

## Panoro Increases Copper and Gold Resources by 40% at the Cotabambas Project

Vancouver, B.C., October 29, 2013 -- **Panoro Minerals Ltd.** (TSXV: PML, Lima: PML, Frankfurt: PZM) ("Panoro", the "Company") Panoro is pleased to announce that it has received the mineral resource estimate for its 100% owned Cotabambas porphyry copper-gold-silver Project located in southern Peru from Tetra Tech .

### Highlights

- Base Case Indicated mineral resource of 117.1 million tonnes at 0.42%Cu, 0.23 g/t Au, 2.74 g/t Ag and 0.0013%Mo at a cut-off of 0.20% Cu<sub>eq</sub>;
- Base Case Inferred mineral resource of 605.3 million tonnes at 0.31% Cu, 0.17 g/t Au, 2.33 g/t Ag and 0.0019%Mo at a cut-off of 0.20 % Cu<sub>eq</sub>;
- The new resource reflects a 40%, increase in contained copper, a 41% increase in contained gold and a 51% increase in contained silver;
- The strip ratio of the conceptual pit shell used to constrain the mineral resource is reduced to 1.3:1 from 3.0:1 in the 2012 resource estimate;
- Remaining potential to increase resource tonnage in several directions and below the current pit shell through additional drilling on the basis of strong copper-gold mineralization; and
- Multiple new exploration targets identified on the Cotabambas property.

### Mineral Resource Estimate

Tetra Tech completed the mineral resource estimate for the Cotabambas project utilizing all drill and assay results available to June 20, 2013 including 56,813 meters of drilling by Panoro and 9,923 meters of drilling from legacy campaigns. The mineral resource estimate includes hypogene and supergene sulphides and oxide copper and gold mineralization from the Ccalla and to a lesser extent the Azulccacca zones contained within a single conceptual pit shell. The conceptual pit shell has been modelled to include that portion of the mineral resource block model having a reasonable prospect for economic extraction based on the current knowledge of the deposit. The mineral resource estimate in the Indicated Category is summarized in Tables 1 and 2 below. Figures "Plan 1", "Cross-Section 1" and "Cross-section 2" further illustrate the resource and can be found at:

<http://www.panoro.com/s/Cotabambas.asp?ReportID=592279& Type=Cotabambas& Title=Maps>

**Table 1: Sensitivity of Indicated Mineral Resource to Cut-off Grade**

Cut-Off Grade % Cu <sub>eq</sub>	Million Tonnes	Cu (%)	Au (g/t)	Ag (g/t)	Mo (%)	Cu (Bib)	Au (Moz)	Ag (Moz)	Mo (Mlb)
<b>0.20</b>	<b>117.1</b>	<b>0.42</b>	<b>0.23</b>	<b>2.74</b>	<b>0.0013</b>	<b>1.09</b>	<b>0.86</b>	<b>10.30</b>	<b>3.45</b>
0.30	80.9	0.53	0.29	3.18	0.0009	0.94	0.76	8.28	1.56
0.40	60.7	0.61	0.34	3.53	0.0005	0.82	0.66	6.88	0.61
0.50	46.3	0.70	0.38	3.82	0.0002	0.71	0.56	5.69	0.19
0.60	35.1	0.78	0.41	4.12	0.0001	0.61	0.46	4.64	0.08

*Note: Base case in bold. Mineral Resources have an effective date of June 20, 2013 and were estimated by Qualified Person Robert Morrison, P.Ge. (APGO, 1839). The estimate is based on 56,813 meters of drilling by Panoro and 9,923 meters of drilling from legacy campaigns. Copper equivalent ( Cu<sub>eq</sub>) is calculated using the equation: Cueq = Cu + 0.4422 Au + 0.0065\*Ag, based on the differentials of long range metal prices net of selling costs and metallurgical recoveries for gold and copper and silver. Mineralization would be mined from open pit and treated using conventional flotation and hydrometallurgical flow sheets. Rounding in accordance with reporting guidelines may result in summation differences.*

**Table 2: Mineral Resource in Indicated Category Classified by Mineralization Type**

Zone	Cut-Off Grade % Cu <sub>eq</sub>	Million Tonnes	Cu (%)	Au (g/t)	Ag (g/t)	Mo (%)	Cu (Blb)	Au (Moz)	Ag (Moz)	Mo (Mlb)
Hypogene Sulphide	0.20	84.2	0.37	0.21	2.73	0.0018	0.69	0.58	7.39	3.43
Supergene Sulphide	0.20	8.9	0.73	0.31	3.07	-	0.14	0.09	0.88	0.01
Oxide Copper-Gold	0.20	23.8	0.49	0.24	2.63	-	0.26	0.18	2.01	0.01
Oxide Gold	na	0.2	-	0.66	3.74	-	-	0.00	0.02	-
<b>Total</b>		<b>117.1</b>	<b>0.42</b>	<b>0.23</b>	<b>2.74</b>	<b>0.0013</b>	<b>1.09</b>	<b>0.86</b>	<b>10.30</b>	<b>3.45</b>

The mineral resource estimate in the Inferred Category is summarized in Tables 3 and 4 below.

**Table 3: Sensitivity of Inferred Mineral Resource to Cut-off Grade**

Cut-Off Grade % Cu <sub>eq</sub>	Million Tonnes	Cu (%)	Au (g/t)	Ag (g/t)	Mo (%)	Cu (Blb)	Au (Moz)	Ag (Moz)	Mo (Mlb)
<b>0.20</b>	<b>605.3</b>	<b>0.31</b>	<b>0.17</b>	<b>2.33</b>	<b>0.0019</b>	<b>4.16</b>	<b>3.38</b>	<b>45.37</b>	<b>24.83</b>
0.30	363.2	0.40	0.22	2.56	0.0016	3.17	2.51	29.88	12.98
0.40	216.4	0.49	0.25	2.77	0.0014	2.32	1.75	19.29	6.82
0.50	126.3	0.59	0.28	2.97	0.0014	1.63	1.15	12.05	4.04
0.60	77.0	0.69	0.31	3.11	0.0013	1.17	0.77	7.70	2.15

*Note: Base case in bold. Mineral Resources have an effective date of June 20, 2013 and were estimated by Qualified Person Robert Morrison, P.Geol. (APGO, 1839). The estimate is based on 56,813 meters of drilling by Panoro and 9,923 meters of drilling from legacy campaigns. Copper equivalent (CuEq) is calculated using the equation:  $CuEq = Cu + 0.4422 Au + 0.0065 Ag$ , based on the differentials of long range metal prices net of selling costs and metallurgical recoveries for gold and copper and silver. Mineralization would be mined from open pit and treated using conventional flotation and hydrometallurgical flow sheets. Rounding in accordance with reporting guidelines may result in summation differences.*

**Table 4: Mineral Resource in Inferred Category Classified by Mineralization Type**

Zone	Cut-Off Grade % Cu <sub>eq</sub>	Million Tonnes	Cu (%)	Au (g/t)	Ag (g/t)	Mo (%)	Cu (Blb)	Au (Moz)	Ag (Moz)	Mo (Mlb)
Hypogene Sulphide	0.20	521.0	0.29	0.18	2.41	0.0021	3.36	2.94	40.35	24.22
Supergene Sulphide	0.20	7.4	0.73	0.18	1.93	0.0007	0.12	0.04	0.46	0.11
Oxide Copper-Gold	0.20	75.8	0.41	0.15	1.82	0.0003	0.68	0.37	4.44	0.50
Oxide Gold	na	1.2	-	0.61	3.27	-	-	0.02	0.12	-
<b>Total</b>	<b>0.20</b>	<b>605.3</b>	<b>0.31</b>	<b>0.17</b>	<b>2.33</b>	<b>0.0019</b>	<b>4.16</b>	<b>3.38</b>	<b>45.37</b>	<b>24.83</b>

## Higher Grade Component of Mineral Resources

A High Grade Mineral Resource was defined to demonstrate the presence of a contiguous volume of higher grade mineralization within the base case conceptual pit shell. Tables 5 and 6 show the High Grade Mineral Resources classified by mineralization type.

**Table 5: High Grade Mineral Resources in Base Case Indicated Category and Classified by Mineralization Type**

Zone	Cut-Off Grade % Cu <sub>eq</sub>	Million Tonnes	Cu (%)	Au (g/t)	Ag (g/t)	Mo (%)	Cu (Bib)	Au (Moz)	Ag (Moz)	Mo (Mlb)
Hypogene Sulphide	0.20	36.1	0.58	0.36	3.91	0.0008	0.46	0.42	4.54	0.60
Supergene Sulphide	0.20	7.6	0.81	0.34	3.26	-	0.14	0.08	0.79	-
Oxide Copper-Gold	0.20	17.0	0.59	0.28	2.84	-	0.22	0.15	1.55	0.01
Oxide Gold	na	0.003	-	1.03	3.39	-	-	0.00	0.00	-
<b>Total</b>	<b>0.20</b>	<b>60.7</b>	<b>0.61</b>	<b>0.34</b>	<b>3.53</b>	<b>0.0005</b>	<b>0.82</b>	<b>0.66</b>	<b>6.88</b>	<b>0.61</b>

*Note: High Grade Mineral Resources are included within the Indicated Mineral Resources listed in Table 2*

**Table 6: High Grade Mineral Resources in Base Case Inferred Category and Classified by Mineralization Type**

Zone	Cut-Off Grade % Cu <sub>eq</sub>	Million Tonnes	Cu (%)	Au (g/t)	Ag (g/t)	Mo (%)	Cu (Bib)	Au (Moz)	Ag (Moz)	Mo (Mlb)
Hypogene Sulphide	0.20	174.6	0.45	0.27	2.97	0.0017	1.73	1.50	16.67	6.50
Supergene Sulphide	0.20	4.7	1.00	0.23	2.18	0.0007	0.1	0.04	0.33	0.07
Oxide Copper-Gold	0.20	37.0	0.59	0.18	1.92	0.0003	0.48	0.22	2.29	0.25
Oxide Gold	na	0.02	-	1.03	4.06	-	-	0.00	0.00	-
<b>Total</b>	<b>0.20</b>	<b>216.4</b>	<b>0.49</b>	<b>0.25</b>	<b>2.77</b>	<b>0.0014</b>	<b>2.32</b>	<b>1.75</b>	<b>19.29</b>	<b>6.82</b>

*Note: High Grade Mineral Resources are included within the Inferred Mineral Resources listed in Table 4.*

These mineral resource estimates include Inferred mineral resources that are normally considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as mineral reserves. Mineral resources that are not mineral reserves do not have demonstrated economic viability. There is also no certainty that these Inferred mineral resources will be converted to the Measured and Indicated mineral resource categories through additional drilling.

### Parameters and Assumptions Used in the Mineral Resource Estimate

The conceptual pit shell constraining that portion of the mineral resource block model having a reasonable prospect for economic extraction based on the current knowledge of the deposit has been constructed according to technical and economic parameters in Table 6.

**Table 7: Parameters Used in the Construction of the Mineral Resource Conceptual Pit Shell**

Parameters	Mineral Resources Pit Shell	Units
Copper Price	3.20	US\$/lb
Gold Price	1350	US\$/oz
Silver Price	23	US\$/oz
Copper Selling Costs (SCu)	0.16	US\$/lb
Gold Selling Costs (SAu)	67.50	US\$/oz
Silver Selling Costs (SAg)	1.15	US\$/oz
Copper Price net of Selling Costs (PCu)	3.04	US\$/lb
Gold Price net of Selling Costs (PAu)	1282.50	US\$/oz
Silver Price net of Selling Costs (PAg)	21.85	US\$/oz
Processing Throughput	80,000	t/day
" "	28,000,000	t/year
Mining Recovery Rate	97	%
Mining Dilution Rate	3	%
<b>Mining Cost</b>	<b>1.90</b>	US\$/tonne mined
<b>Processing Cost</b>	<b>5.69</b>	US\$/tonne Milled
Mill Cost	4.72	US\$/tonne Milled
Additional cost for mineral resources	0.15	US\$/tonne Milled
Ore handling cost	0.32	US\$/tonne Milled
Environmental Cost	0.50	US\$/tonne Milled
<b>General and Administrative Cost</b>	<b>1.11</b>	US\$/tonne Milled
Total Operative Cost	<b>8.70</b>	US\$/tonne Milled
Overall Pit Slope Angle	45	degree

## Exploration Potential

As can be seen in Figure "Plan 2" ([see above link to website](#)) accompanying this news release, the Ccalla zone, which has been the focus of drilling to date and hosts the current mineral resources at Cotabambas, is located in the northeast part of the property where late phase porphyry mineralization is hosted by earlier diorites and andesite of the middle Eocene to early Oligocene Andahuaylas-Yauri batholith. Elsewhere on the property, similar late phase porphyries intrude clastic and carbonate strata of the Jurassic Yura Group and Cretaceous Ferrobamba Formation and are associated with recently discovered porphyry- and skarn-type mineralization. All of the mineralized zones identified to date appear to be aligned in either of two northeast-southeast structural trends up to 10 to 12 km in length.

The Cotabambas Project has a number of areas with significant exploration potential:

- Local scale.** The stated Mineral Resources at 0.2% Cu<sub>eq</sub> cut-off are a pit-constrained subset of the mineralization block model. Substantial mineralization, including higher grades, extends well below this conceptual pit shell and there is potential to include some or most of it in the project resource with further drilling.
- District scale.** The Ccalla and Azulccaca deposits form a 2.1 km northeast-southwest trend. Surface mapping and sampling have shown that this trend extends an additional 3 km to the northeast through the newly outlined Cochapata and Maria Jose mineralized porphyry centres. About 2 km to the west, two additional mineralized porphyries named Guacile and Buenavista form another northeast-southwest trend. Detailed surface mapping and systematic rock chip sampling in this 5 km by 3 km area, including 2,365 samples to date, have defined new mineralized exploration targets for follow up surveys and drilling.

- **Property scale.** Elsewhere on the property, stream sediment geochemistry and surface mapping have identified six new exploration targets with anomalous levels of copper, gold, molybdenum, lead and/or zinc. Most include outcropping porphyry- and/or skarn-style mineralization. At the Jean Louis prospect, there is a complex of three Cu-Au-Mo mineralized porphyries outcropping along a 2 km northeast-southwest trend. To the southeast at Cullusayhua, three skarn zones are hosted by limestone near the contacts with intrusive porphyry. Ccarayoc includes three Cu-Mo mineralized porphyries flanked by mineralized skarn over an area of 1 km by 3 km.

Luquman Shaheen, President & CEO, states, "We are pleased with the growth of the resource at the Cotabambas Project. The Inferred and Indicated resources respectively contain 1.09 B lbs and 4.16 Blb of Cu along with very significant amounts of gold (0.86 and 3.38 Moz), silver (10.3 and 45.37 Moz), and molybdenum (3.45 and 24.83 Mlb).. Drilling over the last year has also served to reduce significantly the potential waste:ore (strip) ratios and upgrade a portion of the resource to the Indicated category. There remains much exploration potential to be realized including higher grade zones of primary and secondary mineralization at the Ccalla Deposit. Also, the exploration work carried out to identify other targets outside the Ccalla Deposit has yielded a number of prospective targets, which will be tested in future drilling programs as we advance the project. We are confident that Cotabambas is on its way to becoming Peru's next important copper development project as this important mining nation advances to try and double its national copper production."

### **Antilla Project, Mineral Resources in Progress**

Panoro is pleased to announce also that will soon receive a mineral resource update for its Cu-Mo Antilla project from Tetra Tech as developed by Qualified Person Paul Daigle, P. Geo.

### **About Panoro**

Panoro's strategic focus is to move its advanced stage projects to the feasibility and development stages and to explore its other projects. The Company owns the advanced Cotabambas Copper-Gold –Silver-Molybdenum and Antilla Copper-Molybdenum Projects which include mineral resources of:

Cotabambas: Indicated Resource 117.1 Mt @ 0.42% Cu, 0.23g/t Au, 2.74 g/t Ag and 0.001%Mo @ 0.2% Cu<sub>Eq</sub> cutoff  
Inferred Resource 605.3 Mt @ 0.31% Cu, 0.17g/t Au, 2.33 g/t Ag and 0.002 %Mo @ 0.2% Cu<sub>Eq</sub> cutoff  
(Tetra Tech, 2013)

Antilla: Inferred 154 Mt @ 0.47% Cu and 0.009% Mo @ 0.25% Cu cut-off with an effective date of 1 June 2009, amended 23 August, 2009  
(in-situ content of 1.6 billion lbs. Cu and 30 million lbs. Mo)  
(AMEC, 2009)

Panoro is very well positioned to advance exploration at the Antilla and Cotabambas Projects. The Company has \$13 million in cash which will allow completion of both resource estimates followed by additional infill and exploration drilling and preliminary economic assessments as both projects move towards feasibility studies.

Panoro's significant portfolio of properties is located primarily in the south-eastern region of Peru. This region contains a number of important copper and copper/gold deposits including Glencore-Xstrata's Las Bambas and Antapaccay Copper Projects and the Tintaya Copper Mine. In September 2010, Xstrata announced US\$5.2 billion of investment to develop Las Bambas. The Antapaccay copper project is in operation. The region also includes First Quantum Minerals' Haquira Copper Project, HudBay Minerals' Constancia Copper Project and Southern Copper's Los Chancas Copper Project. The Constancia project is currently in construction with start-up planned for 2014.



Luis Vela, a P. Geo Qualified Person under National Instrument 43-101, has reviewed and approved the scientific and technical information in this press release.

On behalf of the Board of **Panoro Minerals Ltd.**

Luquman Shaheen, M.B.A., P.Eng., P.E.  
President & CEO

**FOR FURTHER INFORMATION, CONTACT:**

**Panoro Minerals Ltd.**

Luquman Shaheen, President & CEO

Phone: 604.684.4246

Fax: 604.684.4200

Email: [info@panoro.com](mailto:info@panoro.com)

Web: [www.panoro.com](http://www.panoro.com)

**Renmark Financial Communications Inc.**

Barbara Komorowski:

[bkomorowski@renmarkfinancial.com](mailto:bkomorowski@renmarkfinancial.com)

Barry Mire

[bmire@renmarkfinancial.com](mailto:bmire@renmarkfinancial.com)

[www.renmarkfinancial.com](http://www.renmarkfinancial.com)

*This release was prepared by management of the Company who takes full responsibility for its contents. Neither TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.*