Object #	Object Class	Object Sub-Class	Object description	Province	Site	Primary Fabrication Method	Primary Fabrication Method Notes	Location of analysis 1	Analysis location notes 1	Cu 1	Au 1	Ag 1
8199	Bead		Fragments of gold beads (?) . Several of the beads have incised lines on the interior side. There is also a number of embossed dots pushed from interior to exterior.	Bocas del Toro Province	Bocas del Toro	Hammered-Sheet	Surfaces appear formed by hammering	Exterior, Center of largest fragment	Sound metal	30.923	65.882	3.195
8201	Sheet	Band	Small piece of thinly hammered gold sheet with single punched hole near one corner. (0.02" thick) 1.8x2.2cm. Punched from numbered side to un-numbered side	Bocas del Toro Province	Bocas del Toro	Hammered-Sheet	hammering flaws present.	Opposite numbered side, Center	Sound metal	2.493	91.308	6.199
8202	Sheet		Small square hammered sheet with two holes punched from un-numbered side to numbered side (burrs remain on numbered side). Some incised lines in surface across the bottom and top edge. 0.015" thick	Bocas del Toro Province	Bocas del Toro	Hammered-Sheet	Shear fracture and delamination along the edges	Opposite numbered side, Center	Sound metal	1.386	91.842	6.773
8203	Sheet		Small thin square sheet with two holes punched at top corners and design of dots embossed/punched along the edges. The two punched holes are different sizes and the burrs are present on the numbered side. The dots are embossed from the numbered side.	Bocas del Toro Province	Bocas del Toro	Hammered-Sheet	Thin hammered sheet with tears and some shear fractures	Opposite numbered side, Bottom right corner	Sound metal	3.925	89.974	6.101
8204	Sheet		Small square sheet with two punched holes and embossed decoration around the edge. The holes are punched from the front (numbered side) to the back (un-numbered side). The central square was embossed from the front so that it is slightly concave. The next band around the center was embossed from the back and is slightly raised on the front. The band furthest to the edge is punctuated by dots embossed from the back so that they are slightly raised.	Bocas del Toro Province	Bocas del Toro	Hammered-Sheet	Very thin hammered sheet	Opposite numbered side, Center	Sound metal	10.309	86.028	3.663
8206	Disk	Plaque	Round disk 11cm diam., 0.010"-0.011" thick. Convex/concave circle at center with 11mm flat rim around circumference. The numbered, concave side is highly polished, the un-numbered, convex side is shiny but not as highly polished. There are two holes punched from the numbered side (front?) to the un-numbered side (back?) as the burrs are still present on the back. 25.2g	Bocas del Toro Province	Bocas del Toro	Hammered-Sheet	There is a lot of evidence of hammering flaws, which are shear fractures caused by work hardening without annealing. There are cracks along the edges which also are indicative of work hardening.	Side opposite #, Center		43.504	53.694	2.801
8207	Disk	Plaque	Circular gold disk with five embossed circular designs with a double row of circles embossed around the circumference and a single row of small embossed circles around each of the larger circles. All design is embossed from the back (numbered side) to front. Approx. 16cm diam., approx. 0.036" thick at edge. There are four punched holes at the top for suspension and two holes on either side of the a large tear at the top at 11 oclock (from front) possibly from past repair.	Bocas del Toro Province	Bocas del Toro	Hammered-Sheet	There is evidence of hammering in the form of cracks, hammering flaws, shear tears in surface from work hardening/working without annealing. The pinki/brown accretion may have something to do with heating/oxidation.	Reverse, PL side of punched holes		0.214	92.303	7.483
8208	Disk	Plaque/Pectoral?	Round disk with one embossed circle at the center worked from the reverse and surrounded by two rows of embossed dots also punched from behind. There are two punched holes at the edge, punched from the obverse to the reverse- one has an irregular shape to it and the other doesn't appear to be punched all the way through. There is a very small punched hole at the top of the central embossed circle. There is also evidence of incised lines around the edge where the it may be cut. there are also light incised lines around the dot design. 0.014" thick, 6.-7cm diam. 11.6g	Bocas del Toro Province	Bocas del Toro	Hammered-Sheet	No obvious hammer marks	Reverse, Between punched holes, slightly towards center		0.444	92.339	7.218

Object #	Object Class	Object Sub-Class	Object description	Province	Site	Primary Fabrication Method	Primary Fabrication Method Notes	Location of analysis 1	Analysis location notes 1	Cu 1	Au 1	Ag 1
8260	Disk	Plaque/Pectoral?	Small round disk with two rows of small embossed/punched circles around circumference (punched from side A). Incised line around circumference on side A as well. Two small punched holes at top with flanges/burrs on both sides. The outer edges are slightly folded towards side A. Numbered side: side A, Un-numbered side: side B, 6.4cm diam. 8.7g	Chiriquí Province	Bugaba	Hammered-Sheet	No obvious hammer marks but very thin with irregular edge	Opposite # side, Center		0.058	95.908	4.034
163860	Bead		Tubular gold beads. may have been strung together as a bracelet parallel with each other. Some of the 26 beads have a visible or partially visible seam along one side. A few of the beads also have incised lines around the exterior adjacent to the ends. 1.5cm long. 3mm diam.	Coclé Province	Río Grande	Hammered-Sheet	Hammered beads rolled into tube, joined, and cut to length?	, Center	Sound metal	0.938	90.555	8.507
163861	Bead		22 long tubular beads (3.3-3.4cm long).	Coclé Province	Río Grande	Hammered-Sheet	Hammered and rolled into tube. Join along length of bead visible on some of the beads.	Side opposite tag, First bead next to end		1.689	91.096	7.215
163863	Bead		String of 107 cylindrical beads of slightly different sizes (5-9mm long). Most of the beads are tubular and some have more of a barrel shape. 16.9g	Coclé Province	Río Grande	Hammered-Sheet	Some evidence of overlapping ends and working by hammer. There are also incised lines along the edges of some beads, perhaps from cutting.	Side opposite numbered bead, Second bead		1.647	78.361	19.992
163864	Bead		258 small rounded tubular beads. Joins visible along the lengths of some. 2.5mm long. 9.2g	Coclé Province	Río Grande	Hammered-Sheet	Join visible along length of beads. Incised line visible on some along the edge, perhaps from cutting	End with tag, First 6 beads at end		1.636	83.56	14.805
163865	Bead		Small globular/biconical beads made from thin sheet and may have originally been over substrate. 6-8mm diam. One side of the beads tends to be open/wide, while the other is more flattened and in some cases has a burr going towards the interior.	Coclé Province	Río Grande	Hammered-Sheathing Hammered-Sheet Other/Unknown	Possibly sheathing (substrate now missing) or else hammered over mandrel	body, center	Sound metal	1.131	93.522	5.348
163866	Bead		388 beads strung onto the string and 158 loose beads (564 total). 1.5mm long. Hammered tubular beads. Very thin walls. 8.6g	Coclé Province	Río Grande	Hammered-Sheet	Sheet hammered, coiled over and finished by hammering or burnishing	Side without writing , Middle of bag of loose beads		1.046	89.791	9.163
163867	Bead		Necklace with 113 tubular/ring beads approximately 6mm long, with a slightly convex shape.	Coclé Province	Río Grande	Hammered-Sheet	thin gold tubes with visible join along length. There are incised lines at some of the edges of the beads, perhaps from cutting.	End without tag, Single bead at far end		2.223	85.358	12.419
163868	Bead		2mm long thin ring beads. 275 beads. 42g	Coclé Province	Río Grande	Hammered-Sheet	Beads are hammered and twisted into a tube and joined. The individual beads were then cut with a sharp tool.	End with tag, Single bead at far end		0.296	81.858	17.846
225838	Disk	Plaque/Pectoral?	225838c: First of two thin (0.01" thick) polygonal plaque/ornaments (the one in better condition). The plaque is undecorated and there are four punch holes in two rows at the top edge punched from front (numbered side) to back. 12.1g	Panamá Province	Venado beach / Playa Venado between Veracruz and Palo Santo	Hammered-Sheet	Evidence of hammering flaws/ shear fractures on the front surface.	Opposite of numbered side, Lower edge on largest fragment		36.237	58.235	5.528
225840	Disk	Plaque	Gold disk with raised circle around the edge, embossed from back to front. There are four holes punched through the top, punctured with a round tool from front to back as there are burrs remaining on the back side. ~16cm diam. 0.010" thick.	Panamá Province	Venado Beach	Hammered-Sheet	No evidence of work hardening. The disk is still flexible and there are no shear fractures.	Reverse, At embossed edge (5-oclock)		2.907	82.882	14.21
225842	Disk	Plaque/Pectoral?	Round gold disk with wide raised ring embossed around central circle and a repeating triangle design embossed around the edge all tool from back side (numbered side). Four holes, two on either side of the raised ring, punched through from front to back as burrs remain on back. (0.008" thick). 11.9g	Panamá Province	Venado Beach	Hammered-Sheet	Evidence of work hardening around edges where there are shear fractures caused by hammering without sufficient annealing	Back, Center		2.903	80.36	16.737

Object #	Object Class	Object Sub-Class	Object description	Province	Site	Primary Fabrication Method	Primary Fabrication Method Notes	Location of analysis 1	Analysis location notes 1	Cu 1	Au 1	Ag 1
237075	Disk	Plaque/Pectoral?	Round disk with three rows of small punch marks around the edges (punched from the back), a central embossed concentric circle design with 8 smaller concentric circles embossed around the center, just inside the punched design (all embossed from back. There are also two punched holes for suspension, punched from the front to back (going through embossed circle design. High polish on front. 10.5cm diam. 27.2g			Hammered-Sheet	There are hammering flaws present. Delaminating areas of slip on the back side. Flaws are shear fractures caused by working too long without annealing	Obverse, Central embossed circle		0.075	90.89	9.035
237894	Ornament	Ring	C-shaped gold ring. 1.7cm diam., 1mm thick, 3mm wide. Surfaces have longitudinal wavy lines and striations from fabrication and finishing			Other/Unknown Hammered-Sheet	Documentation indicates that it is drawn. There are striations along the length and cracking/stress corrosion along the length as well. The lines along the surface, however, are not regular as if drawn through a die but appear more to be hammered	Outside, Center opposite opening	Sound metal	16.959	77.429	5.612
237897	Tool	Chisel	11.8cm long, 10g. Large gold alloy chisel with pointed end on one side and longer cutting edge that fans out on the other side. Four-sided in cross-section. Long cutting edge has rounded bevel (avg.45 degree angle) ground from the numbered side.			Hammered-Sheet	Shear fractures and flaws visible on surface from hammering	numbered side, center	Sound metal	18.443	77.962	3.594
237898	Tool	Chisel	10.8cm long. 2.75g. Thin chisel with cutting end that fans out slightly and other smaller end terminating in a slightly beveled edge. The cross-section of the chisel is four sided/rectangular. The cutting edge is slightly rounded and there is a burr along one side of the cutting edge (the side opposite the number).			Hammered-Sheet	There is some evidence of hammering from the shear fractures on the surface of one side. There is also evidence of finishing by grinding the edge (from burr)	Un-numbered side, right near small end	Sound metal	5.458	90.754	3.788
237899	Tool	Chisel	7.6cm long. 3.5g. There is a cutting edge on both ends, one longer than the other. Both cutting edges have approx. a 45 degree bevel ground from opposite sides (longer edge ground on numbered side). Chisel is four-sided in cross-section.			Hammered-Sheet	Hammered with some cold working evidenced by shear fracture and delamination in areas	Un-numbered side, Center	Sound metal	19.41	77.445	2.863
240630	Disk	Plaque/Pectoral?	Round disk with no decoration. Four holes are punched towards one edge, two smaller holes in the middle with a larger hole on either side. High polish. Very finished. 104g., 0.014"thick, 14.8cm diam.	Veraguas Province	Veraguas	Hammered-Sheet	No evidence of hammer marks, but thin sheet	Opposite # side, Center		4.21	88.513	7.277
240631	Disk		Round disk with three embossed concentric circle designs and two rows of smaller embossed/punched circles around the circumference all worked from the numbered side. There are two punched holes, punched from the un-numbered side 11.2cm diam. 32.4g	Veraguas Province	Veraguas	Hammered-Sheet	Very thin sheet.	Reverse, Center		0.966	92	7.034
240632	Disk		Round gold disk (15cm diam). with no decoration other than four punched holes at the top, punched from numbered side (front) to back. 110g. ~0.016-0.017" thick at outer edge.	Veraguas Province		Hammered-Sheet	Fairly thick but thinner at edges. Crack at edge probably from work hardening. Cracks also around punch marks	Opposite # side, Center		0.069	94.229	5.701
240633	Disk		Side A: Numbered side, Side B: No number. Round disk embossed with five concentric circles from side A and a punch (embossed) design around the circumference also punched from side A. There are four larger punch holes in a line punched from side A, with remaining flange visible on side B. One of the punch holes is through the concentric embossed design. 0.015"thick just inside embossed circumference. 15.3-15.4cm Diam.	Panamá Province	Venado Beach	Hammered-Sheet		Reverse, Between embossed circles at (proper) 4oclock		0.111	93.111	6.778
240634	Disk		Round gold disk (13cm diam) with no embossing or design. There are four punched holes from front to back (numbered side) with burrs still present on back. 63g and ~0.014" thick.	Panamá Province	Venado Beach	Hammered-Sheet	Small hammering flaws but no shearing.. Not very work hardened. Still flexible.	Opposite # side, Near center		0.055	92.023	7.922

Object #	Object Class	Object Sub-Class	Object description	Province	Site	Primary Fabrication Method	Primary Fabrication Method Notes	Location of analysis 1	Analysis location notes 1	Cu 1	Au 1	Ag 1
240635	Disk		Small round disk with no decoration but two small punch holes at one end. Numbered side: side B. Un-numbered side: side A. 6cm diam., 0.014-0.015" thick 12.6g	Veraguas Province		Hammered-Sheet	There are numerous hammering flaws on both sides but particularly side B. These look like slippage of the metal layers due to work hardening	# side, Center		5.676	87.823	6.501
240637	Band	Band-leg	Hammered gold band with rounded edges and three circular punched holes from outside to inside with flanges still remaining on inside. 46.4g	Veraguas Province	Rojas	Hammered-Sheet	There is evidence of hammering flaws in the form of shear fractures caused by working too long without annealing. There is a large area that has delaminated from the interior side near the end of the band, due to this phenomenon	Exterior, Center opposite ends		1.427	91.684	6.889
240638	Band	Band-leg	Hammered gold band with rounded edges and three circular punched holes from outside to inside with flanges still remaining on inside.41.0g	Veraguas Province	Rojas	Hammered-Sheet	There is evidence of hammering flaws in the form of shear fractures caused by working too long without annealing. There is a large area that is cracking and delaminating on the exterior side near the end of the band, due to this phenomenon	Exterior, Center opposite ends		0.551	92.469	6.981
240639	Band	Headband	Long gold band curved in a circle, 4cm high, 0.015" thick at end. The edges are slightly irregular and there are striations following the length longitudinally. There are four round holes at either end of the band, all punched from the exterior to the interior with flanges remaining on the interior side. There are eight small circular punch marks on one end, lined up parallel to the terminal end.	Veraguas Province	Rojas	Hammered-Sheet	Some hammering flaws, but no obvious shear fractures from work hardening. The edges are slightly irregular and there is some directionality to the grain structure following the band longitudinally	Bottom edge, End with verical row of embossed circles		0.945	93.147	5.908
240642	Tool	Tweezers	Tweezers (?) with large hemispherical tips connected by a thin strip bent over. All one piece. Round tips are convex shape	Coclé Province	Coclé	Hammered-Sheet	There are flaws over the surface that appear to be shear fractures and hammering flaws	Un-numbered side, Center of circle	Sound metal	2.563	88.931	8.506
240644	Ornament	Ring-Nose	Thin (0.013" thick) sheet nose ring. Crescent shaped, open at the end, ends bent over. 3g	Veraguas Province		Hammered-Sheet	Some hammering flaws in surface	Opposite numbered side, Center	Sound metal	32.344	62.598	5.058
240645	Ornament	Ring-Nose	Solid gold ring. open ovoid ring with circular cross-section. Flat ends with no decoration	Colón Province	Lago Alajuelo (Madden Lake)	Cast- Solid Hammered-Sheet Other/Unknown	Identified as solid cast, but there are shear fractures along the surface and slight delamination, indicating hammering.	Opposite numbered side, Center, exactly opposite number	Sound metal	0	83.022	16.978
240649	Ornament	Ring-Nose	Solid cast circular nose ring. Open ring with raised caps at the ends. 12.5g	Colón Province	Lago Alajuelo (Madden Lake)	Cast- Solid Other/Unknown Hammered-Sheet	Much of the surface has the typical cast appearance however there are lines and cracks all over the surface that are also reminiscent of a hammered surface with shear fractures and delamination	Opposite numbered side, Center	Sound metal	1.19	86.448	12.362
240651	Tool	Fishhook	Fish-hook with wide gap between shank and point. Small eye at other end. No barb. 2.35cm high, 1.2cm wide, 0.1cm thick	Chiriquí Province	Chiriquí Viejo	Cast- Solid Other/Unknown Wire/Rod Hammered-Sheet	Most likely cast and then finished by some further hammering and/or rasping/grinding/polishing to shape. The surface is very irregular, which may result from casting. The cracks in the bends may be from stress corrosion cracking caused by stresses during forming	Hook facing right, Center of shaft	Sound metal	34.591	54.51	10.899
240651	Tool	Fishhook	2.7cm long fish-hook with 1.2cm wide gap between shank and point. Cross section is roughly 0.2cm thick (diam).	Chiriquí Province	Chiriquí Viejo	Hammered-Sheet Cast- Solid Wire/Rod Other/Unknown	Possibly cast and finished. Irregular surface	Hook facing right, Center of shaft	Sound metal	13.718	75.058	11.223
240655	Ornament	Band-Nose	Hammered sheet nose ring roughly in shape of butterfly-rounded at either side and center has a double raised rounded band embossed vertically. There are two punch holes on either side of the center band punched from un-numbered side (back). Burrs remain on back (numbered side). Just above the punch holes, the edge of the nose ring is bent down. (0.016" thick)	Colón Province	Lago Alajuelo (Madden Lake)	Hammered-Sheet	Surface texture from hammering including flaws. No shear fracture. Edge is slightly irregular	Numbered side, Center of side with number on it	Sound metal	25.602	71.317	3.081

Object #	Object Class	Object Sub-Class	Object description	Province	Site	Primary Fabrication Method	Primary Fabrication Method Notes	Location of analysis 1	Analysis location notes 1	Cu 1	Au 1	Ag 1
240667	Pendant	Zoo-Bird	Open back cast bird pendant with open, straight beak and a scroll protruding from the top of the beak. There is a double spiral design on top of the head (eyes?) and crescent shaped ears. There is a collar/gorget around the neck and two U-shaped cast wire feet projecting from a very small hemispherical body. There is a single suspension loop in the back of the neck. The wings and tail are thing and flat (~0.032"-0.038"). The tail is a flat band and the wings are crescent shaped. 38.8g	Veraguas Province	Las Palmas	Cast- Open Back Hammered-Sheet	Evidence of casting in form of pitting and porosity. Presence of core material. Some blips and casting flaws (on proper right side of beak, for example). The wings and tail may have been flattened by hammering or polishing as the blips are flattened	Reverse, Bottom center of tail		18.934	74.944	6.122
240668	Pendant	Zoo-Bird	Open back cast bird pendant with double scroll protrusion from top of beak, open hooked beak, and ball in ring eyes. The body is not differentiated from the wings and tail but is thin and flat. The U-shaped cast wire feet project straight out of the flat body directly under the neck. There is a triple cast wire collar/gorget on the bird, and a single suspension loop at the base of the neck on the reverse. The wings are thin (0.032"), flat, crescent shapes and the tail is thin and flat as well(0.031"). 43.2g	Veraguas Province	Saddle, Rio Grande	Cast- Open Back Hammered-Sheet	The pendant was cast as there are casting blips throughout and flaws, and areas that are not polished retain a porous, pitted surface. The wings and tail, however, retain some evidence of hammering as there are some hammering flaws (blips that have been hammered flat), facets, and irregular edges.	Obverse, Bottom center of tail		3.788	89.583	6.629
240669	Ornament	Ear rod	11.6cm long. Hammered ear ornament with hole at center of one end. 12.8g	Coclé Province	El Caño	Hammered-Sheet	Joins visible in some areas. Surface is compact with different facets	Numbered side, Opposite end from number		0.573	95.341	4.085
240670	Sheathing	Ear rod	Long tubular ear rod made of stone with gold sheathing on either end. One end of the gold is open and the other encloses the end of the stone rod. There is a slightly raised ring at the end of the open side. 17.36g	Coclé Province	El Caño	Hammered-Sheathing Hammered-Sheet	Thin sheet gold hammered and then wrapped around the stone rod and burnished.	side opposite number, closed end on side		2.045	93.899	4.056
242462	Bell		Cast bell with bird on top, thin ring around top and thin ring at widest point of body. Projecting from the top of the bell in front of the bird is a thin wire that is bent back on itself and forms a loop in the front on which is a small thin circular spangle with single punch hole (may not be original as spangles were often added). The top two thirds of the body slopes slightly outwards while the bottom third is conical in shape. There is a long slit that dissects the body in half, terminating at the top ring. There is also a cast wire ring on the top of the bell behind the bird that may act as suspension loop. A clapper is present inside the body but may not be original. 20.5g	Herrera Province	Península de Azuero	Cast- Open Back Hammered-Sheet	Not a good cast. Clear casting flaws and artifacts present on surface, however, may also have been repaired using blobs of molten metal as there are many blobs on the surface over cracked areas. Spangle is hammered	Smooth side, Spangle, center		2.478	92.791	4.731
242467	Ornament	Ring-Finger	Hammered finger (?) ring with embossed decoration. The ring is open at the end/adjustable. There is a row of circles embossed from the interior side of the ring and a line on either edge adjacent to circles embossed from the interior as well. There are four holes punched through from the exterior side, two on either end of the ring. 2.0g	Herrera Province	Península de Azuero	Hammered-Sheet	There is a small shear fracture in several locations on the interior near the edge, indicating that it was hammered. The layered structure visible in the delaminating area of fracture is typical of a hammered piece.	Exterior, Middle of side opposite opening in ring		12.997	83.179	3.518
242468	Sheet	Plaque	Roughly square shaped plaque with rounded edges decorated with embossed straight and wavy lines around the edges with small repeated squares embossed between lines. Embossed decoration impressed with tool on the back side (numbered side). There are four holes punched through the placque from front to back, two parallel holes on opposite sides just inside the embossed decoration. (0.021" thick). 47.1g	Herrera Province	Península de Azuero	Hammered-Sheet	Evidence of work hardening only near the edges as surface is pristine in undecorated area but slip/sheer fractures in areas of embossed decoration around the edges on the back side indicating object was likely hammered on the back. Object was therefore well annealed in the center but prolonged hammering occurred on the outer edges. Still retains some flexibility	Front, Center		2.533	93.195	4.272