

DESCRIPTIVE MODEL OF SILICA-CARBONATE Hg

By James J. Rytuba

APPROXIMATE SYNONYM New Almaden type.DESCRIPTION Cinnabar at contact of serpentinite and siltstone-graywacke above subduction-related thrust.GENERAL REFERENCE Bailey (1964).GEOLOGICAL ENVIRONMENTRock Types Serpentine, siltstone-graywacke.Age Range Tertiary.Depositional Environment Serpentinized intrusive rocks (sills and dikes) into siltstone, and graywacke and siltstone, fractures in altered serpentinite.Tectonic Setting(s) Deposits occur in accreted terrane above subduction-related thrust fault.Associated Deposit Types Stibnite veins.DEPOSIT DESCRIPTIONMineralogy Cinnabar, native Hg, other minor sulfides pyrite, stibnite, chalcocopyrite, sphalerite-galena, and bornite.Texture/Structure Replacement and minor veins.Alteration Replacement of serpentinite by quartz and dolomite and minor hydrocarbons to form "silica-carbonate" rock.Ore Controls Contact of serpentinite with siltstone especially where contact forms antiform. primarily in silica-carbonate rock. OreGeochemical Signature Unknown, probably Hg + Sb + Cu + Zn.EXAMPLES

New Almaden, USCA (Bailey, 1964)

GRADE AND TONNAGE MODEL OF SILICA-CARBONATE Hg

By James J. Rytuba and Simon M. Cargill

COMMENTS (See figs. 138, 139)DEPOSITS

<u>Name</u>	<u>Country</u>	<u>Name</u>	<u>Country</u>
Abbott	USCA	Helen	USCA
Aetna	USCA	Keystone	USCA
Bells Oak	USCA	Knoxville	USCA
Chicago	USCA	La Joya	USCA
Contact	USCA	La Libertad	USCA
Corona	USCA	Lion Den	USCA
Culver Bear	USCA	Mirabel	USCA
Dewey's	USCA	Mt. Diablo	USCA
Esperanza	USCA	New Almaden	USCA
Great Eastern-Mt. Jackson	USCA	Patriquin	USCA
Harrison	USCA	Polar Star	USCA

Model 27c--Con.

Red Elephant
 Red Rick
 Reed

USCA
 USCA
 USCA

Socrates
 Twin Peaks
 Wall Street

USCA
 USCA
 USCA

SILICA-CARBONATE MERCURY

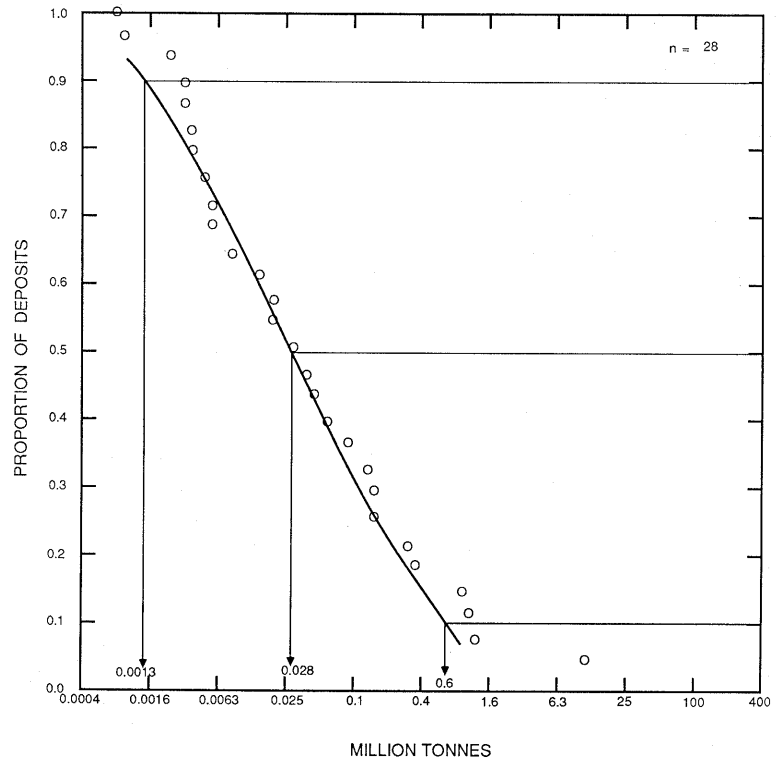


Figure 138. Tonnages of silica-carbonate Hg deposits.

SILICA-CARBONATE MERCURY

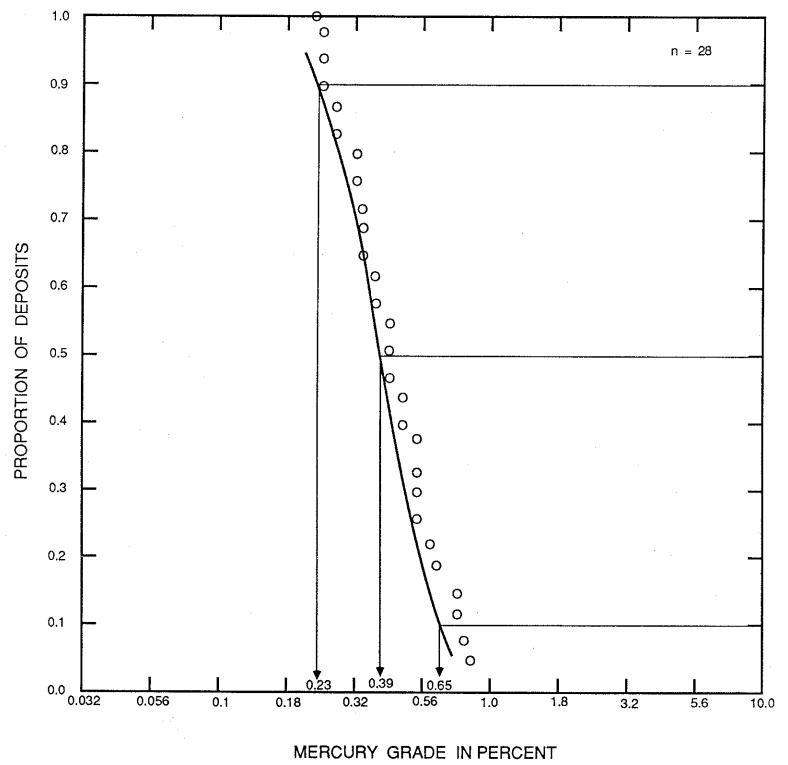


Figure 139. Mercury grades of silica-carbonate Hg deposits.