Hypercinnabar HgS

Crystal Data: Hexagonal. *Point Group:* n.d. Intimately associated with metacinnabar.

Physical Properties: *Fracture:* Subconchoidal to uneven. Hardness = 3 VHN = 51.5(8.0) (25 g load). D(meas.) = 7.43 D(calc.) = 7.54

Optical Properties: Translucent. *Color:* Black with purple cast; in polished section, grayish white. *Streak:* Dark black-purple. *Luster:* Adamantine. *Anisotropism:* Distinct in oil. R_1–R_2: n.d.

Cell Data: *Space Group:* n.d. $a = 7.01(3)$ $c = 14.13(7)$ Z = 12

X-ray Powder Pattern: Synthetic. (ICDD 19-798).
3.08 (100), 1.980 (100), 1.892 (100), 2.80 (90), 3.43 (80), 3.70 (70), 2.97 (60)

Chemistry: Composition established by similarity of X-ray pattern with synthetic material.

Polymorphism & Series: Trimorphous with cinnabar and metacinnabar.

Occurrence: Intimately associated with metacinnabar, which it generally resembles.

Association: Metacinnabar.

Distribution: In the USA, from the Mt. Diablo mine, Contra Costa Co., California [TL]; at the White Caps mine, Manhattan district, Nye Co., Nevada.

Name: In allusion to the fact that the stability field of the species extends to higher temperatures than that of cinnabar or metacinnabar.

Type Material: n.d.

References: (1) Potter, R.W. and H.L. Barnes (1978) Phase relations in the binary Hg–S. Amer. Mineral., 63, 1143–1152.