



ASX/Media Release

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AVALON MINERALS LTD DECEMBER 2009 QUARTERLY REPORT

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ASX Code: AVI
100.5 million shares
6.3 million unlisted options

Directors

David McSweeney (Executive Chairman)
Tan Sri Abu Sahid Mohamed (Non-Executive Director)
Stephen Stone (Non-Executive Director)
Gary Steinepreis (Non-Executive Director)

Inferred Mineral Resources:

'A' Zone South: 8.2mt @ 2.7%Cu
'A' Zone North: 5.1mt @ 1.2% Cu
'B' Zone: 24.1mt @ 0.8% Cu
'D' Zone: 2.5mt @ 1.6% Cu

**For a total of 39.9mt @ 1.3% Cu and
514,400 tonnes of copper metal**

HIGHLIGHTS

Viscaria VMS Copper Project – Sweden (Avalon – 100%)

- Preliminary results from 6,000 metre diamond and Reverse Circulation (RC) drilling program received
- Results confirm the potential to increase the current JORC resource inventory at Viscaria
- Results from the 'Missing Link' area encouraging
- One drill rig currently on site and drilling at Viscaria, a second rig due first week of February.

Corporate

- Successful completion of 15% placement to raise a total of A\$3.2 million

SWEDISH PROJECTS

Viscaria VMS Copper Project

The Viscaria Copper Project in northern Sweden is the Company's primary focus and forms the basis for Avalon's plans to become a mid-tier copper producer. The Viscaria copper deposits are regarded as being of Volcanogenic Massive Sulphide (VMS) origin. Examples of VMS deposits in Western Australia include the Golden Grove and Jaguar deposits and the more recent discoveries in the Doolgunna region, located near Meekatharra.

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 for Avalon to increase the current JORC resource inventory at Viscaria.**

Avalon 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.

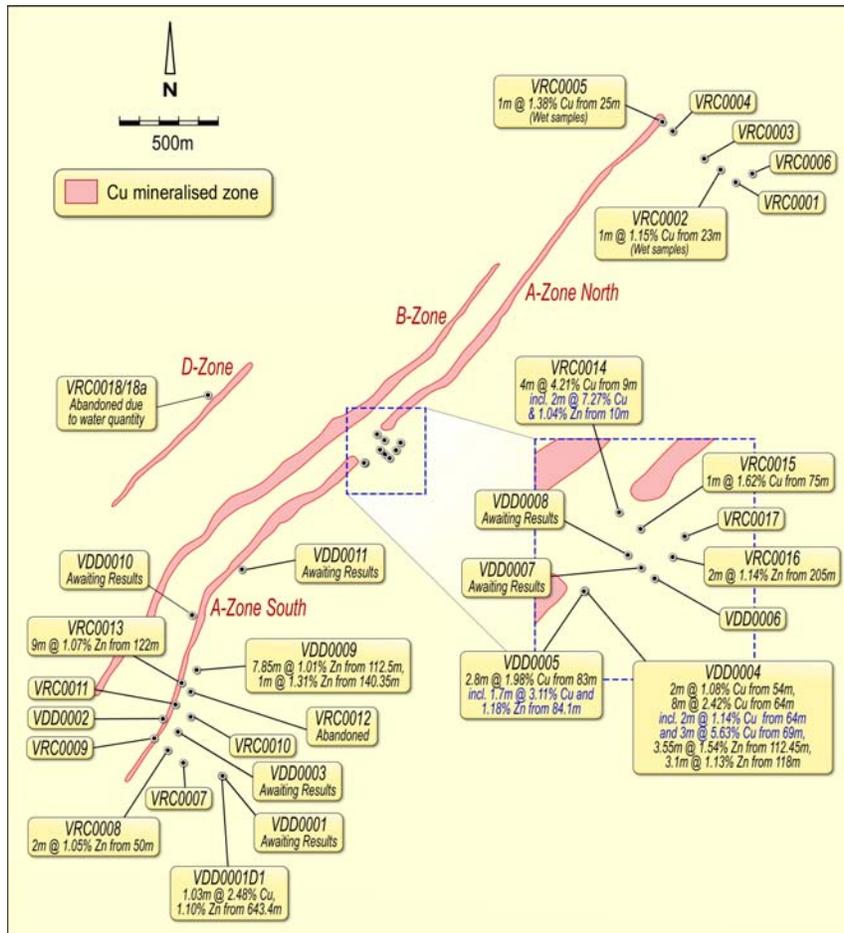


Figure 1: Plan View of holes drilled by Avalon Minerals 2009

'Missing Link' Target

The results from drilling at the 'Missing Link' area (between the 'A' Zone South and 'A' Zone North) 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 and**
- **3.5m @ 1.07 % Zn, 0.25g/t Ag from 124.5 to 128 metres in hole VDD0008.**

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 of 2010.

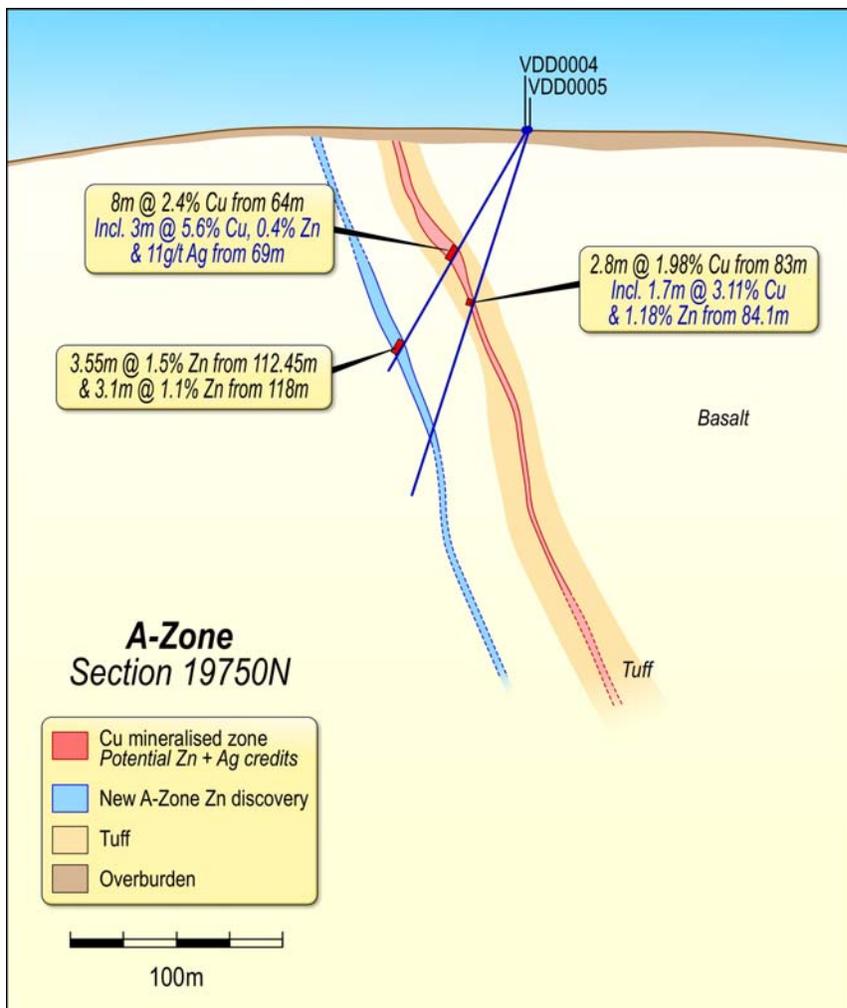


Figure 2: Schematic Cross Section 19750mN. (Only holes drilled by Avalon are displayed).

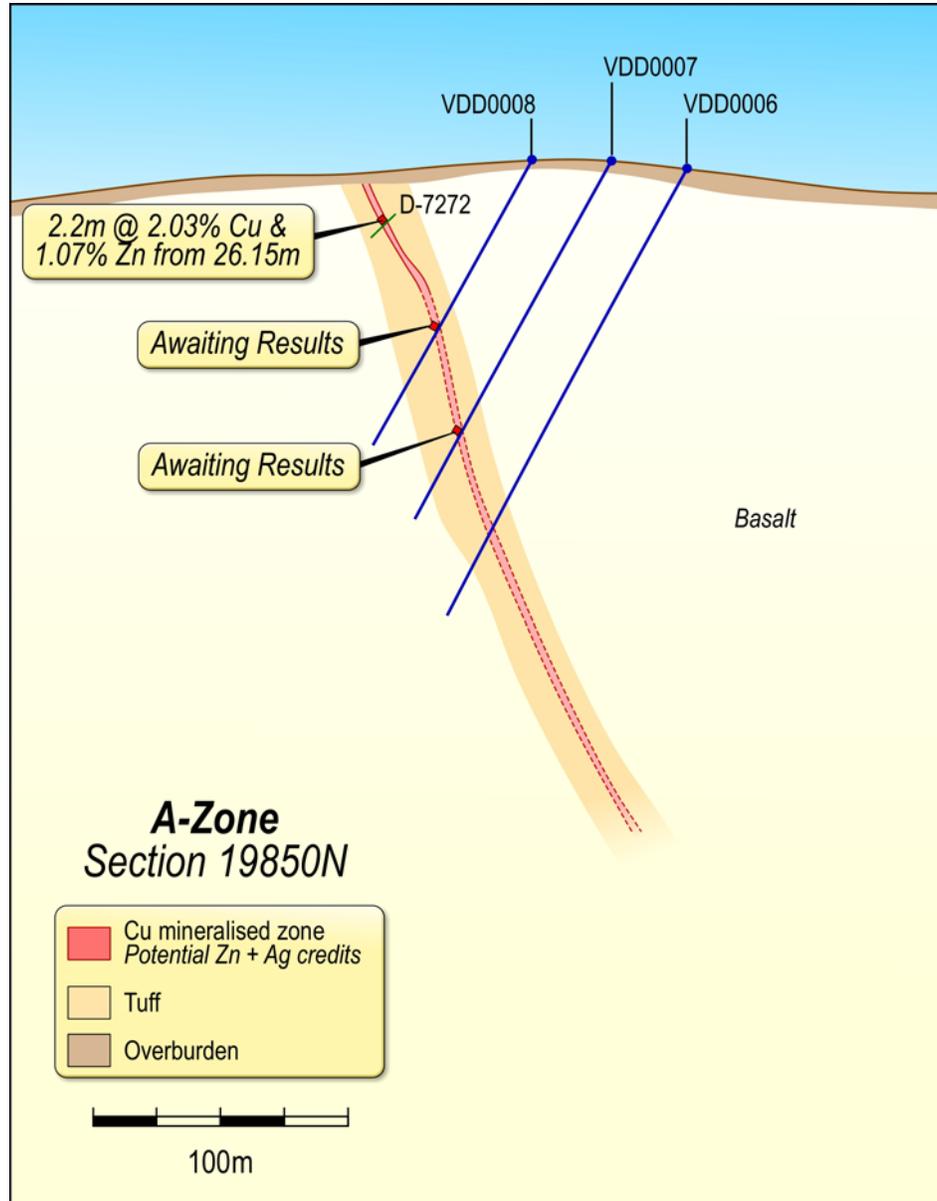


Figure 3: Schematic Cross Section 19850mN.

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

'A' Zone South Depth Extension Target

Historical production from the 'A' Zone South accounted for approximately 8 million tonnes of copper ore produced by the previous operators, LKAB and Outokumpu, between 1982 and 1997. Copper grades within the 'A' Zone South are frequently greater than 3% Cu, with widths greater than 8 metres and over considerable strike lengths. The southerly plunge component of the interpreted 'A' Zone South high-grade zone represents an attractive target for additional high-grade (+3% Cu) mineralisation.

The aim of the 'A' Zone South drilling programme is to establish the continuation of the 'A' Zone South resource down-plunge to the south. It is expected that results from this programme will support a base case development scenario which was previously outlined late last year.

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**

This intersection 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 during the March Quarter.

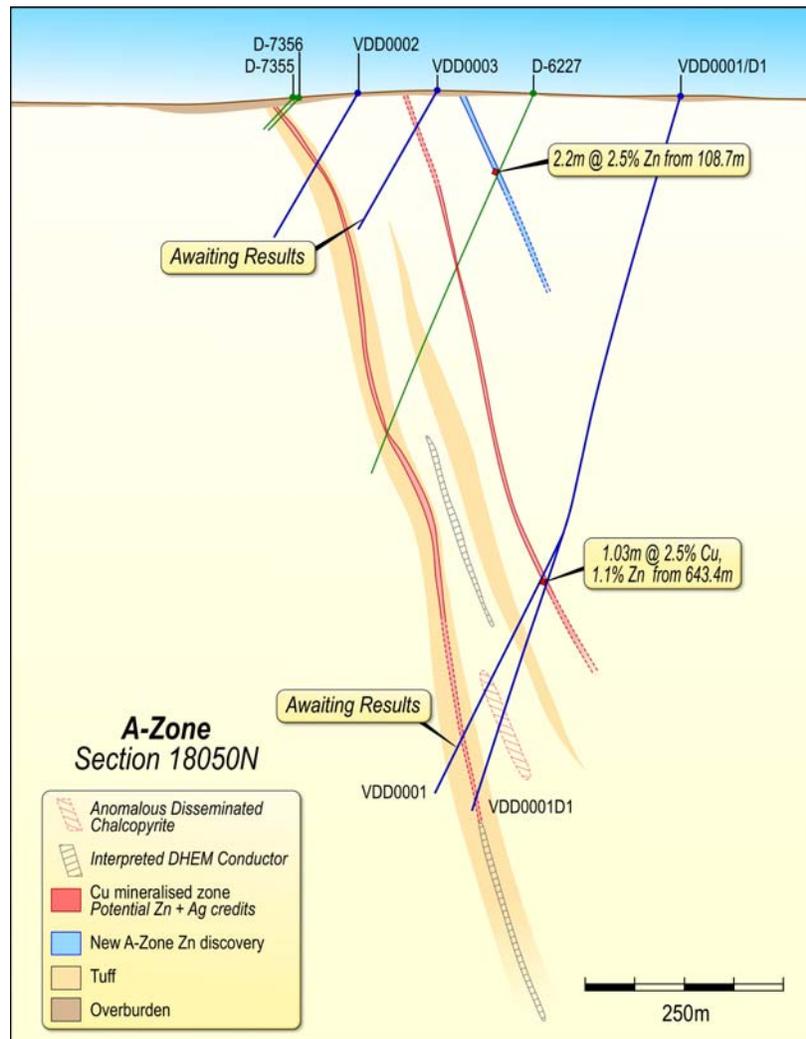


Figure 4: Schematic Cross Section Interpretation 18050mN.

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 and
- 1m @ 2.8% Zn from 138 to 139 metres in hole VDD0010.

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 the Company's 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.

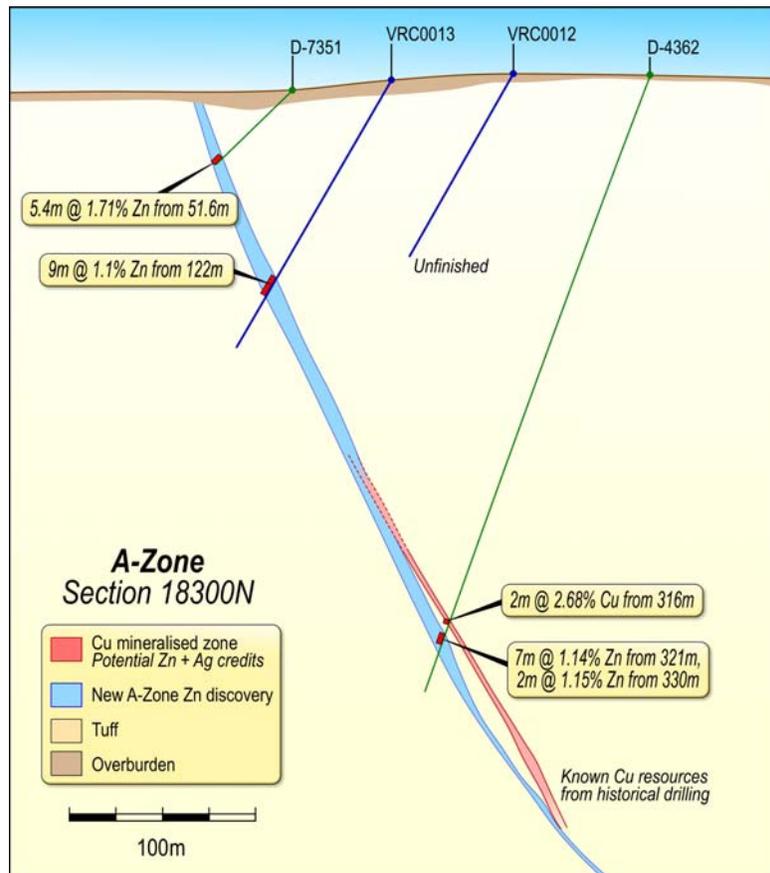


Figure 5: Schematic Cross Section 18300mN.

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

Drilling further north within the 'A' Zone South was designed to intersect the in situ mineable surface mineralisation. Only one hole was completed in this area and it was successful in confirming the present mineralisation. Results include;

- **7.54m @ 1.01% Cu and 2.2g/t Ag from 38.46 to 46 metres and 1.5m @ 1.22% Cu and 2.2g/t Ag from 55 to 56.5 metres and 1m @ 1.48% Cu and 3.4g/t Ag in hole VDD0011.**

'D' Zone

One drill rig is currently on site and drilling at Viscaria with a second rig due to arrive during the first week of February as part of an initial program of over 3,500 metres on the 'D' Zone for approximately 45 holes designed to infill the inferred 'D' Zone resource of 2.5mt @ 1.6% Cu. The average depth of the diamond holes is 85 metres.

Drilling will take approximately 3 months to complete.

The 'D' Zone drilling program is designed to infill the current historical drilling for the purposes of the Company's pre-feasibility study into the open cut potential of the 'D' Zone and 'A' Zone South open cut deposits and to improve the understanding of the potential of the current resource to increase along strike and at depth.

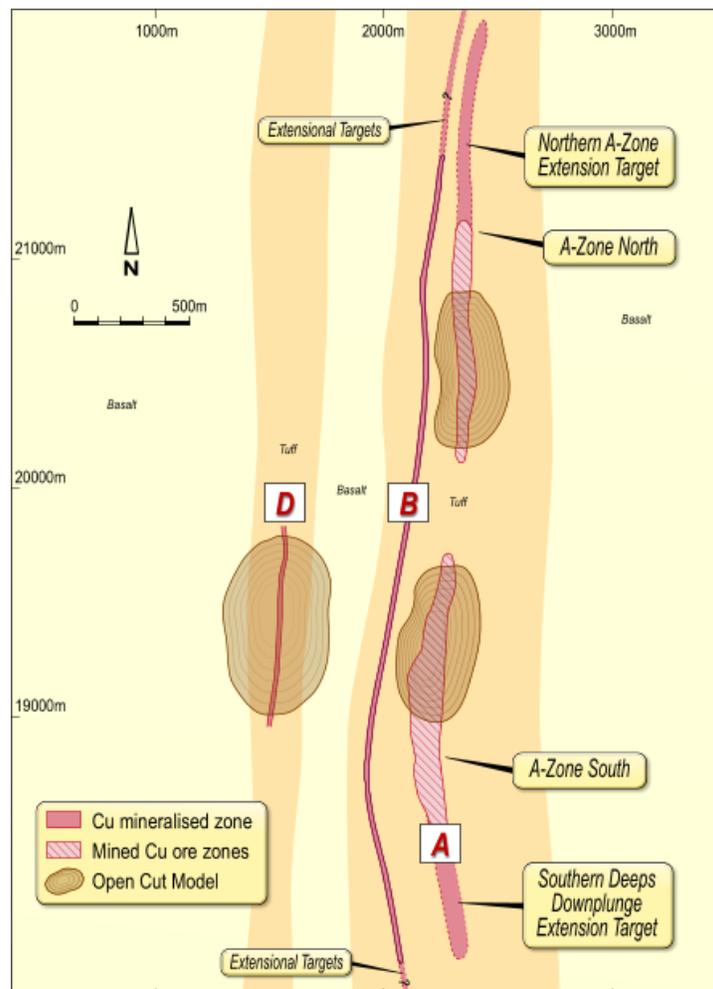


Figure: 2 'D' Zone and 'A' Zone South Potential Open Cuts



Other Exploration Targets at Viscaria

In addition to the three (3) targets set out above, Avalon has identified a number of other brownfields exploration targets at Viscaria including:

'B' Zone - (24.1mt at 0.8% Cu)

The 3km long 'B' Zone, although lower in grade than the other zones at Viscaria, is parallel to the 'A' Zone and is just 200 metres east of the 'A' Zone. A decline was extended from the 'A' Zone North underground development to the 'B' Zone by the previous operators. Within the overall 'B' Zone Resource there are large zones of >1% and 1.5% Cu which may become economic once mining resumes in the 'A' Zone.

'A' Zone

In addition to the down-plunge potential in the 'A' Zone South, the Company has identified a number of other highly prospective zones for extensions of existing copper resources and for new resources below and along strike north and south from the existing 'A' Zone South resource model.

Regional

Avalon controls over 200km² of tenements at Viscaria and has identified a number of highly prospective EM conductor highs in this land package that warrant further exploration following the priority exploration targets currently being evaluated.

A number of these regional targets were inspected by the Company's geologists on a site visit undertaken during the Quarter.

Overview & Location

Global mining company, Outokumpu, closed the Viscaria mine in 1997 after approximately 12.54 million tonnes of ore at 2.29% copper had been produced, mainly from the 'A' Zone over a period of 15 years.

The Viscaria copper concentrate specifications averaged:

- Cu 25%
- Fe 20%
- Zn 3.3%
- Ag 40g/t
- Au 0.5g/t

At the time of its closure, the spot copper price was approximately US\$1.00/lb compared to a price of approximately US\$3.40/lb today and importantly, only minimal exploration has been conducted at Viscaria since the mine closed.

The Viscaria Copper mine is located in the Norrbotten area of Northern Sweden, four kilometres from the Kiruna Iron Ore mine, Sweden's largest iron ore mine and the world's second largest underground mine.

Viscaria is 80 kilometres north of Europe's largest open cut mine, the Aitik copper mine (18mt/annum at 0.3% Cu) which is owned by Boliden and currently being expanded to 35mt/annum at 0.3% Cu.

The Viscaria Project is located adjacent to road, rail and hydro power infrastructure and is only a short distance from the regional mining centre of Kiruna, (population 20,000).



Significant Drilling Intercepts - Viscaria

The table below shows significant intercepts of holes drilled by Avalon Minerals Ltd in 2009. Intercepts in blue are new, all others were reported in the Company's ASX release dated 12 January 2010.

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	No significant intercepts							
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
Including			64	66	2	HC	1.14*	0.563*	0.02*	2.75*
Including			69	72	3	HC	5.634*	0.408*	0.07*	11.19*
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
Including			84.1	85.8	1.7	HC	3.11	1.18	0.11	7.75
VDD0006	Viscaria	Missing Link	No significant intercepts							
VDD0007	Viscaria	Missing Link	No significant intercepts							
VDD0008	Viscaria	Missing Link	124.5	128	3.5	HC	0.02	1.07	0.01	0.25
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	138	139	1	HC	0.01	2.80	0.00	0.25
VDD0011	Viscaria	A-zone South Infill Drilling	38.46	46	7.54	HC	1.01	0.10	0.02	2.17
VDD0011	Viscaria	A-zone South Infill Drilling	55	56.5	1.5	HC	1.22	0.04	0.01	2.23
VDD0011	Viscaria	A-zone South Infill Drilling	64	65	1	HC	1.48	0.04	0.03	3.40
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
Including			10	12	2	CHIPS	7.27	1.04	0.70	26.00
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



Adak Copper Project

The Adak copper project contains five historical mines – **Adak, Lindsfold, Brannmyran, Karlsson and Ruttjebacken** – covering an area of 26.71km², located in the world-class Skelleftea VMS mining district of Northern Sweden. Ruttjebacken was treated separately as it is a zinc-rich ore body.

The Adak mines were operated by the Government of Sweden between 1940 and 1977 when the last mine was closed by Swedish mining giant Boliden. The total material mined from the Adak dome was approximately 10.8Mt at 1.56% Cu including 6.3Mt at 2.02% Cu from the Adak field and 4.74Mt at 0.92% Cu and 2.96% Zn at Ruttjebacken.

Avalon's attraction to Adak is the exploration potential surrounding the existing mines and at depth, and its strategic location within trucking distance of existing concentration facilities.

With the Company's focus shifting to Viscaria, Avalon plans to attract a joint venture partner to farm into the Adak project to earn a majority interest.

CORPORATE

During the Quarter Avalon Minerals Ltd successfully completed a 15% placement to sophisticated investors of Indian Ocean Capital Ltd by the issue of 15.1 million shares at 21 cents to raise a total of A\$3.2 million.

Competent Persons Statement

The information in this report relating to Exploration Results is reviewed by Ms Louise Lindsfog BSc Hons (Geol) who is a Member of the Australasian Institute of Mining and Metallurgy and is the company's Exploration Manager who is a full-time employee. Ms Lindsfog 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".

- ENDS -

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Avalon Minerals – Background

Avalon Minerals Ltd listed in March 2007 with the aim of discovering and developing mineral deposits and to subsequently build a diversified resource mining group based on cash flows from producing operations.

The primary project generation strategy has been very successful with the acquisition of the advanced Viscaria copper deposit in northern Sweden where a maiden JORC Code Compliant Inferred copper resource has been defined.

This Inferred resource is comprised of:

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

These resources combined total 514,600 tonnes of contained copper.

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

Overview of Mining in Sweden

Sweden has a very rich mining history which has been of great economic importance to the country. Mining and metal production are still important Swedish industries, and Sweden is one of the leading ore and metal-producing countries in the European Union.

The many benefits of operating in Sweden include; well developed infrastructure, a highly skilled mining and exploration workforce, extremely low sovereign risk and a very strong mining culture built up over many decades.