



## ASX ANNOUNCEMENT

31 January 2012

### QUARTERLY ACTIVITIES AND CASHFLOW REPORT

#### HIGHLIGHTS

- Kempfield Definitive Feasibility Study progressed;
- Application for the grant of a Mining Lease at Kempfield was lodged on 24 January 2012;
- Significant Deep Intersections at Kempfield;
- Available cash of approximately \$6.0 million at 31 December 2011.

### KEMPFIELD SILVER PROJECT

#### Definitive Feasibility Study (DFS) Update

Argent Minerals Limited (ASX:ARD "Argent" or "Company") is pleased to report that the Company is making good progress towards the completion of the Definitive Feasibility Study (DFS), targeted for the end of June Quarter 2012.

#### Regulatory

- The NSW Planning Department has advised that the Kempfield Project has been accorded "State Significant Project" status;
- The NSW Department of Planning has provided Argent with the Director General's requirements (DGRs) that will need to be addressed in the Environmental Impact Statement (EIS) as part of the Development Approval process;
- An EIS is being developed for the project incorporating an updated process plant layout, preliminary designs for the tailing storage facility (TSF) wall and tailings drainage system, preliminary open pit layouts with associated haul roads and waste rock emplacements and soil stockpiling designs;
- An application for the grant of a Mining Lease at Kempfield was lodged on 24 January 2012. The application will trigger the provisions of the Native Title legislation as there is a native title application over parts of the proposed Mining Lease area. Argent has been in regular contact with the Native Title claimants since the company listed on the ASX in 2008;
- Community Information Meetings have been held with residents of Trunkey Creek and Neville.

#### Drilling

On 24 October 2011 the Company's ASX announcement detailed the infill and extensional drilling undertaken at Kempfield as part of the DFS drilling programme (holes AKRC81 to AKRC140) and a précis of that drilling can be found in the September 2011 Quarterly Activities and Cashflow Report.

A further 31 holes have been drilled including 5 geotech holes and 3 diamond "twinned" holes drilled for the purpose of confirming the assays from 3 previously drilled RC holes. Assays are awaited for the last 2 holes drilled, AKRC169 and 170, and when these are received the results for the full programme will be released.

#### Resource Evaluation

A revised resource estimate will be undertaken after all outstanding assays have been received.



## Mine Design

- Geotechnical drilling in the open pit area has been completed and core logging and associated testwork is well advanced to provide the final design parameters for the open pits;
- Preliminary open pit designs have been completed. These designs will be fine-tuned once the revised resource information and geotechnical evaluation is to hand;
- These preliminary designs include a proposed haul road layout, ROM pad and waste emplacement designs;
- Acid generation testwork is underway on the various waste rock zones to allow the development of final waste emplacement designs.

## Metallurgy

Flotation testwork has continued with new highlights including:

- Successful production of a silver rich lead concentrate and a separate zinc concentrate from the McCarron primary ore with average grades and recoveries from the latest four lead and zinc cleaner runs producing;
  - Lead Cleaner Con – 44% Pb @ 66.8% Pb recovery and 71.8% Ag recovery,
  - Zinc Cleaner Con – 59.7% Zn @ 65.3% Zn recovery;These recoveries for the lead concentrate are higher than those included in the Scoping Study (51% Pb and 49% Ag) but lower than those used for the zinc concentrate, 83% Zn);
- Full locked cycle tests on both BJ and McCarron zone ores will form part of the ongoing testwork to produce marketable grade lead and zinc concentrates at the highest possible metal recoveries;
- Carbon leaching and elution testwork has been conducted which indicates that good recoveries of silver and gold to bullion can be achieved for the oxide and transitional material (81.5% Ag and 80% Au on average), and acceptable recoveries to bullion for the sulphide feed (34.5% Ag and 72% Au on average) The combined silver recoveries for the McCarron primary ore from the leaching and flotation processes amounts to approximately 81%;
- As previously reported, comminution test results have confirmed that the ore is soft to moderately hard. Plant design work is proceeding on the basis that a single stage crusher and a single stage grinding circuit (SAG mill) will be sufficient to achieve design throughput.

## Water Supply

Water balance estimates indicate that the tailings storage facility (TSF) will provide a large proportion of the project's water needs. Additional "make-up" water requirements will depend on rainfall conditions, but are modelled to range from nil in a "wet" year and to 485MLs in the second year of production if a 1 in 100 year drought should coincide with the project life. The requirement in an "average rainfall" year would range between zero and 175MLs over the project life.

A 300mm diameter groundwater test bore was drilled between the BJ and McCarron pit locations and drawdown tests began in October 2011. The results indicated that approximately 30-50MLs per annum of ground water would be available from that bore, which would also be used to de-water the pits. A number of other potential sources of both ground and surface water in the project's vicinity have been identified and test drilling is scheduled to begin in February 2012. Surface water studies are already under way and water licensing needs and availability are being investigated.

## Tailing Storage Facility (TSF)

- Preliminary designs have been completed for inclusion in the draft EIS. These will be updated as the physical parameters of the TSF floor, the tailings and the waste rock are determined;
- Test pitting and soil sample collection along with geotechnical drilling have been carried out on site to establish the geotechnical properties of the TSF floor;
- Geochemical and geophysical testwork is underway to establish the properties of the tailings for both drainage characteristics and acid generation potential;



## Process Engineering

- An overall process plant layout has been developed and detailed design work has commenced, with the early focus being on the comminution and precious metal leaching sections;
- Engineering design work has begun on the comminution section of the plant and pricing enquiries have been issued for key pieces of equipment in this area;
- Work has commenced on preliminary process engineering for the CIL and flotation stages.

## Infrastructure

- Power – power requirements have been determined and several alternative routes have been identified for the construction of a 66kV line to bring power from the State electricity grid. A connection application has been lodged with Essential Energy to trigger the detailed design process for this power supply;
- Roads – meetings were held with Bathurst Regional Council and Blayney Council to discuss their requirements regarding road upgrades and a detailed survey of Colo Road has been completed. Engineering design work for an upgrade of this access road has commenced;
- Communications – discussions have been held with a number of major telecommunications providers regarding options for providing additional long term phone and internet capacity at Kempfield.

## SIGNIFICANT DEEP INTERSECTIONS AT KEMPFIELD

As reported on 15 November 2011, a programme of 6 RC holes was undertaken to test for depth extensions to the BJ and McCarron zones. The drilling identified extensive higher grade intersections up to 100m below the base of the proposed BJ Pit and low grade mineralisation extending 100m below the central section of the proposed McCarron Pit.

### BJ Zone

The 3 holes drilled intersected higher grade mineralization below the base of the proposed pit with the most significant intersections being:

Hole No.	From m	Interval m	Ag g/t	Au g/t	Pb + Zn %	Ag Eq* g/t
<b>AKRC137</b>	186	26	37.8	n/a	1.70	63.3
Including	204	4	97.8	n/a	0.78	109.5
<b>AKRC139</b>	134	44	25.7	0.12	1.97	61.3
Including	134	12	16.4	0.11	4.50	89.4
Also	222	36	30.4	n/a	3.25	79.2
Including	234	12	47.4	n/a	6.03	137.9
<b>AKRC146</b>	162	80	30.2	n/a	1.77	56.8
Including	178	28	41.4	n/a	1.40	62.4
And	230	12	73.2	n/a	1.30	92.7
And	246	2	214.0	0.15	1.05	237.3

\*Ag equivalent formula: 1% Pb or Zn = 15 grams of silver and 1 gram of gold = 50 grams of silver. Recoveries of gold and silver are estimated at 80% and recovered and payable lead and zinc are estimated at 55% of the head grade. Price assumptions are \$30/oz for silver, \$1500/oz for gold and \$2,200 /tonne for lead and zinc.

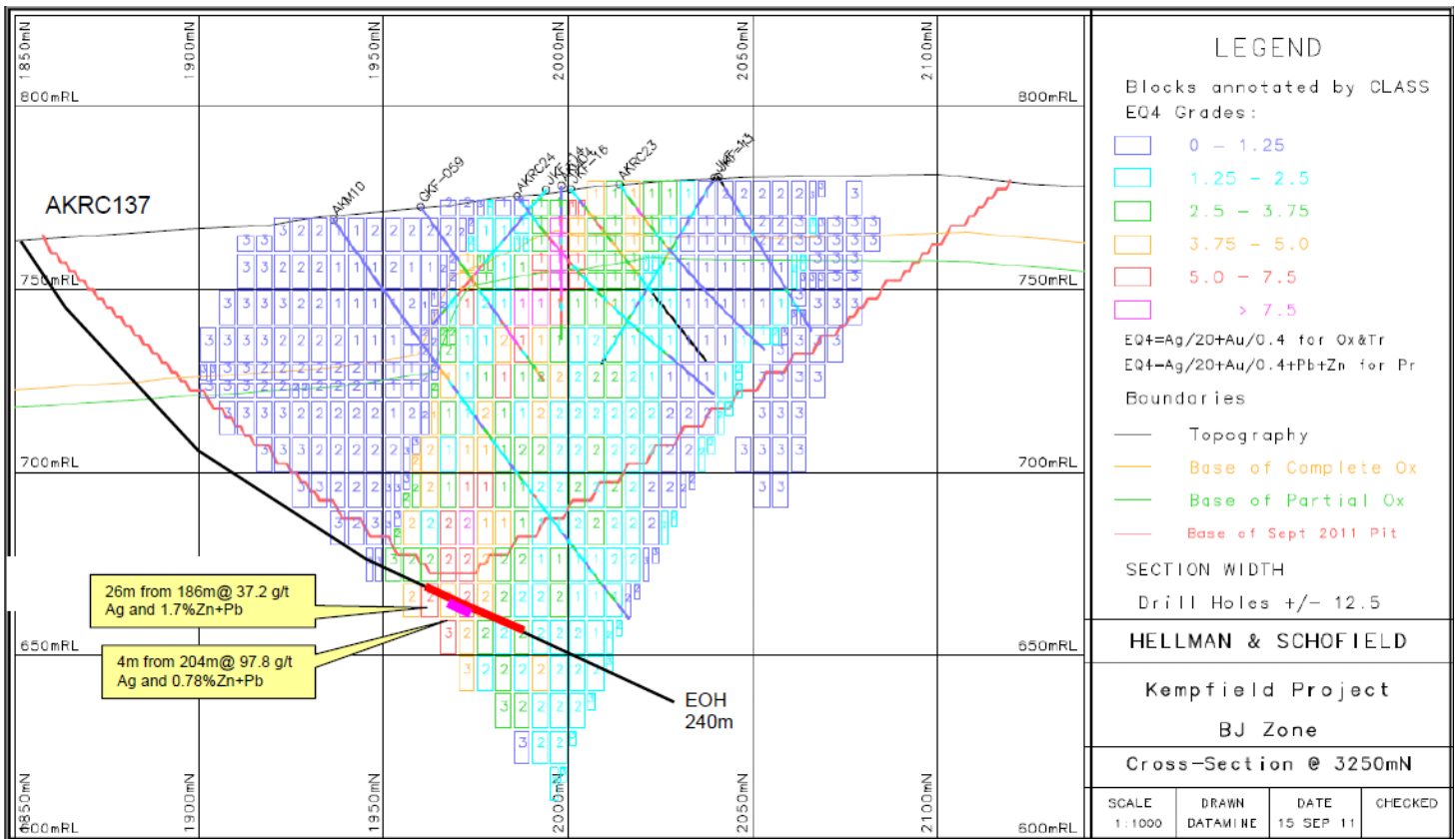


Argent’s Executive Chairman Mr Kerry McHugh said that “the results confirmed the depth potential of the BJ ore zone with the higher grade base metals intersections in hole AKRC139 being particularly encouraging. BJ is proving to be very consistent, it is currently modelled as being 170m from surface to the base of the pit and these drill holes indicate mineralization extends for at least a further 50m with the system still open at depth. It is also noteworthy that the depth extensions appear to be maintaining the width of the mineralization, for example the intersection in hole AKRC146 of 80m grading 30g/t Ag and 1.77% Pb/Zn.

The results for the McCarron zone were less successful with disappointing results from hole AKRC141 and with hole AKRC144 failing to reach and test the targeted central and eastern lenses in the southern part of the zone. Hole AKRC142, in the central part of the zone, identified wide bands of low grade mineralization, interspersed with a small number of higher grade intersections, extending some 100m below the base of the proposed pit.

The drilling indicates that mineralization in both the BJ and McCarron zones extends to depth with the BJ results showing potential to support a deepening of the pit. The extensive bands of lower grade mineralization at depth in both zones give good leverage for Argent to participate in any future increases in the silver price. Consideration will be given to further drilling to test areas that were not adequately tested in this programme.”

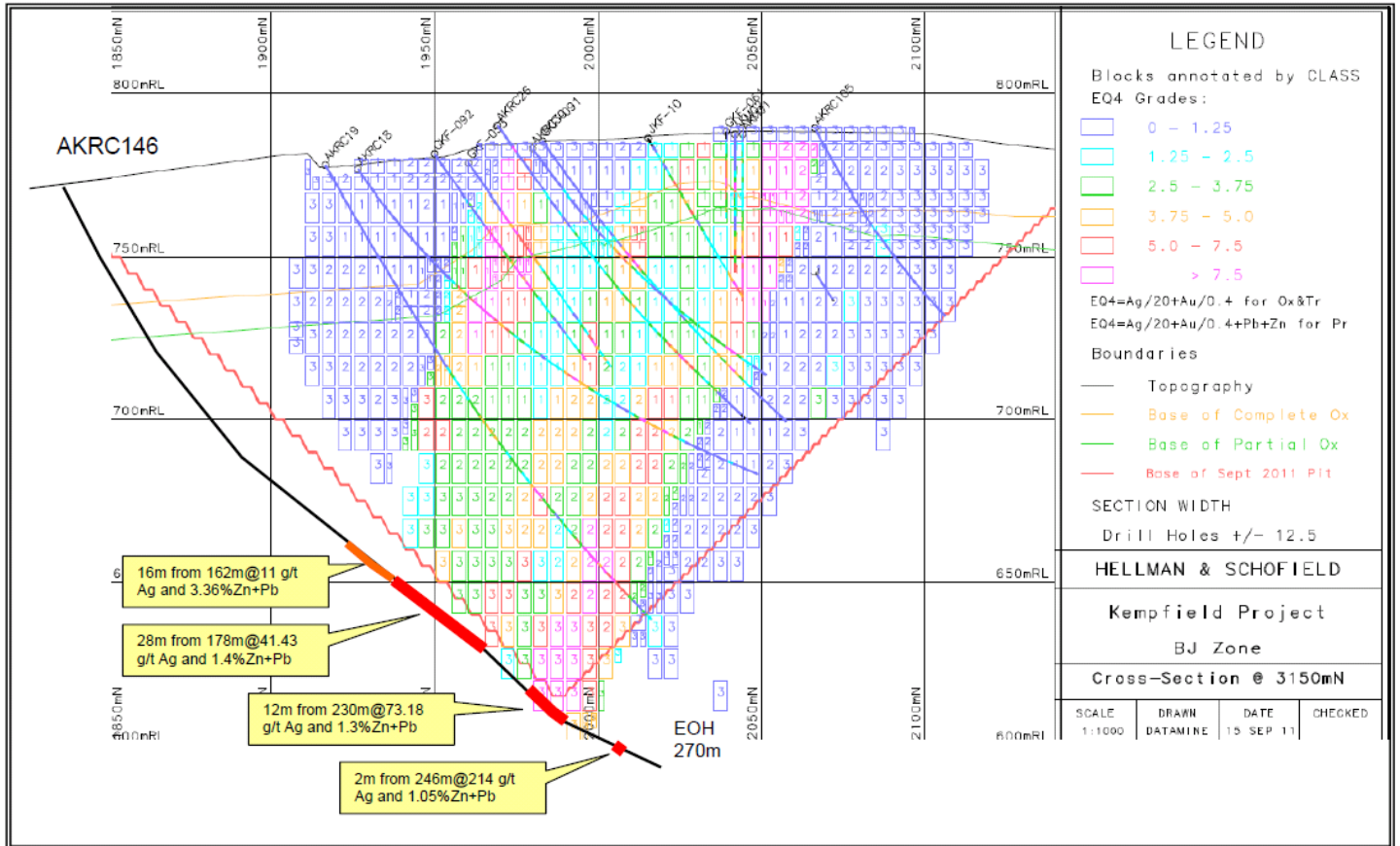
**Figure 1 – BJ Zone Cross Sections**





Hole AKRC137 was drilled on section 3250 (50m north of the centre of the pit). This hole flattened considerably but still successfully tested the region some 30m below hole AKM10 and a short distance below the bottom of the proposed pit.

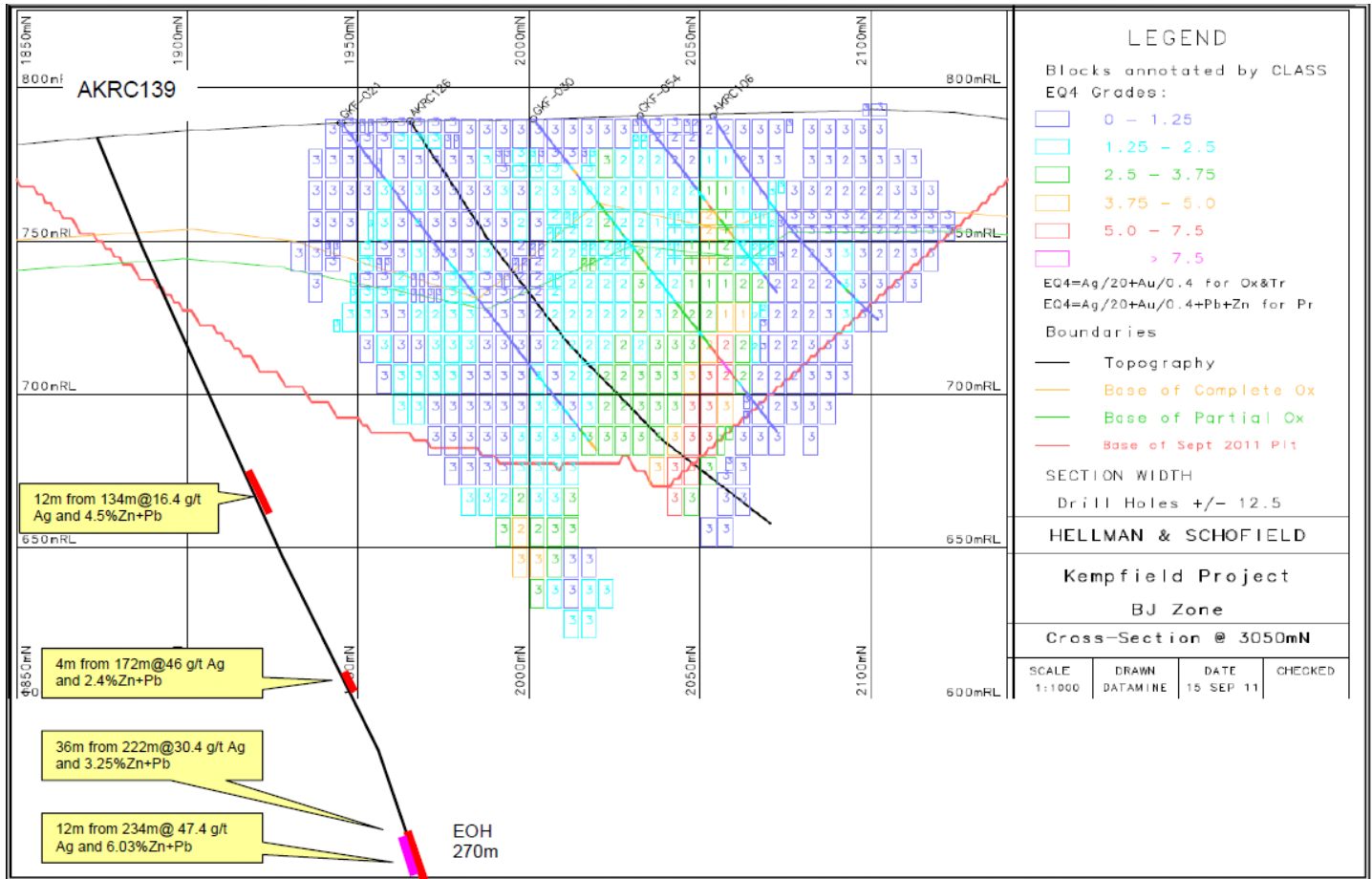
Figure 2



Hole AKRC146, drilled on section 3150 N (approximately 50m south of the middle of the pit) intersected the mineralized envelope approximately 40m to 60m below hole AKRC119 over an interval totalling 80m and encountered intervals of higher grade silver (12m @ 73.2 g/t Ag) and separately, higher grade Pb/Zn (16m @ 3.36 % Pb/Zn).



Figure 3



Hole AKRC139 was drilled on section 3050 N (150m south of the middle of the pit) and is notable for 3 relatively high grade lead/zinc intersections including 12m @ 4.5% Pb/Zn from 134m and 12m @ 6.03% Pb/Zn from 234m, on the western side of the pit, which until now has seen little evidence of high grade base metals. This hole steepened considerably and is thought not to have tested the high grade eastern zone below hole AKRC126 (4m @ 87g/t Ag from 134m) and a further hole to test that zone is warranted.

### WEST WYALONG

A programme of 6 short RC holes was undertaken at the Pine Ridge prospect. Two holes intersected gold. Hole AWGC011 intersected 4m @ 4.06g/t gold from 78m. Hole AWGC004 intersected 4m @ 0.38g/t from 62 metres.

### SUNNY CORNER

Approval is being sought from the NSW Forests Department and the Department of Industry and Investment to drill 5 RC holes proposed to test for extensions to the known Sunny Corner VMS deposit and to drill test the historic Nevada copper mine located some 3kms to the north of the Sunny Corner mine. The holes will be drilled as soon as approval is forthcoming. The expenditure involved in drilling and assaying these holes is expected to take Argent to the level of expenditure required to earn a 70% interest in the tenements.



For more information contact:

[www.argentminerals.com.au](http://www.argentminerals.com.au)

Kerry McHugh  
Executive Chairman  
**Argent Minerals Limited**  
Ph: 0404 465 154

## **Competent Person Statements**

The information in this Report that relates to Exploration is based on information compiled by David Timms who is a member of the Australian Institute of Geoscientists, and a Technical Consultant to Argent, and who has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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 Timms consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

## 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

Argent Minerals Limited

ABN

89 124 780 276

Quarter ended ("current quarter")

31 December 2011

#### Consolidated statement of cash flows

Cash flows related to operating activities	Current quarter \$A'000	Year to date (6 months) \$A'000
1.1 Receipts from product sales and related debtors	-	-
1.2 Payments for (a) exploration & evaluation	(4)	(81)
(b) development	(1,902)	(2,714)
(c) production	-	-
(d) administration	(332)	(593)
1.3 Dividends received	-	-
1.4 Interest and other items of a similar nature received	91	183
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Other - GST	(47)	(53)
<b>Net Operating Cash Flows</b>	<b>(2,194)</b>	<b>(3,258)</b>
<b>Cash flows related to investing activities</b>		
1.8 Payment for purchases of: (a) prospects	-	(1,000)
(b) equity investments	-	-
(c) other fixed assets	(10)	(10)
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	-	-
<b>Net investing cash flows</b>	<b>(10)</b>	<b>(1,010)</b>
1.13 Total operating and investing cash flows (carried forward)	<b>(2,204)</b>	<b>(4,268)</b>

+ See chapter 19 for defined terms.



**Appendix 5B**  
**Mining exploration entity quarterly report**

1.13	Total operating and investing cash flows (brought forward)	(2,204)	(4,268)
	<b>Cash flows related to financing activities</b>		
1.14	Proceeds from issues of shares, options, etc.	-	5,724
1.15	Proceeds from sale of forfeited shares	-	-
1.16	Proceeds from borrowings	-	-
1.17	Repayment of borrowings	-	-
1.18	Dividends paid	-	-
1.19	Other – cost from issue of shares	-	(215)
	<b>Net financing cash flows</b>	-	<b>5,509</b>
	<b>Net increase (decrease) in cash held</b>	<b>(2,204)</b>	<b>1,241</b>
1.20	Cash at beginning of quarter/year to date	8,190	4,745
1.21	Exchange rate adjustments to item 1.20	-	-
1.22	<b>Cash at end of quarter</b>	<b>5,986</b>	<b>5,986</b>

**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	171
1.24	Aggregate amount of loans to the parties included in item 1.10	-

1.25 Explanation necessary for an understanding of the transactions

	\$'000
Directors fees and remuneration	144
Accounting, corporate, bookkeeping and secretarial services	20
Engineering Consulting	7

**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

N/A

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

N/A

+ 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	NIL	NIL
3.2 Credit standby arrangements	NIL	NIL

### Estimated cash outflows for next quarter

	\$A'000
4.1 Exploration and evaluation	100
4.2 Development	1,000
4.3 Production	-
4.4 Administration	250
<b>Total</b>	<b>1,350</b>

### 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	17	11
5.2 Deposits at call	5,969	8,179
5.3 Bank overdraft	-	-
5.4 Other (provide details)	-	-
<b>Total: cash at end of quarter (item 1.22)</b>	<b>5,986</b>	<b>8,190</b>

### 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	N/A		
6.2	Interests in mining tenements acquired or increased	N/A		

+ 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 <b>Preference securities</b> <i>(description)</i>	-	-	-	-
7.2 Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs, redemptions	-	-	-	-
7.3 <b>*Ordinary securities</b>	141,700,493	141,700,493	N/A	N/A
7.4 Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs	-	-	-	-
7.5 <b>*Convertible debt securities</b> <i>(description)</i>	-	-	-	-
7.6 Changes during quarter (a) Increases through issues (b) Decreases through securities matured, converted	-	-	-	-
7.7 <b>Options</b> <i>(description and conversion factor)</i>	2,000,000	2,000,000	<i>Exercise price</i> \$0.178	<i>Expiry date</i> 28 February 2013
7.8 Issued during quarter	-	-	-	-
7.9 Exercised during quarter	-	-	-	-
7.10 Expired during quarter	-	-	-	-
7.11 <b>Debentures</b> <i>(totals only)</i>	-	-		

+ See chapter 19 for defined terms.

7.12	<b>Unsecured notes</b> ( <i>totals only</i> )	-	-
------	---	---	---

## 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: Marcus Michael  
Director

Date: 31 January 2012

Print name: Marcus Michael

## 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.

== == == == ==

---

+ See chapter 19 for defined terms.