Yeomanite

Pb₂O(OH)Cl

Crystal Data: Orthorhombic.  *Point Group:* 2/m 2/m 2/m.  As loose mats, ropey aggregates and strands of fibrous crystals to 15 mm.


Optical Class: n.d.  *Anisotropism:* Weak; grayish to light blue.


Cell Data: *Space Group:* Pnma.  \( a = 6.585(10) \)  \( b = 3.855(6) \)  \( c = 17.26(1) \)  \( Z = 4 \)

X-ray Powder Pattern: Torr Works (Merehead) quarry, East Cranmore, Somerset, England.  2.880 (100), 2.802 (78), 3.293 (61), 3.770 (32), 2.166 (22), 1.662 (19), 2.050 (18)

Chemistry:

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PbO</td>
<td>92.3</td>
<td>92.45</td>
</tr>
<tr>
<td>Cl</td>
<td>7.4</td>
<td>7.34</td>
</tr>
<tr>
<td>H₂O</td>
<td>[1.9]</td>
<td>1.87</td>
</tr>
<tr>
<td>-O = Cl₂</td>
<td>1.7</td>
<td>1.66</td>
</tr>
<tr>
<td>Total</td>
<td>99.9</td>
<td>100.00</td>
</tr>
</tbody>
</table>

(1) Torr Works (Merehead) quarry, East Cranmore, Somerset, England; average of 20 EDS analyses, H₂O from structure analysis; corresponding to Pb₁.₉₉O₀.₉₆(OH)₁.₀₁Cl₁.₀₁.

(2) Pb₂O(OH)Cl.

Occurrence: In cavities in manganese oxide pods.

Association: Mendipite.

Distribution: At the Torr Works (Merehead) quarry, East Cranmore, Somerset, England.

Name: Honors Angela Yeoman (b. 1931) and her company, Foster Yeoman, which operated the quarry until 2006, for her personal interest in mineral collecting, conservation and research at Merehead and for her company that supported these activities for nearly 50 years.

Type Material: Natural History Museum, London, England (BM 2013.5) and in the collections of the National Museum of Natural History, Washington, D.C., USA.
