



ENCOURAGING METALLURGY RESULTS FROM 'D' ZONE AT VISCARIA

Preliminary results from flotation testwork indicate recoveries of up to 87% for Cu while DTR Tests indicate ability to produce a Direct Reduction quality concentrate grading 70% Fe

Australian-based minerals company Avalon Minerals Ltd (ASX: **AVI**; "Avalon") is pleased to report excellent initial results from recent metallurgical test work conducted on iron and copper-rich samples from the 'D' Zone at its 100%-owned **Viscaria Copper and Iron Project** in Northern Sweden.

The results, from test work conducted on samples extracted during the recent successful drilling campaign (see *ASX Announcement – 8 June 2010*) will be incorporated in the current Scoping Study on the 'D' Zone.

Preliminary un-optimised flotation results indicate the ability to achieve:

- **87.4% recovery of copper** from flotation test work;
- **23.7% copper concentrate** grade with 4.0% mass recovery; and
- Flotation tails containing **96.6% of feed iron**.

Davis Tube Recovery (DTR) tests on samples also indicate the ability to achieve:

- a Direct Reduction quality concentrate grading **70.3% Fe and 0.85% SiO₂** by fine grinding (P80 of 40um) with low levels of other contaminants;
- a Blast Furnace quality concentrate averaging **67.7% Fe and 2.6% SiO₂** with low levels of other contaminants by grinding to a P80 of 75um;
- uniformly high mass yields, between 45% and 53%, dependent upon grind size. All ores are soft, easily crushed and have low levels of abrasion.

Commenting on the results, Avalon's CEO, Mr Andrew Munckton, said:

"The initial results from the 'D' Zone test work are very encouraging. The good copper recovery and concentrate grade achieved in the flotation test work gives us confidence that we can repeat the 90% copper recovery and 25% copper concentrate grade achieved at the Viscaria Project in historical mining and treatment operations based on the 'A' Zone ore."

"Further optimisation test work will now be undertaken to confirm these results."

"We are also very encouraged by the outstanding DTR magnetic separation results. The concentrate quality is excellent and the ore is soft and amenable to fine grinding. Further testing of the copper flotation tails material will be undertaken to confirm these results which were conducted on magnetite-rich ores."

"The high iron and low silica grades of the finely ground concentrate would rank it amongst the highest quality pellet feed concentrates in the world."

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"This product will be ideal for steel-makers and is capable of attracting prices at the top end of the range for iron concentrates."

Avalon is now targeting further 'D' zone mineralisation at the previously identified southern extensions to the deposit.

The southern extension of 'D' zone continues for a further 5km south of the recent drilling. The Company has established an Exploration Target for this zone of 30 to 50 million tonnes of ore containing 15 to 25 million tonnes of magnetite concentrate grading 64% to 71%Fe based on our drilling results at 'D' zone and the metallurgical test work results delivered to date.

Promet Engineers, MSP Engineering and Ammtec laboratories of Perth will complete the remaining test work and prepare an Options Study to define the basis for development of the 'D' zone material in conjunction with the already defined 'A' Zone and 'B' Zone deposits at Viscaria.

"With the quality of the concentrates now beginning to be confirmed at the upper end of our expectations, Avalon is looking forward to completing the test work and commencing discussions with potential customers and end users of both the copper and iron concentrates," Mr Munckton said.

"The combination of having the ability to produce two high quality products near world-class infrastructure and with operations located close to established smelters, pellet-makers and steel mills confirms the potential of the Viscaria deposits to be an outstanding project for Avalon in the world-class Kiruna Mineral District of Northern Sweden."

It should be noted that the potential quantity and grade of material at the 'D Zone Extension Exploration Target is conceptual in nature, that there has been insufficient exploration to define a Mineral Resource and that it is uncertain if further exploration will result in the determination of a Mineral Resource.

ENDS

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Competent Persons Statement

The information in this report relating to the Mineral Resources, Exploration Results and Exploration Targets is reviewed by Mr Andrew Munckton BSc (Mining Geology) who is a Member of the Australasian Institute of Mining and Metallurgy and is employed by Avalon Minerals Ltd as the Company's CEO and General Manager of Operations. Mr Munckton 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".

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;
5.6 million tonnes grading 1.3% Cu for the 'A' Zone North;
24.3 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 520,000 tonnes of contained copper.