

AVALON MINERALS LTD DECEMBER 2012 QUARTERLY REPORT

HIGHLIGHTS

Viscaria Copper-Magnetite Project, Sweden (Avalon - 100%)

- Drilling program underway will comprise ~25,000m of drilling, with the objective of extending the Mineral Resources at the A and D Zone prospects and delivering on the potential increases to the project NPV outlined in the October 2012 Scoping Study;
- Assays for the first 2 drill holes from A Zone and first 5 drill holes from D Zone at the Viscaria Project received;
- A zone results include:
 - VDD0135B: high grade copper zone of 8.3m @ 2.0% Cu & 0.5g/t Au and a second mineralised zone of 6m @ 1.4% Cu & 0.1g/t Au, which may indicate a structural repetition of the main A Zone mineralisation.
 - VDD0131: 5.5m @ 1.2% Cu, including 3.55m @ 1.6% Cu.
- The mineralised intersections in VDD0135B and VDD0131 have extended the known mineralisation zones by 150m down plunge and VDD0135B also extended the known mineralisation zones by approximately 60m down dip;
- These latest drilling results add to several historic drill holes at A Zone which intersected:
 - D-3437: 19m at 1.7% Cu from 326m; including 8m at 2.3% Cu.
 - D2254: 8m @ 1.5% Cu from 177m, including 4m @ 2.8% Cu.
 - D4034: 8m @ 2% Cu from 136m.
 - D6696: 14.95m @ 1.1% Cu from 27m, including 4.5m @ 2% Cu.
- D Zone best intersections include:
 - VDD0133: 13.4m @ 2.0% CuEq*, including 6.1m @ 2.5% CuEq*
 - VDD134: 12m @ 1.1% CuEq*, including 5.7m @ 2.0% CuEq*
 - VDD0137: 58.5m @ 0.5% CuEq*, including 3.5m @ 2.1% CuEq*.
- All five drill holes completed to date have intersected copper and iron mineralised intervals from 12.0m to 58.5m down hole thickness;
- Each of these mineralised intersections have extended the known mineralisation at D Zone by at least 30m down dip, suggesting the drill program is on track to deliver "Development Case A" from the project's Scoping Study with the potential to add a further US\$50M to the NPV of D Zone;
- High quality drill target defined by coincident electromagnetic ('EM') conductor and magnetic body of strike length 2000m, from the regional Helicopter EM survey, at the Tjavelk prospect;

- Previous drilling into the Tjavelk prospect intersected 34m @ 39.4% Fe and 0.17% Cu and 39m @ 38.4% Fe and 0.12% Cu at shallow depth, but without intersecting the combined magnetic/EM target;
- The Tjavelk prospect will be drill tested during Q1 2013, following consultation with stakeholders and approval of the drill program by the various regulatory bodies;
- Avalon and Hannans working on a new arrangement for Avalon to purchase the Discovery Zone copper-iron prospect in Sweden;
- Scoping Study indicates the Discovery Zone has the potential to add up to US\$100M in NPV to the Viscaria Project, by extending the proposed mine life to 9.5 years and bringing the overall project potential NPV to \$300M (at US\$3.25/lb Cu);
- Viscaria Project Scoping Study confirmed the technical and economic viability for a copper-magnetite mining operation at the Viscaria Project in Sweden, identified a pathway to deliver significant growth to the value of the Viscaria Project and validates the approach implemented by Avalon's new management team;
- A new revised Mineral Resource for the D Zone Prospect has delivered an increase of 24% in tonnage from approximately 12.5Mt to 15.5Mt;
- For JORC (2004) purposes the new revised D Zone Mineral Resource was reported in terms of both iron and copper mineral resources separately:
 - 14.8Mt @ 25.8% Fe above a 15% Fe Mass Recovery cut-off grade
 - 5.4Mt @ 0.9% Cu above a 0.4% copper cut-off grade
- The new D Zone Mineral Resource is not closed off along strike in either direction, which means there is potential for it to be further increased, especially within areas that could be mined by open pit methods and drilling is underway to test these extensions; and
- The new D Zone Mineral Resource has higher copper grades at higher copper cut-off values and is getting thicker and higher grade at depth, all of which significantly increase its potential to be mined by underground methods as well as by open pit methods.

Corporate

- Successfully completed an institutional placement to raise \$8.4m (before costs) for a drilling program and to progress the Viscaria Project in northern Sweden;
- Introduction of a new cornerstone institutional investor in Acorn Capital;
- Annual General Meeting held 15 November 2012;
- Cash position of the Company at the end of the quarter was \$7.02M.

The Company continued its progress during the quarter and into January 2013, with the first assay results being received from prospects targeted in the ~25,000 metre drilling program currently underway, at the Viscaria Project, the delivery of the Scoping Study, a new revised Mineral Resource for D Zone and continued negotiations with Hannans on a new arrangement for Avalon to purchase the Discovery Zone prospect in Sweden (Discovery Zone).

EXPLORATION

Drilling

On 24 January 2013, the Company announced the assay results for the first two drill holes from the A Zone Prospect of the current drill program, on the Viscaria Copper Project ('**Viscaria Project**') in northern Sweden (Figure 1).

This drill program will comprise approximately 25,000 metres of drilling, with the objective of extending the known Mineral Resources at the A and D Zone prospects and delivering on the potential increases to the project Net Present Value as defined in the Scoping Study (see ASX announcement 11 October 2012).

The drill results from the first two holes drilled at the A Zone prospect indicate that the copper resources, which were previously mined at A Zone, in the Viscaria copper mine, extend both at depth and also down plunge. The results from these first two drill holes have extended the known mineralisation at A Zone at least a further 150 metres further down plunge and appear to be consistent with previous drilling results in these areas. The details of the geochemical assay data for these drill holes are shown in Table 1.

VDD0135B: Central A Zone

Drill hole VDD0135B intersected 27m @ 1.2% Cu & 0.2g/t Au from 294 metres, including a high grade interval of 8.3m @ 2.0% Cu & 0.5g/t Au and a moderate grade interval of 6m @ 1.4% Cu & 0.1g/t. This drill hole extends the known mineralisation at A Zone down dip by approximately 60 metres from historic drill hole D-6696, which intersected 14.95m @ 1.1% Cu from 27.5m, including 4.6m @ 2% Cu.

VDD0135B also extended the known mineralisation down plunge by approximately 40 metres from the previous mining development. Therefore, this excellent mineralised intersection could potentially result in an increase of the A Zone Mineral Resource (Table 2).

The results of the previously announced Scoping Study indicate that the high copper grades in this area could potentially be economically mined by underground methods (Development Case B as detailed in the Scoping Study). VDD0135B also intersected a thin, low grade interval of copper mineralisation a further 110 metres down hole. This newly discovered mineralisation zone presents the possibility that the A Zone mineralisation is structurally repeated in the footwall.

This is an exciting possibility as finding another mineralisation zone with the same characteristics as A Zone could be significantly beneficial to the overall project economics. However, this zone requires further drilling in order to understand its significance.

Table 1: Drill hole details and assays results

Hole	Prospect	Easting (RT90, m)	Northing (RT90, m)	Azi. (°)	Dip (°)	From (down hole m)	To (down hole m)	Interval Width (down hole m)	% Cu	g/t Au	End of Hole (m)	
VDD0135B	A Zone	1,682,134	7,537,238	312	-57	294.00	321.00	27.00	1.2	0.2	486	
						Including						
						295.00	303.30	8.30	2.0	0.5		
						also including						
						313.00	319.00	6.00	1.4	0.1		
And												
						432.00	435.00	3.00	0.6	-		
VDD0131	A Zone	1,682,154	7,537,110	314	-54.3	411.00	416.50	5.50	1.2	N/A	546	
						Including						
						412.00	415.50	3.55	1.6	N/A		

VDD0131: Central A Zone

Drill hole VDD0131 intersected 5.5m @ 1.2% Cu from 411 metres, including 3.55m @ 1.6% Cu. This drill hole extends the known mineralisation at A Zone down plunge by approximately 110 metres from VDD0135B, as well as approximately 30 metres down dip from historic drill hole D-3437. Therefore, this mineralised intersection could potentially result in a significant increase of the A Zone Mineral Resource (Table 2).

Table 2: Currently Defined Mineral Resources on the Viscaria Project

Resource Name	Classification	Tonnes (t)	Cu Grade (%)	Cu Metal (t)
A Zone*	Measured	14,439,000	1.66	239,000
	Indicated	4,690,000	1.22	57,000
	Inferred	2,480,000	1.03	26,000
	Subtotal	21,609,000	1.49	322,000
B Zone*	Measured	123,000	1.33	2,000
	Indicated	4,118,000	0.72	30,000
	Inferred	15,410,000	0.77	118,000
	Subtotal	19,650,000	0.76	150,000
D Zone Cu Resource	Indicated**	3,500,000	0.94	32,900
	Inferred**	1,870,000	0.80	14,960
	Subtotal	5,370,000	0.89	47,860
Overall Cu	Total	46,629,000	1.01	519,860

Resource Name	Classification	Tonnes (t)	Fe Grade (%)	Fe Mass Recovery (%)	Fe Metal (t)
D Zone Fe Resource	Indicated***	9,470,000	25.90	31.3	2,964,110
	Inferred***	5,320,000	25.60	30.8	1,638,560
Overall Fe	Total	14,790,000	25.80	31.1	4,602,670

* 2011 Mineral Resources for A Zone and B Zone are reported above a cut-off grade of 0.4% Cu.

** 2012 Copper Mineral Resource for D Zone above a cut-off grade of 0.4% Cu.

*** 2012 Iron Mineral Resource for D Zone above a cut-off grade of 15% Fe Mass Recovery.

D Zone Prospect Extensional Drill Program

The objective of the D Zone Extensional Drill program is to fully define the copper-iron mineralisation, as the D Zone mineralisation is currently open along strike and at depth. Fully defining the mineralisation will allow optimisations to be completed on an expanded Mineral Resource, which will estimate the proportions of the D Zone mineralisation which will be able to be extracted using open pit and also potentially underground, mining methods.

The Viscaria Project Scoping Study (see ASX announcement, 11 October 2012) showed that extending the D Zone Mineral Resource 300 metres along strike and 35 metres down dip, will add US\$50M to the NPV of the D Zone Mineral Resource. Demonstrating that D Zone has the potential to be mined economically, using underground methods, has the potential to add a further US\$28M to the NPV of D Zone.

The results from the drill holes indicate that on the sections containing drill holes VDD0133 and VDD0137, the grade of the mineralisation is increasing at depth. These two holes exceeded expectations due to the occurrence of mineralisation grading in excess of 2% CuEq* over potentially mineable widths.

Broad zones of copper-iron mineralisation were intersected in holes VDD0130, VDD0134 and VDD0136, which were similar in terms of the grade and thickness of the copper-iron mineralisation previously intersected on the sections containing these drill holes. Consequently, the drill results from these holes met expectations.

VDD0133: Central D Zone

Drill hole VDD0133 intersected 13.4m @ 2.0% CuEq*, including a very high grade interval of 6.1m @ 2.5% CuEq*. This drill hole extended the known mineralisation from previous Avalon drill holes VDD0110, VDD0063, VDD0089, VDD0090 and VDD0106 by approximately 50 metres down dip and therefore, could potentially result in a significant increase of the D Zone Mineral Resource (Table 3).

By comparing the previous drill hole intersections from top to bottom with VDD0130, it is apparent that the copper grade is increasing with depth in this area. This observation is common throughout the D Zone Prospect and often the thickness and/or copper grade of this mineralisation zone continues to increase with depth. The results of the previously announced Viscaria Project Scoping Study indicate that the high copper grades in this area could potentially be economically mined by underground methods (Development Case C), especially if the copper grade continues to increase with depth.

VDD0130: Northeastern D Zone

Drill hole VDD0130 intersected 35.9m @ 0.5% CuEq* and 12.1m @ 0.3% Cu. The upper mineralised intersection extended the known mineralisation from previous Avalon drill holes VDD0114, VDD0088 and VDD0085 by approximately 30 metres down dip and therefore, could potentially result in an increase of the D Zone Mineral Resource. The results of the previously announced Viscaria Project Scoping Study indicate that this broad, shallow mineralised intersection has the scope to increase the tonnes of mineralisation which could be extractable using open pit methods at D Zone (Development Case A).

The second intersection in VDD0130 is a newly discovered mineralisation zone that needs to be followed up with further drilling, in order to understand if it increases in copper grade laterally or vertically.

VDD0136: Northeastern D Zone

Drill hole VDD0136 was drilled 100 metres to the northeast of VDD0130 and intersected 56m @ 0.5% CuEq* from only 38 metres down hole. This drill hole extended the known mineralisation from previous Avalon drill holes VDD0077 and VDD0075 by approximately 30 metres down dip and therefore, could potentially result in an increase of the D Zone Mineral Resource. Also, the results of the previously announced Viscaria Project Scoping Study indicate that this broad, shallow mineralised intersection has the potential to increase the tonnes of mineralisation which could be extractable using open pit methods at D Zone (Development Case A).

VDD0137: Northeastern D Zone

Drill hole VDD0137 was drilled under VDD0136 and intersected 58.5m @ 0.5% CuEq* including a high-grade interval of 3.5m @ 2.2% CuEq*. This drill hole extends the known mineralisation from VDD0136 by approximately 30 metres down dip and therefore, could potentially result in an increase of the D Zone Mineral Resource. Also, the results of the previously announced Viscaria Project Scoping Study indicate that this broad, shallow mineralised intersection has the potential to increase the tonnes of mineralisation which could be extractable using open pit methods at D Zone (Development Case A).

What is also apparent from the drilling results is that high grade copper appears to be starting to accumulate on the footwall side of the mineralisation zone at depth. This observation is common throughout the D Zone Prospect and often the thickness and/or copper grade of this mineralisation zone continues to increase with depth.

VDD0134: Northeastern D Zone

Drill hole VDD0134 was drilled 50 metres to the northeast of VDD0136 and VDD0137, and intersected 12m @ 1.1% CuEq*, including a high-grade interval of 5.7m @ 2.0% CuEq*. This drill hole extended the known mineralisation from previous Avalon drill holes VDD0062, VDD0068 and VDD0060 by approximately 30 metres down dip and therefore, could potentially result in an increase of the D Zone Mineral Resource. Also, the results of the previously announced Viscaria Project Scoping Study indicate that the thickness and grade of this relatively shallow mineralised intersection has the potential to increase the tonnes of mineralisation, which could be extractable using open pit methods at D Zone (Development Case A).

Similar to the previous section 50 metres to the southwest, the drilling results also indicate that high-grade copper is accumulating on the footwall side of the mineralisation zone at depth. On this section, the copper grade of this mineralisation zone increases with depth from 6m @ 1.6% CuEq* in VDD0062 to 5.72m @ 2% CuEq* in VDD0134.

The details of the geochemical assay data for these drill holes are shown in Table 3.

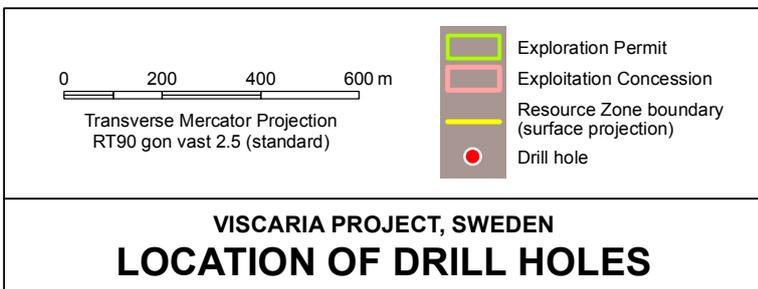
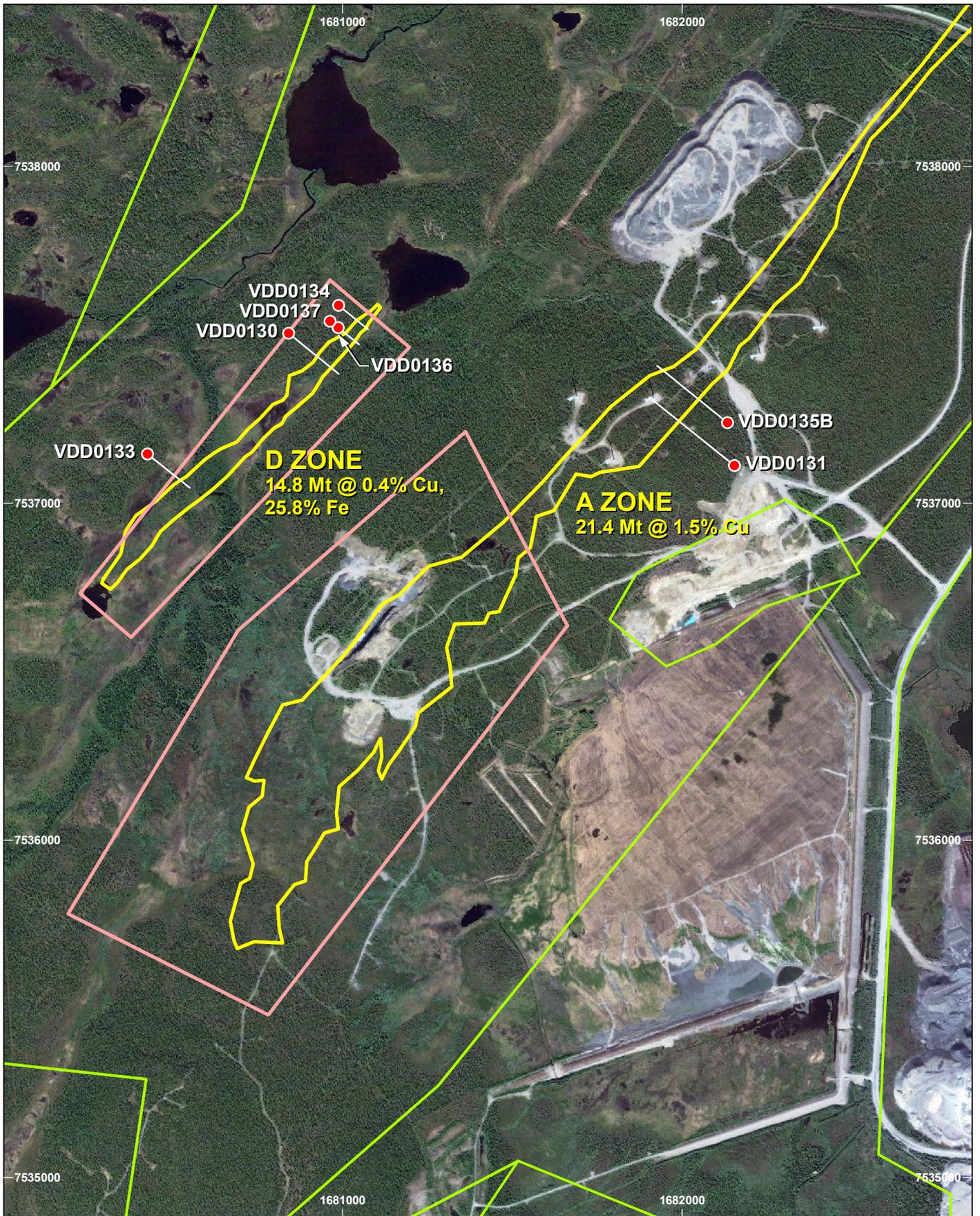
Drilling is continuing and further geochemical results are expected to be received. Figure 2 shows the location of the drill holes completed to date at both A and D Zones.

Table 3

Hole	Prospect	Easting (RT90, m)	Northing (RT90, m)	Azimuth (RT90, degrees)	Inclination (degrees)	From (down hole m)	To (down hole m)	Intersection Width (down hole m)	End of Hole(m)
VDD0130	D Zone	1,680,842	7,537,502	130	-55	200	234	34	324
VDD0131	A Zone	1,682,154	7,537,110	310	-55	404	418	14	546
VDD0133	D Zone	1,680,427	7,537,145	130	-55	228	242	14	270

Figure 1 – Viscaria Project Location







AVALON
MINERALS LTD

65 Park Road
Milton QLD 4064
Tel +61 7 3368 9888
Fax +61 7 3368 9899

Prepared: QH	Date: 07.12.2012
Revised: 21.01.2013	Drwg: AV-002

FIGURE 2

**VISCARIA PROJECT, SWEDEN
LOCATION OF DRILL HOLES**

Helicopter Electromagnetic Survey ('Heli-EM')

On 19 November 2012, the Company announced the first results from a Heli-EM of the regional exploration tenements which are part of the Viscaria Project.

The Heli-EM survey was flown with the intent of assisting in the generation and prioritisation of drill targets, with the goal of intersecting new bodies of copper or copper-magnetite mineralisation. Only a proportion of the regional exploration tenements at the Viscaria Project were covered by the Heli-EM survey and priority was given to areas which, if they did contain copper bearing mineralisation, could be mined and trucked to the processing plant Avalon is planning to build at the A Zone and D Zone prospects in the south-west corner of its Viscaria Project tenements.

Interpretation of the Viscaria Project Heli-EM Survey

During mid-2012, a SkyTEM Heli-EM survey was completed in three separate survey blocks partially covering some of the regional exploration tenements comprising the Viscaria Project. The interpretation of the data from the north-western survey block was completed and is reported below.

The background EM response in the north-western survey block is generally very resistive and free from EM responses associated with graphitic geological units. Within this survey block, two significant zones of conductivity are evident at the Tjavelk and Lulip Borri prospects. The conductor at the Tjavelk prospect strikes east-west and is approximately 2000 metres in strike length, while the conductor at the Lulip Borri prospect strikes north-south and is also about 2000 metres in strike length. The EM conductor at the Tjavelk prospect is the stronger conductor.

Interpretation of the EM data from the Tjavelk prospect suggests that the EM conductor dips to the north and plunges to the west and that it is coincident with the source of a strong magnetic anomaly. The source of the magnetic anomaly appears to be near surface and has been drill tested with three historical drill holes returning 38-39% Fe. However, the EM conductor occurs below 100 metres depth and appears not to have been tested by three further drill holes drilled to the east of the drill holes which tested the near surface source of the magnetic anomaly. Therefore, it appears that the EM conductor has not yet been drill tested.

Surface rock chip samples taken in the vicinity of the Tjavelk prospect returned 12.4% Cu, 6.8% Cu, 6.3% Cu, 5.6% Cu and 1.2% Cu and gold values of 3.1g/t Au, 3.7g/t Au, 1.8g/t Au, 1.3g/t Au and <0.01% Au. The coincidence of the magnetic and EM anomalies in an area of highly anomalous copper and gold geochemistry is extremely encouraging.

Drill testing of the combined magnetic/EM target at the Tjavelk prospect will occur as soon as possible following consultation with stakeholders and approval of the drill program by the various Swedish regulatory bodies. It is likely that drilling will be completed at the Tjavelk prospect by April 2013.

Arrangement – Discovery Zone Prospect

The Company announced on 16 October 2012 that it had signed a binding Heads of Agreement (HOA) with Hannans Reward Limited ('Hannans') to purchase the Discovery Zone Prospect, which is located approximately 10km from Viscaria. The HOA was conditional upon the completion of legal and technical due diligence by Avalon.

As part of the due diligence process for the purchase of the Discovery Zone, a detailed economic assessment of the Discovery Zone was undertaken. On 7 November 2012, the Company announced the results of an economic assessment of the Discovery Zone Mineral Resource which assessed the impact of the acquisition of the Discovery Zone on the overall economics of the project. The economic assessment suggested that the Discovery Zone acquisition could increase the 'Base Case' NPV, for the Mineral Resources that are currently defined on the Viscaria Project, to US\$201 million. Then by extending the Mineral Resources at the A Zone and D Zone prospects and delivering 'Development Case D', the overall Viscaria Project NPV can be increased to US\$342 million.

The due diligence period was subsequently extended to Friday 21 December 2012, by which time it became apparent that the sale and purchase arrangements, as detailed in the HOA, were not optimal for either Avalon or Hannans. Consequently, the Heads of Agreement was allowed to lapse, with the consent of both parties.

Avalon and Hannans are now working to reach a new arrangement for the Discovery Zone Prospect, the aim of which will be for the ownership of the Discovery Zone Mineral Resource to pass to Avalon for the previously agreed amount of AU\$4M. The details of any new arrangement (which will be subject to the usual board approvals) are expected to be agreed between Avalon and Hannans early in 2013 and a status update provided to the ASX.

VISCARIA PROJECT SCOPING STUDY

On 11 October 2012, Avalon announced the results of a Scoping Study completed on the Viscaria Project by Xstract Mining Consultants (Xstract). The Scoping Study assessed a Base Case open pit mining scenario which uses the Mineral Resources currently defined on the Viscaria Project, as well as three Development Cases to convert Exploration Targets into Mineral Resources through an extensional drill program, which is currently in progress. The economic assessments used price assumptions of US\$3.25/lb copper and US\$150/t magnetite (the current copper price is US\$3.69/lb).

A comparison of the Base and Development Cases is given in Table 4.

Base Case open pit mining scenario

The Base Case open pit mining scenario assessed the viability and potential value of the currently defined Mineral Resources on the Viscaria Project.

The current Mineral Resources on the Viscaria Project are defined in Table 2. The existing Mineral Resources were subjected to open pit optimisations using the parameters outlined in Table 5.

Using these parameters, several open pit shells were generated along the near-surface trends of the A Zone, B Zone and D Zone Mineral Resources (Figure 3).

During this exercise it was established that only the D Zone Pit and the A Zone Pit-A significantly contributed to the project NPV and therefore, only these prospects were included in the Base Case open pit mining scenario. Figure 4 and Table 6 show the production profile developed for the Base Case scenario.

Table 4 Comparison of the Base and Development Cases

Scenario	Base Case	Devt Case A	Devt Case B	Devt Case C
Tonnage and Grade	11.0 Mt @ 0.50% Cu 22.2% Fe	15.5 Mt @ 0.46% Cu 23.1% Fe	18.5 Mt @ 0.80% Cu 19.4% Fe	20.2 Mt @ 0.86% Cu 20.0% Fe
Optimum Mining Rate	2.1 Mtpa	3.0 Mtpa	3.3 Mtpa	3.1 Mtpa
Mine Life	5.5 years	5.3 years	5.6 years	5.6 years
Pre-Production Capex	USD 144 M	USD 179 M	USD 201 M	USD 212 M
Life-of-Mine Capex	USD 155 M	USD 194 M	USD 315 M	USD 350 M
C1 Cash Cost (net of Fe Credits)	US\$0.65/lb	US\$0.47/lb	US\$1.03/lb	US\$1.03/lb
NPV_{10% REAL}	USD 61 M	USD 111 M	USD 170 M	USD 198 M
NPV at Prices + 10%	USD 114 M	USD 186 M	USD 272 M	USD 312 M
NPV at Prices - 10%	USD 8 M	USD 37 M	USD 68 M	USD 84 M

Table 5: Pit optimisation parameters

Parameter	Unit	Value	Comments
Overall pit slope angle	Degrees	55	
Copper Price	USD/t	USD7,165	USD3.25/lb Cu
Magnetite Price	USD/t	USD150	Assumed price at end of slurry pipe
Mining Cost (ore)	USD/t	USD4.55	
Mining Cost (waste)	USD/t	USD4.55	
Mining Recovery	%	95%	
Mining Dilution	%	5%	
Metallurgical Recovery	% Cu	90%	
	% Fe	76%	
Concentrate Grade	% Cu	25%	
	% Fe	69%	
Processing Costs	USD/t ore	USD12.04	
Admin Costs	USD/t ore	USD3.08	
Payable Copper	% Cu contained	98%	
Payable Magnetite	% Fe contained	98%	

Figure 3: Site overview showing pit optimisation shells

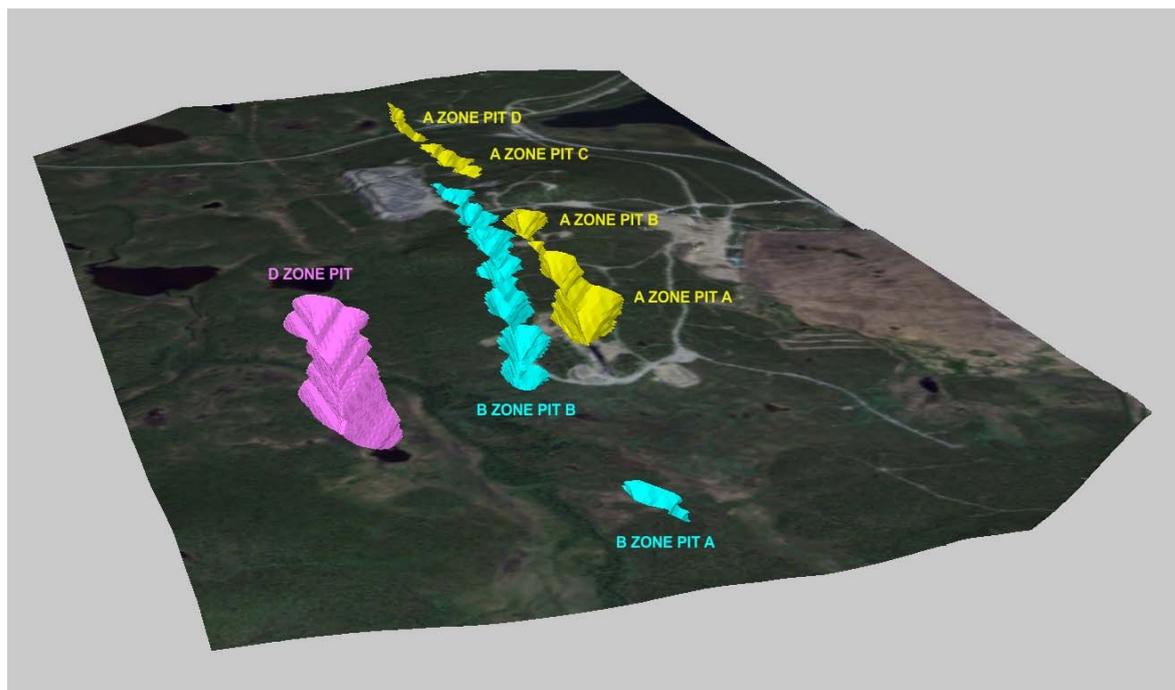


Figure 4: Base Case production profile

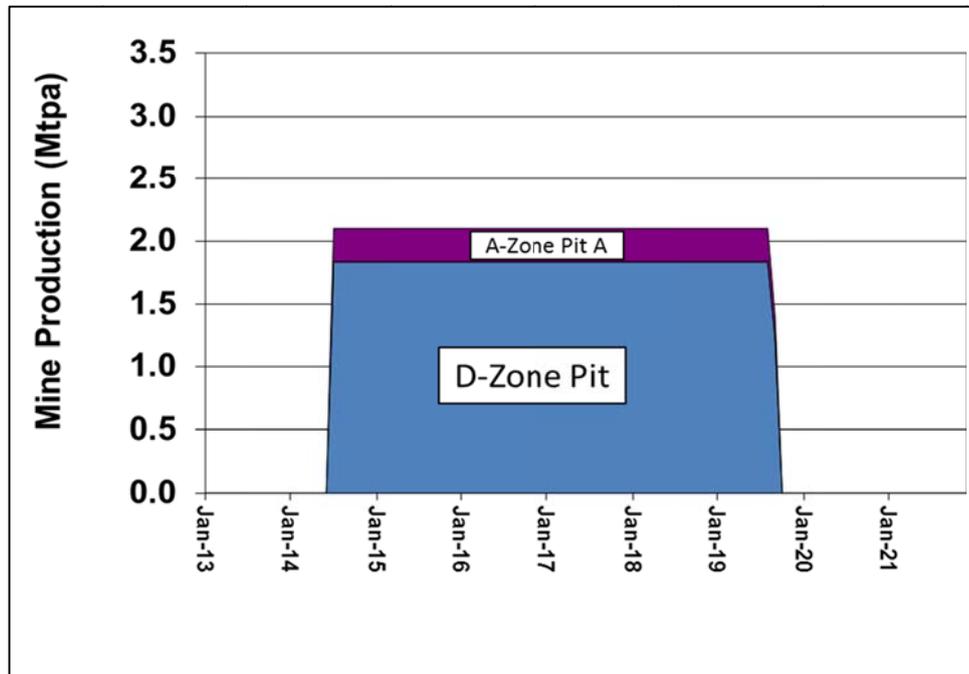


Table 6: Base Case production summary

Year	Tonnes Mined (kt)	% Cu	% Fe	Copper Conc Produced (kDMT)	Contained Copper (kt)	Magnetite Conc Produced (kDMT)	Contained Iron (kt)
2013							
2014	1,050	0.50	22.2	18.9	4.7	274	190
2015	2,100	0.50	22.2	37.7	9.4	549	382
2016	2,100	0.50	22.2	37.7	9.4	549	382
2017	2,100	0.50	22.2	37.7	9.4	549	382
2018	2,100	0.50	22.2	37.7	9.4	549	382
2019	1,518	0.50	22.2	27.3	6.8	396	275
2020							
Total	10,968	0.5	22.2	197	49	2,865	1,991

A summary of the economic assessment of the Base Case open pit mining scenario is displayed in Table 7.

Development Case A open pit mining scenario

The first value creation scenario assessed was Development Case A, which includes the Base Case open pits, as well as an exploration target of extending the D Zone Mineral Resource 300m along strike and 35m in depth. It must be noted that this exploration target is conceptual in nature as 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.

This exploration target is interpreted to be relatively low exploration risk because the D Zone mineralisation is open along strike and is getting higher grade and thicker at depth (see announcement to ASX on 29 August 2012). Figure 5 and Table 8 show the production profile developed for this scenario.

Table 7: Summary of the economic assessment of the Base Case mining scenario

Base Case	D Zone Open Pit and A Zone Open Pit-A	
Tonnage and Grade	11.0 Mt @ 0.50% Cu 22.2% Fe	
Optimum Mining Rate	2.1 Mtpa	
Mine Life	5.5 years	
Pre-Production Capex	USD 144 M	Includes \$18.3M pre-strip
Life-of-Mine Capex	USD 155 M	Excludes closure costs
C1 Cash Cost (net of Fe Credits)	US\$0.65/lb	
NPV_{10% REAL}	USD 61 M	USD3.25/lb Cu USD150/t Magnetite
NPV +	USD 114 M	Prices + 10%
NPV -	USD 8 M	Prices – 10%

Figure 5: Development Case A production profile

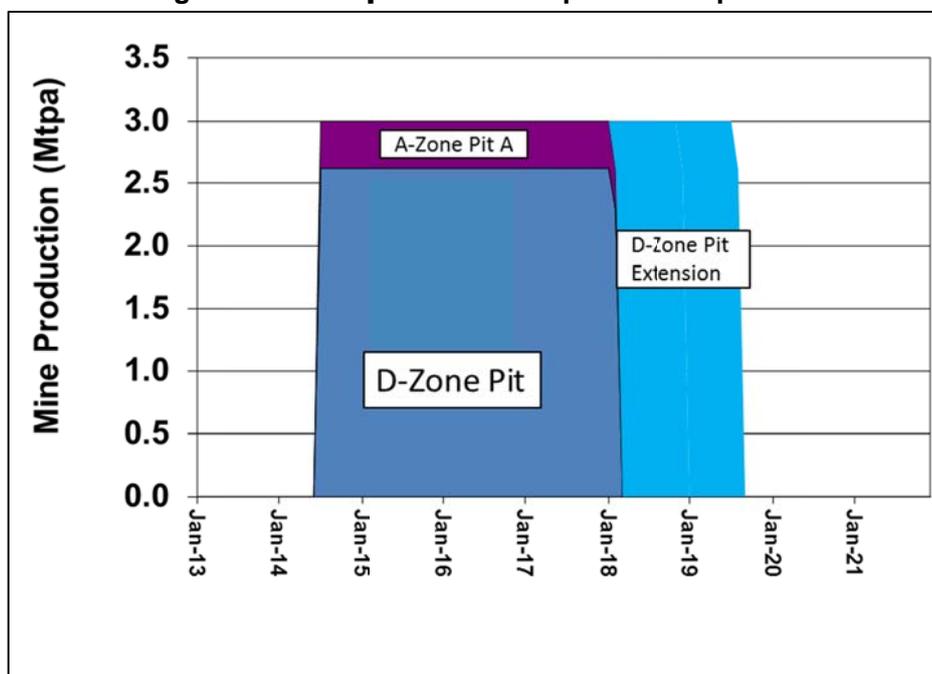


Table 8: Development Case A production summary

Year	Tonnes Mined (kt)	% Cu	% Fe	Copper Conc Produced (kDMT)	Contained Copper (kt)	Magnetite Conc Produced (kDMT)	Contained Iron (kt)
2013							
2014	1,500	0.50	22.2	26.9	6.7	392	272
2015	3,000	0.50	22.2	53.9	13.5	784	585
2016	3,000	0.50	22.2	53.9	13.5	784	585
2017	3,000	0.50	22.2	53.9	13.5	784	585
2018	3,000	0.40	24.9	43.0	10.8	896	623
2019	1,968	0.38	25.4	26.9	6.7	602	418
2020							
Total	15,468	0.5	23.1	259	65	4,241	2,947

A summary of the economic assessment of the Development Case A open pit mining scenario is displayed in Table 9.

Table 9: Summary of the economic assessment of the Development Case A mining scenario

Development Case A	Base Case + Exploration Target extend D Zone 300m along strike and 35m deeper at similar grades	
Tonnage and Grade	15.5 Mt @ 0.46% Cu 23.1% Fe	
Optimum Mining Rate	3.0 Mtpa	
Mine Life	5.3 years	
Pre-Production Capex	USD 179 M	Includes \$26.1M pre-strip
Life-of-Mine Capex	USD 194 M	Excludes closure costs
C1 Cash Cost (net of Fe Credits)	US\$0.47/lb	
NPV _{10% REAL}	USD 111 M	USD3.25/lb Cu USD150/t Magnetite
NPV +	USD 186 M	Prices + 10%
NPV -	USD 37 M	Prices – 10%

Development Case B open pit/underground mining scenario

The second value creation scenario assessed is Development Case B, which includes the previously described Development Case A with the addition of an exploration target of 3.0Mt @ 2.5% Cu from the A Zone prospect area that could be mined by underground methods. It must be noted that this exploration target is conceptual in nature as 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.

This exploration target is interpreted to have moderate exploration risk as its size and grade are relatively high. However, historically when the A Zone mineralisation was being mined the average grade of ore mined was 2.5% copper and Avalon’s initial assessment of the A Zone prospect indicates that there is sufficient scope for a resource of approximately 3.0Mt to be delineated.

Figure 6 and Table 10 show the production profile developed for this scenario.

Figure 6: Development Case B production profile

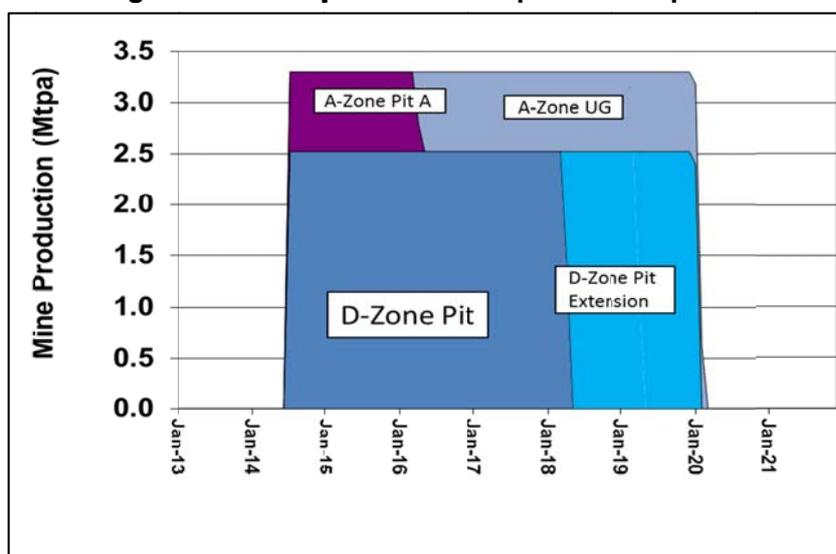


Table 10: Development Case B production summary

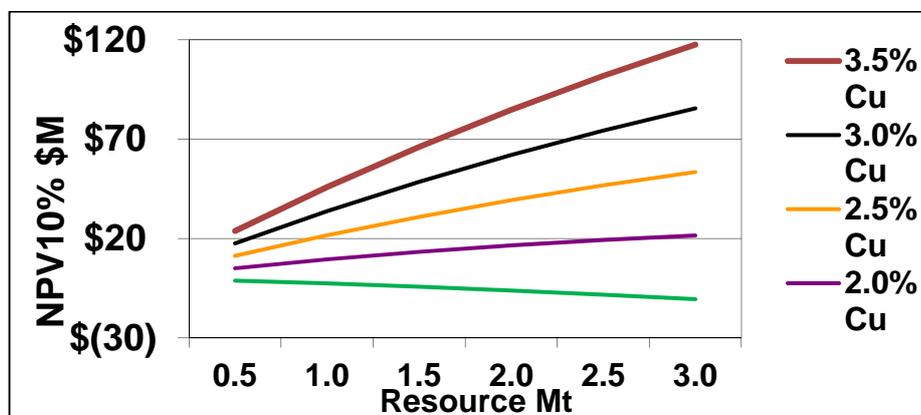
Year	Tonnes Mined (kt)	% Cu	% Fe	Copper Conc Produced (kDMT)	Contained Copper (kt)	Magnetite Conc Produced (kDMT)	Contained Iron (kt)
2013							
2014	1,650	0.60	19.4	35.9	9.0	366	254
2015	3,300	0.60	19.4	71.8	17.9	732	509
2016	3,300	0.81	19.4	95.9	24.0	732	509
2017	3,300	0.88	19.4	104.6	26.2	732	509
2018	3,300	0.88	19.4	104.7	26.2	732	509
2019	3,300	0.88	19.4	104.7	26.2	731	508
2020							
Total	18,468	0.8	19.4	529	132	4,091	2,843

A summary of the economic assessment of the Development Case B open pit/underground mining scenario is displayed in Table 11. Figure 8 displays the impact of various tonnages and grades for the A Zone Underground exploration target on the overall project NPV. This figure indicates that from the A Zone underground a minimum of 2.0Mt @ 2% Cu is needed to positively impact the overall Viscaria Project NPV.

Table 11: Summary of the economic assessment of the Development Case B mining scenario

Development Case B	Devt Case A + Exploration target of 3.0 Mt @ 2.5% Cu from A Zone Underground	
Tonnage and Grade	18.5 Mt @ 0.80% Cu 19.4% Fe	
Optimum Mining Rate	3.3 Mtpa	
Mine Life	5.6 years	
Pre-Production Capex	USD 201 M	Includes \$33.7 M pre-strip
Life-of-Mine Capex	USD 315 M	Excludes closure costs
C1 Cash Cost (net of Fe Credits)	US\$1.03/lb	
NPV _{10% REAL}	USD 170 M	USD3.25/lb Cu USD150/t Magnetite
NPV +	USD 272 M	Prices + 10%
NPV -	USD 68 M	Prices – 10%

Figure 7: Impact of the additional material at various grades and tonnages from the A Zone UG



Development Case C open pit/underground mining scenario

The third value creation scenario assessed is Development Case C, which includes Development Case B with the addition of an exploration target of 1.75Mt @ 1.6% Cu from the D Zone prospect area that could be mined by underground methods. It must be noted that this exploration target is conceptual in nature as 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.

Similar to Development Case A, this exploration target is interpreted to be relatively low exploration risk because the D Zone mineralisation is getting higher grade and thicker at depth. Figure 8 and Table 12 show the production profile developed for this scenario.

Figure 8: Development Case C production profile

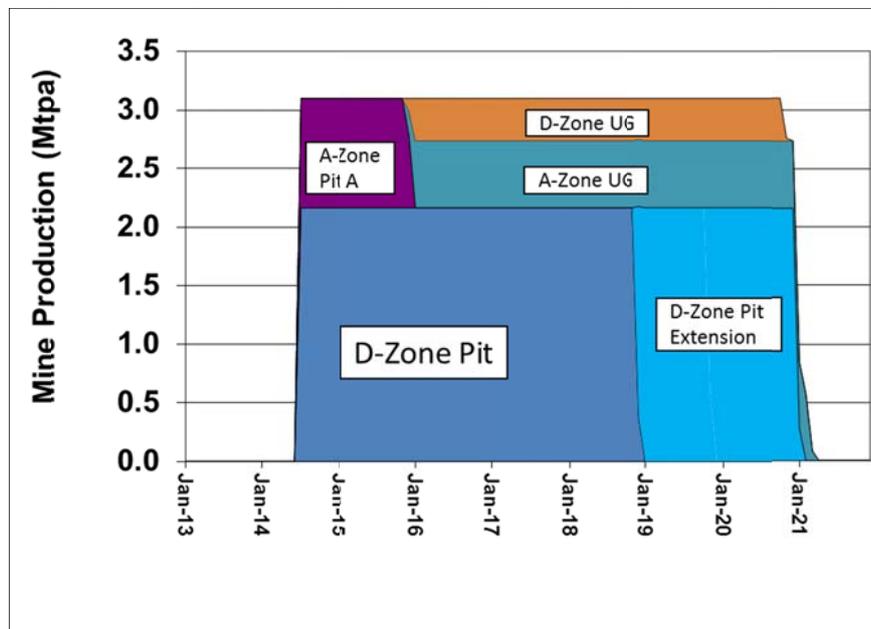


Table 12: Development Case C production summary

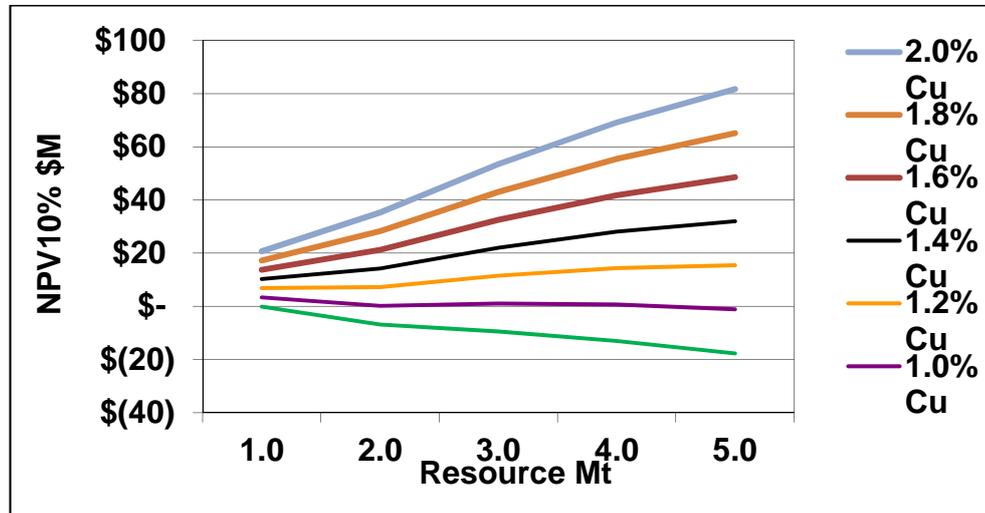
Year	Tonnes Mined (kt)	% Cu	% Fe	Copper Conc Produced (kDMT)	Contained Copper (kt)	Magnetite Conc Produced (kDMT)	Contained Iron (kt)
2013							
2014	1550	0.67	17.7	37.2	9.3	308	214
2015	3100	0.67	17.8	75.2	18.8	619	430
2016	3100	0.92	20.8	102.2	25.5	746	519
2017	3100	0.92	20.8	102.2	25.5	746	519
2018	3100	0.91	20.8	102.1	25.5	746	519
2019	3100	0.92	20.8	102.2	25.5	746	519
2020	3042	0.90	20.7	98.8	24.7	728	518
2021	126	2.12	4.6	9.6	2.4	5	3
Total	20,218	0.9	20.0	629	157	4,643	3,227

A summary of the economic assessment of the Development Case C open pit/underground mining scenario is displayed in Table 13. Figure 9 displays the impact of various tonnages and grades for the D Zone underground exploration target on the overall project NPV. This figure indicates that from the D Zone underground, a minimum of 1.75Mt @ 1.6% Cu or 3Mt @ 1.4% Cu is needed to positively impact the overall Viscaria Project NPV.

Table 13: Summary of the economic assessment of the Development Case C mining scenario

Development Case C	Devt Case B + Exploration Target of 1.75 Mt @ 1.6% Cu from D Zone Underground	
Tonnage and Grade	20.2 Mt @ 0.86% Cu 20.0% Fe	
Optimum Mining Rate	3.1 Mtpa	
Mine Life	5.6 years	
Pre-Production Capex	USD 212 M	Includes \$34.6 M pre-strip
Life-of-Mine Capex	USD 350 M	Excludes closure costs
C1 Cash Cost (net of Fe Credits)	US\$1.03/lb	
NPV_{10% REAL}	USD 198 M	USD3.25/lb Cu USD150/t Magnetite
NPV +	USD 312 M	Prices + 10%
NPV -	USD 84 M	Prices – 10%

Figure 10: Impact of the additional material at various grades and tonnages from the D Zone UG



Cost and Revenue Assumptions

The capital costs used in each of the mining scenarios have been summarised in Table 14, the operating costs assumptions in Table 15 and the revenue assumptions in Table 16. Copper cash operating costs for each mining scenario in comparison to other copper producers is displayed in Figure 10.

The C1 copper cash operating costs, net of iron credits, for the Base Case and Development Case A open pit mining scenarios are predicted to be in the lower quartile of copper producers, while the Development

Case B and Development Case C open pit/underground mining scenarios have C1 copper cash operating costs that are intermediate in comparison.

Future Resource Definition Program

The Scoping Study results show that the conversion of the exploration targets assessed in Development Case A, B and C to Mineral Resources has the potential to grow the NPV of the Viscaria Project significantly from USD\$61M to USD\$198M using a copper price of US\$3.25/lb.

Therefore, Avalon has commenced an extensive resource extension drill program focussed on assessing the potential of these exploration targets to deliver the tonnage and grade assumed in various Development Cases detailed in the Scoping Study. Drilling conducted earlier in 2012 and reported to the ASX between March–July 2012, demonstrated that the existing copper and copper-magnetite mineralisation extends beyond the current boundaries of the A and D Zone Mineral Resources. This drilling proved the concept that it is probable that the A and D Zone Mineral Resources will be able to be extended.

Given the Company management team’s past record with Discovery Metals Limited and Meridian Minerals Limited for increasing project Mineral Resources and creating value, Avalon has the expertise to execute this strategy and significantly increase the value of the Viscaria Project.

Table 14: Capital Cost assumptions

Item	Base Case USD M	Dev't Case A USD M	Dev't Case B USD M	Dev't Case C USD M	Comments
Process Plant	111.7	138.3	146.5	141.1	Scalable on production capacity
Pit D site establishment	2.5	2.5	2.5	2.5	Includes provision of site services and access roads
Pit A site establishment	1.7	1.7	1.7	1.7	
Underground Mine Establishment, De-watering & Rehabilitation	-	-	56.0	56.0	
New Underground Development	-	-	45.0	82.5	
Studies and Test work	5.0	5.0	5.0	5.0	
Pre-Strip	18.3	26.1	33.7	34.6	
Tailings Storage Facility	5.0	5.0	5.0	5.0	
Replacement Capital	11.0	15.5	19.7	22.1	
Closure Costs	-	-	-	-	Not Included
Total	155	194	315	350	

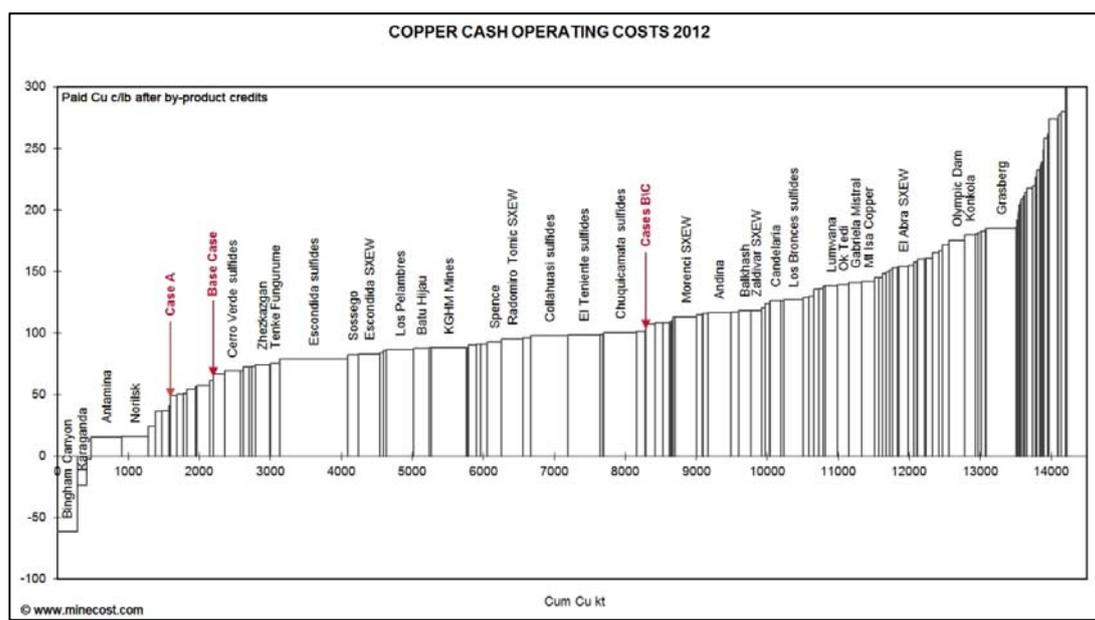
Table 15: Operating Cost assumptions

Parameter	Unit	Value	Comments
Mining Cost (ore)	USD/t	USD4.55	
Mining Cost (waste)	USD/t	USD4.55	
Processing Costs	USD/t ore	USD12.04	Variable – assumes 40% fixed costs and 12.04/t @ 1.5Mtpa
Admin Costs	USD/t ore	USD3.08	
Copper Conc. Transport	USD/DMT conc	15.75	Assumes local smelter
Magnetite Conc. Transport	USD/DMT conc	1.50	Assumes slurry pipe to LKAB

Table 16: Revenue assumptions

Parameter	Unit	Value	Comments
Overall pit slope angle	Degrees	55	
Copper Price	USD/t	USD7,165	\$3.25/lb Cu
Magnetite Price	USD/t	USD150	For 69% Fe magnetite pellets
Mining Recovery	%	95%	
Mining Dilution	%	5%	
Metallurgical Recovery	% Cu	90%	
	% Fe	76%	
Concentrate Grade	% Cu	25%	
	% Fe	69%	
Payable Copper	% Cu contained	98%	
Payable Magnetite	% Fe contained	98%	
Copper Conc. Treatment charge	c/lb Cu	45	
Copper Conc. Refining charge	c/lb Cu	4.5	
	USD/dmt	28	
	%	0.75	

Figure 10: Copper Cash Operating Costs for each mining scenario in comparison to other copper producers



New Resource for D Zone

On 2 October 2012, the Company announced a new revised Mineral Resource at the D Zone Prospect on the Viscaria Project in northern Sweden (Figures 1 and 11). For JORC (2004) purposes the new revised D Zone Mineral Resource has been reported in terms of both iron and copper mineral resources separately (See Tables 17 and 18):

- 14.8Mt @ 25.8% Fe at a cut-off above a 15% Fe Mass Recovery grade, and is classified as 9.5Mt @ 25.9% Fe Indicated and 5.3Mt @ 25.6% Fe Inferred according to the guidelines of the JORC Code (2004);
- 5.4Mt @ 0.9% Cu above a 0.4% copper cut-off grade, and is classified as being 3.5Mt @ 0.9% Cu Indicated and 1.9Mt @ 0.8% Cu Inferred according to the guidelines of the JORC Code (2004);

The Mineral Resource reported for the Viscaria Project D Zone deposit is in accordance with the guidelines of the 2004 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code, 2004). Note that the total Indicated and Inferred Mineral Resource reported for the Copper (Table 17) and for above 15% Fe Mass Recovery (Table 18) are not mutually exclusive; the Mineral Resource for above 15% Fe Mass Recovery excludes 0.72 million tonnes at 0.77% Cu above a cut-off grade of 0.4% Cu.

Table 17: D Zone Mineral Resource for Copper reported above a 0.4% Cu cut-off grade

Mineral Resource Category	TONNES (Mt)	Cu (%)	Copper Metal (t)
Indicated	3.5	0.9	33,000
Inferred	1.9	0.8	15,000
Indicated + Inferred	5.4	0.9	48,000

Table 18: D Zone Mineral Resource for Iron reported above a 15% Mass Recovery cut-off grade

Mineral Resource Category	TONNES (Mt)	Fe Mass Recovery (%)	Fe (%)	Recovered Iron (Mt)
Indicated	9.5	31.3	25.9	3.0
Inferred	5.3	30.8	25.6	1.6
Indicated + Inferred	14.8	31.1	25.8	4.6

Geological setting of the D Zone Deposit

The Viscaria D Zone deposit consists of a northeast-southwest oriented, magnetite ± chalcopyrite ± pyrite mineralised lens that steeply dips to the northwest. In the hanging wall of the mineralised lens is a sequence of rheologically strong mafic intrusive/extrusive rocks and in the footwall is a sequence of rheologically weak tuffaceous siltstones. This rheological difference has caused strain from a regional deformation/metamorphic event to be partitioned at this geological boundary, resulting in intense shearing. The shear zones appear to completely envelop the mineralised lens and therefore, it is probable that additional mineralised lenses could have been sheared away (boundinaged), representing further exploration targets.

The magnetite-rich mineralised lens appears to be fine-grained around the margins where it is in contact with the enveloping shear zones and semi-massive to massive towards the core of the lens. It is interpreted that the fine-grained nature of the magnetite around the margins of the mineralised lens is the result of deformational recrystallisation controlled by the ductile shear zones. Chalcopyrite is closely associated with pyrite and most often occurs as veinlets cross-cutting the semi-massive to massive magnetite mineralisation and is also commonly observed to be coating the individual magnetite grains.

The entire rock package is overprinted by an upper greenschist facies alteration assemblage of chlorite + talc + carbonate + tremolite ± scapolite ± biotite ± quartz, which is interpreted to be related to both the regional deformation/metamorphic event and a later, overprinting hydrothermal skarn alteration associated with the chalcopyrite and pyrite mineralisation. The skarn hydrothermal alteration and associated chalcopyrite and pyrite mineralisation appear to be most intense within the enveloping shear zones and therefore, it is interpreted that these structures have focused the chalcopyrite and pyrite mineralising event.

It has also been observed that the chalcopyrite and pyrite has predominantly precipitated directly onto the magnetite mineralisation. On the small scale this relationship is displayed by chalcopyrite and pyrite mineralisation coating individual magnetite grains. While on the large scale, this relationship is displayed by the chalcopyrite and pyrite mineralisation being concentrated along the outer margin of the overall magnetite mineralised lens, resulting in the best copper grades around the margins with decreasing copper grade towards the core. This observation is interpreted to indicate that a copper and sulphur rich hydrothermal fluid came into contact with the magnetite mineralised lens (focused by the enveloping shear zones) and that the oxidised chemistry of the magnetite then caused copper and sulphur to be precipitated.

As drilling of the D Zone mineral deposit has progressed, it has been shown that the overall geometry of the mineralised zone is getting thicker and higher grade with depth. This observation suggests the possibility that the copper mineralisation associated with the D Zone mineral deposit could extend and even get better at depth. Supporting this interpretation is the observation that chalcopyrite and pyrite mineralisation is related to a later, overprinting hydrothermal alteration event. It is interpreted that this hot, copper and sulphur enriched fluid would have most likely been transported up from a deeper, hotter zone within this orogenic belt and therefore the best copper sulphide mineralisation should be associated with the magnetite mineralised lens at depth, where it first came into contact with the magnetite. Therefore, it is interpreted that the exploration potential to increase the mineral resource for the D Zone mineral deposit at depth is high.

Drilling

The D Zone Prospect area contains 202 drill holes totalling 21,983 metres of which 170 holes fall within the area for resource evaluation. Drill holes are supported by detailed collar records as well as down hole surveys and some quality assurance and quality control (QAQC) data.

The Viscaria D Zone deposit has been drilled on northwest-southeast sections spaced approximately 50 metres apart along the strike of mineralisation extending 1,150 metres. There are generally between five and eight drillholes per section, spaced approximately 25 metres across strike. The majority of the holes are drilled at an approximate angle of 60° from the horizontal at an azimuth of 135° (90° in local mine grid) in order to intersect the plane of mineralisation at a high angle. Xstract reviewed all data provided by Avalon and confirmed that the information used for modelling is of sufficient quality to support a Mineral Resource for public reporting purposes.

Mineral Resource Interpretation

The mineralised zone of the Viscaria D Zone deposit has been interpreted on 50 metre sections coincident with drilling. Mineralisation is generally dipping between 70° and 85° to the northwest, and has been intersected from the base of till and extends in places to around 350 metres below surface.

Mineralisation is tightly constrained within 19 copper and 4 iron zones comprising high and low grade domains.

The 3D geological interpretation of the copper mineralisation is based primarily on cut-off grades in the drillhole data. Boundaries for low grade copper were generated where the copper grade was above 0.2% Cu, with high grade copper domains being created where grade was above 0.8% Cu over at least a 2 metre width down hole. Copper grades also exist outside of these domains and within the iron domains.

The iron interpretations were created by Avalon using a combination of grades and lithological units. The high grade iron follows the boundary of the ironstone along strike, and extends away from the boundary where the composited grade was greater than 25% Fe. Low grade iron is based on grades of <20% Fe and generally form a shell around the high grade iron domains. Very low grade areas were also interpreted where Fe < 10%, and are commonly found to the west of the low grade domains. There is also one further iron domain occurring in the upper shear zone, where the zone outlines an area of 10% to 20% Fe.

Mineral Resource Estimation Methods

Ordinary Kriging (OK) was used to estimate copper and iron into block models of the mineralisation wireframes/domains. The block model parent cells have dimensions of 5 mE by 20 mN by 10 m Elevation, with sub-celling used to accurately represent the geometry and volume of the mineralisation models. The estimation parameters were optimised based on the drillhole data spacing and the models of grade continuity produced by a variography study of copper and iron.

Dry bulk density data provided by Avalon was used to determine dry bulk density factors for estimating material tonnages. A relationship between iron grade and bulk density was derived and the resultant regression formula was applied across the model to determine dry bulk density. Where no iron grade was calculated in the model, a dry bulk density value of 2.9g/m³ was applied.

The Fe Mass Recovery (%) values within the block model were calculated from total Fe (%) estimates using a regression formula. The regression formula was determined by carrying out a regression analysis between Fe Mass Recovery (%) and total Fe (%) results from Davis Tube Recovery (DTR) test work.

Comparison with previously reported D Zone Mineral Resource

The previous D Zone Mineral Resource as announced in November 2011 is displayed in Table 19, while the new revised D Zone Mineral Resource described in similar terms is displayed in Table 20. The overall tonnage of the new revised mineral resource is approximately 15.5 million tonnes, compared to approximately 12.5 million tonnes in the previous D Zone Mineral Resource as announced in November 2011. This represents an increase of 3 million tonnes or 24%.

The increased tonnage in the main portion of the mineral resource that is above a 15% Fe Mass Recovery has been achieved with a minor increase in iron grade but also a minor decrease in copper grade. However, while the overall copper grade has decreased, the copper grade of the D Zone Mineral Resource at higher copper grade cut-off values has increased as shown in the grade tonnage data displayed in Tables 21 to 24 as well as Figures 11 and 12. This increase in the copper grade also increases the potential for the D Zone deposit to be mined by underground methods as well as open pit methods.

Table 19: Previous 2011 D Zone block model reporting

Reporting Criteria	Cut-off	Tonnes	Cu%	Fe%	Fe Mass Rec%
Above 15% Fe mass recovery	15.0	11,942,000	0.6	24.1	35.6
Copper above 0.4% Cu in remaining blocks	0.4	585,000	0.9	17.1	8.1

Table 20: New 2012 D Zone block model reporting

Reporting Criteria	Cut-off	Tonnes	Cu%	Fe%	Fe Mass Rec%
Above 15% Fe mass recovery	15.0	14,782,370	0.4	25.8	31.1
Copper above 0.4% Cu in remaining blocks	0.4	715,288	0.8	4.6	4.5

Future Mineral Resource Extension Plans

Geological analysis of the D Zone Mineral Resource indicates that it is not closed off in either direction along strike or at depth. In fact, the deposit appears to be getting thicker and higher in copper and iron grades at depth (Figure 13). This observation indicates that there is potential for the D Zone Mineral Resource to be further increased in areas that could be mined by open pit as well as underground mining methods. This potential was a significant factor in commencing the Viscaria Project Resource Extension drill program to increase the D Zone Mineral Resource

Table 21: New 2012 D Zone block model Cu grade tonnage data

CUTOFF (Cu %)	TONNES	Cu (%)
0.01	23,473,041	0.30
0.2	7,855,613	0.71
0.3	6,918,914	0.77
0.4	5,369,376	0.89
0.5	3,864,745	1.07
0.6	2,794,312	1.27
0.7	2,258,371	1.41
0.8	1,961,557	1.51
0.9	1,821,664	1.56
1	1,693,233	1.61
1.1	1,601,581	1.64
1.2	1,497,056	1.68
1.3	1,364,524	1.72
1.4	1,240,267	1.76
1.5	1,026,711	1.82
1.6	865,673	1.87
1.7	594,389	1.97
1.8	399,844	2.08
2	189,036	2.30

Table 22: Previous 2011 D Zone block model Cu Grade tonnage data

CUTOFF (Cu %)	TONNES	Cu (%)
0.01	13,620,465	0.54
0.2	9,126,718	0.75
0.3	7,818,777	0.83
0.4	6,796,709	0.90
0.5	6,001,320	0.96
0.6	5,202,480	1.03
0.7	4,307,293	1.10
0.8	3,533,253	1.18
0.9	2,782,843	1.27
1	2,165,254	1.36
1.1	1,666,173	1.46
1.2	1,281,447	1.55
1.3	986,860	1.64
1.4	740,885	1.74
1.5	552,218	1.84
1.6	405,429	1.94
1.7	298,171	2.05
1.8	223,869	2.15
2	126,033	2.35

Table 23: New 2012 D Zone block model Fe Mass Recovery grade tonnage data

CUTOFF (Fe Mass Rec %)	TONNES	Fe Mass Rec (%)
0.01	23,034,209	23.45
3	22,999,683	23.48
5	22,878,271	23.58
10	17,904,543	27.85
15	14,782,370	31.10
20	11,888,004	34.40
25	9,927,468	36.76
30	8,008,711	38.97
35	5,683,490	41.56
40	3,107,036	44.89

Table 24: Previous 2011 D Zone block model Fe Mass Recovery grade tonnage data

CUTOFF (Fe Mass Rec %)	TONNES	Fe Mass Rec (%)
0.01	13,581,595	27.10
3	13,229,218	27.77
5	12,927,931	28.33
10	12,113,250	29.73
15	11,134,400	31.22
20	9,766,400	33.11
25	7,851,395	35.67
30	5,536,795	39.08
35	3,542,748	42.86
40	2,117,520	46.54

Figure 11 – Location of D Zone Mineral Resource, in relation to the A Zone and B Zone Mineral Resources (in mine grid)

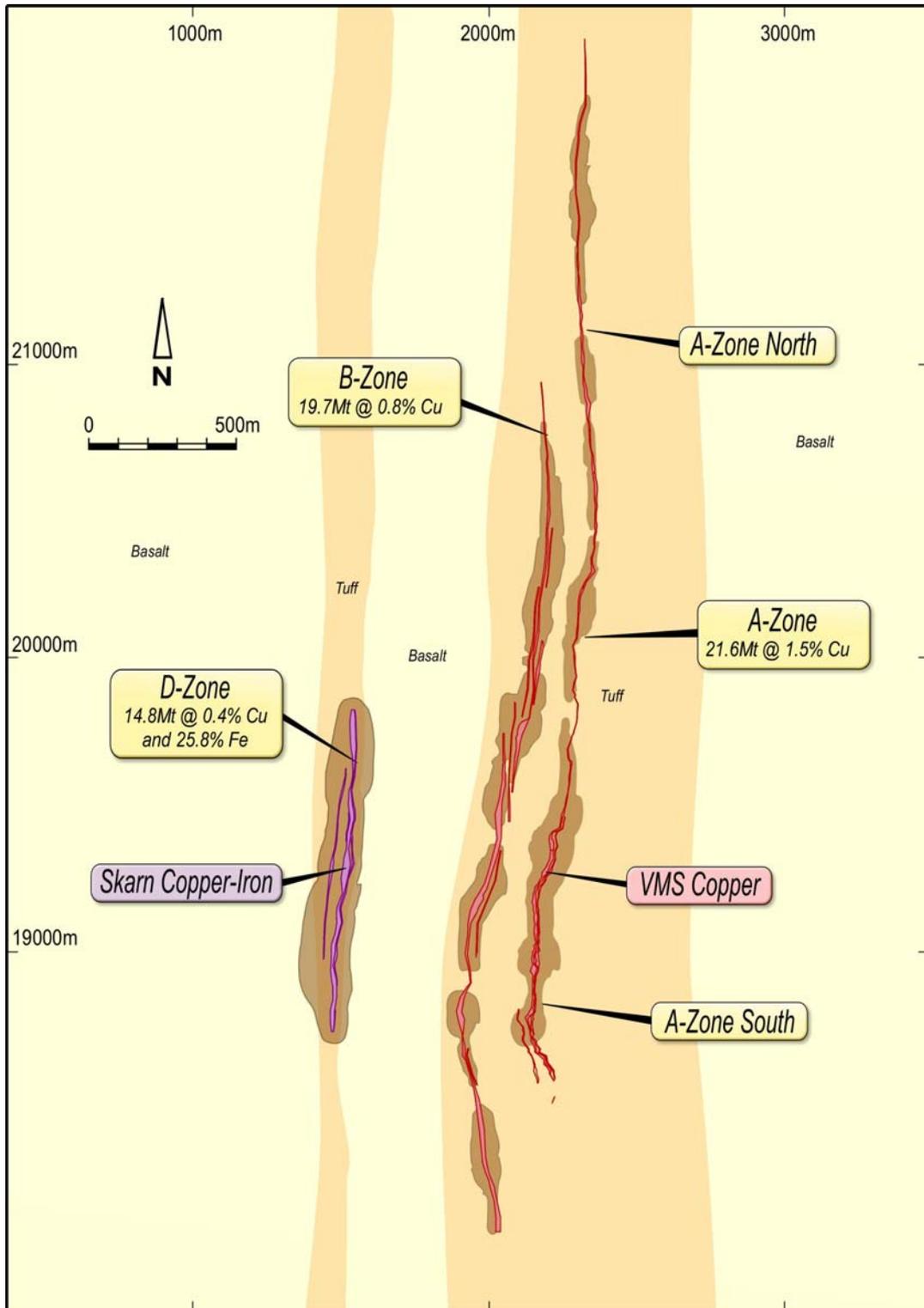


Figure 12: Grade tonnage chart for copper comparing Xstract 2012 block model vs 2011 block model

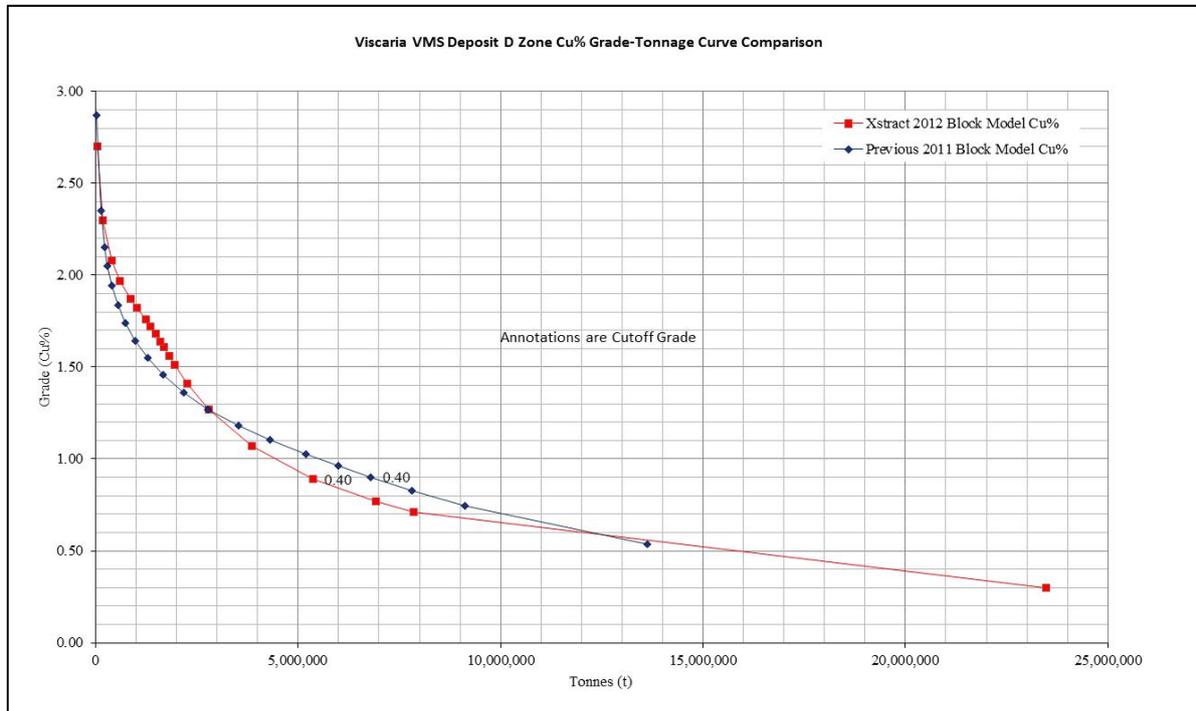


Figure 13: Grade tonnage chart for Fe Mass Recovery comparing Xstract 2012 vs 2011 block models

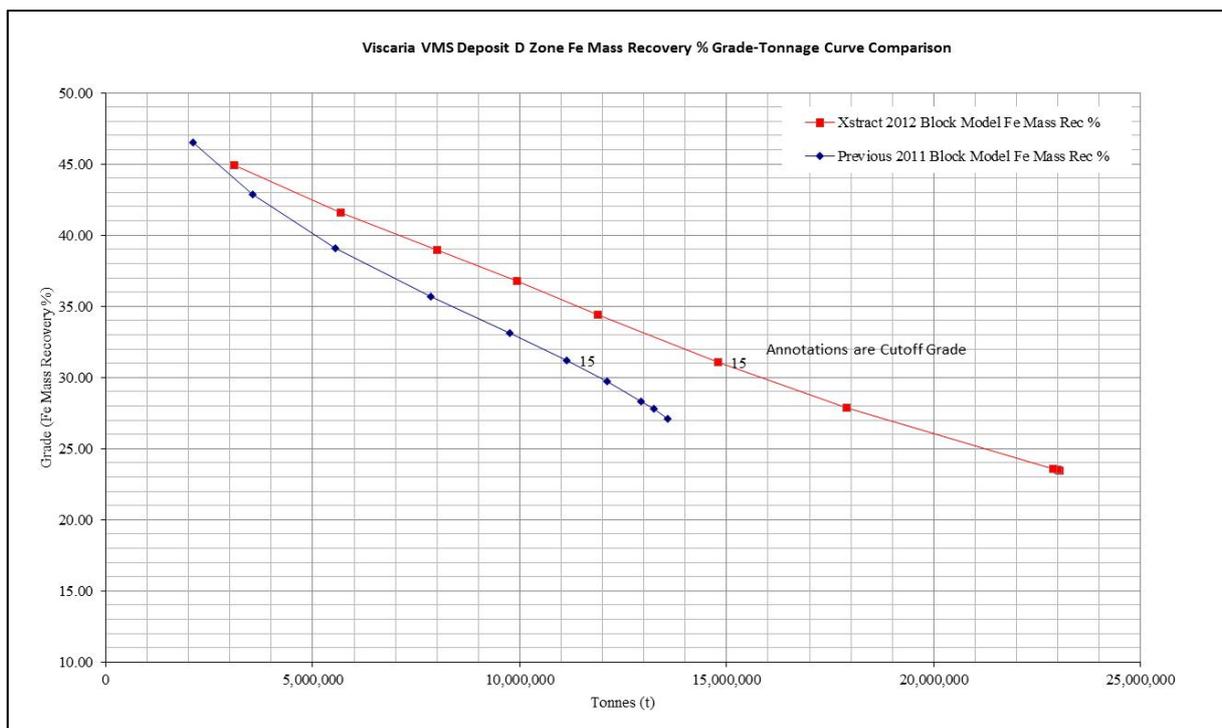
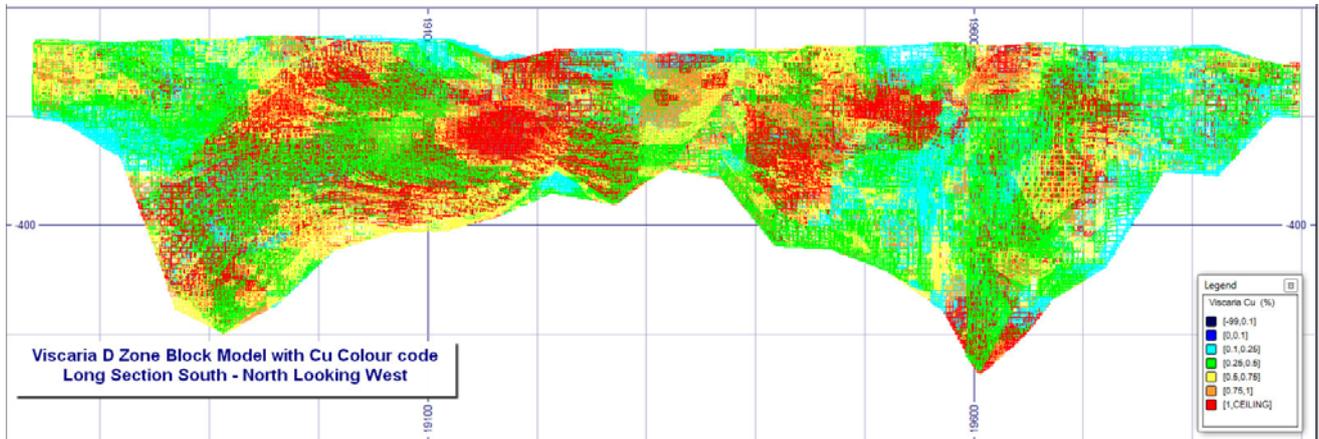


Figure 14 – Long sectional view of the D Zone Mineral resource displaying the distribution of copper grade



Bankable Feasibility Study

The BFS of the Viscaria Copper-Iron Project commenced in October 2010 remains suspended pending further review and analysis of the project economics.

Approvals

a) MEC

The Mining Exploitation Concession (MEC) for the Viscaria Project was submitted to the Bergsstaten (Mines Department) in April 2010 and was significantly amended in early 2011 following submissions from the city of Kiruna. The Bergsstaten approved the MEC for Viscaria in two licences; Viscaria K3 and Viscaria K4. The two MEC's granted cover the D zone and the southern area of the A Zone and B Zone mining areas.

A third MEC application (Viscaria K7) remains under consideration by Bergsstaten pending an amendment to the Kiruna town planning act to allow for the grant of a mining lease which includes the power generation windmills and a power line affected by the northern parts of A Zone and B Zone. Avalon has commenced the process to have the amendment to the Kiruna town planning act ratified by the Kiruna Kommun, hence allowing the MEC K7 to be granted.

The granting of the MEC is a precursor to consideration by the regulator of the Environmental Impact Assessment and permits access to the historical underground mining openings to check present day geotechnical conditions and groundwater levels.

b) Environment Impact Assessment

The Environment Impact Assessment (EIA) was submitted to the Environmental Court of Sweden (ECS) in April 2011. Following the suspension of the BFS, the Company sought suspension of consideration of the EIA by the ECS for up to 12 months to reduce expenditure. A response from the ECS to the request is yet to be received. Avalon is currently making preparations to resubmit the EIA before the end of 2013.

CORPORATE

November Placement

During the quarter, the Company successfully completed an institutional placement to raise \$8.4m through the issue of 119.6m shares at \$0.07/share (announced 1 November 2012). Proceeds from the equity raising will primarily be used for the 25,000m drill program required to extend the existing Mineral Resources at both the A and D Zones and to meet key resource targets as previously defined in the Viscaria Project Scoping Study to underwrite the development of a planned 25ktpa Cu operation. Regional targets will also be tested and acquisition opportunities will continue to be reviewed by the Company. Sydney-based Foster Stockbroking Pty Ltd acted as Lead Manager to the placement which has enabled the introduction of a new cornerstone institutional investor in Acorn Capital.

Issue of Shares - tranche 2 vesting conditions met

During the quarter, 14,700,000 shares were issued to key management personnel, including Mr Read and Mr Niardone. These shares were issued when the vesting conditions of Tranche 2 of the Performance Shares were met.

Annual General Meeting – 15 November 2012

On 15 November 2012, the Company's annual general meeting was held to consider 8 resolutions, including the remuneration report and election of directors. All 6 resolutions regarding the election of directors were successfully passed. However, the remuneration report received its 'first strike' and Resolution 8 regarding an additional 10% placement capacity was withdrawn.

Cash Resources

As at 31 December 2012, the Consolidated Entity had cash reserves of \$7.02M.

Shareholder Information

At 31 December 2012, the Company had 464,838,511 fully paid ordinary shares on issue and approximately 1,010 shareholders.

For further information please visit www.avalonminerals.com.au or contact:

Mr Jeremy Read
Managing Director
Avalon Minerals Limited
Office: 07 3368 9888
Mob: 0409 484 322

***Copper Equivalent Formula**

$\% \text{ CuEq} = \% \text{ Cu} + ((\% \text{ Fe} \times \text{Fe price US\$/tonne} \times \text{Fe recovery}) / (\text{Cu price US\$/tonne} \times \text{Cu recovery}))$

Cu price US\$/tonne = \$7,163.00 (US\$3.25/lb)

Cu Recovery = 90%

Fe price US\$/tonne = \$144.93 (calculated from US\$100 Net Price per tonne of magnetite concentrate containing 69% Fe)

Fe Recovery = 70%

Results from extensive metallurgical test work completed by Avalon Minerals Limited indicate that both copper (Cu) and iron (Fe) have a reasonable potential to be recovered from the mineral resource contained within the Viscaria Project.

Competent Persons Statement

The information in this report that relates to Mineral Resources and exploration targets is based upon information reviewed by Mr Jeremy Read BSc (Hons) who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Read 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 Read consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The Mineral Resource estimate for the D Zone prospect was compiled and prepared by Stefan Mujdrica (MAusIMM) of Xstract Mining Consultants who is a Competent Person as defined by the Australasian Code for the reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code) 2004 Edition and who consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

The Mineral Resource estimate for A and B Zones was compiled and prepared by Dr Bielin Shi (MAusIMM, MAIG) of CSA Global Pty. Ltd. who is a Competent Person as defined by the Australasian Code for the reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code) 2004 Edition and who consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

The Scoping Study results were compiled and prepared by Tim Horsley (MAusIMM) of Xstract Mining Consultants who is a Competent Person as defined by the Australasian Code for the reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code) 2004 Edition and who consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

The mineral resource estimate for the Discovery and Tributary Zones is effective from 13 January 2012 and has been prepared by Mr Thomas Lindholm, MSc of GeoVista AB, Luleå, Sweden acting as an independent "Competent Person". Mr Lindholm is a Fellow of the Australasian Institute of Mining and Metallurgy (Member 230476). Mineral resources of the Rakkuri iron deposits have been prepared and categorised for reporting purposes by Mr Lindholm, following the guidelines of the JORC Code. Mr Lindholm is qualified to be a Competent Person as defined by the JORC Code on the basis of training and experience in the exploration, mining and estimation of mineral resources of gold, base metal and iron deposits.

The Base Case includes material from Inferred Mineral Resources and therefore, exploration drilling and re-estimation may result in changes to the economically minable portion of the Mineral Resources.

Development Cases A, B and C includes material that has not yet been discovered or defined and is considered an exploration target.

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.

Company Directory

AVALON MINERALS LIMITED
ABN 68 123 184 412

Web site: www.avalonminerals.com.au

Email: info@avalonminerals.com.au

Stock Exchange Listing

Australian Stock Exchange – ASX Code: AVI

Investor Information Contacts:

Mr Jeremy Read - Managing Director
Avalon Minerals Limited
Tel: 07 3368 9888
Mob: 0409 484 322
Em: jeremy.read@avalonminerals.com.au

Mr James Harris
Professional Public Relations
Tel: 08 9388 0944
Mob: 0400 296 547
Em: james.harris@ppr.com.au

Shareholder Enquiries:

Share registry matters should be directed to:

Computershare Investor Services
Phone: 1300 850 505
Website: computershare.com.au

Registered Office:

Level One
65 Park Road
Milton Queensland 4064
Phone: 07 3368 9888
Fax: 07 3368 9899

Issued capital:

Ordinary shares: 464,838,511 (AVI)

Directors:

Tan Sri Abu Sahid Bin Mohamed – Chairman
Jeremy Read – Managing Director
Dato Philip Siew – Deputy Chairman
Paul Niardone – Non-Executive Director
Edward Siew – Non-Executive Director
Mr Gary Goh – Non-Executive Director

Company Secretary:

Roslynn Shand

Appendix 5B

Mining exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10

Name of entity

Avalon Minerals Limited

ABN

68 123 184 412

Quarter ended ("current quarter")

31 December 2012

Consolidated statement of cash flows

	Current quarter \$A'000	Year to date (6 months) \$A'000
Cash flows related to operating activities		
1.1 Receipts from product sales and related debtors	-	-
1.2 Payments for (a) exploration & evaluation	(2,119)	(3,500)
(b) development	-	-
(c) production	-	-
(d) administration	(813)	(1,318)
1.3 Dividends received	-	-
1.4 Interest and other items of a similar nature received	58	65
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Other (provide details if material)	-	-
Net Operating Cash Flows	(2,874)	(4,753)
Cash flows related to investing activities		
1.8 Payment for purchases of:		
(a) prospects	-	-
(b) equity investments	-	-
(c) other fixed assets	(76)	(201)
1.9 Proceeds from sale of:		
(a) prospects	-	-
(b) equity investments	-	-
(c) other fixed assets	-	-
1.10 Loans to other entities	-	-
1.11 Loans repaid by other entities	-	-
1.12 Other (provide details if material)	-	-
Net investing cash flows	(76)	(201)
1.13 Total operating and investing cash flows (carried forward)	(2,950)	(4,954)

+ See chapter 19 for defined terms.

Appendix 5B
Mining exploration entity quarterly report

1.13	Total operating and investing cash flows (brought forward)	(2,950)	(4,954)
	Cash flows related to financing activities		
1.14	Proceeds from issues of shares, options, etc.	8,090	11,861
1.15	Proceeds from sale of forfeited shares	-	-
1.16	Proceeds from borrowings	-	-
1.17	Repayment of borrowings	-	-
1.18	Dividends paid	-	-
1.19	Capital raising costs	(513)	(627)
	Net financing cash flows	7,577	11,234
	Net increase (decrease) in cash held	4,627	6,280
1.20	Cash at beginning of quarter/year to date	2,393	740
1.21	Exchange rate adjustments to item 1.20	-	-
1.22	Cash at end of quarter	7,020	7,020

Payments to directors of the entity and associates of the directors
Payments to related entities of the entity and associates of the related entities

		Current quarter \$A'000
1.23	Aggregate amount of payments to the parties included in item 1.2	150
1.24	Aggregate amount of loans to the parties included in item 1.10	-
1.25	Explanation necessary for an understanding of the transactions	
	Director's remuneration.	150

Non-cash financing and investing activities

- 2.1 Details of financing and investing transactions which have had a material effect on consolidated assets and liabilities but did not involve cash flows

Nil

- 2.2 Details of outlays made by other entities to establish or increase their share in projects in which the reporting entity has an interest

Nil

+ See chapter 19 for defined terms.

Financing facilities available

Add notes as necessary for an understanding of the position.

	Amount available \$A'000	Amount used \$A'000
3.1 Loan facilities	-	-
3.2 Credit standby arrangements	-	-

Estimated cash outflows for next quarter

	\$A'000
4.1 Exploration and evaluation	(4,826)
4.2 Development	-
4.3 Production	-
4.4 Administration	(556)
Total	(5,382)

Reconciliation of cash

Reconciliation of cash at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts is as follows.

	Current quarter \$A'000	Previous quarter \$A'000
5.1 Cash on hand and at bank	7,020	2,393
5.2 Deposits at call	-	-
5.3 Bank overdraft	-	-
5.4 Other (provide details)	-	-
Total: cash at end of quarter (item 1.22)	7,020	2,393

Changes in interests in mining tenements

	Tenement reference	Nature of interest (note (2))	Interest at beginning of quarter	Interest at end of quarter
6.1 Interests in mining tenements relinquished, reduced or lapsed	Nil			
6.2 Interests in mining tenements acquired or increased	Nil			

+ See chapter 19 for defined terms.

Appendix 5B
Mining exploration entity quarterly report

Issued and quoted securities at end of current quarter

Description includes rate of interest and any redemption or conversion rights together with prices and dates.

	Total number	Number quoted	Issue price per security (see note 3) (cents)	Amount paid up per security (see note 3) (cents)
7.1 Preference securities <i>(description)</i>				
7.2 Changes during quarter				
7.3 +Ordinary securities	464,838,511	464,838,511		
7.4 Changes during quarter				
(a) Increases				
• Placement	119,285,714	119,285,714	\$0.07	\$0.07
• Performance Rights	14,700,000	14,700,000	\$0.00	\$0.00
(b) Decreases through returns of capital, buy-backs	-	-	-	-
7.5 +Convertible debt securities <i>(description)</i>	-	-	-	-
7.6 Changes during quarter				
(a) Increases	-	-	-	-
(b) Decreases	-	-	-	-
7.7 Options <i>(description and conversion factor)</i>			<i>Exercise price</i>	<i>Expiry date</i>
	500,000	Nil	30 cents	31/01/2013
	1,000,000	Nil	40 cents	31/01/2014
	500,000	Nil	30 cents	1/07/2014
	300,000	Nil	40 cents	27/04/2015
	6,000,000	Nil	5 cents	30/09/2015
	7,800,000	Nil	5 cents	30/09/2015
	12,200,000	Nil	5 cents	30/09/2015
Performance Rights	9,750,000	Nil	Nil	5/06/2019
	15,550,000	Nil	Nil	5/06/2019
7.8 Issued during quarter	-	-	-	-
7.9 Exercised during quarter				
• Performance Rights	14,700,000	Nil	Nil	7/11/2012
7.10 Expired during quarter	-	-	-	-
7.11 Debentures <i>(totals only)</i>	-	-		
7.12 Unsecured notes <i>(totals only)</i>	-	-		

+ See chapter 19 for defined terms.

Compliance statement

- 1 This statement has been prepared under accounting policies which comply with accounting standards as defined in the Corporations Act or other standards acceptable to ASX (see note 5).
- 2 This statement does give a true and fair view of the matters disclosed.



Sign here:
(Company Secretary)

Date: 31 January 2012

Print name: Ros Shand

Notes

- 1 The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity wanting to disclose additional information is encouraged to do so, in a note or notes attached to this report.
- 2 The "Nature of interest" (items 6.1 and 6.2) includes options in respect of interests in mining tenements acquired, exercised or lapsed during the reporting period. If the entity is involved in a joint venture agreement and there are conditions precedent which will change its percentage interest in a mining tenement, it should disclose the change of percentage interest and conditions precedent in the list required for items 6.1 and 6.2.
- 3 **Issued and quoted securities.** The issue price and amount paid up is not required in items 7.1 and 7.3 for fully paid securities.
- 4 The definitions in, and provisions of, *AASB 6: Exploration for and Evaluation of Mineral Resources* and *AASB 107: Statement of Cash Flows* apply to this report.
- 5 **Accounting Standards** ASX will accept, for example, the use of International Financial Reporting Standards for foreign entities. If the standards used do not address a topic, the Australian standard on that topic (if any) must be complied with.

== == == == ==