Rajite

Crystal Data: Monoclinic. Point Group: 2/m. As tabular to bladed crystals, elongated along [100], to 1.5 mm, with strongly curved faces; may be in bundles.

Physical Properties: Cleavage: On {010}. Tenacity: Brittle. Hardness = 4
D(meas.) = 5.75(6)  D(calc.) = 5.77

Optical Class: Biaxial (+). Pleochroism: Weak; in watery greens. Orientation: Y = b; X ∧ c = 22°; Z ∧ a = 3°. Absorption: Z > Y > X. α = 2.115  β = 2.135  γ = 2.26  2V(meas.) = 40°


X-ray Powder Pattern: Lone Pine mine, New Mexico, USA.
3.064 (100), 4.654 (8), 3.348 (8), 3.111 (7), 2.744 (7), 3.793 (6b), 2.844 (5)

Chemistry:

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TeO₂</td>
<td>80.91</td>
<td>80.05</td>
</tr>
<tr>
<td>CuO</td>
<td>18.03</td>
<td>19.95</td>
</tr>
<tr>
<td>CaO</td>
<td>1.06</td>
<td></td>
</tr>
</tbody>
</table>

Total [100.00]  100.00
(1) Lone Pine mine, New Mexico, USA; average of three analyses, each corrected to 100.00% for remnant SiO₂ as quartz; corresponds to (Cu₀.₉₀Ca₀.₀₈)Σ=₀.₉₈Te₂₀.₁₈O₅. (2) CuTe₂O₅.

Occurrence: A very rare mineral, coating fractures in intensely silicified rhyolite breccia.

Association: Mackayite, quartz.

Distribution: At a prospect near the Lone Pine mine, Wilcox district, Catron Co., New Mexico, USA.

Name: To honor Robert Allen Jenkins (1944– ), American geologist and mineralogist, Phelps Dodge Corporation, who found the first specimens.
