Fortuna Discovers High-Grade Ag-Au Mineralization at the Caylloma Mine, Peru

February 2, 2010: Fortuna Silver Mines Inc. (TSX: FVI / Lima Exchange: FVI) is pleased to announce the discovery of high-grade silver-gold mineralization in the upper portion of the Animas Vein at the Caylloma Mine in southern Peru. A series of exploration raises and cross-cuts recently developed along the Animas structure cut Bonanza-style silver-gold mineralization above level 6 (production to date from the Animas Vein has all been derived from below the 6th level.)

Mr. Jorge Ganoza, President and CEO, commented: “This is an exciting discovery of high grade silver-gold mineralization in the Animas vein, traditionally a polymetallic vein, that is the source of 85% per cent of production at our Caylloma mine. We’re currently investigating the full significance of the new discovery and our exploration and mine planning teams are working to define resources to be included in our mine plan”.

Highlights of sampling on the new zone include:

Raise CH 418N: 41 channel samples taken every two meters along 84m of vertical extent on the raise returned an average of 1,890 g/t Ag and 5.4 g/t Au over an average sample width of 1.35m.

Cross-Cut 418N: Averaged 2110 g/t Ag and 13.27 g/t Au over a true width of 4.36m.

Raise CH412N: 30 channel samples taken every two meters along 60m of vertical extent on the raise returned an average of 404 g/t Ag and 1.26 g/t Au over an average sample width of 1.55m.

The high-grade silver-gold zone is open laterally over a strike distance of 400m and vertically to the surface, a distance of 150 to 200m along the inclination of the vein. The significance of these results still needs to be fully quantified and built into the current mine plan.

Results of the systematic channel sampling every two meters of the raises are summarized in the following table. Silver and gold values range up to 13,202 g/t and 181.95 g/t, respectively.

<table>
<thead>
<tr>
<th>Raises</th>
<th>Avg Channel Sample Width (m)</th>
<th>Sampled Interval along Inclination of Vein (m)</th>
<th>Ag (g/t)</th>
<th>Au (g/t)</th>
<th>Pb %</th>
<th>Zn %</th>
<th>Cu %</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH 418N</td>
<td>1.35 (41 Channels)</td>
<td>84</td>
<td>1,890</td>
<td>5.37</td>
<td>1.06</td>
<td>2.06</td>
<td>0.10</td>
</tr>
<tr>
<td>CH 412N</td>
<td>1.55 (30 Channels)</td>
<td>60</td>
<td>406</td>
<td>1.26</td>
<td>1.71</td>
<td>3.38</td>
<td>0.08</td>
</tr>
<tr>
<td>CH 414N</td>
<td>1.42 (11 Channels, in-progress)</td>
<td>22</td>
<td>653</td>
<td>1.28</td>
<td>0.99</td>
<td>2.09</td>
<td>0.05</td>
</tr>
</tbody>
</table>
The average widths in Table 1 correspond to the average width of the channel samples in the raise and not to the true width of the structure. The true width of the mineralized structure has been measured in 3 cross cuts and one raise bore and appears to be greater than the width measured in the raises in Table 1.

Table 2.

<table>
<thead>
<tr>
<th>Cross-Cuts/Raise-Bore</th>
<th>True Width – Animas Vein (m)</th>
<th>Ag (g/t)</th>
<th>Au (g/t)</th>
<th>Pb %</th>
<th>Zn %</th>
<th>Cu %</th>
</tr>
</thead>
<tbody>
<tr>
<td>EST 418N</td>
<td>4.36</td>
<td>2,110</td>
<td>13.27</td>
<td>1.73</td>
<td>2.47</td>
<td>0.11</td>
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<tr>
<td>CHA 407N</td>
<td>10.0</td>
<td>1,453</td>
<td>6.12</td>
<td>0.62</td>
<td>0.66</td>
<td>0.09</td>
</tr>
<tr>
<td>EST 412N</td>
<td>6.85</td>
<td>179</td>
<td>0.46</td>
<td>0.94</td>
<td>1.94</td>
<td>0.06</td>
</tr>
<tr>
<td>EST397N</td>
<td>7.35</td>
<td>261</td>
<td>0.31</td>
<td>1.19</td>
<td>1.13</td>
<td>0.08</td>
</tr>
</tbody>
</table>

To-date, only one drill hole has been completed above level 6 in the Animas vein. Drill hole ANIS007506 intersected the Animas vein just above level 6, approximately 200m north-northwest of raise CH418N, and assayed 116 g/t Ag, 1.03 g/t Au, 3.74% Pb, 5.43% Zn and 0.29% Cu over an interval of 5.2m. The drill hole was oriented perpendicular to the mineralized structure. The location of the underground workings and the single existing drill hole are illustrated in the attached longitudinal section of the Animas Vein. Please click on the following thumbnail to view the section:


A 1,300m, 15 hole diamond drill program has been developed to test the lateral and vertical continuity of this Bonanza-style mineralization. Drilling should start in mid-February.

Other High-Grade Targets

Initial exploration drilling will also be carried out at the Don Luis II and Vilafro prospects where surface sampling and mapping have identified mineralized structures with strong silver and gold mineralization. Surface channel samples collected over a strike length of 400m at the Don Luis II vein include 9.89 g/t Au and 347 g/t Ag (sample 251778), 10.0 g/t Au and 93.5 g/t Ag (sample 251740) and 1.16 g/t Au and 1250 g/t Ag (sample 251751). In the Vilafro area, high grade silver mineralization ranging to 3,132 g/t Ag in rock chip samples is associated with a northwest-trending fracture zone.

QA/QC

Sample results reported for the underground workings, including raises and cross-cuts, are based on channel samples systematically collected perpendicular to the orientation of the vein. Samples are dried, prepared and analyzed at company-owned sample preparation and laboratory facilities at the Caylloma property. Silver and base metals are assayed by atomic absorption methods utilizing an aqua regia digestion. Gold is assayed by standard fire assay methods with an atomic absorption finish. Certified reference standards are blindly inserted into the sample stream at a frequency of 1 per 20 normal samples. Assay blanks are blindly inserted at a frequency of 1 per 30 samples and field duplicates are collected and analyzed at a frequency of 1 per 80 normal samples. Check assay samples and preparation duplicate samples are routinely submitted to ALS Chemex facilities in Lima to verify sample preparation and assay quality.
Qualified Person

Mr. Miroslav Kalinaj, P. Geo., is the Company’s Qualified Person as defined by National Instrument 43-101 and is responsible for the accuracy of the technical information in this news release.

Fortuna Silver Mines Inc.

Fortuna is a growth oriented, silver and base metal producer focused on mining opportunities in Latin America. Our primary assets are the Caylloma Silver Mine in southern Peru and the San Jose Silver-Gold Project in Mexico. The Company is selectively pursuing additional acquisition opportunities. For more information, please visit our website at www.fortunasilver.com.

ON BEHALF OF THE BOARD

Jorge Ganoza
President, CEO and Director
Fortuna Silver Mines Inc.

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