**Table OR2-1** Electron microprobe analytical setups for apatite

<table>
<thead>
<tr>
<th></th>
<th>Low intensity method (LI)</th>
<th>High intensity method (HI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acceleration voltage</td>
<td>10 kV</td>
<td>15 kV</td>
</tr>
<tr>
<td>Beam current</td>
<td>4 nA</td>
<td>40 nA</td>
</tr>
<tr>
<td>Spot diameter</td>
<td>10 µm</td>
<td>15 µm</td>
</tr>
<tr>
<td><strong>Duration on peak (s)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>30</td>
<td>Apatite</td>
</tr>
<tr>
<td>Si</td>
<td>30</td>
<td>Olivine</td>
</tr>
<tr>
<td>Fe</td>
<td>30</td>
<td>Hematite, Fayalite</td>
</tr>
<tr>
<td>Mg</td>
<td>30</td>
<td>Olivine</td>
</tr>
<tr>
<td>Ca</td>
<td>30</td>
<td>Apatite</td>
</tr>
<tr>
<td>Na</td>
<td>30</td>
<td>Albite</td>
</tr>
<tr>
<td>S</td>
<td>60</td>
<td>Celestine</td>
</tr>
<tr>
<td>Sr</td>
<td>150</td>
<td>Celestine</td>
</tr>
<tr>
<td>Y</td>
<td>60</td>
<td>YPO₄</td>
</tr>
<tr>
<td>La</td>
<td>60</td>
<td>LaPO₄</td>
</tr>
<tr>
<td>Ce</td>
<td>60</td>
<td>CePO₄</td>
</tr>
<tr>
<td>Mn</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>F</td>
<td>60</td>
<td>Topaz</td>
</tr>
<tr>
<td>Cl</td>
<td>60</td>
<td>Scapolite</td>
</tr>
</tbody>
</table>
Table OR2-2 Analyses of the Durango apatite using the LI and HI method.

<table>
<thead>
<tr>
<th></th>
<th>Low intensity method (n=12)</th>
<th>High intensity method (n=8)</th>
<th>Young et al. (1969)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average (wt%)</td>
<td>SD (wt%)</td>
<td>SD (rel%)</td>
</tr>
<tr>
<td>P₂O₅</td>
<td>40.51</td>
<td>0.61</td>
<td>1.5</td>
</tr>
<tr>
<td>SiO₂</td>
<td>0.39</td>
<td>0.04</td>
<td>0.9</td>
</tr>
<tr>
<td>FeO</td>
<td>0.10</td>
<td>0.07</td>
<td>74.3</td>
</tr>
<tr>
<td>MgO</td>
<td>0.01</td>
<td>0.01</td>
<td>94.7</td>
</tr>
<tr>
<td>CaO</td>
<td>54.35</td>
<td>0.47</td>
<td>0.9</td>
</tr>
<tr>
<td>Na₂O</td>
<td>0.19</td>
<td>0.02</td>
<td>12.7</td>
</tr>
<tr>
<td>SO₃</td>
<td>0.34</td>
<td>0.05</td>
<td>15.5</td>
</tr>
<tr>
<td>SrO</td>
<td>0.07</td>
<td>0.05</td>
<td>79.9</td>
</tr>
<tr>
<td>Y₂O₃</td>
<td>0.10</td>
<td>0.05</td>
<td>51.8</td>
</tr>
<tr>
<td>La₂O₃</td>
<td>0.36</td>
<td>0.11</td>
<td>32.1</td>
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<tr>
<td>Ce₂O₃</td>
<td>0.59</td>
<td>0.09</td>
<td>15.6</td>
</tr>
<tr>
<td>MnO</td>
<td>0.01</td>
<td>0.01</td>
<td>92.5</td>
</tr>
<tr>
<td>F</td>
<td>3.64</td>
<td>0.07</td>
<td>1.9</td>
</tr>
<tr>
<td>Cl</td>
<td>0.44</td>
<td>0.02</td>
<td>5.6</td>
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</tbody>
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