight:
	Good condition. There are small cracks and several small losses in the gold revealing the black core underneath. There is a white polishing residue in the cracks and losses.
Corrosion	X None 🔲 Green-Surface 🔲 Green-Core 🗌 Black-Surface 🗌 Black-Core 🔲 Red-Surface 🔲 Red-Core 🗌 Other
Corrosion notes	
	□ Cast- Open Back □ Cast- Solid □ Hammered-Sheathing □ Other/Unknown ☑ Cast- Closed Core □ Hammered-Sheet □ Wire/Rod
Fabrication Notes	Black core visible underneath the thin gold layer in areas of loss
Material	☐ Copper 🖾 Gold Alloy  ☐ Organic  ☐ Resin  ☐ Stone  ☐ Shell  ☐ Composite  ☐ Unknown  ☐ Not present  ☐ Otr
Material Notes	
L Surface Coloration	Coppery 🛛 Gold 🔲 Reddish 🗍 Pinkish 🗍 Mixed 🗍 Other
Coloration Notes	
Finishing	Surface Enrichment 🛛 Polished 🗋 None 🗋 Other
Finishing Notes	
L	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
Joinery	All cast Mechanical Solder Other/Unknown
Joinery Notes	
Usewear/toolmarks Usewear/toolmarks Notes	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Pseudomorphs	□ Pseudomorph □ Organics 🛛 None □ Other Notes
Analysis rec's	XRF X-ray radiograph ESEM-EDS PIXE LA-ICPMS Metallography Other
Analysis Rec Notes	
Ī	Special 🔲 Followup 🔲 Re-do 🔲 Conservation required 🔲 Re-packaging required 🔲 Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 1/27/20 📖 Reliability
Location of analysis See	
	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Analysis #2	Type XRF Analysis Operator ACH Analysis Date 1/27/20 📰 Reliability
Location of analysis See	
	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed



Museum/Object Info	
Object/Catalogue #	180759.000 Owner NMAI Count Curation Location
Object Class	Bead Object Sub-Class
Country	Mexico Province Oaxaca Area
Site	Geographic Zone Style Style
Provenience Documentation	Field Notes       Accession docs/letters       Stylistic       Other         Publication       Inferred       None
Accession #	Name in Records
Collector	Date Collected
Donor	Date Accessioned
Cultural ID	Period
Catalogue Info	Accession Info
Research Notes	References
Technical Examination	Examination 🛛 Visual 🖾 Microscopy 🖾 MicroPhoto 🗋 Other Exam Operator ACH Exam date 5/18/2011
-	4 round beads of different sizes with a light gray fine ceramic/clay (?) substrate and a thin shell of gold on the surface. A hole is illed through the center.
Measurements	
Len	gth: Width: Height: Diam.: Thickness Weight:
	ood condition, however there are several losses in the thin gold surface layer and residual polishing compound in the crevices
Corrosion <b>D</b>	None Green-Surface Green-Core Black-Surface Black-Core Red-Surface Red-Core Other
Corrosion notes	
Drimony Ephricotion	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown
	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown
Fabrication Notes Li	ght gray core material present and a gold flange from casting is visible towards the interior of some of the beads
Material	] Copper 🖾 Gold Alloy □ Organic □ Resin □ Stone □ Shell □ Composite □ Unknown □ Not present □ Otr
Material Notes	
L Surface Coloration	Coppery 🛛 Gold 🔲 Reddish 🔲 Pinkish 🗌 Mixed 🗋 Other
Coloration Notes	
Finishing	Surface Enrichment 🛛 Polished 🔲 None 🔲 Other
Finishing Notes	
Decorative details	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
	All cast 🔲 Mechanical 🔲 Solder 🔲 Other/Unknown
Joinery Notes	
L Usewear/toolmarks Usewear/toolmarks Notes	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
L	Pseudomorph Organics One Other Notes
· -	XRF     X-ray radiograph     ESEM-EDS     PIXE     LA-ICPMS     Metallography     Other
Analysis Rec Notes	
	Special 🔲 Followup 🔲 Re-do 🔲 Conservation required 🔲 Re-packaging required 🔲 Other
	Type XRF Analysis Operator ACH Analysis Date 2/3/201 IIII Reliability
Location of analysis See p	
	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
	35.9 Results
Analysis #2	Type XRF Analysis Operator ACH Analysis Date 2/3/201 📰 Reliability
Location of analysis See p	
	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 8.0 71.0 2	



Museum/Object Info	
Object/Catalogue #	180760.000 Owner NMAI Count Curation Location
Object Class	Bead Object Sub-Class
Country	
Site	Geographic Zone Style
Provenience Documentation	
Accession #	
Collector	Date Collected Determined Determi
Donor	Date Accessioned
Cultural ID	Period Period
Catalogue Info	Accession Info
Research Notes	References
Technical Examination	🛿 Examination 🛛 Visual 🖾 Microscopy 🖾 MicroPhoto 🔲 Other Exam Operator ACH 🛛 Exam date 5/18/2011 []]
Description F	Round beads with a ceramic/clay (?) substrate with a thin shell of gold on the surface and a hole drilled through the center
Measurements 2	2.9-4.6mm diam
-	ngth: Width: Height: Diam.: Thickness Weight:
Condition/Treatment Notes	good condition. Some beads have losses and abrasion in gold, revealing black core material
Corrosion	X None 🔲 Green-Surface 🗌 Green-Core 🗌 Black-Surface 📄 Black-Core 🔲 Red-Surface 🔲 Red-Core 🔲 Other
Corrosion notes	
	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown
Fabrication Notes	Core present
L Material	 ☐ Copper
Material Notes	
L	
-	Coppery 🛛 Gold 🔲 Reddish 🗋 Pinkish 🗋 Mixed 🗋 Other
Coloration Notes Finishing	Surface Enrichment 🛛 Polished 🔲 None 🔲 Other
° .	Surface Enrichment 🛛 Polished 🗋 None 🗋 Other
Finishing Notes	
Decorative details	All cast Embossed Incised Chased Filigree Granulation Punched Other
L	All cast Mechanical Solder Other/Unknown
Joinery Notes	
Usewear/toolmarks	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Pseudomorphs	□ Pseudomorph □ Organics □ None □ Other Notes
Analysis rec's	XRF X-ray radiograph ESEM-EDS PIXE LA-ICPMS Metallography Other
Analysis Rec Notes	core material?
[	☐ Special  ☐ Followup  ☐ Re-do  ☐ Conservation required  ☐ Re-packaging required  ☐ Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/4/201 📖 Reliability
Location of analysis See	
	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed 29.0 Results
Analysis #2	Type XRF Analysis Operator ACH Analysis Date 2/4/201 📰 Reliability
Location of analysis See	
	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
	22.7 Results



Museum/Object Info	
Object/Catalogue #	180761.000 Owner NMAI Count Curation Location
Object Class	Bead     Object Sub-Class     Openwork
Country	Mexico Province Oaxaca Area
Site	Geographic Zone Style Style
Provenience Documentation	
Accession #	Name in Records
Collecto	Date Collected 180761.000 Items: 2 Mexico Acy
Dono	Oaxaga
Cultural IE	Period
Catalogue Info	Accession Info
Research Notes	References
Technical Examination	🛛 Examination 🛛 Visual 🖾 Microscopy 🖾 MicroPhoto 🗌 Other Exam Operator ACH 🛛 Exam date 5/18/2011 [ 🏢
Description	Two openwork cast beads with squiggle and dot designs. Core has been removed
Measurements	5.42mm long x 5.83mm diam. (bead that is not squashed)
Le	ngth: Width: Height: Diam.: Thickness Weight:
Condition/Treatment Notes	One of the beads is squashed and out of plane
L Corrosion	None Green-Surface Green-Core Black-Surface Black-Core Red-Surface Red-Core Other
Corrosion notes	
	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown
Fabrication Notes	Dpenwork casting where core has been removed
L Material	 ☐ Copper
Material Notes	
L Surface Coloration	Coppery 🛛 Gold 🔲 Reddish 🔲 Pinkish 🔲 Mixed 🔲 Other
Coloration Notes	
Finishing	Surface Enrichment 🛛 Polished 🗋 None 🗋 Other
Finishing Notes	
Decorative details	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
· · ·	All cast Dechanical Solder Other/Unknown
Joinery Notes	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Usewear/toolmarks Usewear/toolmarks Notes	
	Pseudomorph Organics None Other Notes
	XRF X-ray radiograph ESEM-EDS PIXE LA-ICPMS Metallography Other
Analysis Rec Notes	
	Special Followup Re-do Conservation required Re-packaging required Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/3/201 IIII Reliability
Location of analysis See	
Cu Au Elements 8.7 75.3	Ag       Zn       Cd       As       Ni       Fe       Sn       Sb       Hg       Pb       Bi       Trace       Removed         16.0       Image: Comparison of the second of the s
Analysis #2	Type XRF Analysis Operator ACH Analysis Date 2/3/201 IIII Reliability
Location of analysis See	
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 9.8 73.8	16.4 Results



Museum/Object Info	
Object/Catalogue	# 180762.000 Owner NMAI Count Curation Location
Object Class	Bead Object Sub-Class
Country	/ Mexico Province Oaxaca Area
Site	
Provenienc Documentation	
Accession	180762.000 Items. 42
Collecto	r Date Collected Date Collected
Dono	Date Accessioned Bead
Cultural II	Period
Catalogue Inf	Accession Info
Research Note	
Technical Examination	1 Examination 🛛 Visual 🖾 Microscopy 🖾 MicroPhoto 🗌 Other Exam Operator ACH 🛛 Exam date 5/18/2011 📗
Description	42 gourd shaped beads with 5 lobes. The beads are thinly cast gold over a black core material.
	8-9mm diam x ~6.5mm long
	Ingth: Width: Height: Diam.: Thickness Weight:
	Good condition except that the thin gold has worn away in some areas revealing the black core. There are also a few areas on several beads where the thin gold layer is peeling away. Cotton fibers present in the interior of the many bead apertures
Corrosion	X None Green-Surface Green-Core Black-Surface Black-Core Red-Surface Red-Core Other
Corrosion notes	
Primary Fabrication	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown
Fabrication Notes	Core present
Material	Copper 🛛 Gold Alloy 🗌 Organic 🔲 Resin 🔲 Stone 🔲 Shell 🔲 Composite 🔲 Unknown 🔲 Not present 🗍 Otr
Material Notes	
Surface Coloration	Coppery 🛛 Gold 🔲 Reddish 🗋 Pinkish 🗋 Mixed 🗋 Other
Coloration Notes	
Finishing	Surface Enrichment 🛛 Polished 🗌 None 🔲 Other
Finishing Notes	
Decorative details	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
Joinery	All cast Mechanical Solder Other/Unknown
Joinery Notes	
Usewear/toolmarks Usewear/toolmarks Notes	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Pseudomorphs	Pseudomorph     Organics     None     Other Notes
	□ XRF □ X-ray radiograph □ ESEM-EDS □ PIXE □ LA-ICPMS □ Metallography □ Other
Analysis Rec Notes	
	Special Followup Re-do Conservation required Re-packaging required Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/4/201 IIII Reliability
Location of analysis See	
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 11.4 68.5	
Analysis #2	Type XRF Analysis Operator ACH Analysis Date 2/4/201 📰 Reliability
Location of analysis See	
<u>Cu</u> Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 10.6 68.8	20.5 Results



Museum/Object Info	
Object/Catalogue #	180763.000 Owner NMAI Count Curation Location
Object Class	Bead Object Sub-Class
Country	Mexico Province Oaxaca Area
Site	Geographic Zone Style
Provenience Documentation	
Accession #	t Name in Records 180763.000 Items: 30
Collector	Date Collected Date Collected
Donoi	Date Accessioned
Cultural ID	Period
Catalogue Info	Accession Info
Research Notes	References
Technical Examination	🛛 Examination 🛛 Visual 🖾 Microscopy 🖾 MicroPhoto 🔲 Other Exam Operator ACH 🛛 Exam date 5/18/2011 [ 🏢
Description	30 tubular gold beads with depressed lines around each opening. The black core is present at the interior.
Measurements	9.8mm long x 4.5mm diam.
-	ngth: Width: Height: Diam.: Thickness Weight:
Condition/Treatment Notes	Good condition. White polishing residue present as well as cotton fibers.
Corrosion	None 🔲 Green-Surface 🗌 Green-Core 🗌 Black-Surface 🔲 Black-Core 🔲 Red-Surface 🔲 Red-Core 🗌 Other
Corrosion notes	
	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown
_	Black core material present and a gold flange from the casting process is visible on the interior of the apertures
L Material	 ☐ Copper
Material Notes	
L	
-	Coppery 🛛 Gold 🔲 Reddish 🔲 Pinkish 🗍 Mixed 🗍 Other
Coloration Notes Finishing	Surface Enrichment 🛛 Polished 🗌 None 🔲 Other
	Raised areas are polished
L	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
Joinery	All cast Dechanical Solder Other/Unknown
Joinery Notes	
Usewear/toolmarks	Abrasion 🗌 Rubbed 🛛 Scratches 🔲 Burr(s) 🗌 Cracking 🔲 Incised 🔲 Core/Investment 🔲 Other
Usewear/toolmarks Notes	Scratches present in the depressed lines, possibly from finishing with an abrasive tool
Pseudomorphs	Pseudomorph Organics None Other Notes
Analysis rec's	□ XRF □ X-ray radiograph □ ESEM-EDS □ PIXE □ LA-ICPMS □ Metallography □ Other
Analysis Rec Notes	
[	Special Followup Re-do Conservation required Re-packaging required Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/4/201 📰 Reliability
Location of analysis See	photo or .evt file Analysis location notes bead 1
Cu Au Elements 20.6 60.4	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed 19.0
Analysis #2	Type XRF Analysis Operator ACH Analysis Date 2/4/201 📰 Reliability
Location of analysis See	
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 20.5 60.8	18.7



Museum/Object Info	
Object/Catalogue #	181706.000 Owner NMAI Count Curation Location
Object Class	Bead Object Sub-Class
Country	Colombia Province Magdalena Area
Site	Bonda Geographic Zone Style
Provenience	
Documentation	Publication Inferred None
Accession #	t Name in Records
Collector	Date Collected
Donor	Magdalena
Cultural ID	
Catalogue Info	Accession Info
Research Notes	References
To obvice I Freewine die v	
-	🛿 Examination 🛛 Visual 🖾 Microscopy 🖾 MicroPhoto 🗋 Other Exam Operator ACH 🔤 Exam date 5/16/2011
Description F	Rolled sheet bead
Ļ	
	4.5mm diam.x 17.7mm long
Ler	ngth: 17.7 Width: Height: Diam.: 4.5mm Thickness 0.1mm Weight:
Condition/Treatment Notes	Good condition. Burial soil encrusted between ends. Adhesive present at end of rolled sheet
Corrosion	None Green-Surface Green-Core Black-Surface Black-Core Red-Surface Red-Core Other
Corrosion notes	
L Primary Fabrication	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown
	Cast- Closed Core X Hammered-Sheet Wire/Rod
-	Hammered sheet, cut and rolled
Material	□ Copper 🛛 Gold Alloy □ Organic □ Resin □ Stone □ Shell □ Composite □ Unknown □ Not present □ Otr
Material Notes	
L Surface Coloration	Coppery 🛛 Gold 🔲 Reddish 🔲 Pinkish 🗋 Mixed 🗋 Other
Coloration Notes	
L	Surface Enrichment 🛛 Polished 🗌 None 🔲 Other
Finishing Notes	
Decorative details	All cast 🔲 Embossed 🔲 Incised 🔲 Chased 🔲 Filigree 🔲 Granulation 🔲 Punched 🔲 Other
Decorative detail notes	
Joinery	All cast Mechanical Solder Other/Unknown
Joinery Notes	
L Usewear/toolmarks	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Usewear/toolmarks Notes	
L Pseudomorphs	Pseudomorph Organics None Other Notes
· •	□ XRF □ X-ray radiograph □ ESEM-EDS □ PIXE □ LA-ICPMS □ Metallography □ Other
Analysis Rec Notes	
· · · ·	Special Followup Re-do Conservation required Re-packaging required Other
Analysis #1	
	Type XRF     Analysis Operator ACH     Analysis Date     2/1/201     Reliability
Location of analysis See	
	Ag       Zn       Cd       As       Ni       Fe       Sn       Sb       Hg       Pb       Bi       Trace       Removed         14.9       Image: Comparison of the second of the s
Analysis #2	Type Analysis Operator Analysis Date Reliability
Location of analysis	Analysis location notes
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements	Results



Museum/Object Info	
Object/Catalogue #	# 186585.000 Owner NMAI Count Curation Location
Object Class	s Bead Object Sub-Class
Country	y Peru Province Lambayequ Area
Site	Geographic Zone Style Style
Provenience Documentation	
Accession	
Collecto	Date Collected Date Collected Dept of Lambayeque Acy
Dono	Date Accessioned Bead
Cultural II	D Period Period
Catalogue Inf	Accession Info
Research Note	References
Technical Examination	n Examination 🛛 Visual 🖾 Microscopy 🖾 MicroPhoto 🔲 Other Exam Operator ACH 🛛 Exam date 5/25/2011 [[]]
Description	Three small fish shaped beads
Measurements	
Le	ength: Width: Height: Diam.: Thickness Weight:
Condition/Treatment Notes	Good condition. White accretion at center and in crevices
Corrosion	🛛 None 🔲 Green-Surface 🔲 Green-Core 🔲 Black-Surface 📄 Black-Core 📄 Red-Surface 📄 Red-Core 📄 Other
Corrosion notes	
	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown
	Appears to be embossed sheet and joined at the edges
Material	Copper 🛛 Gold Alloy Crganic Resin Stone Shell Composite Unknown Not present Otr
Material Notes	
Surface Coloration	Coppery 🛛 Gold 🔲 Reddish 🔲 Pinkish 🔲 Mixed 🗌 Other
Coloration Notes	
Finishing	Surface Enrichment Z Polished None Other
Finishing Notes	
Docorativo dotails	All cast 🛛 Embossed 🔲 Incised 🔲 Chased 🔲 Filigree 🗌 Granulation 🔲 Punched 🔲 Other
Decorative detail notes	
	All cast 🔲 Mechanical 🛛 Solder 🖾 Other/Unknown
· · ·	rough texture at edges with evidence of finishing. Possibly soldered
	□ Abrasion □ Rubbed
Cooncantoonnanto	Scratches along edges from finishing methods
	Pseudomorph Organics Other Notes
	□ XRF □ X-ray radiograph □ ESEM-EDS □ PIXE □ LA-ICPMS □ Metallography □ Other
Analysis Rec Notes	
-	Special Followup Re-do Conservation required Re-packaging required Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/15/20 IIII Reliability
Location of analysis See	
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 3.2 87.1	
Analysis #2	Type XRF Analysis Operator ACH Analysis Date 2/15/20 📰 Reliability
Location of analysis See	
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 2.8 81.7	15.6 Results



Museum/Object Info	
Object/Catalogue #	# 188410.000 Owner NMAI Count Curation Location
Object Class	Bead Object Sub-Class
Country	/ Mexico Province Veracruz Area
Site	Tezechoan River       Geographic Zone       Style
Provenience Documentation	
Accession	# Name in Records
Collecto	r Date Collected Determined Acy
Dono	Date Accessioned Bead
Cultural IE	Period
Catalogue Info	Accession Info
Research Note	s References
Technical Examination	1 Examination 🛛 Visual 🖾 Microscopy 🖾 MicroPhoto 🗋 Other Exam Operator ACH 🛛 Exam date 5/18/2011 🔃
	2 round beads with curvilinear designs depressed into the gold surface. The dark gray ceramic/clay (?) core material is present at the interior of the gold surface. A hole is drilled through the center.
Measurements	15mm diam.
Le	ngth: Width: Height: Diam.: Thickness Weight:
Condition/Treatment Notes	Good condition, some areas of abraded/lost gold. White polishing compound present in crevices
L Corrosion	None Green-Surface Green-Core Black-Surface Black-Core Red-Surface Red-Core Other
Corrosion notes	
	□ Cast- Open Back □ Cast- Solid □ Hammered-Sheathing □ Other/Unknown ☑ Cast- Closed Core □ Hammered-Sheet □ Wire/Rod
	Dark gray core material present. The decorative lines appear to have been scored into the core material first and the wax model would have then been pressed into the depressions and perhaps scored again.
· · · · · · · ·	□ Copper
Material Notes	
l	
	Coppery 🛛 Gold 🔲 Reddish 🗍 Pinkish 🗋 Mixed 🗍 Other
Coloration Notes Finishing	Surface Enrichment Z Polished None Other
, i i i i i i i i i i i i i i i i i i i	Surface Enrichment Z Polished None Other
Finishing Notes	
Decorative details	All cast Embossed Incised Chased Filigree Granulation Punched Other
Decorative detail notes	
Joinery	All cast Mechanical Solder Other/Unknown
Joinery Notes	
Usewear/toolmarks Usewear/toolmarks	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Pseudomorphs	Pseudomorph Organics None Other Notes
	XRF X-ray radiograph ESEM-EDS PIXE LA-ICPMS Metallography Other
Analysis Rec Notes	
•	Special Followup Re-do Conservation required Re-packaging required Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/3/201 📖 Reliability
Location of analysis See	
Cu Au Elements 14.0 45.5	Ag   Zn   Cd   As   Ni   Fe   Sn   Sb   Hg   Pb   Bi   Trace   Removed     40.5
Analysis #2	Type XRF Analysis Operator ACH Analysis Date 2/3/201 Reliability
Location of analysis See	
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed



Museum/Object Info	
Object/Catalogue #	188411.000 Owner NMAI Count Curation Location
Object Class	Bead Object Sub-Class
Country	Mexico Province Veracruz Area
Site	Tezechoan river       Geographic Zone       Style       Image: Constraint of the style
Provenience Documentation	
Accession #	# Name in Records
Collecto	r Date Collected Determined Acy
Dono	Tozechoan River Near Vicente
Cultural IE	Period
Catalogue Info	Accession Info
Research Notes	s References
Technical Examination	🛿 Examination 🛛 Visual 🖾 Microscopy 🖾 MicroPhoto 🔲 Other Exam Operator ACH 🛛 Exam date 5/18/2011 🔛
	3 round beads of different sizes with a light gray fine ceramic/clay (?) substrate and a thin shell of gold on the surface. A hole is drilled through the center.
Measurements	
Le	ngth: Width: Height: Diam.: Thickness Weight:
Condition/Treatment Notes	Good condition, however there are several losses in the thin gold surface layer
L Corrosion	None Green-Surface Green-Core Black-Surface Black-Core Red-Surface Red-Core Other
Corrosion notes	
-	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown
Fabrication Notes	
Material	□ Copper 🛛 Gold Alloy □ Organic □ Resin □ Stone □ Shell □ Composite □ Unknown □ Not present □ Oth
Material Notes	
L	
-	Coppery 🛛 Gold 🔲 Reddish 🔲 Pinkish 🗌 Mixed 🗍 Other
Coloration Notes Finishing	Surface Enrichment 🛛 Polished 🗌 None 🔲 Other
Ļ	Highly polished surface
Decorative details Decorative detail notes	All cast Embossed Incised Chased Filigree Granulation Punched Other
Joinery	All cast Mechanical Solder Other/Unknown
Joinery Notes	
Usewear/toolmarks Usewear/toolmarks Notes	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Pseudomorphs	Pseudomorph Organics None Other Notes
Analysis rec's	XRF X-ray radiograph ESEM-EDS PIXE LA-ICPMS Metallography Other
Analysis Rec Notes	
-	Special Followup Re-do Conservation required Re-packaging required Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 2/3/201 📖 Reliability
Location of analysis See	
Cu Au Elements 16.8 49.0	Ag   Zn   Cd   As   Ni   Fe   Sn   Sb   Hg   Pb   Bi   Trace   Removed     [34.2]
Analysis #2	Type XRF Analysis Operator ACH Analysis Date 2/3/201 Reliability
Location of analysis See	
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed



Museum/Object Info	
Object/Catalogue #	# 247233.000 Owner NMAI Count Curation Location
Object Class	s sheathing Object Sub-Class
Country	/ Colombia Province Area
Site	
Provenience Documentation	
Accession	# Name in Records
Collecto	r Date Collected
Donc	Date Accessioned
Cultural II	D Period Period
Catalogue Inf	o Accession Info
Research Note	s References
Technical Examination	1 Examination 🛛 Visual 🖾 Microscopy 🖾 MicroPhoto 🗋 Other Exam Operator ACH 🛛 Exam date 5/13/2011 🟢
Description	Sheathing beads in the shape of a saurians. A perforation is present on either side of the head with the burrs facing the interior
Measurements	44.5mm long x 16mm wide (max)
Le	ngth: 44.5mm Width: 16mm Height: Diam.: Thickness Weight:
Condition/Treatment Notes	Good condition. Some cracking and breakage along areas of stress at the front of the head. Coated with clear lacquer.
Corrosion	None Green-Surface Green-Core Black-Surface Black-Core Red-Surface Red-Core Other
Corrosion notes	
Primary Fabrication	Cast- Open Back Cast- Solid Hammered-Sheathing Other/Unknown
	Cast- Closed Core Hammered-Sheet Wire/Rod
Fabrication Notes	Sheet gold was burnished over a carved substrate and the substrate was then removed. The same substrate (pattern) was used
	for each of the beads as evidenced by the repetition of the pattern. The PL eye, for example is located slightly behind the PR eye
Material	🗋 Copper 🖾 Gold Alloy 🗋 Organic 🗋 Resin 📄 Stone 📄 Shell 📄 Composite 📄 Unknown 📄 Not present 📄 Oth
Material Notes	
Surface Coloration	🛛 Coppery 🖾 Gold 🔲 Reddish 🔲 Pinkish 🔲 Mixed 🗌 Other
Coloration Notes	
Finishing	Surface Enrichment 🛛 Polished 🗌 None 🔲 Other
Finishing Notes	
	All cast 🛛 Embossed 🔲 Incised 🗋 Chased 🗍 Filigree 🗋 Granulation 🗋 Punched 🗍 Other
Decorative detail notes	
	All cast Mechanical Solder Other/Unknown
Joinery Notes	
Usewear/toolmarks Usewear/toolmarks Notes	Abrasion Rubbed Scratches Burr(s) Cracking Incised Core/Investment Other
Pseudomorphs	Pseudomorph     Organics     None     Other Notes
	XRF X-ray radiograph ESEM-EDS PIXE LA-ICPMS Metallography Other
Analysis Rec Notes	
	Special Followup Re-do Conservation required Re-packaging required Other
Analysis #1	Type XRF Analysis Operator ACH Analysis Date 1/27/20 IIII Reliability
Location of analysis See	
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 37.7 43.6	
Analysis #2	Type XRF Analysis Operator ACH Analysis Date 1/27/20 📰 Reliability
Location of analysis See	photo or .evt file Analysis location notes bead 2
Cu Au	Ag Zn Cd As Ni Fe Sn Sb Hg Pb Bi Trace Removed
Elements 46.0 37.5	16.5 Results