



ASX: AZS

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## More Positive Metallurgical Results From Promontorio

### HIGHLIGHTS

- **New commercial-scale flotation testwork returns significantly higher concentrate grades:**
  - **Copper: 39.5% (17% higher than previous testwork)**
  - **Silver: 773ppm (107% higher than previous testwork)**
  - **Gold: 9.6ppm (39% higher than previous testwork)**
- **Optimum processing route is via conventional crushing, grinding and flotation to produce a high grade copper-gold-silver concentrate**
- **Bulk samples of concentrate despatched to third party smelters for off-take evaluation**
- **Planning for extensive drilling program at Promontorio, including potential for resource extensions, underway**

Mexican focused precious and base metals explorer, **Azure Minerals Limited** ("Azure" or "Company"), announced today that follow-up metallurgical testwork on mineralised material from the high grade Promontorio copper-gold-silver deposit has returned better than expected results.

At the request of various smelters to provide a concentrate sample suitable for downstream testing of the smelting and refining characteristics of the Promontorio ore, Azure commissioned international mining consultancy Coffey Mining and Perth-based metallurgical consultancy Ammtec Ltd to undertake the bulk flotation preparation work.

Utilising Ammtec's semi-commercial scale facility, rather than the benchtop scale used for the first stage flotation tests, the new tests returned significantly higher copper, silver and gold grades in the concentrate (see Table 1).

**TABLE 1: METALS GRADES IN CONCENTRATE**

COPPER GRADE			SILVER GRADE			GOLD GRADE		
New Test	Previous Test	Increase	New Test	Previous Test	Increase	New Test	Previous Test	Increase
39.5%	33.9%	17%	773 ppm	377 ppm	107%	9.6 ppm	6.9 ppm	39%

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Azure's Executive Chairman, Mr Tony Rovira, said that these results confirm the Company's view that a very high grade copper concentrate with strong silver and gold credits will be achieved during commercial production.

"We are particularly pleased to have increased the gold grade by nearly 40% and to have more than doubled the silver grade, when compared with the first stage testwork," said Mr Rovira.

"These concentrate grades and high metal recoveries, together with the initial interest expressed by smelters, have endorsed Azure's decision to continue advancing Promontorio through the feasibility study process towards a decision to mine".

Azure is also seeking to increase the Promontorio mineral resource through additional drilling, with an intensive resource delineation program planned. Approvals for this program are awaited from Mexican authorities. This drilling program aims to extend the high grade Promontorio copper-gold-silver deposit along strike to the north and south and also to test the depth extensions. It will also test the numerous targets identified during the regional exploration undertaken over the year, including the epithermal gold targets at Creston Colorado, Sehue and Cascada.

## **BACKGROUND**

The Promontorio project in Chihuahua, Mexico, is Azure's flagship project. It contains a high grade copper-gold-silver mineral deposit and outstanding exploration potential with the mineralisation boundaries not defined by current drilling.

The JORC Code mineral resource (Indicated + Inferred) is:

**502,000 tonnes @ 4.7% Copper, 2.1 g/t Gold and 99 g/t Silver**

at a 1% copper cut off, containing a total of 23,400 tonnes of copper, 34,000 ounces of gold and 1.6 million ounces silver. Full details of the resources classification and estimation methodologies are detailed in Azure's announcement to the ASX, released on 7<sup>th</sup> January 2009, and attached as Appendix 1.

-ENDS-

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### **Competent Person Statement:**

*Information in this document that relates to Exploration Results and Mineral Resources is based on information compiled by Mr Tony Rovira, who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Rovira is a full-time employee of Azure Minerals Limited. Mr Rovira has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Rovira consents to the inclusion in the documents of the matters based on his information in the form and context in which it appears.*

**APPENDIX 1**  
**PROMONTORIO RESOURCE ESTIMATE DETAILS**

<p><b>Table 1</b></p> <p><b>Promontorio Cu Au Ag Project, Chihuahua Province, Mexico</b></p> <p><b>Classified Resource Estimate</b></p> <p>Reported Using Kriged Density and above Various Lower Cu Cut Offs</p> <p>3D Kriged Estimate Using Grade x Density and Grade as Service Variables on 1m Drillhole Composites</p> <p>Parent Cell Dimensions of 10m NS by 5m EW by 10m RL</p>
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Classification	Kt	Cu (%)	Au (ppm)	Ag (ppm)	Contained Cu (Kt)	Contained Au (Koz)	Contained Ag (Koz)
Reported Above 0.5% Cu							
Indicated	340	3.7	1.9	83	12.4	21	910
Inferred	226	5.1	2.0	101	11.4	15	732
<b>Total</b>	<b>565</b>	<b>4.2</b>	<b>2.0</b>	<b>90</b>	<b>23.8</b>	<b>36</b>	<b>1,642</b>
Reported Above 1.0% Cu							
Indicated	290	4.2	2.1	94	12.1	20	873
Inferred	212	5.3	2.1	106	11.3	14	724
<b>Total</b>	<b>502</b>	<b>4.7</b>	<b>2.1</b>	<b>99</b>	<b>23.4</b>	<b>34</b>	<b>1,598</b>
Reported Above 2.0% Cu							
Indicated	213	5.1	2.5	112	11.0	17	769
Inferred	184	5.9	2.3	115	10.9	14	682
<b>Total</b>	<b>397</b>	<b>5.5</b>	<b>2.4</b>	<b>114</b>	<b>21.9</b>	<b>31</b>	<b>1,451</b>

\* Note: Figures have been rounded

- Drilling coverage is predominantly on a 40m by 20m to 40m by 40m spacing. The bulk of the drilling (38 holes) was performed by Azure in 2008 using HQ core, the remainder (21 holes - of which 12 were include in the estimate) was historical diamond drilling by another company ( TSX-V listed Dia Bras Exploration Inc) undertaken in 2004 and 2006 using NQ core.
- The Azure samples consisted of ¼ core which was crushed and pulverised at the ALS Chemex preparation facility in Hermosillo then sent for assaying by ALS Laboratories in Canada. Base metals and silver were analysed by four acid digest with ICP-AES finish, Aqua Regia Digestion with an AAS finish or peroxide fusion with IXP-AES finish (ore grade samples). Gold was analysed using Fire Assay Fusion with an AAS finish. The Dia Bras core was halved and analysed by ALS Chemex in Chihuahua using Aqua Regia Digestion with an AAS finish for Cu and Ag and Fire Assay Fusion with an AAS finish for Au.
- All samples had a density applied using the following methods in order of preference: water immersion (237 composites), calliper (33 composites), factored calliper (61 composites), factored pycnometer (97 composites) and factoring by Cu grade (100 composites).
- A nominal 0.5% Cu lower cut-off was used to define the mineralised zones.
- Statistical analyses on samples and 1m composites were completed. Variography and search neighbourhood analysis were also conducted as input into grade estimation.
- The method used to obtain grade estimates within the mineralised zones for Cu, Au and Ag was Block Ordinary Kriging (OK). Both density weighted composites and density were interpolated followed by back-calculation of the grade for each of the elements. The estimated OK density was used when reporting the Resource.
- Resource classification was developed from the confidence levels of key criteria including drilling methods, geological understanding and interpretation, sampling, data density and location, grade estimation and the quality of the estimate.