

Appendix: Photos of Scored Coupons

Updated: 10/01/2020

This photo library shows photos of scored copper coupons that were aged 28 days in the Met's current Oddy test system (Method: 20190226_OT_1). This method involves the hanging of coupons from laser sintered nylon holders. The coupons are unfolded and flattened for scoring and photographing. Photographs of the coupons are taken separately with two different light sources—one is a diffuse lighting meant to distinguish colors and the other is a glancing angle light source meant to pick-up on surface textures. The light source techniques are abbreviated as "Si" for diffuse light and "GA" for glancing angle light. See table below for a key. "GA" photos are only displayed if they show more detail than "Si" photos. Coupon photos are labelled with the abbreviation of the light source that was used to capture the photo. If a glancing-angle-photo appears, it is shown next to its corresponding diffuse-lighting-photo.

Photo Lighting Set-up Abbreviation Key	
Si	Diffuse lighting meant to distinguish colors.
GA	Glancing angle light meant to pick-up on surface textures.

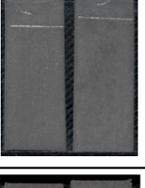
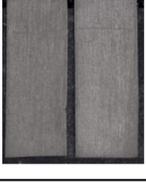
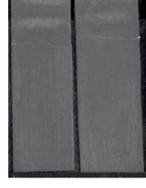
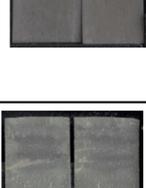
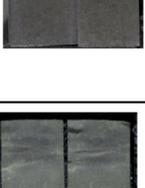
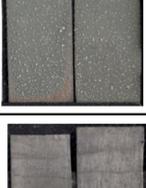
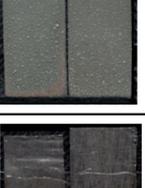
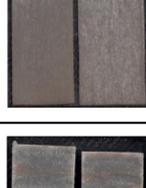
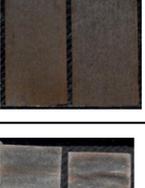
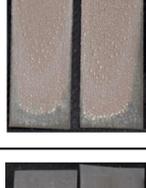
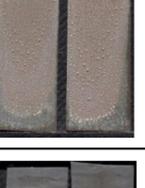
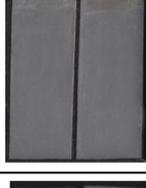
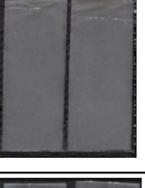
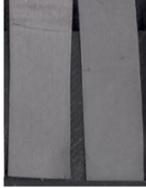
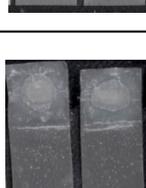
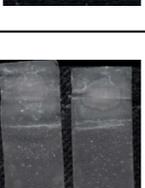
The following ratings are used to assess non-control coupons:

Permanent (P) rating: The material tested may be used indefinitely in the presence of art.

Temporary (T) rating: The material is safe for use near but not in contact with art for up to six months.

Unsuitable (U) rating: The material should not be used in contact with or near art and another material should be found.

Lead Corrosion Library:

Corrosion: Definition	Intensity	Rating	Side Angle	Glancing Angle	Comments
Control	N/A	N/A			Control coupons from jars without sample material – no visible corrosion
Darkening: a change in color that may cause a loss of reflectivity and a darker hue compared to the control	Very Slight	P			Very slight darkening overall
	Slight	T			Slight darkening overall
	Moderate	T			Moderate darkening overall
	Extreme	T			Extreme darkening overall; also spots of thin white compacted corrosion overall and at the edges
Blue Tarnish: a change in color without the loss of reflectivity that results in a blue hue. *on occasion a violet tarnish has also been recorded	N/A	T			Blue tarnish overall; also moderate darkening overall
Rainbow Tarnish: a change in color without the loss of reflectivity that results in a rainbow-like color gradient	N/A	T			Rainbow tarnish overall; also moderate darkening overall
Yellow/Green Compacted Corrosion: a change in color resulting in a matte texture with a yellow or green hue	Thin	T			Thin yellow/green compacted corrosion at the center of the coupons; also moderate darkening overall
	Thick	U			Thick yellow/green compacted corrosion overall; also fluffy white crystals overall
Orange Compacted Corrosion: a change in color resulting in a matte texture with an orange hue	Thin	T			Thin orange compacted corrosion overall
	Thick	U			Thick orange compacted corrosion over most of the coupon; also fluffy white crystals overall
Blue Compacted Corrosion: a change in color resulting in a matte texture with a pale blue hue	Thin	T			Thin blue compacted corrosion overall
	Thick	U			Thick blue compacted corrosion over most of the coupon; also moderate darkening at the top
White Compacted Corrosion: a change in color resulting in a matte texture with a white hue	Thin	T			Thin white compacted corrosion overall
	Thick	U			Thick white compacted corrosion at the edges; also thin white compacted corrosion overall
Fluffy White Crystals: a 3-dimensional white crystal growth on the coupon's surface	Diffuse	U			Diffuse fluffy white crystals overall; also moderate darkening and thin white compacted corrosion
	Concentrated	U			Areas of concentrated fluffy white crystals; also thick white compacted corrosion overall
					Concentrated fluffy white crystals overall, the crystals have formed a brittle white sheet over the metal coupon in this example