Patrónite  

Crystal Data:  Monoclinic.  \textit{Point Group:} 2/m.  Massive, and as aggregates of columnar crystals.

Physical Properties:  \textit{Cleavage:} Pronounced columnar cleavage.  \textit{Hardness = Very low.}  
\textit{VHN = n.d.}  \textit{D(meas.) = 2.82(1) D(calc.) = 2.834}


Cell Data:  \textit{Space Group:} I\textit{2}/c.  
\textit{a = 6.775(5) \textit{b = 10.42(1)}} \textit{c = 12.11(1) \textit{β = 100.8(2.0)°}}  
\textit{Z = 8}

X-ray Powder Pattern:  Synthetic VS_4.
5.604 (100), 5.181 (65), 2.473 (30), 2.216 (30), 2.047 (25), 3.151 (20), 2.962 (20)

Chemistry:  Composition established by comparison of X-ray patterns with synthetic material.

Occurrence:  As interstitial filling in the core of a porous 2.5 m layer of admixed vanadium-bearing minerals.  These vanadian materials are in fissures that cut red shales and that were probably filled by a remobilized asphaltite deposit.

Association:  Sulfur, bravoite, pyrite, minasragrite, stanleyite, dwornikite, quartz, vanadian lignite, natural coke.

Distribution:  A major ore mineral in what was the world’s richest vanadium deposit, at Minasragra, 46 km from Cerro de Pasco, Peru [TL].

Name:  After Antenor Rizo-Patrón (1866–1948), Peruvian metallurgist, discoverer of the Peruvian occurrence.

Type Material:  n.d.