Vincentite  

(Pd, Pt)₃(As, Sb, Te)

Crystal Data: Monoclinic.  

Point Group: n.d.  

As grains to 40 microns.

Physical Properties: Cleavage: n.d.  

Tenacity: n.d.  

Hardness = n.d.  

VHN = 494 (15 g. load)  

D(meas.) = n.d.  

D(calc.) = 10.86

Optical Properties: Opaque.  

Color: In reflected light, light brownish-gray.  

Anisotropy: Weak, greenish gray to dark brown.  

Luster: n.d.  

Bireflectance: Weak.

Optical Class: n.d.

Cell Data: Space Group: n.d.

a = 11.226(3)  

b = 6.318(2)  

c = 8.047(2)  

β = 100.95(4)°  

Z = 8

X-ray Powder Pattern:  

Riam Kanen River, S.E. Borneo.

1.800 (10), 1.775 (9), 1.758 (8), 1.745 (8), 1.838 (6), 2.888 (4), 3.951 (3)

Chemistry:

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pd</td>
<td>61.3</td>
<td>60.31</td>
</tr>
<tr>
<td>Pt</td>
<td>14.4</td>
<td>16.70</td>
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<tr>
<td>As</td>
<td>7.3</td>
<td>6.99</td>
</tr>
<tr>
<td>Sb</td>
<td>6.3</td>
<td>9.18</td>
</tr>
<tr>
<td>Te</td>
<td>8.9</td>
<td>7.12</td>
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<tr>
<td>Total</td>
<td>98.2</td>
<td>100.30</td>
</tr>
</tbody>
</table>

(1) Riam Kanen River, S.E. Borneo; electron microprobe analysis, corresponding to (Pd₂.₆₆Pt₁.₃₄)Σ=3.₀₀(As₀.₄₅Sb₀.₂₄Te₀.₁₂)Σ=₁.₁₁.  

(2) Riam Kanen River, S.E. Borneo; electron microprobe analysis, corresponding to (Pd₂.₆₅Pt₁.₃₄)Σ=2.₉₉(As₀.₄₅Sb₀.₂₄Te₀.₀₂)Σ=₁.₀₁.

Occurrence:  

As inclusions in Fe-bearing palladium grains in sediment concentrates from the Riam Kanen River, S.E. Borneo.

Association: Platinum, osmium.

Distribution: Riam Kanen River, S.E. Borneo.

Name: Honors Professor E. A. Vincent of Oxford University, England.

Type Material: Not found.

References:  

