

Orickite

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Crystal Data: Hexagonal. *Point Group:* n.d. As grains and laths, to 150 μm .**Physical Properties:** *Cleavage:* Good on {100}. *Fracture:* Conchoidal. Hardness = ~ 3.5 VHN = n.d. D(meas.) = n.d. D(calc.) = 4.212 Weakly magnetic.**Optical Properties:** Opaque. *Color:* Brass-yellow. *Streak:* Black. *Luster:* Metallic. *Pleochroism:* Weak, pale yellow to slightly deeper yellow. *Anisotropism:* Strong, from grayish brown to grayish blue. R_1 – R_2 : (470) 34.7, (546) 39.9, (589) 42.8, (650) 46.9**Cell Data:** *Space Group:* n.d. $a = 3.695(1)$ $c = 6.16(1)$ $Z = 4$ **X-ray Powder Pattern:** Near Orick, California, USA.

3.08 (100), 3.20 (90), 1.85 (70), 2.84 (60), 1.73 (55), 1.583 (30), 2.20 (20)

Chemistry:

	(1)
Na	0.4
K	0.2
Cu	31.7
Fe	31.0
S	33.6
H ₂ O	[3.1]
Total	[100.0]

(1) Near Orick, California, USA; by electron microprobe, average of six grains, H₂O by difference (1.5% to 5.1% oxygen qualitatively determined, presumed to be in H₂O); then corresponds to $(\text{Na}_{0.03}\text{K}_{0.01})_{\Sigma=0.04}\text{Cu}_{0.95}\text{Fe}_{1.06}\text{S}_{2.00} \cdot 0.33\text{H}_2\text{O}$.

Occurrence: In an alkalic mafic diatreme, in small pegmatitic clots thought to have crystallized late in the consolidation of the Coyote Peak intrusive.**Association:** Djerfisherite, rasvumite, bartonite, erdite, coyoteite, phlogopite, schorlomite, acmite, sodalite, cancrinite, pectolite, natrolite, magnetite, calcite.**Distribution:** From Coyote Peak, near Orick, Humboldt Co., California, USA [TL].**Name:** For the town of Orick, California, USA, near the locality.**Type Material:** National Museum of Natural History, Washington, D.C., USA, 150336.**References:** (1) Erd, R.C. and G.K. Czamanske (1983) Orickite and coyoteite, two new sulfide minerals from Coyote Peak, Humboldt Co., California. *Amer. Mineral.*, 68, 245–254.