



ASX Announcement

31 October 2012

QUARTERLY ACTIVITIES AND CASH FLOW REPORT – FOR QUARTER ENDING 30 SEPTEMBER 2012 HIGHLIGHTS

- **Kempfield Silver Project breakthrough**
- **Feasibility study progress**
- **Exploration update – Kempfield, West Wyalong and Sunny Corner**
- **Available cash of approximately \$ 2.37 million as at 30 September 2012**

KEMPFIELD SILVER PROJECT

Stage 1 Project Breakthrough

In its 31 March and 30 June 2012 quarterly reports Argent Minerals Limited (“Argent Minerals”) reported that it had identified an opportunity to establish an open cut mining and processing operation at Kempfield as a first project stage that will initially mine the oxide and transitional material and extract leachable minerals to produce silver and gold doré bars.

Argent Minerals has been aggressively identifying and pursuing opportunities to reduce costs which have risen sharply across the Australian mining industry during the feasibility study, and is now pleased to announce that a revised processing method has been evaluated and selected as the preferred development strategy for Stage 1 of the Kempfield Silver Project.

Following further metallurgical testing and a detailed evaluation of available leach processing methods, the Company has determined that heap leaching the Kempfield Silver Project material provides significant advantages over agitated leach, including:

- Significant reduction in total capital expenditure (“capex”);
- Significant reduction in operational expenditure per tonne (“opex”); and
- Significantly reduced environmental impact and related costs.

Whittle pit shell optimisation, preliminary mine scheduling and financial modelling performed during the quarter by Australian Mine Design and Development Pty Ltd (“AMDAD”) in conjunction with Argent Minerals revealed that heap leaching of the Kempfield oxide and transitional material (and some of the near surface primary material) provides compelling financial advantages over the traditional carbon in leach (“CIL”) process; these advantages include superior project net present value (“NPV”), internal rate of return (“IRR”), and reduced financial sensitivity to a range of project and market risks.

In summary, the initial evaluation revealed that the difference in heap leach and CIL recoveries will be offset by the lower heap leaching opex, leaving capex as by far the most significant factor in determining project NPV and IRR. The Company has determined that the initial capex for the heap leaching pad, plant and infrastructure will be significantly less than that for CIL, by as much as 30%, with the potential for further reductions.



With heap leaching there will be no tailings dam for Stage 1 of the project, substantially reducing the initial project area. Based on the official calculator provided by NSW Government Resources & Energy, the rehabilitation security deposit estimate has been reduced to a fraction of the previous CIL-based estimate.

As a total package the Stage 1 net cash flow estimates for heap leaching are significantly ahead of those for CIL, including taking working capital requirements into account.

Argent Minerals CEO David Busch, who took up office on 10 April this year, said, “We are very pleased with this outcome. This is a major step forward for the Kempfield Silver Project. Argent Minerals has defined a significant mineral resource at Kempfield which continues to be upgraded including in April this year. At the same time, however, costs have risen substantially in Australia especially during the last two years, requiring both capex and opex estimates to be increased during the feasibility study. But rather than just accept these rising costs, we have aggressively identified and pursued alternatives, and achieved this breakthrough. Heap leaching Stage 1 of the Kempfield Silver Project will require far less capital than that demanded by the CIL approach, and operational costs will also be considerably lower per tonne. Capex estimates are now back to where they should be – a fraction of what we were seeing for the total all-encompassing CIL and flotation scenario. The project ‘footprint’ is now quite compact, and we have been advised that this should be well-received by stakeholders for a relatively straight forward environmental approval process. We expect to shortly be in a position to make a more detailed announcement concerning the Kempfield Silver Project and the path which the Company intends to take”.

Column tests were performed by ALS Metallurgy (formerly Metcon Laboratories) under the supervision of authoritative international heap leaching experts Kappes, Cassidy and Associates Australia (“KCAA”). The tests were performed on representative samples of McCarron Zone material in order to complement earlier column testing of BJ Zone material. Correlation of these results with the comprehensive Kempfield metallurgical database enabled KCAA to calculate a heap leach recovery estimate for each mineralisation zone and oxidation/transitional/primary material class.

Based on these recoveries, and opex estimates provided by Argent Minerals, AMDAD performed Whittle pit shell optimisation and developed preliminary mine schedules. Separate models were optimised and developed for several heap leach and CIL scenarios, enabling side-by-side comparisons to be made on a total life of mine project basis.

Highly regarded environmental consultants and engineers RW Corkery & Co Pty Ltd and Knight Piésold Consulting designed preliminary site layouts and provided capex estimates for the heap leach scenario, for incorporation into the financial analyses.

Subsequent to the September quarter Argent Minerals submitted a revised Preliminary Environmental Assessment (“PEA”) to the NSW Department of Planning to reflect the revised development strategy. It is anticipated that any resulting modifications to the Director General’s Requirements (“DGRs”) for project approval should be relatively minor.



Key Project Parameters

The Whittle optimisation performed by AMDAD revealed that the optimum pit shells for the heap leaching would incorporate primary material despite its generally lower recoveries, and this could result in as much as 8.8 million tonnes of leachable material being produced in the first stage of the project's development.

Whilst work continues in finalising key project parameters, in broad terms the Company is currently focusing on a Stage 1 heap leach project to mine up to 8.8 million tonnes of leachable material at a strip ratio of approximately 0.7:1¹, producing in excess of 9.5 million ounces of silver and 15,000 ounces of gold. The preliminary design incorporates a series of starter pits with an initial strip ratio of 0.5:1.

At 1.5 million tonnes per annum the mine life could be up to 6 years for Stage 1. However, more recent optimisation and mine scheduling analysis by AMDAD has indicated that potentially significant benefits could be attained by increasing and varying the throughput rate. This analysis is continuing.

Feasibility Study Progress

This project breakthrough required a significant review of the project design and triggered a number of additional investigations for both feasibility and impact assessment purposes. These included:

Air Quality & Noise Analyses

- New equipment layouts were completed for early, middle and late stages of the project development to allow air quality and noise impacts to be remodelled.

Aquatic Ecology Survey

- Further assessment was conducted on fish habitats along Rocky Bridge Creek to evaluate the potential impact of the project on fish populations – particularly that of the Macquarie Perch.
 - No significant potential impacts were detected.

Community & Stakeholder Engagement

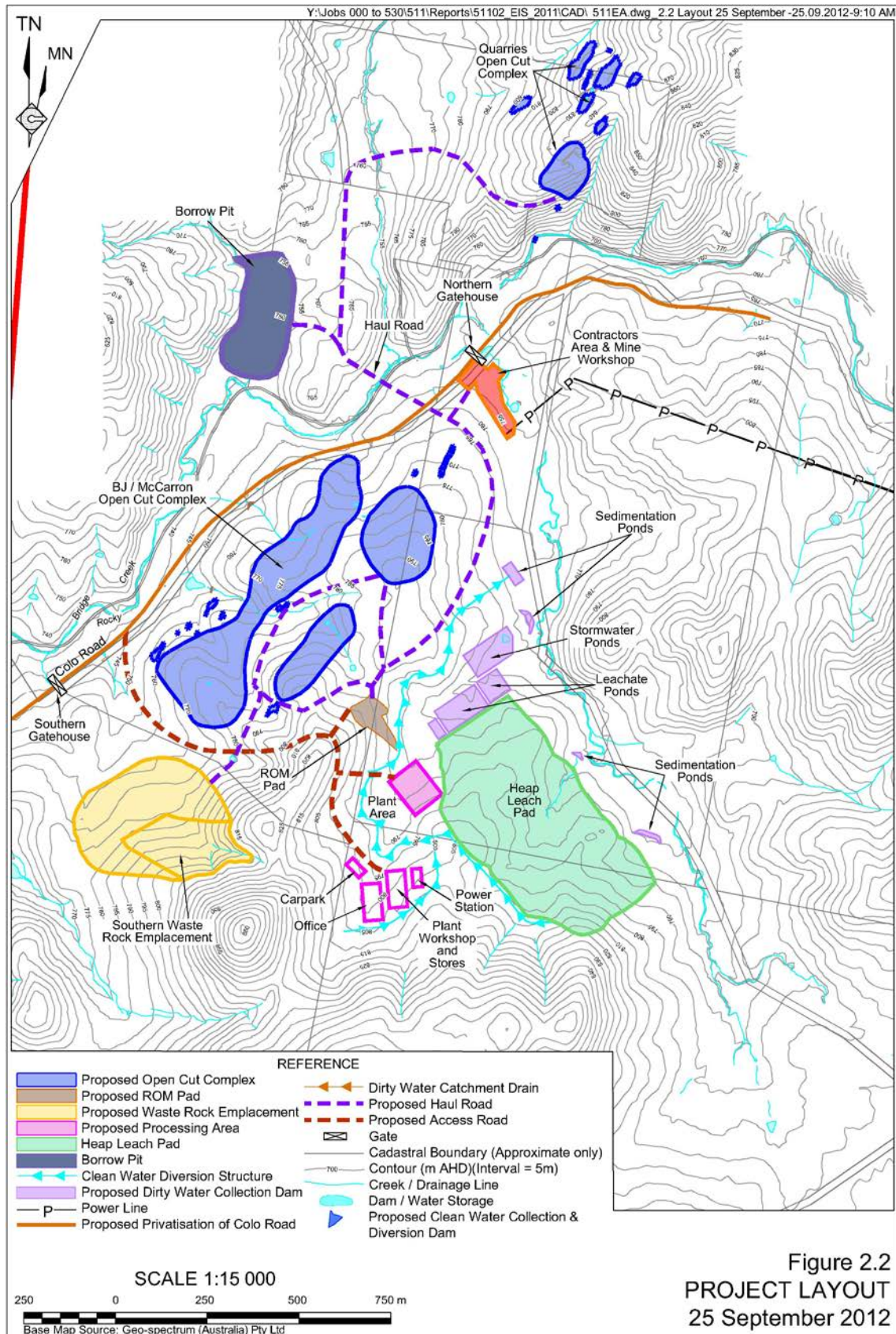
- The privatisation process for the Colo Road access route continued with further discussions being held with both the Bathurst Regional Council and the local community. Bathurst Regional Council has advised that this application is likely to be considered during the December quarter.
- Ongoing discussions were held with a variety of stakeholders regarding possible impacts of the project's development on the community.

Figure 1 is a preliminary revised site layout for heap leaching drafted by RW Corkery. This is subject to further change as mine designs and optimum leach pad dimensions are finalised.

¹ Total waste volume:total leachable material volume



Figure 1 – Revised Site Layout for Kempfield Silver Project Draft EIS (RW Corkery & Co Pty Ltd)





Flora & Fauna Assessments

- Additional impact surveys were carried out to assess the effects of the modified site layouts and alternative processing strategies engendered by the various development options.
- Assessment was commenced on the need for Biodiversity Offsets to compensate for any flora and fauna impact that might be engendered by the project development. This assessment included the identification of possible offset areas in the region.
- Discussions have been scheduled with the NSW Office of Environment and Heritage to firm up the Biodiversity Offset requirements for inclusion in the EIS.

Heritage Surveys

- Additional impact surveys were carried out to assess the effects of modified site layouts and alternative processing strategies inherent in the various development options.

Metallurgical Investigations

- Column leaching tests were undertaken as noted earlier in this report.
- Further such column tests are planned based on additional core samples that were obtained during the last quarter.

Mining Lease Application

- An application was lodged with the NSW Department of Primary Industries to establish a mining lease surrounding the Kempfield project site on 24 January 2012. This application is progressing and is subject to Project Approval being granted.
- Advertisements have been placed in relevant newspapers to provide an opportunity for potential Native Title Claimants to register a Native Title Application.

Power Supply Investigation

- An alternative, lower cost, grid power alternative was investigated for the smaller peak loads and lower average power draws of the heap leach scenario.
- A 33kV option has been identified as the most likely for the heap leach process design.
- The possibility of short and long term site generated power continued to be evaluated.

Process Design and Engineering

- Discussions were held with a number of process engineering firms to assess whether they would be able to offer the relevant experience and resources for the heap leach design.
- Investigation continued into the availability and cost of various reagents and other key consumables that would be required for the project's operation.

Rehabilitation Bond Assessment

- A number of calculations were carried out on the various project scenarios to assess the quantum and timing of the required Rehabilitation Bond.

Roads & Traffic Analysis

- Continuous recording of vehicular traffic through the Kempfield site was undertaken as part of the assessment of the potential impact of closure of Colo Road to general traffic. The results of this survey will form part of the submission to the Bathurst Regional Council requesting partial privatisation of this road in the project area.



Site Layout Development

- Significant progress was made in firming up the various elements of the proposed mine site for inclusion in the EIS. These include:
 - Open pits;
 - Waste rock emplacements;
 - Haul roads
 - Process plant and equipment
 - Offices, warehouses, laboratories and changerooms;
 - Access roads;
 - Soil stockpiles; and
 - Borrow pits.

Telecommunications Investigations

- Discussions with Telstra continued during the quarter on the possibility of providing a fibre optic cable connection to site as part of the project development.
- The lower cost alternative of provision of a microwave link to either Orange or Bathurst was also evaluated and potential savings identified.

Water Supply Assessment

- Groundwater modelling was commissioned to assess the impact of pit dewatering and water bore operation on sub-surface flows.
- Hydrogeologist and environmental scientist Hydroilex Pty Ltd has evaluated the bore water test results at Kempfield and advised Argent Minerals to apply to NSW Office of Water for 140 Megalitres per year based on 6 litres per second at 75% utilisation. This is an encouraging result.
- Discussions continued with current holders of Surface Water Licences in the Abercrombie Above Wyangala River Catchment to establish the availability of such licences if required for the project.
- Discussions with the NSW Office of Water are planned to firm up the various components of the water supply system for inclusion in the EIS.

EXPLORATION

Kempfield

During the quarter rock chip and soil sampling was performed within the Kempfield project area at the Colossal Reef and Golden Wattle prospects. These prospects have never been drilled. However, Argent Minerals has identified historical reports of rich copper and gold “shows” in the area, which inspired this recent exploration. Analysis and interpretation of the surface geochem assays is encouraging thus far, based on the Colossal Reef assay results at hand. The remaining 50% of the Colossal Reef assay results are expected to be available within the next two weeks. A separate announcement will be made following completion of the analysis and interpretation.

There is a possibility that the predominantly silver and barite Kempfield deposit, whilst substantial in its own right, is the “apron” of a Volcanogenic Massive Sulphide (“VMS”) system of which the core is yet to be located. This interpretation is based on little or no copper being evident in the Kempfield mineral resource, which remains to be considered as open to the north and at depth. Copper is considered to be more mobile than silver and lead, and if identified, can form an important clue as to the location of a potentially rich copper gold core of the VMS system.



Professor Ross Large, the Director of the renowned Centre of Excellence for Ore Deposits of the University of Tasmania (“CODES”), has agreed to be engaged by Argent to review this interpretation of the Kempfield (“VMS”) system and provide expert guidance on the ongoing exploration strategy for the resource.

West Wyalong

During the quarter Argent Minerals analysed historical data concerning the West Wyalong tenement EL5915, an area considered to be highly prospective for large scale porphyry copper gold mineralisation. This review confirmed that the EL5915 data is “voluminous and in good order”.

Whilst there is a well defined gravity magnetic anomaly in the south western area of the tenement, which Argent Minerals is planning to drill at depth (eg. 500 metres) as part its exploration strategy, the study identified an area to the south east of the tenement as an immediate exploration priority. This area has been identified as hosting several chargeability anomalies (MIMDAS survey), including at the Yiddah North and Narragudgil prospects.

EL5915 abuts EL6845² to the south which contains large tonnage copper gold mineral resources, the largest of which is located only 3km in the south of EL5915. The host rocks for this tonnage extend into EL5915.

The analysis revealed that out of a total of 681 holes drilled to date in EL5915, only 100 of these are reverse circulation (“RC”) holes, and only 28 were diamond (“DD”); 65% of all drilling comprised air core (“AC”) and rotary air blast (“RAB”) drilling.

Whilst porphyry copper deposits can be expected to be relatively deep (eg. > 300-500+ metres), only 13% of the historical holes were drilled deeper than 100 metres, 2% below 175 metres, and 2 holes deeper than 250 metres.

Newcrest performed extensive drilling (108 holes for more than 11,000 metres) in the West Wyalong Joint Venture area at the time with Golden Cross Operations Pty Ltd. Based on its review of DD intercepts in 1998 at the North Yiddah prospect, Newcrest observed, “Sheeted quartz-chalcopyrite-pyrite veins from a porphyry source” (2000 report).

MIM identified additional IP anomalies in the area. However, these remain largely untested.

Argent Minerals has engaged geophysicist ArcTan Services Pty Ltd to further analyse the existing IP data and design additional surveys to complement the earlier work.

Sunny Corner

As noted in the Argent Minerals 2012 Annual Report the Company focused its exploration efforts on two key aspects:

² Owned by others. Neither Argent nor its Related Parties own an interest in EL6845



- Rock chip and soil sampling in the following prospects, mainly amongst old mine workings:
 - St. George's Reef;
 - Bushranger's Hill;
 - Blackbutt Mountain;
 - Silver Mines South;
 - Paddy Lackey; and
 - Dunn's Reef.

- The discovery of potential extensions of the known Sunny Corner mineralisation through Reverse Circulation ("RC") drilling of the Silver Hill prospect.

The first activity (discovery of potential additional feeds) comprised 13 rock chip samples and 158 soil samples (to a depth of 30cm) selected from the 6 prospects. Various gold anomalies were detected by the assays and the results will be announced following completion of the analysis which has been delayed in order to focus on the highest priority – the Kempfield Silver Project.

Drilling of the Silver Hill prospect was delayed by a requirement to perform an environmental Assessment of Significance. Four out of five planned RC holes were drilled in July 2012, for a total of 274 metres. These holes successfully intersected the prospective stratigraphy of the Sunny Corner Formation at Silver Hill. However, no significant mineralisation was observed, so the fifth hole was cancelled. The lack of significant mineralisation was confirmed by subsequent assays.

Only a further \$36,023 needs to be invested in exploration by 1 June 2013 for Argent Minerals to reach the \$686,000 target and earn a 70% interest in the JV.

APPENDIX 5B CASH FLOW REPORT

The Appendix 5B cashflow report is attached.

David Busch
Managing Director
Argent Minerals Limited
Ph: 0415 613 800



Competent Person Statement

The information in this report that relates to Exploration Results is based on information compiled by Dr Vladimir David who is a member of the Australian Institute of Geoscientists, and a full-time employee of Argent Minerals, and who has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activities being undertaken to qualify as a Competent Person as defined in the 2004 Edition of the “Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves” (JORC Code). Dr. David consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

Disclaimer

This report contains certain forward looking statements, including possible or assumed production levels, rates, costs, prices or future performance. Such statements are not a guarantee of future performance and include unknown risks and uncertainties, as well as other factors which are beyond the control of Argent Minerals Limited. Actual results and developments may differ materially from those expressed or implied by these forward looking statements depending on a variety of factors. Nothing in this report should be construed as an offer to sell or a solicitation of an offer to buy or sell securities.

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")

30 September 2012

Consolidated statement of cash flows

	Current quarter \$A'000	Year to date (3 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	(76)	(76)
(b) development	(764)	(764)
(c) production	-	-
(d) administration	(257)	(257)
1.3 Dividends received	-	-
1.4 Interest and other items of a similar nature received	28	28
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes (paid)/refunded	-	-
1.7 Other - GST	40	40
- R&D Tax Incentive	54	54
Net Operating Cash Flows	(975)	(975)
Cash flows related to investing activities		
1.8 Payment for purchases of:		
(a) prospects	-	-
(b) equity investments	-	-
(c) other fixed assets	-	-
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	-	-
Net investing cash flows	-	-
1.13 Total operating and investing cash flows (carried forward)	(975)	(975)

+ See chapter 19 for defined terms.

Appendix 5B
Mining exploration entity quarterly report

1.13	Total operating and investing cash flows (brought forward)	(975)	(975)
	Cash flows related to financing activities		
1.14	Proceeds from issues of shares, options, etc.	-	-
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 (provide details if material)	-	-
	Net financing cash flows	-	-
	Net increase (decrease) in cash held	(975)	(975)
1.20	Cash at beginning of quarter/year to date	3,345	3,345
1.21	Exchange rate adjustments to item 1.20	-	-
1.22	Cash at end of quarter	2,370	2,370

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	183
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	155
Accounting, corporate, bookkeeping and secretarial services	27
Engineering Consulting	1

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	682
4.2 Development	-
4.3 Production	-
4.4 Administration	370
Total	1,052

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	16	41
5.2 Deposits at call	2,354	3,304
5.3 Bank overdraft	-	-
5.4 Other (provide details)	-	-
Total: cash at end of quarter (item 1.22)	2,370	3,345

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	ELA4625	Exploration Licence Application	-	100%

+ 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 (a) Increases through issues (b) Decreases through returns of capital, buy-backs, redemptions	-	-	-	-
7.3 *Ordinary securities	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 *Convertible debt securities <i>(description)</i>	-	-	-	-
7.6 Changes during quarter (a) Increases through issues (b) Decreases through securities matured, converted	-	-	-	-
7.7 Options <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 Debentures <i>(totals only)</i>	-	-		

+ See chapter 19 for defined terms.

7.12	Unsecured notes (totals only)	-	-
------	-------------------------------	---	---

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 October 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.