

## AVALON MINERALS HITS HIGH-GRADE COPPER AND IDENTIFIES NEW MINERALISED ZONES AT VISCARIA

**CONFIRMS POTENTIAL FOR ADDITIONS TO EXISTING JORC RESOURCE INVENTORY**

Australian-based metals company Avalon Minerals Ltd (ASX: AVI; "Avalon") is pleased to announce that recently completed drilling at its 100%-owned **Viscaria VMS Copper Project** in northern Sweden has successfully identified new zones of mineralisation.

Preliminary results from a 6,000 metre diamond and Reverse Circulation (RC) drilling program include high-grade copper intersections from three separate areas, confirming along-strike and down-plunge extensions of the 'A' Zone resource and the 'Missing Link' area between 'A' Zone South and 'A' Zone North. **The results confirm the potential to increase the current JORC resource inventory at Viscaria.**

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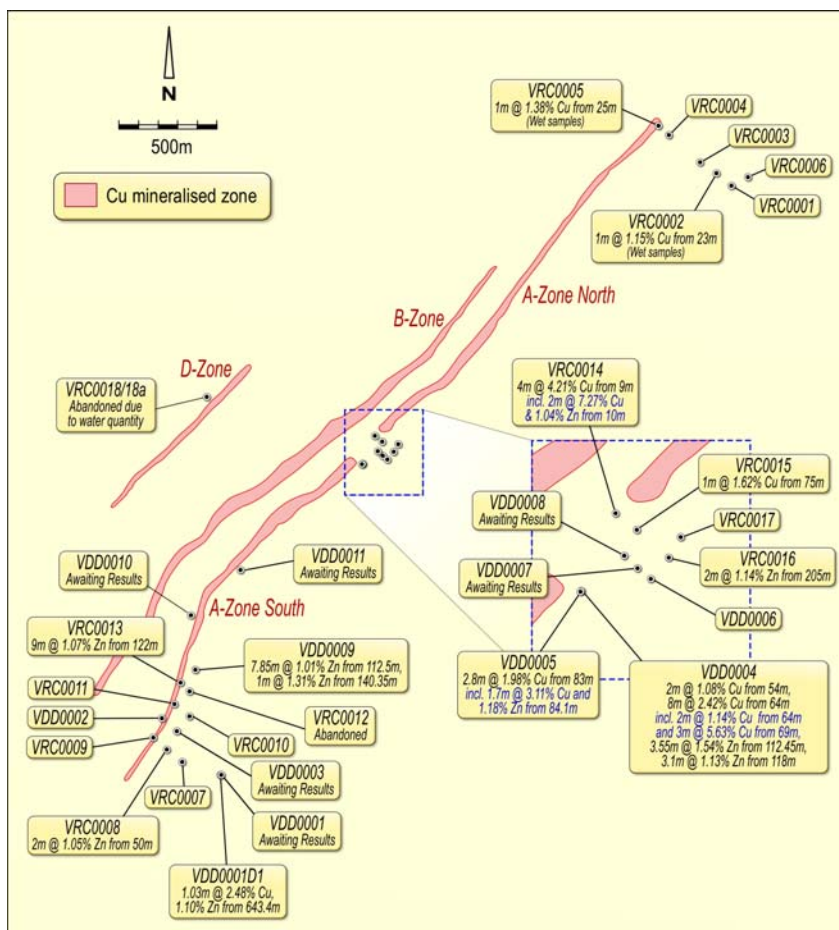
**ASX Code:** AVI

**Directors**  
David McSweeney  
(Managing Director & CEO)

Tan Sri Abu Sahid  
Mohamed (Non-Executive Director)

Stephen Stone  
(Non-Executive Director)

Gary Steinepreis  
(Non-Executive Director)



**Figure 1: Plan View of holes drilled by Avalon Minerals 2009**

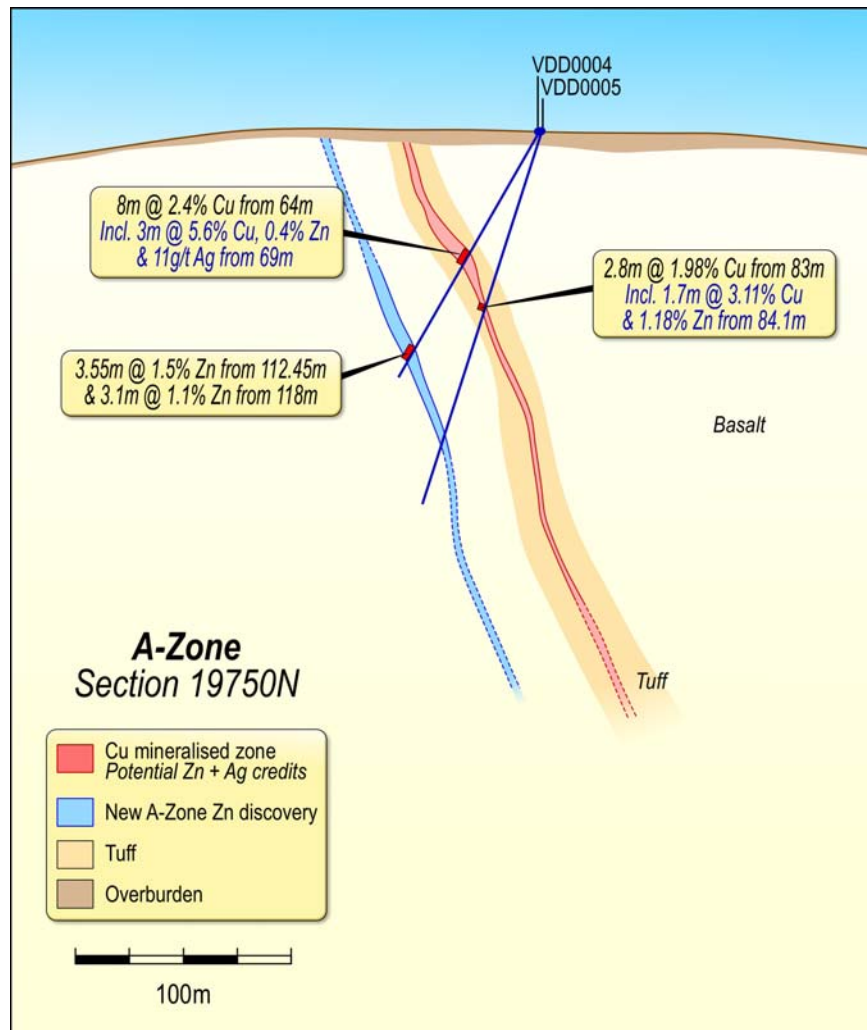
## Missing Link Target

The results from the Missing Link area were very encouraging with best intersections of:

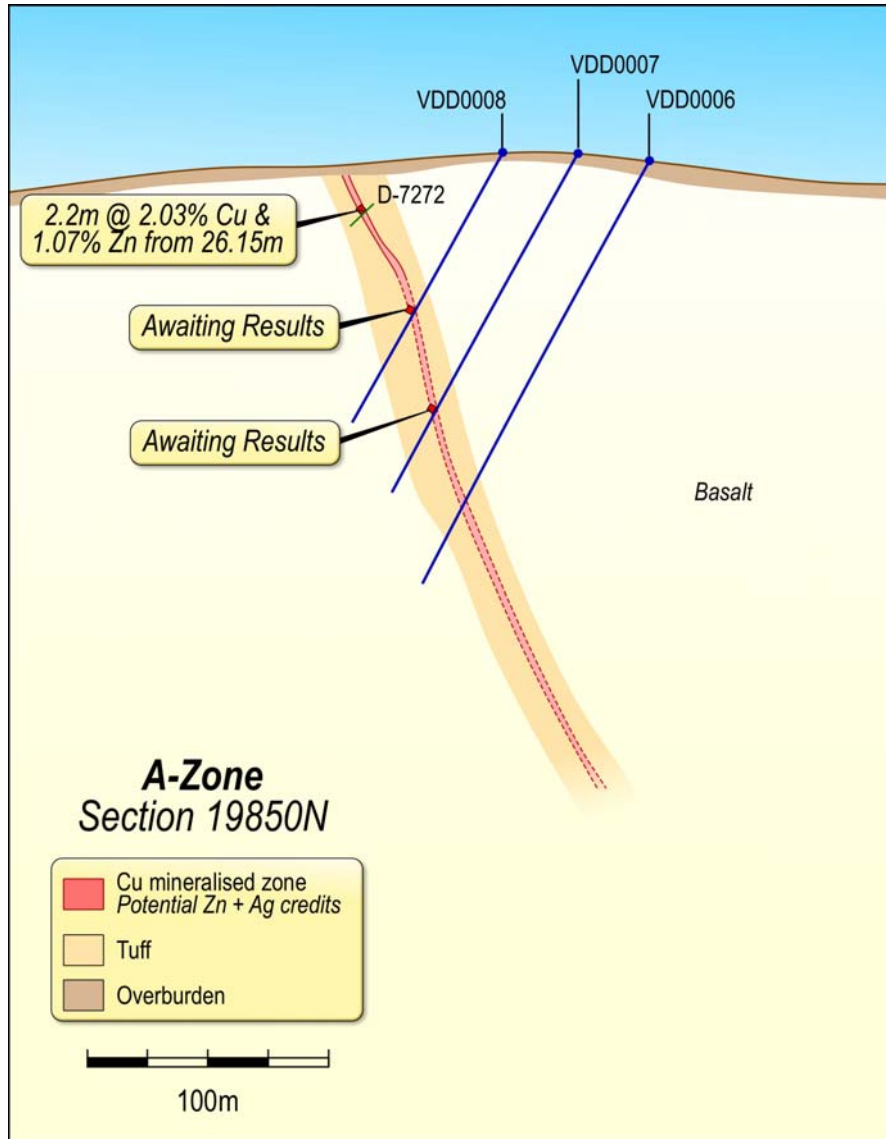
- **3m @ 5.6% Cu, 0.4% Zn and 11g/t Ag from 69 to 72 metres** in hole VDD0004
- **1.7m @ 3.1% Cu, 1.2% Zn and 7.75g/t Ag from 84.1 to 85.8 metres** in hole VDD0005
- **4m @ 4.2 % Cu, 0.6% Zn, 0.37g/t Au and 15g/t Ag from 9 to 13 metres** in hole VRC0014

The higher silver and zinc results in the Missing Link area confirm the Company's general assumption that the 'A' Zone and other Zones at Viscaria may host significant opportunities for optimising by-product credits and for hosting higher grade zones of both precious metals and zinc.

As a result of the high grade copper intersections above, the Company expects to increase the size of the 'A' Zone South resource (Inferred Resource of 8.2 million tonnes grading 2.7% Cu) in the Missing Link area in the March Quarter 2010.



**Figure 2: Schematic Cross Section 19750mN.  
Only holes drilled by Avalon are displayed.**



**Figure 3: Schematic Cross Section 19850mN.**  
Only holes drilled by Avalon (in blue) and historical holes with significant intercepts are displayed (in green).

## 'A' Zone South Depth Extension Target

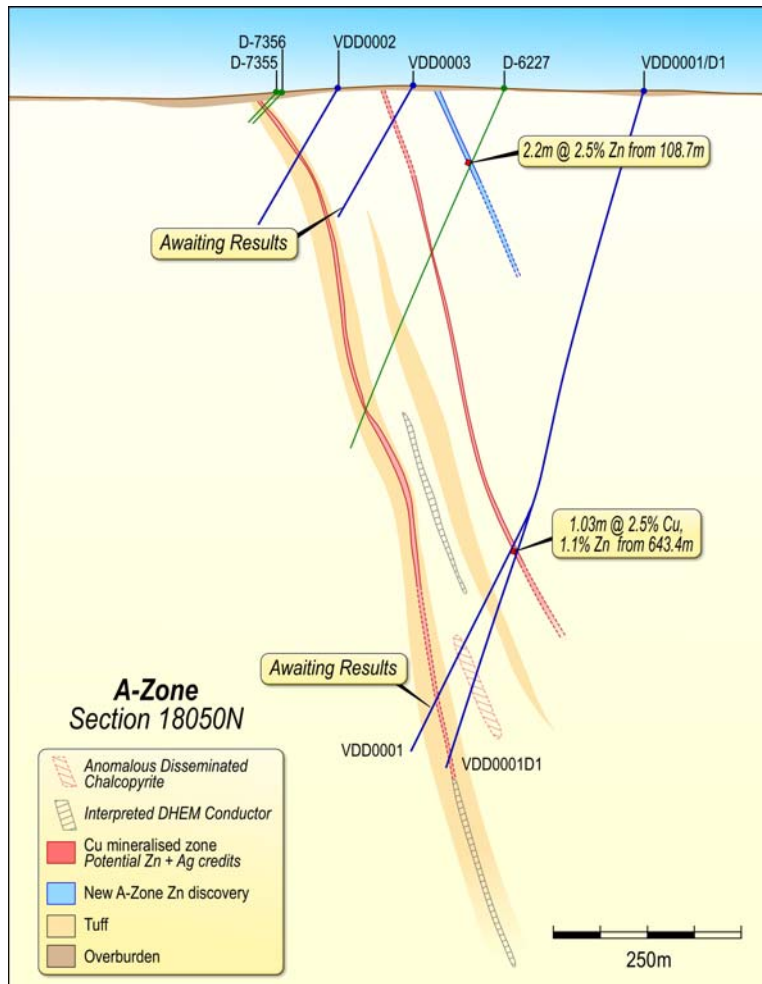
As outlined in the Company's September 2009 Quarterly Report, a parent hole and a series of daughter holes were planned to test the down-plunge extension of the high grade zone within the 'A' Zone South.

All assays and the preliminary results from the first daughter hole have been received, with a best result of:

- **1.03m @ 2.5% Cu, 1.1% Zn and 0.5g/t Ag from 643.4 metres in hole VDD0001D1**

The intersection of 1.03m @ 2.48% Cu was approximately 130 metres south of the historical mining area and supports the current interpretation of a parallel sheet of copper mineralisation east of the main 'A' Zone South sheet as projected and interpreted by Avalon.

Importantly, the preliminary down-hole EM survey has identified the presence of two conductors, one above and one below the extent of the current drilling as indicated in figure 4 below. Further drilling is required to test the interpretation in figure 4 below.



**Figure 4: Schematic Cross Section Interpretation 18050mN.**  
Only holes drilled by Avalon (in blue) and selected historical holes (in green) are displayed.

The assays from the parent hole VDD0001 are pending.

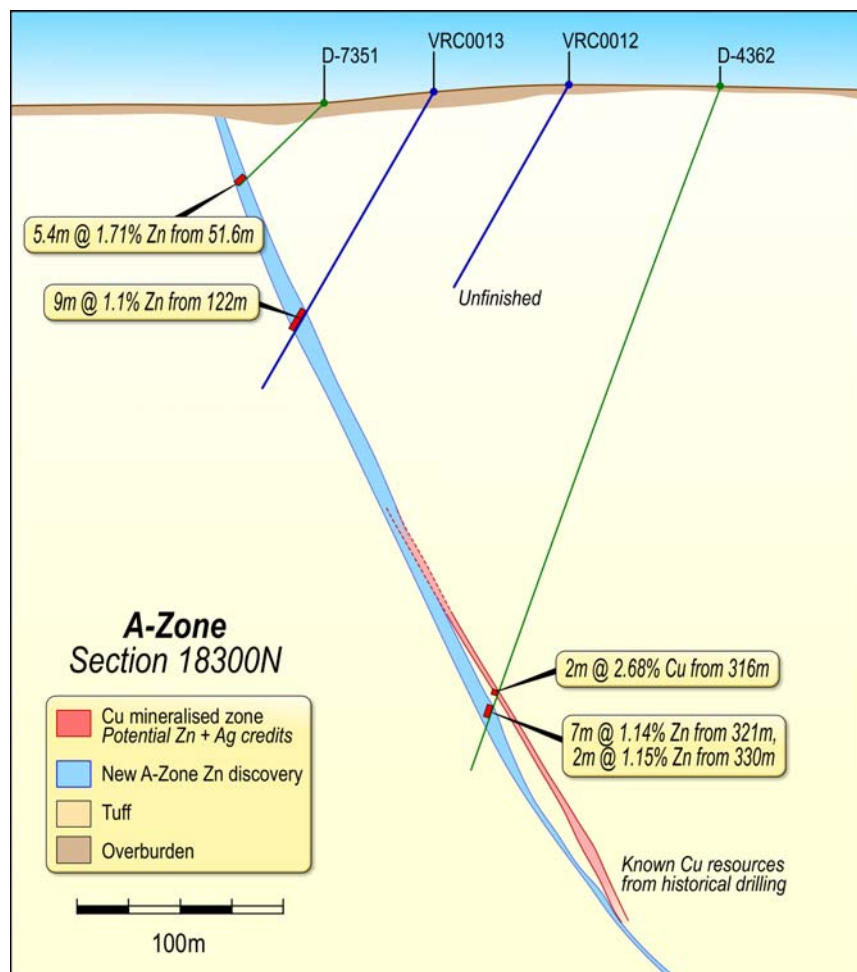
### 'A' Zone South Strike Extension

Drilling of the 'A' Zone South Strike extension was designed to intersect the up-dip shallower extensions of the 'A' Zone South ore body and was successful in identifying a new zone of zinc, with best results of:

- 7.85m @ 1.0% Zn and 1.02g/t Ag from 112.5 to 120.35 metres and 1m @ 1.3% Cu and 10.2g/t Ag from 140.35 to 141.35 metres in hole VDD0009
- 2m @ 1.0% Zn from 50 to 52 metres in hole VRC0008
- 9m @ 1.1% Zn from 122 to 131 metres in hole VRC0013

The significance of this drilling is that Avalon has discovered a **potential new zone of zinc mineralisation not previously identified by earlier operators at Viscaria.**

The presence of the new zone of zinc mineralisation further increases our confidence that the Viscaria deposit hosts separate zones with varying levels of copper, zinc and precious metals credits similar to other VMS deposits. The potential to follow up this target focusing on the potential for higher grade zones of zinc mineralisation is now being reviewed.



**Figure 5: Schematic Cross Section 18300mN.**

*Only holes drilled by Avalon (in blue) and historical holes with significant intercepts are displayed (in green).*



Avalon is very encouraged by the outcome of the recent drilling program and is continuing with its plans to recommence drilling in January 2010 as part of its ongoing exploration and feasibility studies at Viscaria.

The Company is also pleased to note the increase in the copper price to over US\$3.40/lb and notes that the average operating costs during the life of the historical Viscaria mining operations was US\$0.60/lb in 1997.

The drilling and feasibility program for 2010 includes the commencement of in-fill drilling of the potential 'D' Zone and 'A' Zone open cut resources and testing of several high priority exploration targets.



**Table 1 – Significant intercepts of holes drilled by Avalon Minerals Ltd in 2009**

Hole ID	Project	Prospect	From	To	Interval	Type	Cu	Zn	Au	Ag
VDD0001	Viscaria	A-zone South Depth Extension					Awaiting results			
VDD0001D1	Viscaria	A-zone South Depth Extension	643.4	644.43	1.03	HC	2.48	1.10	0.01	0.50
VDD0002	Viscaria	A-zone South Strike Extension	No significant intercepts							
VDD0003	Viscaria	A-zone South Strike Extension					Awaiting results			
VDD0004	Viscaria	Missing Link	54	56	2	HC	1.08	0.05	0.03	2.65
VDD0004	Viscaria	Missing Link	64	72	8	HC	2.42	0.31	0.03	4.98
<i>Including</i>			<i>64</i>	<i>66</i>	<i>2</i>	<i>HC</i>	<i>1.14*</i>	<i>0.563*</i>	<i>0.02*</i>	<i>2.75*</i>
<i>Including</i>			<i>69</i>	<i>72</i>	<i>3</i>	<i>HC</i>	<i>5.634*</i>	<i>0.408*</i>	<i>0.07*</i>	<i>11.19*</i>
VDD0004	Viscaria	Missing Link	112.45	116	3.55	HC	0.06	1.54	0.01	1.13
VDD0004	Viscaria	Missing Link	118	121.1	3.1	HC	0.05	1.13	0.00	1.48
VDD0005	Viscaria	Missing Link	83	85.8	2.8	HC	1.98	0.73	0.07	5.02
<i>Including</i>			<i>84.1</i>	<i>85.8</i>	<i>1.7</i>	<i>HC</i>	<i>3.11</i>	<i>1.18</i>	<i>0.11</i>	<i>7.75</i>
VDD0006	Viscaria	Missing Link	No significant intercepts							
VDD0007	Viscaria	Missing Link					Awaiting results			
VDD0008	Viscaria	Missing Link					Awaiting results			
VDD0009	Viscaria	A-zone South Strike Extension	112.5	120.35	7.85	HC	0.08	1.01	0.01	1.02
VDD0009	Viscaria	A-zone South Strike Extension	140.35	141.35	1	HC	1.31	0.06	0.09	10.20
VDD0010	Viscaria	A-zone South Strike Extension					Awaiting results			
VDD0011	Viscaria	A-zone South Infill Drilling					Awaiting results			
VRC0007	Viscaria	A-zone South Strike Extension	No significant intercepts							
VRC0008	Viscaria	A-zone South Strike Extension	50	52	2	CHIPS	0.03	1.05	0.01	0.25
VRC0009	Viscaria	A-zone South Strike Extension	No significant intercepts							
VRC0010	Viscaria	A-zone South Strike Extension	No significant intercepts							
VRC0011	Viscaria	A-zone South Strike Extension	No significant intercepts							
VRC0012	Viscaria	A-zone South Strike Extension	Not Sampled - Abandoned before target depth							
VRC0013	Viscaria	A-zone South Strike Extension	122	131	9	CHIPS	0.02	1.07	0.01	0.25
VRC0014	Viscaria	Missing Link	9	13	4	CHIPS	4.21	0.58	0.37	15.13
<i>Including</i>			<i>10</i>	<i>12</i>	<i>2</i>	<i>CHIPS</i>	<i>7.27</i>	<i>1.04</i>	<i>0.70</i>	<i>26.00</i>
VRC0015	Viscaria	Missing Link	75	76	1	CHIPS	1.62	0.22	0.18	8.60
VRC0016	Viscaria	Missing Link	205	207	2	CHIPS	0.04	1.14	0.00	0.25
VRC0017	Viscaria	Missing Link	No significant intercepts							
VRC0018	Viscaria	D-zone	No significant intercepts - Abandoned before target depth							
VRC0018a	Viscaria	D-zone	No significant intercepts - Abandoned before target depth							

Weighted average grades of mineralised zones are derived using the grade compositing function in Micromine with the following input values: Minimum Length = 1 metre, Minimum grade of final composite = 1% of relevant element, Maximum consecutive length of waste = 3 metres, Maximum total length of waste = 5 metres, Trigger value = 0.2% of relevant element.

\*Assay values marked with \* are derived as per the description above with the following changes to the input values: Maximum consecutive length of waste = 1 metre, Maximum total length of waste = 1 metre



– ENDS –

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#### **Competent Persons Statements**

*The information in this report relating to Exploration Results is reviewed by Ms Louise Lindskog BSc Hons (Geol) who is a Member of the Australasian Institute of Mining and Metallurgy and is the Company's Exploration Manager. Ms Lindskog has over 8 years of exploration experience in a variety of mineral deposit styles including uranium, diamonds, base metals and gold mineralisation and she consents to inclusion of the information in this report in the form and context in which it appears. She qualifies as a Competent Person as defined in the 2004 Edition of the "Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves".*

#### **Avalon Minerals – Background**

Avalon Minerals Ltd listed in March 2007 with the aim of developing and discovering mineral deposits.

Avalon's corporate objective is to build a diversified resource mining group based on cash flows from producing operations.

The primary project generation strategy has been successful with the acquisition of the advanced Viscaria copper deposit in northern Sweden where a maiden JORC Code compliant copper resource has been defined. This resource comprises of an Inferred Resource of:

8.2 million tonnes grading 2.7% Cu for the 'A' Zone South;  
5.1 million tonnes grading 1.2% Cu for the 'A' Zone North;  
24.1 million tonnes grading 0.8% Cu for the 'B' Zone; and  
2.5 million tonnes grading 1.6% Cu for the 'D' Zone.

When combined, this totals 514,600 tonnes of contained copper.

In addition the recently acquired cluster of six closed historical copper- zinc mines at Adak, 300km south of Viscaria, also provides potential for Avalon to grow its base metal inventory within northern Sweden.