Laphamite

\( \text{As}_2(\text{Se}, \text{S})_3 \)

\( \text{As}_2(\text{Se}, \text{S})_3 \)

Crystal Data: Monoclinic. Point Group: 2/m. As prismatic crystals, to less than 5 mm, elongated along [100] and tabular (010). Crystals are commonly resorbed to give incomplete individuals.


Cell Data: Space Group: \( \text{P2}_1/\text{n} \) (synthetic As\(_2\)Se\(_3\)). \( a = 12.0774(4) \) \( b = 9.9037(6) \) \( c = 4.2835(6) \) \( \beta = 90.458(9)^\circ \) \( Z = 4 \)

X-ray Powder Pattern: Burnside, Pennsylvania, USA.
2.833 (100), 2.773 (80), 4.87 (70), 2.905 (60), 1.777(50), 1.709 (50), 3.72 (40)

Chemistry:

<table>
<thead>
<tr>
<th>Element</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>As</td>
<td>47.0</td>
</tr>
<tr>
<td>Se</td>
<td>43.7</td>
</tr>
<tr>
<td>S</td>
<td>8.7</td>
</tr>
<tr>
<td>Total</td>
<td>99.4</td>
</tr>
</tbody>
</table>

(1) Burnside, Pennsylvania, USA; by electron microprobe, corresponding to \( \text{As}\(_{2.00}\)(\text{Se}\(_{1.91}\)\text{S}\(_{0.93}\) \)

\( \text{As}\(_{0.16}\)\sum = 3.00 \)

Occurrence: As a secondary incrustation, probably by sublimation, on clinker adjacent to a surface vent on a burning pile of waste material from an anthracite coal mine.

Association: Arsenolite, orpiment.

Distribution: From Burnside, Northumberland Co., Pennsylvania, USA [TL].

Name: To honor Dr. Davis M. Lapham (1931–1974), former Chief Mineralogist of the Pennsylvania Geological Survey.
