

ASX/Media Release 21 February 2011

# DRILLING UPDATE - VISCARIA COPPER-IRON PROJECT, SWEDEN

#### MAJOR DRILLING PROGRAMS CONTINUING WITH FOUR RIGS CURRENTLY ACTIVE

International minerals company Avalon Minerals Ltd (ASX: **AVI**; "Avalon" or "the Company") is pleased to provide an update on the ongoing 2011 exploration and resource development drilling programs at its 100%-owned **Viscaria Copper-Iron Project** in Northern Sweden.

Intensive drilling programs are progressing as part of the current Bankable Feasibility Study (BFS) works, with over 15,000m of RC (Reverse Circulation) and diamond drilling planned across the proposed A, B and D zone open pit mines which form the central focus of the BFS.

The BFS commenced in October 2010 and is based on 3.0Mtpa of production sourced from these three deposits.

Four drill rigs are currently active on site, including three diamond rigs and one RC rig, with planned drilling including 10,000m at D Zone, 2,000m at D Zone South and 3,000m of metallurgical and geotechnical drilling at A Zone and B Zone.

### Aims of the Current Program:

- To upgrade the D Zone Inferred Resource of **9.0Mt** @ **0.6% Cu and 27% Fe** to the Measured and Indicated category.
- To test a potential zone of mineralisation similar in style to the D Zone copper-iron mineralisation in a corridor up to 5 kilometres south of the 'D' Zone.
- Complete the geotechnical and metallurgical evaluation of A and B Zone copper deposits.

### D Zone

To date, 19 diamond core holes have been completed from a 90-hole program. Assays have been returned for the initial 14 holes.

By necessity, the drilling program commenced at the northern end of D Zone, which, due to its higher topography, required drilling prior to the completion of the "freeze" in late January.

The northern end of D Zone has previously returned lower than average grades of copper and generally average grades of iron.

Results from the 2011 round of drilling confirm this expectation.

Drilling results are summarised in Table 1 below and their location is shown in Figure 1 attached. A complete set of results are appended in Table 4.

Avalon Minerals Ltd ACN 123 184 412

PO Box 165 West Perth WA 6872

> Telephone: +61 8 9322 2752 Mobile: 0435 635 598

Email: andrew.munckton@avalonminerals. com.au

www.avalonminerals.com.au

**ASX Code:** AVI

#### **Directors**

Web:

David McSweeney (Chairman)

Andrew Munckton (Managing Director / CEO)

Tan Sri Abu Sahid Mohamed (Non-Executive Director)

Stephen Stone (Non-Executive Director)

Gary Steinepreis (Non-Executive Director)



Table 1: Drilling Intersections Viscaria D Zone

North	Hole ID	From	То	Interval	Fe%	Cu%
19800	VDD0068	40	63	13	28	0.1
		67	80	13	26	0.2
19750	VDD0075	21	30	9	32.2	-
	Including	27	30	3	-	0.7
	VDD0077	43	58	15	25.7	
	Including	52	58	6	-	0.2
19700	VDD0070	38	66	28	25.7	
	Including	48	66	18	-	0.8
	VDD0071	93	124	31	23.1	
19550	VDD0074	99	105	6	30.5	0.3
	VDD0076	123	134	11	-	0.2
19500	VDD0079	42	47	5	26.2	0.6
19475	VDD0080	46	64	18	21.8	1.3
19450	VDD0081	15	35	20	-	0.7

In addition, several holes have been completed to test the interpretation of a southerly plunging shoot of higher grade mineralisation in the centre of the D Zone deposit (see Figure 1).

Assays results have not yet been received for these holes, however two of the drill holes appear to support this interpretation, with initial results summarised in Table 2 below:

**Table 2: Drilling Intersections Without Assays** 

North	Hole ID	From	То	Interval	Comment	
19650	VDD0086	124	168	44	Massive & disseminated Magnetite & disseminated chalcopyrite	
19400	VDD0082	58	73	15	Disseminated magnetite and Chalcopyrite in bands	
	VDD0084	129	150	21	Massive & disseminated Magnetite & Chalcopyrite	

Commenting on the results, Avalon's CEO, Mr Andrew Munckton, said: "The results to date have been generally as expected and have confirmed our earlier interpretation of the D Zone deposit. The copper and iron grades north of 19500N are all within the lower grade envelope of mineralisation. Drilling south of that line has started to deliver the higher grade, wider mineralisation previously encountered through the central part of the deposit.

"The one surprising hole in the program to date has been VDD0086, which appears to indicate much wider and better mineralisation than expected. We are keenly awaiting the assay results from this hole as it potentially indicates better grade mineralisation at depth in this location," he continued.

"Longer term, the real benefits of this drilling program won't be seen until we have worked our way through the central portion of the D Zone deposit over the February to April period," Mr Munckton continued. "We are looking forward to completing that phase of drilling as it will assess the open pit depth extensions and indicate the potential for mineralisation within the D Zone extending into underground mining positions."



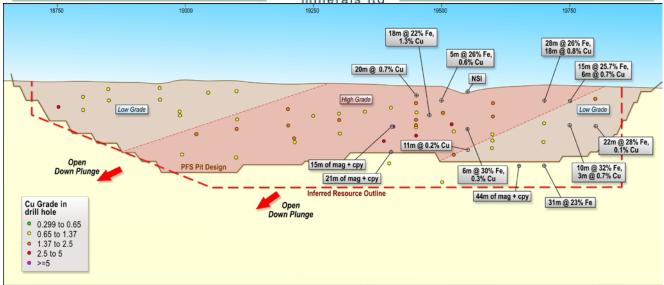


Figure 1 – D Zone Drilling Overview

#### **D** Zone South

The Company has completed 4 lines of RC holes at the D Zone South exploration prospect.

The drilling targeted potential magnetite and copper mineralisation in the same stratigraphic position as the D Zone deposit further north. A semi-continuous magnetic anomaly (shown in Figure 2) shows the interpreted position of the potentially mineralised zone, which lies approximately 3 kilometres south of the D Zone resource drilling.

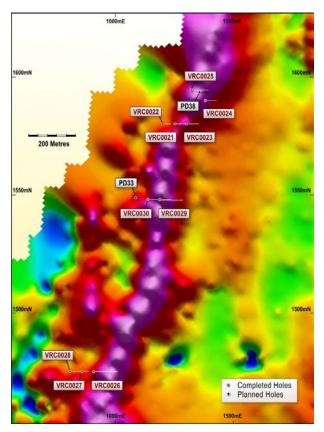


Figure 2 – D Zone South Drilling Overview

Results from the drilling program are summarised in Table 3 below:



Table 3: Drilling Intersections Viscaria D Zone South

Drill Hole	Prospect	From	То	Interval	Fe %	Cu %
VRC0021	D Zone South				Unmineralised	
VRC0022	D Zone South	51	55	4	21.6	
VRC0023	D Zone South	54	100		Unmineralised	
VRC0024	D Zone South	40	48	8		0.191
		62	74	12		0.100
		77	82	5		0.121
VRC0025	D Zone South	31	44	13		0.121
		62	72	10		0.230
		109	134	25		0.131
VRC0026	D Zone South	39	46	7	15.5	
		52	71	19	18.3	
VRC0027	D Zone South				Unmineralised	
VRC0028	D Zone South				Unmineralised	
VRC0029	D Zone South				Unmineralised	
VRC0030	D Zone South				Unmineralised	

Intersections in this region to date have been sub-economic. However, drilling has intersected mostly basaltic rocks which sit to the west of the mineralisation at D Zone. This suggests the potentially mineralised stratigraphic position has not yet been tested by the above drilling program. Additional geophysics and ground reconnaissance is planned to better define the target zone before undertaking further drilling.

Mr Munckton said "We remain positive that the presence of copper mineralisation in the western basalts at the northern end of the drilling is a good indicator of the mineralising event which led to the formation of D Zone. The drilling resources available at Viscaria are now focused on the completion of the D Zone resource drilling, however we plan to return to better assess the D Zone South exploration target in the June Quarter.

#### Competent Person's Statement

The information in this report that relates to Mineral Resources and exploration targets is based upon information reviewed by Mr Andrew Munckton BSc (Mining Geology) who is a Member of the Australasian Institute of Mining and Metallurgy.

Mr Munckton is a full time employee of Avalon Minerals Ltd and 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 Munckton consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

#### JORC – Exploration Targets

It is common practice for a company to comment on and discuss its exploration in terms of target size and type. The information relating to exploration targets should not be misunderstood or misconstrued as an estimate of Mineral Resources or Ore Reserves. Hence the terms Resource(s) or Reserve(s) have not been used in this context. The potential quantity and grade is conceptual in nature, since there has been insufficient work completed to define them beyond exploration targets and that it is uncertain if further exploration will result in the determination of a Mineral Resource.



Released by: Nicholas Read Read Corporate

Read Corporate Telephone: +61 (0)8 9388 1474 On behalf of: Mr Andrew Munckton Managing Director and CEO Avalon Minerals Limited Mobile: +61 0435 635 598

# Appendix - Table 4: Drilling Intersections Viscaria D Zone

VDD0068	D Zone	40.3	62.9	22.6	28.2	0.113
		67.2	79.7	11.5	25.9	0.201
		60	79.7	19.7		0.176
VDD0069	D Zone				Abandoned	
VDD0070	D Zone	38.1	66.25	28.1	25.7	
		47.9	66.25	18.3		0.78
		79.6	84.1	2.3		0.29
VDD0071	D Zone	93	124	31	23.1	
VDD0072	D Zone				Abandoned	
VDD0073	D Zone				Unmineralised	
VDD0074	D Zone	98.7	104.7	6	30.5	
		100.3	104.7	4.4		0.35
VDD0075	D Zone	12	18	3.5		0.14
		21	30.5	5	32.2	
		27.5	30.5	1.5		0.738
VDD0076	D Zone	123	134	10.8		0.188
VDD0077	D Zone	27	33	6	20.4	
		43	58	15	25.7	
		52	58	6		0.218
VDD0078	D Zone				Abandoned	
VDD0079	D Zone	42	47	5	26.2	0.578
VDD0080	D Zone	46	63.5	17.5	21.79	1.31
VDD0081	D Zone	15.55	35	19.5		0.69