The Rovina Valley Au-Cu Project, Golden Quadrilateral, Romania: New Discoveries in an Old Mining District

Randall K. RUFF, Carpathian Gold Inc., Toronto

Toronto Geological Discussion Group, April 16, 2013
Forward-Looking Statement

Statements and certain information contained in this presentation and any documents incorporated by reference may constitute “forward-looking statements” within the meaning of applicable Canadian securities legislation which may include, but is not limited to, information with respect to the Corporation’s expected production from, and further potential of, the Corporation’s properties; the Corporation’s ability to raise additional funds; the future price of minerals, particularly gold and copper; the estimation of mineral reserves and mineral resources; conclusions of economic evaluation; the realization of mineral reserve estimates; the timing and amount of estimated future production; costs of production; capital expenditures; success of exploration activities; mining or processing issues; currency exchange rates; government regulation of mining operations; and environmental risks. Often, but not always, forward-looking statements/information can be identified by the use of words such as “plans”, “expects”, “is expected”, “budget”, “scheduled”, “estimates”, “forecasts”, “intends”, “anticipates”, or “believes” or variations (including negative variations) of such words and phrases, or statements that certain actions, events or results “may”, “could”, “would”, “might” or “will” be taken, occur or be achieved. Forward-looking statements/information is based on management’s expectations and reasonable assumptions at the time such statements are made. Estimates regarding the anticipated timing, amount and cost of exploration and development activities are based on assumptions underlying mineral reserve and mineral resource estimates and the realization of such estimates are set out herein. Capital and operating cost estimates are based on extensive research of the Corporation, purchase orders placed by the Corporation to date, recent estimates of construction and mining costs and other factors that are set out herein. Forward-looking information involves known and unknown risks, uncertainties and other factors that may cause the actual results, performance or achievements of Carpathian and/or its subsidiaries to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Such factors include: uncertainties of mineral resource estimates; the nature of mineral exploration and mining; variations in ore grade and recovery rates; cost of operations; fluctuations in the sale prices of products; volatility of gold and copper prices; exploration and development risks; liquidity concerns and future financings; risks associated with operations in foreign jurisdictions; potential revocation or change in permit requirements and project approvals; competition; no guarantee of titles to explore and operate; environmental liabilities and regulatory requirements; dependence on key individuals; conflicts of interests; insurance; fluctuation in market value of Carpathian’s shares; rising production costs; equipment material and skilled technical workers; volatile current global financial conditions; and currency fluctuations; and other risks pertaining to the mining industry. Although Carpathian has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results to differ from those anticipated, estimated or intended. Forward-looking information contained herein or incorporated by reference are made as of the date of this presentation or as of the date of the documents incorporated by reference, as the case may be, and Carpathian does not undertake to update any such forward-looking information, except in accordance with applicable securities laws. There can be no assurance that forward-looking information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such information. Accordingly, readers are cautioned not to place undue reliance on forward-looking information. The forward-looking information contained or incorporated by reference in this document is presented for the purpose of assisting shareholders in understanding the financial position, strategic priorities and objectives of the Corporation for the periods referenced and such information may not be appropriate for other purposes.

*According to the cautionary statement required by NI 43-101, it should be noted that any reference to a Preliminary Economic Assessment (“PEA”) is preliminary in nature as it includes inferred mineral resources that cannot be categorized as reserves at this time and as such there is no certainty that the preliminary assessment and economics will be realized.
**Key Assets**

“To Become a 400,000 to 500,000 Au Eq(1) oz/yr Producer”

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**Rovina Valley Project (‘‘RVP’’)**

**Riacho dos Machados (‘‘RDM’’)**

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**Total Measured + Indicated Resources of 8.13 Million oz Au and 1.42 Billion lbs Cu**

<table>
<thead>
<tr>
<th>RVP Status</th>
<th>PFS to be released in early 2013 Conversion to a Mining License</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership</td>
<td>100%</td>
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<tr>
<td>Location</td>
<td>Romania</td>
</tr>
<tr>
<td>LOM Av Production</td>
<td>Est 340,000 Au Eq* /yr (based on PEA)</td>
</tr>
<tr>
<td>Mine Life</td>
<td>Estimated + 18 yrs</td>
</tr>
<tr>
<td>Reserves</td>
<td>-</td>
</tr>
<tr>
<td>Resources (M + I)</td>
<td>7.2 Moz Au &amp; 1.4Bn lbs Cu</td>
</tr>
<tr>
<td>Resources (Inf)</td>
<td>330 koz Au &amp; 97.0m lbs Cu</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RDM Status</th>
<th>In Construction mid 2013 Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership</td>
<td>100%</td>
</tr>
<tr>
<td>Location</td>
<td>Brazil</td>
</tr>
<tr>
<td>LOM Av Production</td>
<td>100,000 oz/yr</td>
</tr>
<tr>
<td>Mine Life</td>
<td>+ 8 yrs</td>
</tr>
<tr>
<td>Reserves</td>
<td>830,200 oz</td>
</tr>
<tr>
<td>Resources (M + I)</td>
<td>936,000* oz</td>
</tr>
<tr>
<td>Resources (Inf)</td>
<td>587,000 oz</td>
</tr>
</tbody>
</table>
RDM Project, Brazil: In Construction

Construction +70% Complete; waste and ore mining underway

The Rovina Valley Au-Cu Project, Golden Quadrilateral, Romania: New Discoveries in an Old Mining District
Au equivalent contents from Measured + Indicated Resources
(July 2012 NI 43-101 Resource Estimate Update, details below)

- **ROVINA**
  - Cu-Au Porphyry
  - 2.50 Moz Au-eq

- **COLNIC**
  - Au-Cu Porphyry
  - 2.98 Moz Au-eq

- **CIRESATA**
  - Au-Cu Porphyry
  - 5.35 Moz Au-eq

Total 10.84 Moz Au-eq M+I Resources (Includes 7.19 Moz Au-only)

* For Au Eq. calculation, determined by using a gold price of US$ 1,370 per ounce and a copper price of $3.52/lb (3yr trailing ave. as of July 10, 2012), metallurgical recoveries are not taken into account. In-pit resource calculation based on US$1,313/oz Au oz and $2.27 to $2.57/Cu. Cut-off grades used of 0.25% Cu eq (yellow blocks) for the Rovina deposit, 0.35 g/t Au eq (yellow blocks) for the Colnic deposit and 0.65 g/t Au eq (yellow blocks) for the Ciresata deposit.
Carpathian Gold Inc.

- Approximately 40,000 - 45,000 tpd mining and processing operation from 2 open-pits & 1 underground bulk mine
- Standard flotation process producing a saleable Au-rich Cu concentrate
- Approximately 18-20 year mine life
- New plant location from 2010 PEA study
- Partial back-fill Colnic pit being studied as part of TMF plan
- Existing infrastructure beneficial to new mine development

Pertaining to the PEA and Prefeasibility studies, see cautionary notes on slide 2.
Global Distributions of Porphyry Deposits

Golden Quadrilateral

Within the Golden Quadrilateral recent exploration by western companies defines 30 MM oz of gold only resources (all categories) & growing

- Rosia Montana (GBU) 18.5 MM oz Au
- Rosia Poieni (State) Cu-Au Porphyry
- RVP (CPN) 10.84 MM oz Au Eq* of M + I Resources (7.19 MM oz Au & 1.42 Billion lbs Cu)
- Certej (ELD) 4.8 MM oz Au

Current Mining studies indicate a potential combined ≈1.0 MM oz Au only production per year.

Western Part of Tethyan Belt
3,000 km of mineral deposits/occurrences

* For Au Eq. calculation, determined by using a gold price of $US 1,370 per ounce and a copper price of $3.52/lb (3yr trailing ave. as of July 10, 2012), metallurgical recoveries are not taken into account.
Location of Ore Deposits in Southeast Europe

- Porphyry and epithermal deposits
- Cretaceous to Neogene in age
- Largest gold district in South Apuseni Mts, Romania; the ‘Golden Quadrilateral’
Fig. 5. Tomographic cross-section through the Eastern Alps, Apuseni Mountains and Eastern Carpathians. Blue colour denotes high-velocity, cool bodies interpreted to represent subducted lithosphere, red colour represents low-velocity, hot bodies. Note the low-velocity channels (red arrows) beneath the South Apuseni Mountains: these are interpreted to represent slab windows. Note also the still-attached subducted European lithosphere at the bend zone between the Eastern and Southern Carpathians. Figure courtesy Rinus Wortel and Wim Spakman, Utrecht (Fig. 5 from Neubauer, F., Lips, A., Kouzmanov, K., Lexa, J., Ivascanu, P., 2005, Subduction, slab detachment and mineralization: The Neogene in the Apuseni Mountains and Carpathians: Ore Geology Reviews, v. 27, pp. 13-44.)
The ‘Golden Quadrilateral’ Mining District

Historical production of 55 MM oz gold

Recent exploration by western companies defines 30 MM oz gold only resources

The Rovina Valley Au-Cu Project, Golden Quadrilateral, Romania: New Discoveries in an Old Mining District
An OLD Mining district

Gold production dates back to pre-Roman times

Romans Conquered Dacia in 106 AD mined for approximately 150 years

Estimates range up to 30Moz gold mined, processed, and shipped to Rome
Carpathian Gold Inc.

12 Cordurea Target
Rocks 0.32 – 2.16 g/t Au
Dumps up to 101 g/t Au, 2,400 g/t Ag

Valisoara Au - (Pb-Zn) Target
Breccia Zone 0.6 – 4.0 g/t Au

Known deposits
Porphyry-style
* Au-Cu

Epithermal-style
Pb+Zn+Cu minor Au-Ag
Au+Ag minor base metals

* For Au Eq calculation, determined by using a gold price of $US 1,370 per ounce and a copper price of $3.52/lb (3yr trailing ave. as of July 10, 2012), metallurgical recoveries are not taken into account.
### RVP – NI 43-101 Resources (07/2012)

#### Resource Category

<table>
<thead>
<tr>
<th>Resource Category</th>
<th>Tonnes (MM t)</th>
<th>Au (g/t)</th>
<th>Cu (%)</th>
<th>Au Eq* (g/t)</th>
<th>Gold (MM oz)</th>
<th>Copper (MM lbs)</th>
<th>Au Eq* (MM oz)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Measured</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rovina Deposit (OP)</td>
<td>31.8</td>
<td>0.36</td>
<td>0.30</td>
<td>0.89</td>
<td>0.37</td>
<td>209.0</td>
<td>0.91</td>
</tr>
<tr>
<td>Colnic Deposit (OP)</td>
<td>29.4</td>
<td>0.64</td>
<td>0.12</td>
<td>0.85</td>
<td>0.61</td>
<td>75.0</td>
<td>0.80</td>
</tr>
<tr>
<td>Ciresata Deposit (UG)</td>
<td>29.7</td>
<td>0.86</td>
<td>0.16</td>
<td>1.15</td>
<td>0.82</td>
<td>105.0</td>
<td>1.09</td>
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<tr>
<td><strong>Total Measured</strong></td>
<td><strong>90.9</strong></td>
<td><strong>0.62</strong></td>
<td><strong>0.19</strong></td>
<td><strong>0.96</strong></td>
<td><strong>1.81</strong></td>
<td><strong>389.0</strong></td>
<td><strong>2.80</strong></td>
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<tr>
<td><strong>Indicated</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rovina Deposit (OP)</td>
<td>73.5</td>
<td>0.27</td>
<td>0.23</td>
<td>0.67</td>
<td>0.64</td>
<td>370.0</td>
<td>1.59</td>
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<tr>
<td>Colnic Deposit (OP)</td>
<td>106.3</td>
<td>0.47</td>
<td>0.10</td>
<td>0.64</td>
<td>1.59</td>
<td>226.0</td>
<td>2.18</td>
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<tr>
<td>Ciresata Deposit (UG)</td>
<td>135.1</td>
<td>0.72</td>
<td>0.15</td>
<td>0.98</td>
<td>3.15</td>
<td>435.0</td>
<td>4.26</td>
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<tr>
<td><strong>Total Indicated</strong></td>
<td><strong>315.0</strong></td>
<td><strong>0.53</strong></td>
<td><strong>0.15</strong></td>
<td><strong>0.79</strong></td>
<td><strong>5.38</strong></td>
<td><strong>1,031.0</strong></td>
<td><strong>8.03</strong></td>
</tr>
<tr>
<td><strong>Total M + I</strong></td>
<td><strong>405.9</strong></td>
<td><strong>0.55</strong></td>
<td><strong>0.16</strong></td>
<td><strong>0.83</strong></td>
<td><strong>7.19</strong></td>
<td><strong>1,420.0</strong></td>
<td><strong>10.84</strong></td>
</tr>
</tbody>
</table>

#### Inferred

<table>
<thead>
<tr>
<th>Resource Category</th>
<th>Tonnes (MM t)</th>
<th>Au (g/t)</th>
<th>Cu (%)</th>
<th>Au Eq* (g/t)</th>
<th>Gold (MM oz)</th>
<th>Copper (MM lbs)</th>
<th>Au Eq* (MM oz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rovina Deposit (OP)</td>
<td>11.3</td>
<td>0.19</td>
<td>0.20</td>
<td>0.55</td>
<td>0.08</td>
<td>60.0</td>
<td>0.24</td>
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<tr>
<td>Colnic Deposit (OP)</td>
<td>3.8</td>
<td>0.32</td>
<td>0.10</td>
<td>0.49</td>
<td>0.04</td>
<td>8.0</td>
<td>0.06</td>
</tr>
<tr>
<td>Ciresata Deposit (UG)</td>
<td>9.6</td>
<td>0.67</td>
<td>0.14</td>
<td>0.92</td>
<td>0.21</td>
<td>29.0</td>
<td>0.28</td>
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<tr>
<td><strong>Total Inferred</strong></td>
<td><strong>26.8</strong></td>
<td><strong>0.38</strong></td>
<td><strong>0.16</strong></td>
<td><strong>0.67</strong></td>
<td><strong>0.33</strong></td>
<td><strong>97.0</strong></td>
<td><strong>0.58</strong></td>
</tr>
</tbody>
</table>

*For Au Eq. calculation, determined by using a gold price of $US 1,370 per ounce and a copper price of $3.52/lb (3yr trailing ave. as of July 10, 2012), metallurgical recoveries are not taken into account. In-pit resource calculation based on US$1,313/oz Au oz and $2.27 to $2.57/Cu. Cut-off grades used of 0.25% Cu eq (yellow blocks) for the Rovina deposit, 0.35 g/t Au eq (yellow blocks) for the Colnic deposit and 0.65 g/t Au eq (yellow blocks) for the Ciresata deposit.*
Rovina Valley Project: Alteration-mineralization features

*Three similar porphyries with differences*

*gold grades increase southward*

<table>
<thead>
<tr>
<th>Porphyry</th>
<th>Drillhole/intersection length</th>
<th>Au (g/t)</th>
<th>Cu (%)</th>
<th>g/tAu: Cu%</th>
<th>Intersection Comment</th>
<th>Distinguishing geologic characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rovina (north)</td>
<td>RRD-5/ 506 m</td>
<td>0.39</td>
<td>0.34</td>
<td>1</td>
<td>Main porphyry (C)</td>
<td>Extensive vertical component to mineralisation (600 m) related to cylindrical composite porphyry; grades decrease laterally.</td>
</tr>
<tr>
<td>Rovina (north)</td>
<td>RRD-32/ 544 m</td>
<td>0.85</td>
<td>0.27</td>
<td>3</td>
<td>Late-stage Axial intrusive Porhyry (B)</td>
<td></td>
</tr>
<tr>
<td>Colnic (middle)</td>
<td>RCD-5/ 300 m</td>
<td>0.83</td>
<td>0.13</td>
<td>6</td>
<td></td>
<td>Decreasing grade from surface downward to 250 m depth (low grade continues); largely capped and locally overprinted by phyllic/intermediate argillic alteration.</td>
</tr>
<tr>
<td>Ciresata (south)</td>
<td>RGD-12/ 255.7 m</td>
<td>1.50</td>
<td>0.24</td>
<td>6</td>
<td></td>
<td>High-grades centered on the pipe-like early mineral porphyry and includes extensive multidirectional stockwork fracturing of hornfels wallrock.</td>
</tr>
</tbody>
</table>
Rovina Porphyry Geology and Grade Shell
vertical cross-sections looking northwest

High-grade centered on late-interminal axial Porphyry B within Porphyry C; mineralization locally cut by post-mineral glam breccia

Core (M+I) with >0.5% Cu eq cut-off, 25 MMt @ 0.51 g/t Au & 0.35% Cu

For Cu Eq calculation, determined by using a gold price of $US 1,370 per ounce and a copper price of $3.52/lb (3yr trailing ave. as of July 10, 2012), metallurgical recoveries are not taken into account.
Colnic Porphyry Geology and Grade Shell
vertical cross sections looking northeast

High-grade ‘cupola’ associated with upper Rovina Valley porphyry and margins of late-intermineral F2-Hill porphyry

For Au Eq calculation, determined by using a gold price of $US 1,370 per ounce and a copper price of $3.52/lb (3yr trailing ave. as of July 10, 2012), metallurgical recoveries are not taken into account.
Ciresata Porphyry Geology and Grade Shell
vertical cross sections looking northwest

High-grade core associated with the Early Mineral porphyry and adjacent hornfels sediment

For Au Eq calculation, determined by using a gold price of $US 1,370 per ounce and a copper price of $3.52/lb (3yr trailing ave. as of July 10, 2012), metallurgical recoveries are not taken into account.
### Au-Rich Cu Porphyries – Comparisons to RVP

#### Au-Rich Cu Porphyries – Comparisons to other Bulk Mineable Deposits

<table>
<thead>
<tr>
<th>Company</th>
<th>Deposit</th>
<th>Tonnes (MM)</th>
<th>Au (g/t)</th>
<th>Au (MM oz)</th>
<th>Cu (%)</th>
<th>Au Eq* (g/t)</th>
<th>Ag (g/t)</th>
<th>Ag (MM oz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kinross</td>
<td>Lobo-Marte (D)</td>
<td>199</td>
<td>1.08</td>
<td>6.9</td>
<td>0.71</td>
<td>1.08</td>
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<tr>
<td>Andina</td>
<td>Volcan (D)</td>
<td>390</td>
<td>0.71</td>
<td>8.9</td>
<td></td>
<td>0.71</td>
<td></td>
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<tr>
<td>Kinross</td>
<td>Maricunga Mine (P)</td>
<td>272</td>
<td>0.68</td>
<td>5.9</td>
<td></td>
<td>0.68</td>
<td></td>
<td></td>
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<tr>
<td>Exeter</td>
<td>Caspiche (FS)</td>
<td>1,360</td>
<td>0.50</td>
<td>21.9</td>
<td>0.19</td>
<td>0.83</td>
<td>1.1</td>
<td>48.1</td>
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<tr>
<td>Kinross/Barrick</td>
<td>Cerro Casale (FS)</td>
<td>1,429</td>
<td>0.56</td>
<td>25.7</td>
<td>0.21</td>
<td>0.93</td>
<td>1.4</td>
<td>66.2</td>
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<tr>
<td>Newcrest Mining</td>
<td>Ridgeway U/G (P)</td>
<td>120</td>
<td>0.76</td>
<td>2.9</td>
<td>0.35</td>
<td>1.38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newcrest Mining</td>
<td>Cadia East U/G (D)</td>
<td>2,200</td>
<td>0.44</td>
<td>31.1</td>
<td>0.29</td>
<td>0.95</td>
<td></td>
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<tr>
<td>Anglogold-Ashanti</td>
<td>La Colosa (EX)</td>
<td>516</td>
<td>0.98</td>
<td>16.3</td>
<td></td>
<td>0.98</td>
<td></td>
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<tr>
<td>Sunward Resources</td>
<td>Tiriti (FS)</td>
<td>275</td>
<td>0.52</td>
<td>4.6</td>
<td>0.10</td>
<td>0.70</td>
<td></td>
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<tr>
<td>Kinross</td>
<td>Fort Knox (P)</td>
<td>426</td>
<td>0.42</td>
<td>5.8</td>
<td></td>
<td>0.42</td>
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<td></td>
</tr>
<tr>
<td>Kinross</td>
<td>Paracatu (P)</td>
<td>1,629</td>
<td>0.39</td>
<td>20.4</td>
<td></td>
<td>0.39</td>
<td></td>
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<tr>
<td>Carpathian Gold</td>
<td>RVP (PFS)</td>
<td>406</td>
<td>0.55</td>
<td>7.2</td>
<td>0.16</td>
<td>0.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ciresata Porphyry only</td>
<td></td>
<td>165</td>
<td>0.75</td>
<td>4.0</td>
<td>0.15</td>
<td>1.01</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Deposit tonnes and grade are proven+probable reserves + measured and indicated resources from company reports.

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**Ciresata, RGD-17**

- **716 m @ 1.14 g/t Au** and 0.16% Cu-equivalent
  - **Including 244 m @ 1.70 g/t Au** and 0.22% Cu

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* For Au Eq calculation, determined by using a gold price of $US 1,370 per ounce and a copper price of $3.52/lb (3yr trailing ave. as of July 10, 2012), metallurgical recoveries are not taken into account.
Colnic and Ciresata: Au-rich Porphyry Deposits

Cutoff grades: Rovina 0.35% Cu-eq; Colnic 0.45 g/t Au-eq; Ciresata 0.70 g/t Au-eq. For Au Eq calculation, determined by using a gold price of $US 1,370 per ounce and a copper price of $3.52/lb (3yr trailing ave.as of July 10, 2012), metallurgical recoveries are not taken into account.

M = Maricunga porphyry belt, Chile

Porphyry database from Singer, 2005; appended by Author
Variations of typical porphyry features

- Chalcopryite-pyrite-magnetite in quartz stockwork and disseminated
- Polyphase porphyritic diorite and andesite mineralized subvolcanic stocks
- Overprinting alteration types:
  - Early K-alteration (Biotite +/- K-spar)
  - Early magnetite alteration
  - Magnetite-propylitic assemblage
  - Late-stage quartz-stockwork related sericite
  - Marginal phyllic halo
- Intermineral cross-cutting relationships
Ciresata Porphyry Deposit: Cross-cutting Relationships

Recognising and modeling intrusive and veining cross-cutting relationships is key to porphyry understanding.

<table>
<thead>
<tr>
<th>Lithology unit</th>
<th>Avg Au ppm</th>
<th>Avg Cu ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sediments</td>
<td>1.004</td>
<td>1957</td>
</tr>
<tr>
<td>Early Mineral porphyry (EMP)</td>
<td>1.146</td>
<td>1813</td>
</tr>
<tr>
<td>Intra Mineral porphyry (IMP)</td>
<td>0.877</td>
<td>1159</td>
</tr>
<tr>
<td>Late Mineral porphyry (LMP)</td>
<td>0.333</td>
<td>511</td>
</tr>
</tbody>
</table>

All lithological unit in core of the deposit (1g Au eq* envelope)

*Au eq calculated for Au price 1000USD/oz and Cu price 3USD/lb*

Early-mineral Porphyry in contact with the sedimentary host rock; both are affected by potassic alteration and cross-cut by intense and thin A type Qz veins (RGD-17, 461.7 m).
Sediment fragment within the Inter-mineral Porphyry. The fragment has truncated early Qz-Magnetite veins and later through-going Qz-chalcopyrite-pyrite within a medium-fine grained dioritic porphyry (RGD-46, 532 m).

Inter-mineral Porphyry with intense and pervasive secondary biotite intruding the Early-mineral Porphyry and truncating Qz veins and silicification.
Early-mineral Porphyry: Petrography

Early-mineral Porphyry phenocryst assemblage of hornblende (Amf)-plagioclase (Plag) with incipient secondary biotite (Bi) and pervasive sericite overprint (RGD-17, 356.9 m)

Early-mineral Porphyry plagioclase (Plag) groundmass locally replaced by secondary biotite (Bi) (RGD-17, 356.9 m).

Damian, G., 2011: Petrographic analyses of thin and polished section of the Ciresata porphyry deposit
Rovina Valley Project: Metallurgy
Gold-rich porphyries with simple mineralogy

**Pyrite-Chalcopyrite-Magnetite: Reflected Light Microscopy**

**Typical mineral assemblage**

- Pyrite
- Chalcopyrite
- Magnetite

**Typical gold occurrence**

- Gold occurs as liberated grains (photomicrograph 3) and locked in chalcopyrite +/- magnetite (photomicrograph 4).

Polished-section reflected light microscopy from the Colnic deposit with a typical mineral assemblage for the Rovina Valley Project. Complex grains of chalcopyrite (indicated by Cp and broken red arrow) – pyrite (indicated by py and broken pink arrow) – magnetite (indicated by Mt and broken orange arrow).
RVP: Exploration History

- 19th Century Austro-Hungarian period: high-grade gold vein target

- 1970's – 1980's Romania State: porphyry targets for copper-only (~4000 m)

- 1999 – 2000 Rio Tinto: reconnaissance

- 2001 – 2003 Romania State: small drill program (2300 m) gold-only

- Late 2005 – present: Carpathian Gold discovery-delination of three porphyry deposits (136,000 m drilled to date)

Colnic and Rovina discovered in 2006
Initial NI 43-101 compliant Resource Estimate (May 2007)

Ciresata discovered in 2008
NI 43-101 compliant Resource Estimate (November 2008, all three deposits, Initial for Ciresata)

Currently in Prefeasibility Stage following resource growth and estimate updates
Colnic Discovery Outcrop

Average 1.07 g/t Au + 0.16% Cu

Ca. 50 meters
RCD-9  RCD-2

Drill hole intercepts:
• RCD-2: 0 - 100 m (eoh) 1.09 g/t Au and 0.13% Cu includes 31 m at 1.57 g/t Au and 0.21% Cu

• RCD-9: 0 – 150 m (eoh) 0.95 g/t Au and 0.13% Cu includes 70 m at 1.20 g/t Au and 0.14% Cu
The Rovina Valley Au-Cu Project, Golden Quadrilateral, Romania: New Discoveries in an Old Mining District
Colnic Porphyry: Carpathian Present Geologic Model

86 drill holes later:
Composite porphyry stock complex

The Rovina Valley Au-Cu Project, Golden Quadrilateral, Romania: New Discoveries in an Old Mining District
Ciresata Exploration Summary

blind deposit – discovered in 2008

> 1.2 g/t Au-eq
Rovina Valley Project

Surface Exploration Signatures

Rovina and Colnic Porphyries

- Variants of magnetic high within low
- Soil geochemistry Au + Cu ± Mo
- Detailed alteration mapping – hand lens vital
Surface Signatures

Rovina Valley Project

Surface Exploration Signatures

Ciresata Porphyry

- Variants of magnetic high within low
- Soil geochemistry Au + Cu ± Mo
- Detailed alteration mapping – hand lens vital
Conclusions

- A new exploration model for Golden Quadrilateral: *Au-rich porphyry*
- Exploration success from:
  - Compilation of historic data,
  - Ground magnetics and soil geochemistry surveys,
  - Detailed alteration mapping hand lens geology.
- Extensive knowledge-based field work
- Discovery costs 5 USD/Au-eq Oz

*New exploration models, technology, economics, brings new life to old mining districts*