



AVALON PREPARES RESOURCE ESTIMATE FOR 'D' ZONE AT VISCARIA FOLLOWING RECEIPT OF FINAL ASSAY RESULTS

FURTHER STRONG DRILLING RESULTS DEFINE MINERALISATION OVER 1.1km STRIKE LENGTH

Australian-based minerals company Avalon Minerals Ltd (ASX: **AVI**; "Avalon") is pleased to advise that it has commenced work on a JORC compliant resource estimate for the '**D**' Zone at its 100%-owned **Viscaria Copper and Iron Project** in Northern Sweden after receiving final assay results from the recently completed drilling program.

Further strong results have been received in the final batch of assays, bringing to a close the initial phase of drilling of the '**D**' Zone prior to completion of the Pre-Feasibility Study on the proposed re-commencement of mining operations at Viscaria.

As previously announced, the '**D**' Zone comprises overlapping zones of iron-rich and copper-rich mineralisation hosted within a magnetite-carbonate Skarn iron-copper deposit. The '**D**' Zone is the largest of Avalon's three potentially open pit resources at Viscaria.

New intersections from the recently completed 4,994 metre diamond core program include:

Iron Ore

- VDD0054 36m @ 27.7% Fe from 62m
- VDD0055 24m @ 36.1% Fe from 130m and 19m @ 26.2% Fe from 160m
- VDD0062 36m @ 27.5% Fe from 75m
- VDD0063 23m @ 28.5% Fe from 140m

Copper

- VDD0053 4.9m @ 1.6% Cu from 124.9m
- VDD0054 9.7m @ 1.4% Cu from 89m
- VDD0055 16.3m @ 0.9% Cu from 130.7m
- VDD0060 7.0m @ 1.6% Cu from 21m
- VDD0061 11.0m @ 1.5% Cu from 28m

The '**D**' Zone has now been defined **over a strike length of 1,100 metres** to a depth of approximately 150 metres below surface and consists of a zone of coarse-grained magnetite mineralisation that dips steeply west and averages approximately 20 metres in true thickness.

Within this magnetite zone are copper-rich zones of 5 to 10 metres true width of greater than 1.0% Cu, surrounded by lower grade mineralisation (0.1% to 0.8% Cu).

Metallurgical test work undertaken to date on the '**D**' Zone has shown that an acceptable quality copper concentrate can be produced from the ore (see *ASX Announcement – 30 June 2010*) and that a magnetite concentrate of either Blast Furnace (BF) quality (grading 64% to 68% Fe) or Direction Reduction

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(DR) quality (grading 69% to 71% Fe) can be produced from the copper flotation tails and magnetite-rich ores with additional grinding.

The 'D' Zone resource calculation and estimation is expected to be completed in the September Quarter together with revised resource estimates for 'A' and 'B' Zone.

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

"The results of this drilling program have confirmed our view that the 'D' Zone is a very attractive zone of mineralisation that remained untouched by the previous owners of the project which can potentially be extracted by open pit mining methods. The 'D' Zone is open both along strike and down dip and has been demonstrated as a 20 metre wide zone over 1,100 metres in strike with significant continuity at depth.

"The magnetite and copper mineralisation is very consistent and, coupled with the excellent recent metallurgical results, gives us confidence that the 'D' Zone will form the basis of a very solid concentrate project at Viscaria.

"We can now proceed with resource estimation and pit optimisation and design work to support the Pre-Feasibility Study and ultimately the Bankable Feasibility Study for development of the Project."

'D' Zone Metallurgical Test Work

Metallurgical testing of the 'D' Zone ores is continuing, following the favourable initial results reported in June (see ASX Announcement – 30 June 2010).

Recent work has focused on copper flotation performance and magnetic separation of magnetite iron concentrate from the copper flotation tails. Further work in these areas is continuing. Results to date show satisfactory copper recovery in a variety of tests on a suite of ores at 'D' Zone and are summarised in Table 1 below:

Table 1: Metallurgical Test Results

Ore Type	Feed			Copper Concentrate		Magnetite Concentrate from Tailings				
	Cu%	Fe%	S%	Cu%	Recovery%	Wt%	Fe%	Cu%	S%	SiO ₂ %
Oxide/Transition 106µm	1.7	32	0.36	22	62	58	65	0.16		
			0.37							
45µm	1.7	34		27	63					
Sulphide 106µm	1.1	32	1.26	28	86	52	66	0.009		
			1.26							
45µm	1.1	32		27	95					

Awaiting results

Commenting on the results, Andrew Munckton said:

"The copper flotation results are very pleasing and demonstrate comparable results to the historical performance of the plant at Viscaria. We are confident of being able to produce a very clean concentrate grading approximately 26% copper at 90% copper recovery from the 'D' Zone ore."

"The work has also shown that market-acceptable quality magnetite concentrate can be produced from the tailings stream of the ore after the copper removal. We are now testing how this material responds to further grinding. We are increasingly confident of the ability to produce both copper concentrate and magnetite concentrate that will be highly sought after by the market from the 'D' Zone ores."



Impact of the D zone findings on Viscaria

The recent work at 'D' Zone is likely to impact the outcomes of the Pre Feasibility Study at Viscaria. While the quantification of the impact is the subject of the PFS it is likely that changes to the project under study will include:

- The mining of a larger combined Cu and Fe resource in open pit at D Zone
- Lower unit mining costs at D zone incorporating the economies of scale achievable in larger open pit mining
- Larger processing plant with increased capital and lower unit operating cost
- Increased sales of Cu concentrate due to increased mining and processing outputs
- A second revenue stream from sales of magnetite concentrate

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.