

# DE GREY MINING LTD

*The Bold Explorer*

## QUARTERLY REPORT

FOR THE QUARTER ENDING 30 JUNE 2010

ASX CODE: DEG

**Shares on Issue**

225,112,350

**Board of Directors**

*Campbell Ansell  
Chairman*

*Gary Brabham  
Managing Director*

*Darren Townsend*

**Company Secretary**

*Dennis Wilkins*

**Exploration Manager**

*Dave Hammond*

**Registered Office**

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A.B.N. 65 094 206 292

### Highlights

#### Argentina Projects Acquisitions (gold, silver)

- Tenement applications, farm-in agreement and option agreement to secure rights to 2,193km<sup>2</sup> of ground in Santa Cruz Province, Argentina.
- Significant landholding in the Deseado Massif, a region now recognized as one of the world's great epithermal Au-Ag provinces.
- The Deseado has an extraordinary recent history of discoveries: over 11.5Moz Au and 245Moz Ag resources and reserves delineated since 1990.

#### Queensland Projects (gold, base metals)

- Detailed gravity survey completed at Apex farm-in.
- Confirms coincident magnetic and gravity IOCG-type target signatures.

#### Pilbara Iron Assets (iron ore)

- Under favourably modified terms, De Grey now to receive \$6.05 million prior to 30 November 2010 for the sale of its 20% interest in Beyondie magnetite iron ore project to Emergent Resources Limited. De Grey retains rights to all non-iron ore minerals.

### Corporate

- Wholly-owned subsidiary De Grey Argentina S.A. formed to house Argentina assets.
- The Company continues to carefully assess numerous new project opportunities, seeking high quality exploration assets.



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### Argentina Projects

#### Santa Cruz Province Acquisitions

On 15 July De Grey announced that through a farm-in agreement, an option agreement and tenement applications in its own right, it has secured exploration rights over 2,193km<sup>2</sup> of highly prospective ground in Santa Cruz Province, Argentina (Figure 1). The Company has established an Argentine subsidiary, De Grey Argentina S.A., to facilitate its exploration push into Argentina.

All of the areas have seen little or no previous exploration and represent early stage exploration opportunities in highly prospective Jurassic volcanic rocks of the Deseado Massif in Southern Patagonia. The region hosts numerous low-sulphidation epithermal gold-silver deposits, with resources and reserves totaling 11.5Moz Au and 245Moz Ag discovered since 1990, making it one of the world's premier exploration regions for this style of mineralisation. Despite this record of discovery, exploration in the region is still in its infancy.

The majority of projects were originally acquired following target generation exercises using regional aeromagnetic data to identify structural corridors thought to be important controls on the location of the epithermal gold-silver mineralisation. Further targets were selected on the basis of alteration anomalies interpreted from the processing and analysis of Aster multi-spectral satellite data. Such signatures can reflect hydrothermal alteration associated with gold-silver mineralisation in epithermal systems. These alteration targets provide De Grey with areas for immediate field investigation.

Project interests comprise:

- A two-stage option-to-purchase agreement with Minera Sudamericana S.A. (MSA) over nine project areas covering a total of 1,390km<sup>2</sup>. MSA is a private Argentine company headed by experienced geologists who pegged the properties in 2008 and 2009 after undertaking a targeting study.
- A farm-in with Minera Kingsgate Argentina S.A. (Minera Kingsgate), a wholly owned subsidiary of Kingsgate Consolidated Ltd, over Minera Kingsgate's Boleadora project. The Boleadora Project comprises six tenements covering 527km<sup>2</sup> in the north western Deseado Massif. The project is strategically located between Andean Resources' Cerro Negro Project, just 30km to the north, and Mirasol Resources' recent grass roots Virginia silver vein field discovery, approximately 25km to the south.
- Applications by De Grey Argentina S.A. for four properties over a combined area of 276km<sup>2</sup>. The properties were acquired following the identification of anomalous Aster (multispectral satellite) signatures over Jurassic volcanic rocks that may reflect hydrothermal alteration associated with epithermal mineralisation.

Further details of the terms of the MSA and Minera Kingsgate agreements, along with more information concerning mineral exploration in Argentina, and Santa Cruz Province in particular, are provided in the Company's ASX release dated 15 July 2010.

De Grey geologists visited several of the properties during due diligence investigations in April 2010. Field checking of an Aster anomaly target area on the Sierra Morena property located siliceous breccias that outcrop discontinuously over approximately 1km strike. Rock chip samples returned up to 0.49g/t Au and 13g/t Ag (Table 1). A single rock chip sample from a second area of poorly exposed quartz veining 700m distant from the breccias outcrops returned 0.20g/t Au and 20g/t Ag.



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Low levels of base metals in the rock chip samples, along with the textures in breccia outcrops, indicate exposure at a high level in the epithermal system.

At the La Evelina property, a single sample from a ferruginous fault structure assayed 0.13g/t Au along with elevated levels of pathfinder elements arsenic and antimony. Aerial photography indicates that the structure extends at least 2km to the west.

Brief field checks have also lead to discoveries of epithermal vein quartz on the Bajo Grande and Tres Cerros properties. Limited sampling did not return elevated gold or silver values but, considering the strong vertical zoning of precious metals typical of low-sulphidation epithermal deposits, the vein systems merit more thorough investigation.

Considering the very limited field work undertaken to date, the results are regarded as very encouraging.

Winter prevents exploration access to much of southern Patagonia, particularly for early-stage field work. Exploration campaigns using experienced Argentine geological personnel are scheduled to commence in the December quarter, after winter snows have receded. Detailed mapping and sampling will be completed over the specific exploration targets identified at each of the properties with the aim of rapidly firming up drill targets. This targeted work will be complemented by systematic reconnaissance of all outcropping areas of prospective Jurassic volcanic rocks and soil and stream sediment sampling in less well exposed areas.

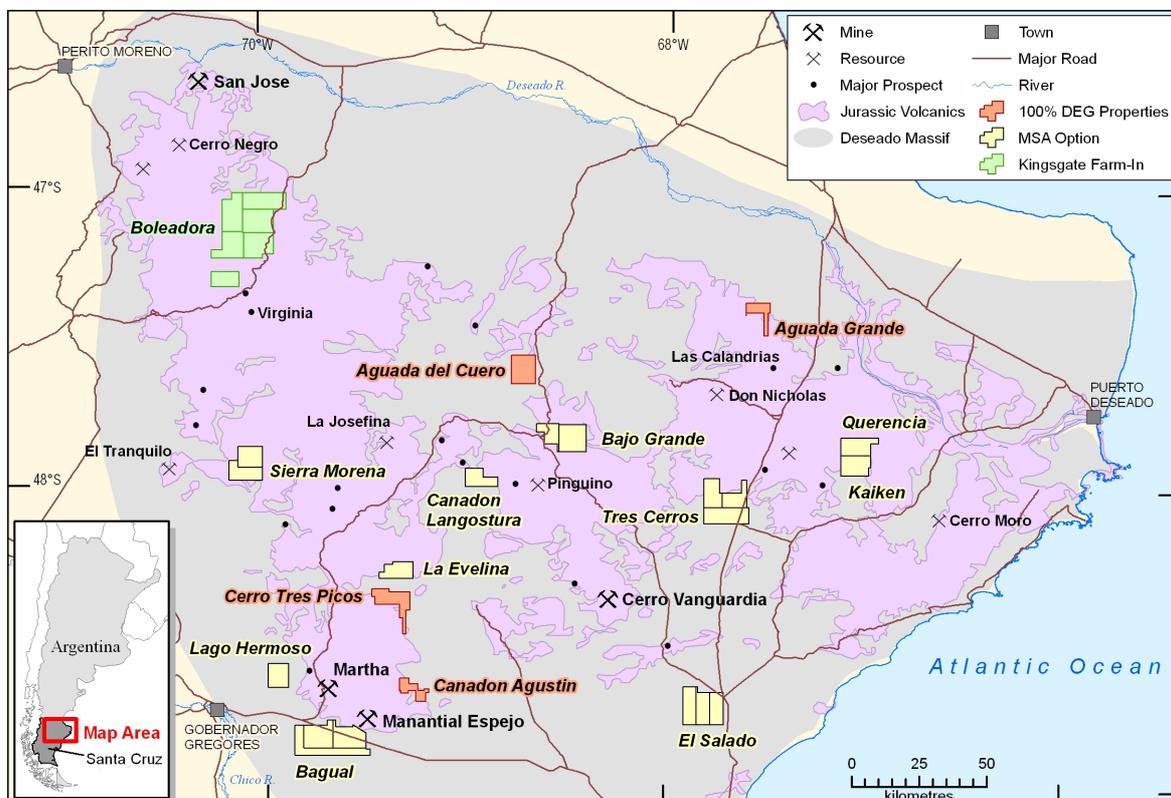


Figure 1: Locations of De Grey's projects, Santa Cruz, Argentina



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### QUEENSLAND PROJECTS

#### Apex Project Farm-in

De Grey has entered into a farm-in agreement with Teck Australia Pty Ltd (Teck) under which De Grey can earn 100% interest in EPM14142, located north of Cloncurry in Northwest Queensland.

EPM14142 covers a geophysical feature informally called the Apex Magnetic Complex, located 55km north of Xstrata's Ernest Henry copper-gold mine and 90km south of Falcon Minerals/Anglogold Ashanti's Saxby project, in the covered northern extension of the Eastern Succession of the Mount Isa Inlier.

A 1,035 station detailed ground gravity survey covering a 32.7km<sup>2</sup> area was completed in June, confirming a significant gravity anomaly at Apex (Figure 2).

The coincident magnetic - gravity signatures at Apex (Figures 2, 3) are similar to that at Ernest Henry and occur in an area of structural complexity immediately adjacent to the intersection of major, terrane-bounding structures. The high-amplitude anomalies are thought to be due to magnetite associated with an IOCG-style alteration system or, alternatively, a mafic intrusive complex similar to that which hosts nickel-copper mineralisation reported by Falcon Minerals at Saxby.

Computer modelling of the combined gravity-magnetic data is now underway in order to create a three dimensional geological model for drill targeting. Diamond drilling is scheduled for the December quarter of 2010.

De Grey has been awarded funding of up to \$80,000 under the Queensland Government's Cooperative Drilling Initiative (CDI) to drill test the Apex Magnetic Complex. The CDI grant provides recognition of the quality and the potential of this exciting drill target in a frontier exploration area.

De Grey can earn 100% interest in the project by sole funding \$2 million exploration expenditures over 4 years, including a commitment to spend \$250,000 in the first year with a work program to include at least two drill holes to basement, with Teck retaining a 1% NSR royalty and the right to earn back to 70% interest by incurring a significant premium on De Grey's expenditures at any time up until De Grey has spent \$7.5 million.

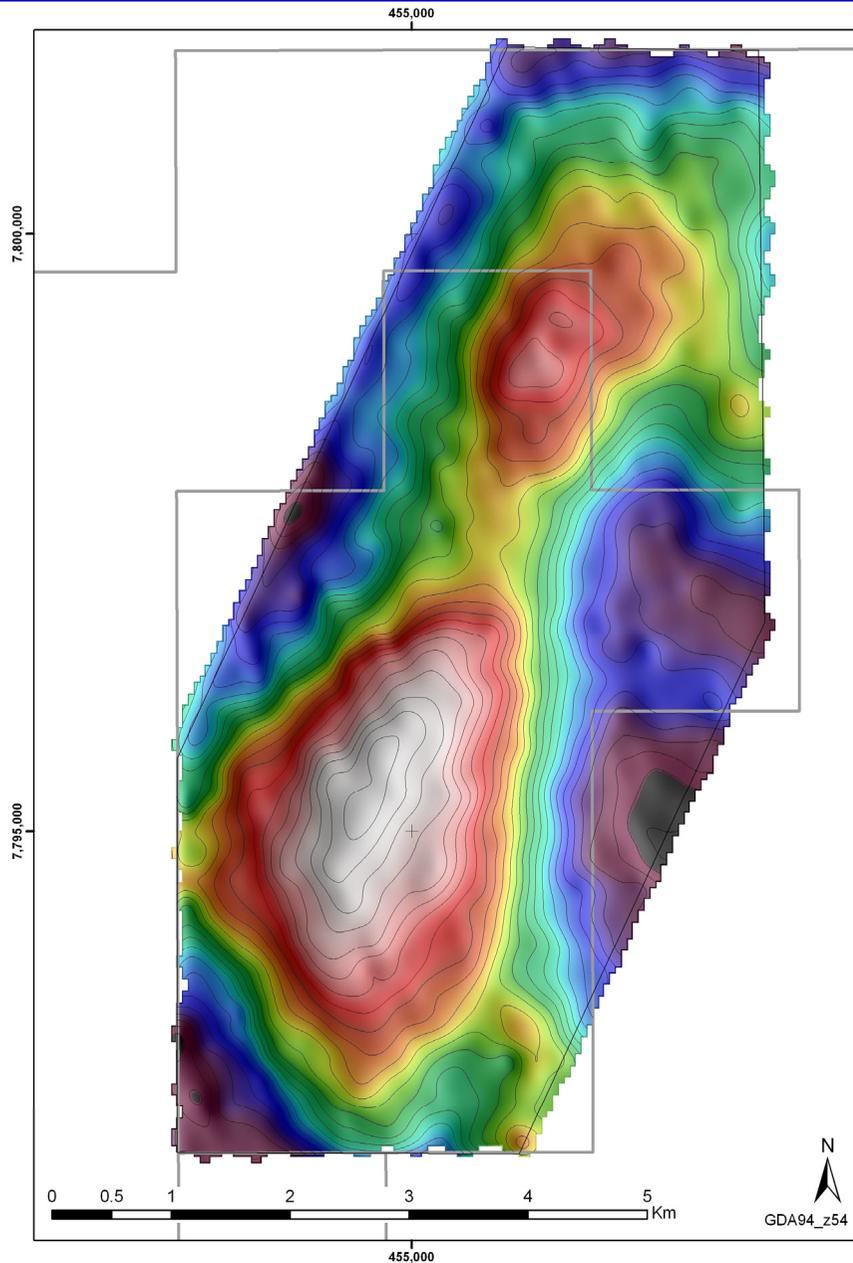
#### Jacky's Creek and Cattle Creek

De Grey has lodged applications for two EPMS, Jacky's Creek and Cattle Creek, covering a combined 158km<sup>2</sup> of ground contiguous with the Tee Tree Well EPM that covers the Apex IOCG target.

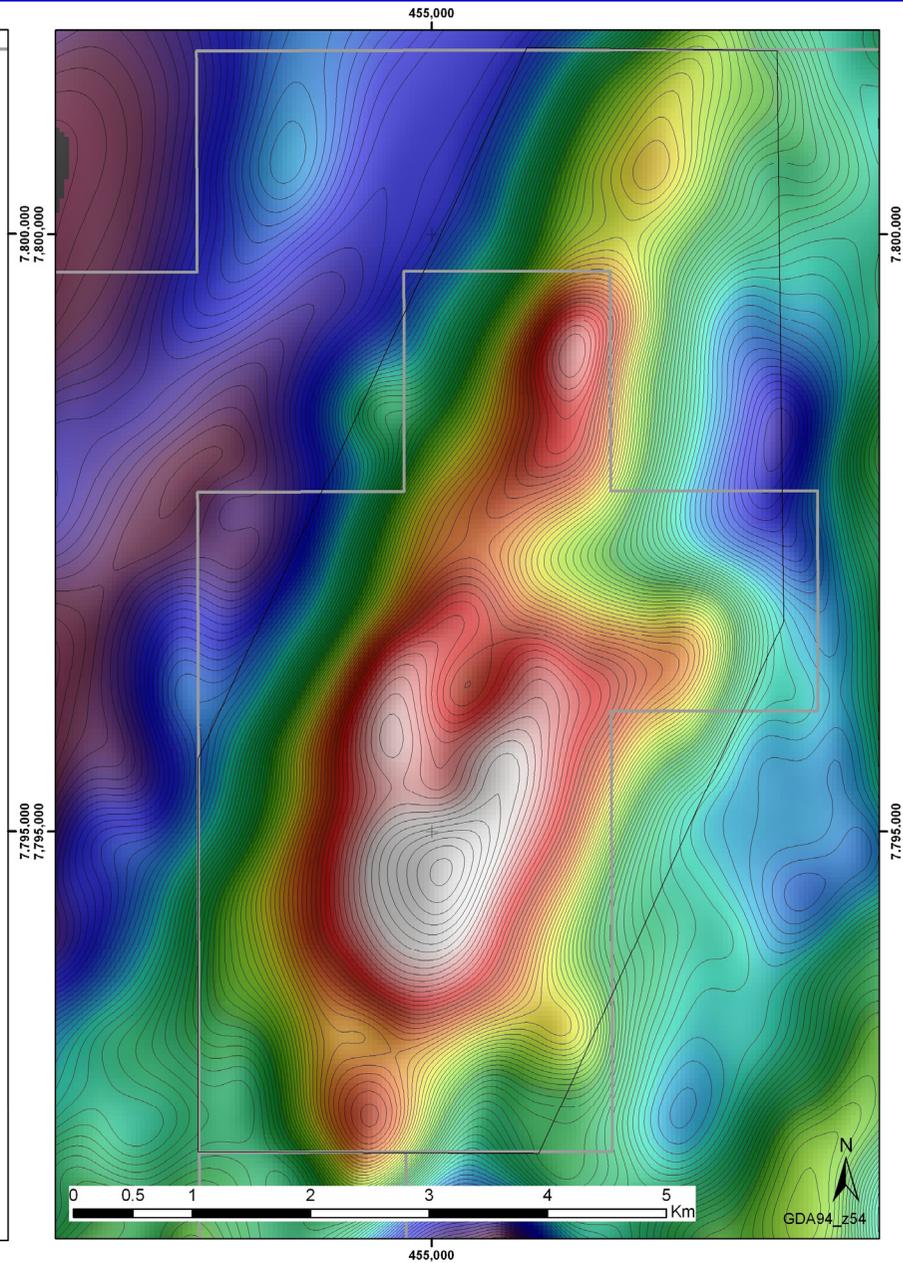
The application areas cover other discrete geophysical features that may represent alteration associated with IOCG-style copper-gold mineralisation. Exploration will commence upon grant of the tenements.



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**Figure 2: Residual gravity image over Apex Magnetic Complex. Contour intervals are 1 gravity unit**



**Figure 3: RTP magnetic image of Apex Magnetic Complex. Contours are at 25 nT intervals**



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### **PILBARA IRON ASSETS**

#### **Beyondie Magnetite Iron**

As announced on 12 July 2010, De Grey and Emergent Resources Limited (Emergent) have agreed to vary the terms for the sale of De Grey's 20% free carried interest to decision to mine in the Beyondie Iron Joint Venture, comprising exploration licences E52/1806 and E52/2215. The variation follows Emergent's revision of the terms of its proposed joint venture with Beijing China Metallurgical Investment Co. Limited (CMIC).

Under the originally proposed sale terms, Emergent was to pay De Grey \$4.5 million by 30 June 2010 plus a further \$2.25 million to be paid from future free cash flow after commencement of commercial production from the project.

Under the revised terms, Emergent is to pay \$5 million as soon as practicable following completion of its placement of shares and options to CMIC plus a further \$1.05 million on or before 30 November 2010.

Emergent advises that it expects to conclude its placement to CMIC during August and consequently De Grey expects the initial payment to occur in September.

The removal of project risk from the terms of the Sale and Purchase Agreement and the greatly shortened timeframe for completion of the second payment is viewed as favourable.

Under a Split Commodity Agreement, De Grey retains the rights to all non-iron ore minerals on the 841km<sup>2</sup> covered by the two tenements.

### **TURNER RIVER PROJECT**

#### **Turner River Farm-out Agreements**

In August 2009, De Grey entered into agreements with HJH Nominees Pty Ltd (HJH) over each of the Company's Turner River gold and base metals exploration projects, excluding the Wingina Well gold resource, under which HJH may earn up to 75% interest in each project. HJH is an unlisted Australian company partly funded by Chinese investors.

HJH has yet to commence exploration and the status of the farm-in agreements will be reviewed in the September quarter.

### **PATERSON PROJECT**

Utilising the recently released results of a regional airborne electromagnetic (AEM) survey by Geoscience Australia, De Grey has applied for exploration licences over 2,100km<sup>2</sup> of ground in the Paterson region, south of Rudall River National Park.

This frontier exploration region represents the southern extension of geological units that host, variously, the Telfer gold mine, Nifty copper mine, Kintyre uranium deposit and Maroochydore copper deposit. Despite the prospectivity of the areas De Grey has pegged, they have seen little exploration over the last 15 years or more.



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A large amount of exploration data available from work by previous explorers in the 1980's and early 1990's is being compiled into a digital database for the region. Compilation work is initially being concentrated on two areas where previous exploration and geology highlight the potential for uranium and base metals mineralisation. These two target areas represent the continuation of prospective stratigraphy under shallow cover and have not been drill tested.

Commencement of exploration relies upon finalisation of exploration access and heritage agreements with Native Title parties, the terms of which are currently being discussed.

**TABLE 1 – SANTA CRUZ, ARGENTINA  
RECONNAISSANCE ROCK SAMPLING RESULTS**

Project	Sample	East	North	Gold, g/t	Silver, g/t	Antimony, ppm	Arsenic, ppm	Geology Comments
La Evelina	SC002	2,480,362	4,650,480	0.13	0	537	1,205	Iron oxide rich breccia zone in felsic volcaniclastic along prominent WNW structure
Sierra Morena	SC003	2,424,933	4,688,000	0.28	1	13	311	Silicified red felsic volcanic breccia outcrop over a 2m x 10m area
	SC004	2,424,425	4,688,266	0.49	0	21	95	Quartz veinlets in red siliceous alteration of felsic volcanic
	SC006	2,424,246	4,688,552	0.32	13	82	1,183	Strongly silicified breccia with cellular networks and cavities
	SC007	2,424,058	4,688,612	0.14	2	63	566	Silica-haematite breccia zone within felsic volcanic
	SC008	2,424,784	4,689,078	0.20	20	75	2,351	Quartz veinlets in tuffaceous ignimbrite

**Note:** Coordinates are Gauss Kruger, Campo Inchauspe datum, Argentina Zone2. Samples are surface rock samples. Analysis is by Acme Analytical Laboratories Ltd using Aqua Regia digest and ICP-MS analysis

The information in the report to which this statement is attached that relates to Exploration Results is based on information compiled by Mr David Hammond, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Hammond 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 JORC Code Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Hammond consents to the inclusion in the report of the matters based on his information in the form and context in which it appears

# Appendix 5B

## Mining exploration entity quarterly report

Introduced 1/7/96. Origin: Appendix 8. Amended 1/7/97, 1/7/98, 30/9/2001, 01/06/10.

Name of entity

**De Grey Mining Limited**

ABN

65 094 206 292

Quarter ended ("current quarter")

30 June 2010

### Consolidated statement of cash flows

Cash flows related to operating activities	Current quarter \$A'000	Year to date (12 months) \$A'000
1.1 Receipts from product sales and related debtors	-	-
1.2 Payments for (a) exploration & evaluation	(200)	(566)
(b) development	-	-
(c) production	-	-
(d) administration	(169)	(791)
1.3 Dividends received	-	-
1.4 Interest and other items of a similar nature received	33	113
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Other (provide details if material)	3	25
<b>Net Operating Cash Flows</b>	<b>(333)</b>	<b>(1,219)</b>
<b>Cash flows related to investing activities</b>		
1.8 Payment for purchases of: (a) prospects	-	-
(b) equity investments	-	-
(c) other fixed assets	-	(3)
1.9 Proceeds from sale of: (a) prospects	-	740
(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)	-	-
<b>Net investing cash flows</b>	<b>-</b>	<b>737</b>
1.13 Total operating and investing cash flows (carried forward)	<b>(333)</b>	<b>(482)</b>

+ See chapter 19 for defined terms.

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

1.13	Total operating and investing cash flows (brought forward)	(333)	(482)
	<b>Cash flows related to financing activities</b>		
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)	-	-
	<b>Net financing cash flows</b>	-	-
	<b>Net increase (decrease) in cash held</b>	(333)	(482)
1.20	Cash at beginning of quarter/year to date	2,713	2,862
1.21	Exchange rate adjustments to item 1.20	-	-
1.22	<b>Cash at end of quarter</b>	2,380	2,380

**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	106
1.24	Aggregate amount of loans to the parties included in item 1.10	-

1.25 Explanation necessary for an understanding of the transactions

Item 1.23 includes aggregate amounts paid to directors including salary, directors' fees, consulting fees and superannuation.

**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

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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

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**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

+ See chapter 19 for defined terms.

**Estimated cash outflows for next quarter**

		\$A'000
4.1	Exploration and evaluation	200
4.2	Development	-
4.3	Production	-
4.4	Administration	270
<b>Total</b>		<b>470</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	186	145
5.2 Deposits at call	2,194	2,568
5.3 Bank overdraft	-	-
5.4 Other (provide details)	-	-
<b>Total: cash at end of quarter</b> (item 1.22)	<b>2,380</b>	<b>2,713</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			
6.2	Interests in mining tenements acquired or increased			

+ See chapter 19 for defined terms.

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

**Issued and quoted securities at end of current quarter**

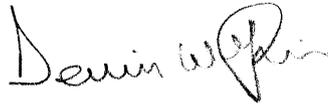
*Description includes rate of interest and any redemption or conversion rights together with prices and dates.*

	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>	225,112,350	225,112,350		
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>	5,200,000 2,000,000 2,500,000 3,250,000 3,000,000 3,250,000		<i>Exercise price</i> 20 cents 20 cents 7.5 cents 20 cents 25 cents 25 cents	<i>Expiry date</i> July 2010 December 2010 June 2011 June 2011 July 2011 June 2012
7.8 Issued during quarter				
7.9 Exercised during quarter				
7.10 Expired during quarter				
7.11 <b>Debentures</b> <i>(totals only)</i>				
7.12 <b>Unsecured notes</b> <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 4).
- 2 This statement does ~~does not~~\* (*delete one*) give a true and fair view of the matters disclosed.



Sign here:

(Company secretary)

Date: 29 July 2010

Print name: **Dennis Wilkins**

## 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 1022: Accounting for Extractive Industries* and *AASB 1026: Statement of Cash Flows* apply to this report.
- 5 **Accounting Standards** ASX will accept, for example, the use of International Accounting 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.

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+ See chapter 19 for defined terms.