Orickite  
\[(\text{Na}, \text{K})_{0.4} \text{CuFeS}_2 \cdot 0.3\text{H}_2\text{O}\]

Crystal Data:  Hexagonal.  \textbf{Point Group:}  n.d.  As grains and laths, to 150 \(\mu\)m.


 \[R_1 - R_2: (470) 34.7, (546) 39.9, (589) 42.8, (650) 46.9\]

Cell Data:  \textbf{Space Group:}  n.d.  \ \textbf{a} = 3.695(1) \ \textbf{c} = 6.16(1) \ \textbf{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:  
\[
\begin{array}{lcc}
\text{Na} & 0.4 \\
\text{K} & 0.2 \\
\text{Cu} & 31.7 \\
\text{Fe} & 31.0 \\
\text{S} & 33.6 \\
\text{H}_2\text{O} & [3.1] \\
\hline
\text{Total} & [100.0]
\end{array}
\]

(1) Near Orick, California, USA; by electron microprobe, average of six grains, H\(_2\)O by difference (1.5\% to 5.1\% oxygen qualitatively determined, presumed to be in H\(_2\)O); then corresponds to \((\text{Na}_{0.03}\text{K}_{0.01})\Sigma=0.04\text{Cu}_{1.06}\text{Fe}_{2.00}\text{S}_2\cdot0.3\text{H}_2\text{O}\).

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.
