

Object #	Site	Exam.Date	Operator	Fabrication	Joining methods	Surface condition	Tool marks	Recommended next steps
CJD-M-010	Cerro Juan Diaz	26-Jul-07	KCC 25	hammer forged into a very nice round ring shape but no hammer marks visible. Surface enriched, with coppery red substrate metal. Gold is preserved in center of one flat side but edges black and corroded, other side heavily encrusted with excavation soil (easily removed), with only a few areas where gold surface is visible. no gold visible on complete end; somewhat rounded. outer edge nicely finished.				could be sampled - but ...
CJD-M-014	Cerro Juan Diaz	27-Jul-07		it appears to be one continous sheet (the two short ends that would have completed the piece are missing). The metal was burnished over the underlying form to produce pleating and overlap along the long edges as it conformed to the shape of the object below. the underlying object (form?) probably was finish on the gold's interior surface. the top and bottom edges (long edges) are finished but do not join each other and do not provide evidence for the remaining shape of the underlying object.	none visible due to loss of the ends	none	none visible	
CJD-M-015	Cerro Juan Diaz	25-Jul-07		forged into rectangular shape, striations in all faces from forming (likely revealed by corrosion stripping post-butial). Stripping removed surface metal too. Metal has been annealed. Metal wqas bent at a softened (annealed) state (no evidence of stress cracking along bend, or sompression at inside curve of the bend). benbd was not part of its use as a tool. possibly bent to "kill"				
CJD-M-024	Cerro Juan Diaz	25-Jul-07	KCC 21	Tool (copper). forged with finished sides and sanded end., square in cross-section. iron-like surface consistently overall, but no magnetism. In possible sampled area, brown, green, smooth, the red layer and then copper - indications are copper. Forged and corrosion is burnished at the slender end. Thick end should be flatter (mushroomed) if used as a tool to be hammered. could be broken, but rounded a little bit. end looks file tapered or hammer tapered (no surface marks visible) - shaped on two opposite to creat a wedge, and then rounded slightly (on other 2 sides, not shaped so much).				do an x-ray? Or better, metallography to find out hammering direction
CJD-M-026	Cerro Juan Diaz	26-Jul-07	KCC 25	looks like high carat gold. Hammered from rectangular stock with squared blunt ends. Ends seem cut, slightly beveled. One retains vestige of bend-to-break on inside surface (with any sharp edges smoothed) (more fully polished); divet pock marks on other end (not fully polished). slight seams along thin sides. inside of ring, unidirectional diagonal (lower right to upper left) sanding marks. longer striations parallel to sides (2 or 3 deeper gouges) on inner surface. inside of ring has alot of areas of casting flaws. possibly shear fracture flaw and area of surface loss (delaminated) on outer surface. weight 2.2g, strip that forms band is 3mm wide, 1.2mm thick.				
CJD-M-027	Cerro Juan Diaz	26-Jul-07	KCC 25	3-sided rounded circle with opening in middle of one of the sides, rounded stock, with slightly tapered ends. Cast stock, very pitted and poroous, with dendritic sturcture visible on outer surface; suggests not a finished piece (early form of ring in process?). workhardened. distortion/torque from use, opening, or from stage of hammering. long striations recessed into and parallel to length of wire, possily result of compression in forming (or rolling iinto round stock). flat planar surface on anvil side, more dishd and faceted on hammered side. one end more rounded and finished, other end more crystalline, uneven appearnace due to breaking from trimming. cast wire ring with dendritic structure and casting porosity and flaws. weight 1.4g, overall 13.1mm (opening to opposite side) x 15.4mm; wire diameter 1.75mm.				sample for metallography to determine whether cast

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CJD-M-036-01	Cerro Juan Diaz	27-Jul-07		bead was made by casting. There is an overlap of what would have been the overlapping of the wax sheet. There is a lot of porosity distinctive of casting. However, HFB thinks that there are also characteristics of overlapped sheet that should be investigated.	joinery was completed all in the wax	none	none	metallography? Sample and examine for production method
CJD-M-036-02	Cerro Juan Diaz	27-Jul-07		appears to be cast from tubular wax sheet which was then hammered and filed	no joins except in cast wax	none	sanding and polishing marks overall	look at again!
CJD-M-036-07	Cerro Juan Diaz	27-Jul-07		made by coiling sheet that is gold-rich into slightly barrel-shaped form. Sheet was probably hammered between layers of soft material (rather than hammered directly). Overlapping sheet held together by pressure fit.	mechanical	none		possibly metallography to compare to other 036 beads that appear cast
CJD-M-036-08	Cerro Juan Diaz	27-Jul-07		tubular sheet bead made by coiling gold-rich sheet. Sheet probably hammered between layers of soft material.				
CJD-M-036-09	Cerro Juan Diaz	27-Jul-07		hammered sheet overlapped onto itself.		none		
CJD-M-036-10	Cerro Juan Diaz	27-Jul-07		tube formed by coiling hammered sheet with overlap		none	none	
CJD-M-036-12	Cerro Juan Diaz	27-Jul-07		bead was made by casting, followed by working on the mandrel. No evidence of solder seams.			none except for casting	
CJD-M-037	Cerro Juan Diaz	25-Jul-07	KCC 21	Tool (copper). square in cross-section with rounded tip. hammer forged, likely annealed with rounded end finished probably by grinding, sanding. rod rectangular in section, blunt end (broken), pointed end intact. Pointed end: rounded across wider dimensions. On shorter sides show slight bulging/compression from hammering on the wider sides, during formation of wedge shape (after the basic shaft had been established). wedge is slightly more angled on one face than other.				
CJD-M-039	Cerro Juan Diaz	27-Jul-07		round wire ring with wire forming four-sided knot at topo. Ring is made from one continuous piece of wire, which contains copper. There is a surface layer of silver-rich metal that is very granular and pitted,. Layer appears as distinct layer on substrate metal - there is no visible evidence of silver in substrate. KCC thinks it is applied as a plating (electrochemical?) appears to coat or overlap areas that have been soldered.	no solder seam visible at bottom of ring (no visible joining)		no visible tool marks. Ends of wire are somewhat rounded. No solder seam or join area visible at bottom of ring.	
CJD-M-042	Cerro Juan Diaz	25-Jul-07	KCC 21	Tool (copper). round cross-section at tip, square at halfway point, to thin rectangle at spatulate end. delamination at knife edge. tapers rapidly from spatulated end to almost square-rectangular shank in center to a rounded cross-section 4/5 of the way down the tool from the spatulated end. Tapers to a point. Hammered end: ground to a point. Spatulated end" considerably workhardened at knife edge for cutting use, and sanded to gently round the edges of the blade. quite sharp, strong.				

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CJD-M-046 MARTA noAo CL-43-93	Cerro Juan Diaz	26-Jul-07	KCC 22	oval to round ring, round in cross-section, with opening 1mm at narrowest. Hard to tell if cast as round wire or rod stock, but has been hammerered on sides (somewhat compressed to a slight oval, with a bit of an edge/bulge). Possibly hammered, hammered and sanded or sanded to give a oval profile. bend shape is slightly angular approaching the opening, not truly round on inside. ring doesn't lie truly flat so argues for bending the rod. ends are somewhat tapered, one more than other. workhardened. sample hole is very coppery in color. corrosion on ends: pseudomorphs of fine threads wrapping the ends threads are well-flattened. band of raised material/indentations follow along the outer edge of the wrapping. weight 17.6g, 4.15 to 5mm diameter, 47 x 51.25mm overall diameter, 152mm circumference. 17mm from one end is a sample drill hole. possibly cast as round stock then hammered and bent into a ring. With drill hole at 1 o'clock, a flattened area at 3 o'clock shows evidence of hammering on top surface, flattened on back from anvil.				pseudomorph area: consolidate and make an impression in silicone rubber
CJD-M-054	Cerro Juan Diaz	25-Jul-07		hollow backed casst, no evidence of gilding. Originally 2 pairs of attachment loops, joined by rod on verso just behind heads. Only head area survives. Each loop is 3 wires thick.				
CJD-M-056	Cerro Juan Diaz	26-Jul-07	KCC 22	hammered copper ring made of roughly circular wire, pobabaly from strip cut from sheet. Wire is roughly rounded with slightly flattened sides from hammering. Faint comporession marks on inside and outside from earlier hammering into round stock. evidence of hammering on all four sides. more faceted ones on outside may be to shape the ring/opening area. open ends are flattened; bit of a lip toward inner curvature but otherwise not granular; outer edges are not rounded or finished. flattening on top, anvil flattening on bottom. some facets from hammer marks visible, same manufacture as -046.				
CJD-M-059	Cerro Juan Diaz	27-Jul-07	KCC 25	Tool (copper). hammer forged to two wedged ends. all sides of tool are smooth and finished. widths: 4.25 and 0.75, knife edge 0.25 [HFB:unclear what these correspond to]. fine indications of specifically shaped tool. Square wire stock, forged so that one end is broad and flattened, and other end graudally tapers to square-ended tool with second beveled edge, with cutting end at same orientation to wider end. Broad knife edge: evidence of tool refinement visible in scored marks at the knife edge on both sides of bevel, which run consistently in one direction (lower L to upper R - indicates brining the tool to the sharpening surface. can keep a planar surface vs. tendency to round a surface when the tool is held, and grinder is brought to it.) [Note: uneven cutting edge from hammering, only a rough0shaped knife-edge taper.] sides (corner) of the tool are finished, so that sides approach the blade neatly. small end tapers on all four sides, ending with a knife edge - this was likely the end to mount the tool in a (wooden"?) handle. compare with -072.			wide end:	

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CJD-M-068	Cerro Juan Diaz	25-Jul-07	KCC 21	Tool (copper). round in cross-section, with one rounded end and a break edge at other. shaft fragment with circular cross-section, tapering toward cracked and broken end. Broken end is deformed out of plane during break. Unbroken end is roughly flat end. Minor longitudinal cracking in a few places near the broken end. No evidence of being drawn. broken end is workhardened state because not bent very far before broken (splintered) - brittle break. nicely made, regular made in all directions. corners (edges) created by hammering during forming (tapering, lengthened) were likely filed and sanded away because it maintains such a regular profile (no long striations, pleatings visible).				
CJD-M-072	Cerro Juan Diaz	25-Jul-07	KCC 21	Tool (copper), forged to knife edge but unfinished. sides are sharp and knife edge is hammered but unsanded state. hammered on all four sides. Longitudinal edges are sharp, well-defined, but not refined. Business edge has not been ground, filed or finished, or worn from use (appears as achieved from forging). Bulging/compression manifests on skinny sides from hammering the wide sides. tool edge is flat with rounded ends.				
CJD-M-073	Cerro Juan Diaz	25-Jul-07	KCC 21	lost wax cast, surface gilded by depletion-enrichment. Black oxidized surface				