



**ASX: IPT** 

Number: 195/270112

## Market Cap A\$7.0 m (0.06 p/s)

**Issued Capital** 117,403,328

# **DECEMBER 2011 OUARTERLY REPORT SUMMARY**

#### 1. URANIUM

Date: 27 January 2012

Botswana (Africa, Impact 100%):

**ASX ANNOUNCEMENT** 

Maiden drill programme at the Red Hills Uranium Prospect identified an extensive alteration system at least 1.5 km long and 1 km wide comprising multi-metal and mineral assemblages typical of those associated with major Proterozoic uranium deposits. Significant intercepts include:

RHRC001: 32 m at 0.11% Total Rare Earth Elements (TREE)

from 85 m; and

56 m at 0.1% TREE and 16 ppm U<sub>3</sub>O<sub>8</sub> from 166 m;

RHRC009: 17 m at 0.14% TREE and 13 ppm U<sub>3</sub>O<sub>8</sub> from 55 m; and

31 m at 0.1% TREE from 86 m;

RHRC010: 32 m at 0.13% TREE and 10 ppm U<sub>3</sub>O<sub>8</sub> from 45 m;

RHRC011: 48 m at 0.13% TREE from 36 m; and

31 m at 15 ppm U<sub>3</sub>O<sub>8</sub> from 111 m;

**RHRC014:** 57 m at 0.1% TREE from surface, including

24 m at 0.15% TREE and 20 ppm uranium from 6 m;

and 12 m at 0.1% TREE from 214 metres.

These intercepts are in part coincident with similar thick intercepts of anomalous silver, lead, zinc and other metals.

Assay results from four other drill holes are being interpreted.

#### Sale of the Nowthanna Uranium Deposit

Sale completed of Impact's 40% beneficial interest in the Nowthanna uranium deposit (100% of E51/1075 and 20% of E51/1072) to Toro Energy Limited. Impact received \$713,000 cash and 5,485,000 shares in Toro.

#### 2. NICKEL-COPPER-PGE

Xade Ni-Cu-PGE Option Agreement, Botswana (Impact earning 51%)

Interpretations of the surface and bedrock geology from satellite and airborne magnetic and radiometric data were completed over the northern part of the Xade Complex. This data is being assessed to identify areas for follow up work.

#### Directors

Peter Unsworth Chairman

Dr Mike Jones Managing Director

Dr Rodney Fripp **Executive Director** 

Paul Ingram Non-Executive Director

James Cooper-Jones Company Secretary

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52 119 062 261





• Strategic Alliance with Impala Platinum Limited:

Tenement applications lodged to secure a significant ground position over extensive outcrops of mineralised rock in southern Africa are still being assessed for grant.

• Yarrabubba Nickel JV Project, WA (Impact 20%):

A drill rig has been mobilised to site to test Target P1 for porphyrystyle copper-molybdenum-gold mineralisation. Excessive rainfall has delayed access to the area and the rig is on stand-by until ground conditions improve.

#### 3. CORPORATE

• Cash \$1.32 million.

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### **Directors**

Peter Unsworth Chairman

Dr Mike Jones Managing Director

Dr Rodney Fripp Executive Director

Paul Ingram
Non-Executive Director

James Cooper-Jones Company Secretary

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ABN 52 118 062 261

#### 1. Botswana Uranium Project (Impact 100%)

Impact's Botswana Uranium Project comprises an extensive area of over 30,000 square kilometres of Prospecting Licences and applications that cover 450 km of the strike extensions of rocks that host many significant uranium deposits throughout southern Africa, including the adjacent uranium deposits owned by A-Cap Resources Limited at the Letlhakane Project near Serule (Figure 1).

Here A-Cap has reported a combined Indicated and Inferred Resource of 261 Mlb of uranium oxide at an average grade of 152 ppm at a cut-off grade of 100 ppm, in deposits hosted both by near-surface calcrete and by Karoo Supergroup sedimentary rocks. A feasibility study on the Letlhakane Project is in progress.

China Growth Minerals Limited, Impact's largest shareholder with 10.1%, also has a 16.1% shareholding in A-Cap.

Work by Impact has shown that Botswana Uranium Project is prospective for four types of uranium deposits:

- uranium hosted by calcrete and sand in Cainozoic palaeochannels, a style of mineralisation well known in Australia (such as Yeelirrie, >50,000 tonnes U<sub>3</sub>O<sub>8</sub>) and Namibia (such as Langer Heinrich, >50,000 tonnes U<sub>3</sub>O<sub>8</sub>);
- deposits hosted by Karoo sedimentary rocks, which host a number of large uranium deposits throughout southern Africa, including at Letlhakane;
- deposits of uranium with associated rare earth oxides hosted by Proterozoic sedimentary and basement rocks with geological characteristics similar to those at and around the unconformity and basement-hosted uranium deposits in Proterozoic rocks in the Athabasca Basin (Canada) and the Pine Creek Geosyncline (Australia).
  - The known deposits of this style are high grade and are attractive exploration targets. The uranium mines of the Athabasca region collectively produce about 20% of the World's uranium. The uranium deposits mined historically, or currently being mined, range in size up to 450 Mlbs  $U_3O_8$  at an average grade of up to 19%  $eU_3O_8$ , as at the Cigar Lake Mine.
- Bulk-tonnage deposits of uranium hosted in leucocratic granite rocks ("alaskite") similar to the Rossing Mine in Namibia.

Impact made four modest uranium discoveries on its Botswana Uranium Project during its 2010 drill programme at **Lekobolo**, **Morolane** and **Mosolotsane** in Karoo rocks and at **Moiyabana** in Proterozoic basement rocks (Figure 1).

Reverse circulation (RC) drilling was completed late in the September Quarter at three priority drill targets, Red Hills, Mogome and Moiyabana South, all located west of the town of Mahalapye (Figure 1).

Final drill assays have only been recently received because of excessive delays at the laboratory and interpretation of all of this data is still in progress.



#### 1.1 Red Hills

At the Red Hills Prospect the drill programme has discovered an extensive alteration system that is at least 1.5 km long and 1 km wide, and comprises multi-metal and mineral assemblages typical of those associated with some of the World's largest and very high grade uranium deposits of similar, Proterozoic age.

The prospect occurs at the western end of a 60 km long by 3 km wide structural and stratigraphic corridor within which the sedimentary rocks show intense and widespread haematite and chlorite alteration, with local large airborne uranium anomalies (Figure 2). Analyses of surface rock samples are very anomalous, with up to about 100 ppm  $U_3O_8$  and up to 0.6% total rare earth elements (TREE). These features are similar to those around major Proterozoic unconformity-style uranium deposits elsewhere, such as Cigar Lake (209 Mlb at 17%  $U_3O_8$ ) in the Athabasca Basin in Canada and the Ranger Mine (350 Mlb at 0.1%  $U_3O_8$ ) in the Pine Creek area of northern Australia.

#### **Results**

The drilling at Red Hills has shown that the Palapye Group comprises conglomerates, sandstones and siltstones up to 80 m thick overlying basement granite (Figure 3). On all three drill sections the granite has been intensely and pervasively altered by deep red haematite, specular haematite (shiny and reflective) and chlorite. Within this alteration zone, which is open-ended in all directions, there is a central elongated core of much more intense specular haematite alteration that is up to 100 m thick and 400 m wide and that extends the length of the 1.5 km section drilled (Figure 3).

In addition this intense alteration is largely constrained to a major regional fault zone that has a strike extent of at least 60 km and that was identified by Impact in the regional airborne magnetic and radiometric data (Figure 2).

The drilling has intersected this fault zone in many holes, and has identified quartz-haematite breccias that contain quartz-carbonate-fluorite veins in places (Figure 3).

Significantly, the alteration minerals, the fault-hosted breccias and these anomalous element associations are characteristic of the unconformity-style uranium deposits.

The significant analytical results, which are for samples of basement granite except where stated, are summarised below:

**RHRC001:** 32 m at 0.11% TREE from 85 m; and

56 m at 0.1% TREE and 16 ppm U<sub>3</sub>O<sub>8</sub> from 166 m;

RHRC009: 17 m at 0.14% TREE and 13 ppm U<sub>3</sub>O<sub>8</sub> from 55 m; and 31 m at 0.1% TREE from

86 m;

**RHRC010:** 32 m at 0.13% TREE and 10 ppm U<sub>3</sub>O<sub>8</sub> from 45 m;

**RHRC011:** 48 m at 0.13% TREE from 36 m; and

31 m at 15 ppm U<sub>3</sub>O<sub>8</sub> from 111 m;

**RHRC014:** 57 m at 0.1% TREE from surface, including

24 m at 0.15% TREE and 20 ppm uranium from 6 m in sedimentary rocks and

basement granite; and 12 m at 0.1% TREE from 214 metres.

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In addition many samples returned similar thick intercepts with anomalous silver, lead, zinc and other metals.

Samples from four other drill holes were also sent for chemical assay. Results have been received and are being interpreted.

#### **Implications for Exploration**

All of the work reported here has very important implications for the uranium potential of Impact's licences in Botswana. The company's initial concept for the presence of Proterozoicage unconformity-related deposits has been re-inforced with multiple avenues of evidence: the mineral alteration assemblages, the nature of their host-rocks, the altered fault breccias and the regional fault control, and the thick drill intercepts with anomalous Rare Earth Elements and other metals.

Unconformity-related deposits of Proterozoic age occur in two global regions: the Athabasca Basin of Canada, and the Pine Creek Orogen of northern Australia. Together they contain six of the 17 largest uranium deposits in the world and have ore grades that are measured in the range of 0.1% to 22% (at McArthur River in Canada). The Mahalapye Complex identified by Impact in Botswana has a similar aerial extent to the Athabasca and Pine Creek regions.

#### 1.2 Other Prospects

Interpretation of drill assays from the **Mogome** and **Moiyabana Prospects** and soil geochemistry data from the **Khurutse Prospect** are in progress.

### 2. Sale of the Nowthanna Uranium Deposit

During the Quarter the sale of Impacts 40% share of the Nowthanna uranium deposit in Western Australia to Toro Energy Limited was completed.

The sale comprised 100% of Impact's tenement E51/1075 (the Quinns Lake Project) and also the Company's 20% share of E51/1072 (part of the YB Nickel Joint Venture).

Impact received \$713,000 cash and 5,450,000 Toro Energy Limited shares.

Through the direct shareholding in Toro, Impact will also retain significant upside to the targeted first production from late in 2013 from Toro's Wiluna uranium project in Western Australia, as well as its extensive portfolio of uranium prospective exploration assets elsewhere. This includes the recent discovery at Theseus in Western Australia as well as other projects in South Australia, the Northern Territory and Namibia.

Impact will retain its 20% interest in the remaining tenements within the Yarrabubba Project.



### 3. Xade Nickel-Copper-PGE JV Project: Botswana (Impact earning 51%)

The Xade Project covers a poorly explored gabbro intrusion in central Botswana with excellent potential to host deposits of PGEs and nickel-copper sulphides. The Project is close to excellent infrastructure and the World Class Orapa diamond mine (Figure 4).

Impact has entered into an option agreement with private company Manica Minerals Limited to spend US\$1.2 million over two years to earn a 51% interest in the Xade Project. Impact may then elect to earn a 75% interest by defining an Indicated Mineral Resource.

The Xade Complex occurs in the North West Botswana Rift, an igneous and sedimentary province of similar age and geological characteristics to the Midcontinent Rift region of North America, and which hosts many major nickel-copper-PGE deposits, such as:

- the extraordinary Nokomis deposit of disseminated Cu-Ni-PGE mineralisation in the Duluth Complex (Duluth Metals Limited: Indicated Resource of 550 Mt at 0.64% copper, 0.2% nickel and 0.66 g/t total platinum plus palladium plus gold);
- the Eagle nickel-copper massive sulphide deposit of Rio Tinto (3.6 Mt at 3.5% nickel and 2.9% copper); and
- the new PGE-nickel-copper discovery of Magma Metals Limited at the Thunder Bay North Project with an Indicated Resource of 8 Mt at 2.3 g/t platinum equivalent (platinum plus palladium plus copper plus nickel) for 591,000 ounces platinum equivalent.

Results of detailed and systematic geochemical analyses and relogging of about 320 metres of Xade diamond drill core confirm Impact's view that the Xade Complex is very prospective for deposits of nickel, copper and PGE's.

Drilling and interpretation of previous geophysical surveys by others indicates that the Complex is buried beneath between 200 m and 600 m of younger cover. The shallowest parts are in the north, and this same area has been interpreted as a prospective feeder zone for the entire Complex.

During the Quarter interpretation of data from an airborne magnetic gradiometry and radiometric survey over the northern part of the Xade Complex was completed together with an interpretation of the surface geology of the area. Together, this work will be used to target more detailed areas for follow up ground geophysics and/or geochemistry.

### 4. PGE Strategic Alliance with Impala Platinum Limited

In mid-2008 the Company entered into a Strategic Alliance with Impala Platinum Limited, the World's second largest platinum producer, to explore for and develop deposits of Platinum Group Elements (PGE's) in southern Africa.

Under the Alliance Impala Platinum will fund project generation work done by Impact up to US\$800,000 and in return will have the first right to earn equity in any projects identified. Projects in which Impala Platinum elects to earn an interest will require a minimum expenditure by Impala of US\$1 million before withdrawal, and a further US\$1 million



expenditure to earn 50%. Any projects which Impala Platinum does not elect to progress with can be retained by Impact.

As part of the Alliance work, tenement applications were lodged in late 2010 to secure a significant ground position over a prospective gabbro intrusion where a reconnaissance field visit identified extensive outcrops of weathered sulphides. Further details will be announced when the tenements are granted.

#### 5. Yarrabubba Project, Western Australia (Impact 20%)

The Yarrabubba Project (E51/1072,1073,1404 and E20/563-567,731 and 732) is located 70 km south east of Meekatharra in Western Australia and is prospective for Sudbury-style World Class nickel-copper-PGE deposits.

The Yarrabubba area has most of the geological characteristics of the World Class Sudbury nickel mining camp in Canada. An extremely large sub-circular magnetic low in regional magnetic data and outcrops with distinctive geological features are the signature of a structure caused by a major meteorite impact. It is generally accepted that such an impact occurred at Sudbury and that this gave rise to the many World Class nickel-copper-PGE deposits in that area. Large impact structures host major deposits of other commodities in many places around the world.

#### **Drill Programme at Target P1**

The statutory approvals process has been completed for a drill programme to test Target P1, identified by previous soil geochemistry programmes, for porphyry-style coppermolybdenum-zinc mineralisation.

A drill rig has been mobilised to site but is currently unable to operate because of extensive rainfall. An update will be provided when appropriate.

### 6. Corporate

The Company's cash balance at December 31st 2011 was \$1.32 million.

#### **Invictus Gold Limited**

Impact owns 16 million shares and 12.8 million options in Invictus Gold Limited, a gold and gold-copper-molybdenum explorer with extensive ground holdings in Queensland. Shareholders are encouraged to read the full announcements by Invictus which can be viewed in full on the ASX Website under the Invictus Gold code of **IVG** or in the **Latest News** section of the Invictus Gold website <a href="http://www.invictusgold.com.au">http://www.invictusgold.com.au</a>.

Dr Michael G Jones

**Managing Director** 

\* eU and eU $_3$ O $_8$  are the equivalent uranium content of materials calculated from either airborne radiometric data and measurements taken with an industry-standard portable spectrometer or a down hole probe respectively.

The review of exploration activities and results contained in this report is based on information compiled by Dr Mike Jones, a Member of the Australian Institute of Geoscientists. He is a director of the company and works for Impact Minerals Limited. He has sufficient experience which is relevant to the style of mineralisation and types of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the December 2004 edition of the Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code). Mike Jones has consented to the inclusion in the report of the matters based on his information in the form and context in which it appears.

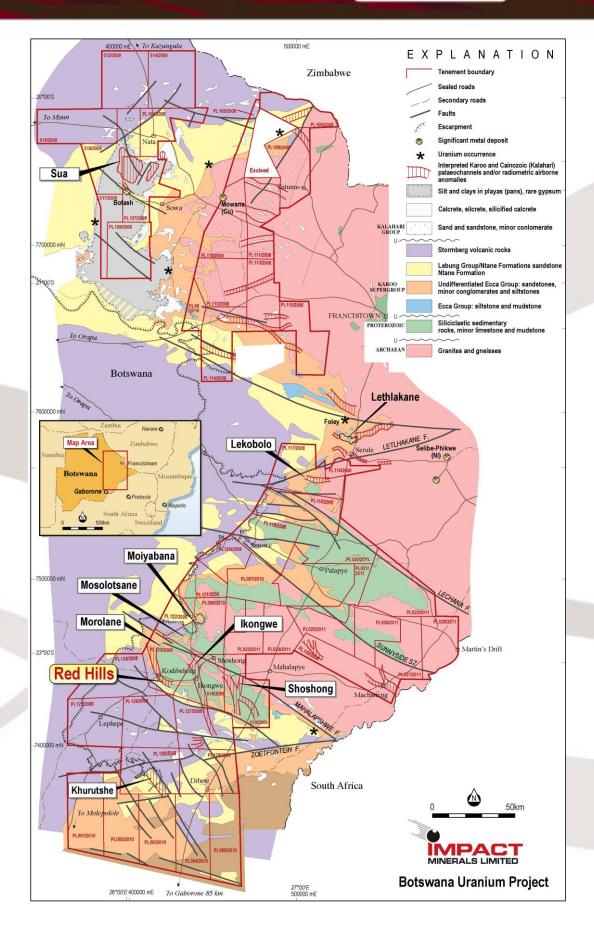


Figure 1. Location and Geology of the Botswana Uranium Project.

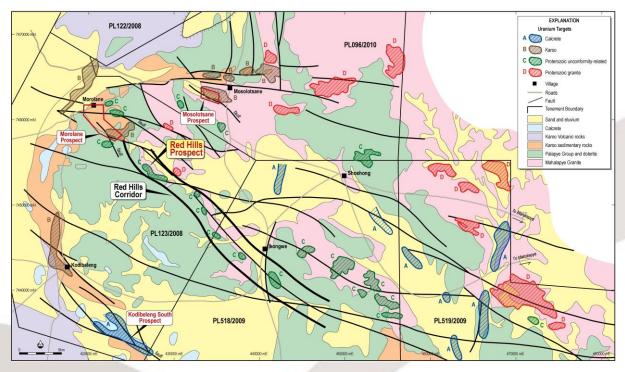
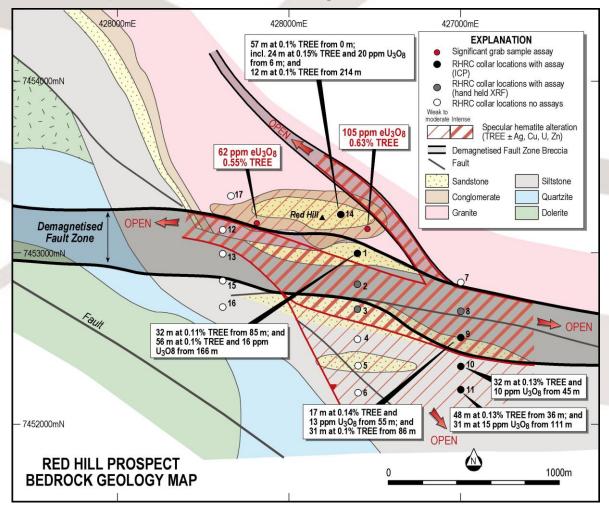


Figure 2. Location of the Red Hills Prospect and the Red Hills Corridor.



**Figure 3.** The geology and alteration system at the Red Hills Prospect.

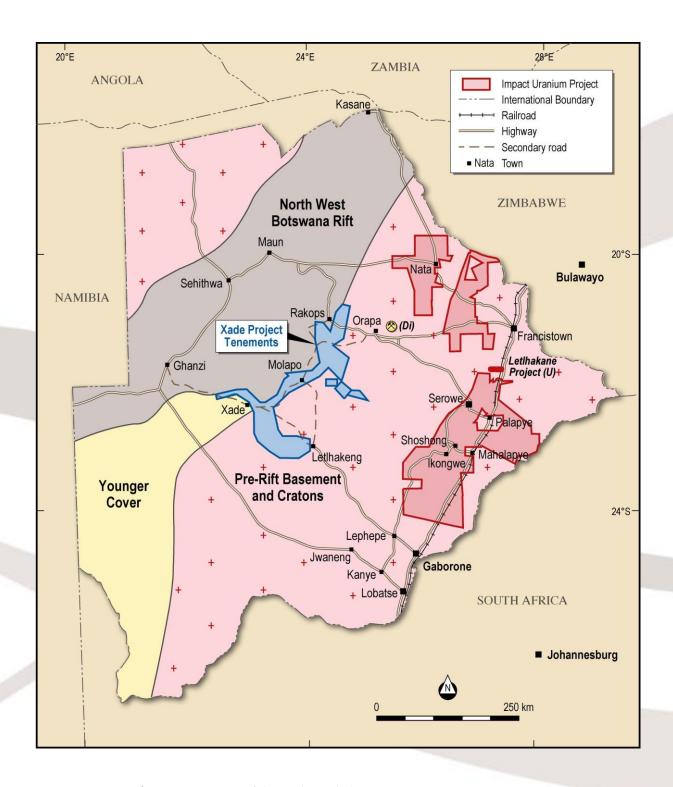


Figure 2. Location of the Xade Nickel-Copper-PGE Project, Botswana.

Rule 5.3

# **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

IMPACT MINERALS LIMITED				
ABN	Quarter ended ("current quarter")			
52 119 062 261	DECEMBER 2011			

### Consolidated statement of cash flows

Cash f	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 (b) development (c) production	(799)	(1,880)
1.0	(d) administration	(276)	(458)
1.3	Dividends received	4.4	01
1.4	Interest and other items of a similar nature received	44	81
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	(1,032)	(2,257)
1.8	Cash flows related to investing activities Payment for purchases of: (a) prospects (b) equity investments (c) other fixed assets		
(d) environmental bonds 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 - Sale of exploration asset	563	563
	Net investing cash flows	563	563
1.13	Total operating and investing cash flows (carried forward)	(468)	(1,693)

<sup>+</sup> See chapter 19 for defined terms.

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1.13	Total operating and investing cash flows (brought forward)	(468)	(1,693)			
1.14 1.15 1.16 1.17 1.18 1.19	Cash flows related to financing activities Proceeds from issues of shares, options, etc. Proceeds from sale of forfeited shares Proceeds from borrowings Repayment of borrowings Dividends paid Other (provide details if material)					
	Net financing cash flows	-	-			
	Net increase (decrease) in cash held	(468)	(1,693)			
1.20 1.21	Cash at beginning of quarter/year to date Exchange rate adjustments to item 1.20	1,792	3,017			
1.22	Cash at end of quarter	1,323	1,323			
1.23	Aggregate amount of payments to the partie	s included in item 1.2	Current quarter \$A'000			
1.24	Aggregate amount of loans to the parties inc	luded in item 1.10	-			
1.25	Explanation necessary for an understanding	of the transactions				
No						
2.1	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 in					
2.2	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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<sup>+</sup> 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

4 1	Followers and a charges	\$A'000
4.1	Exploration and evaluation	300
4.1.a	Proceeds from sale of tenements*	300
4.2	Development	
4.3	Production	-
4.4	Administration	
		250
	Total	550

<sup>\*</sup>Relates to the sale of 100% of E51/1075 and 20% of E51/1072 to Toro Energy Limited. This sale was completed and funds transferred during October 2011.

### **Reconciliation of cash**

show	nciliation of cash at the end of the quarter (as in in the consolidated statement of cash flows) re related items in the accounts is as follows.	Current quarter \$A'000	Previous quarter \$A'000
5.1	Cash on hand and at bank	59	10
5.2	Deposits at call	1,264	1,782
5.3	Bank overdraft	-	-
5.4	Other (provide details)	-	-
	Total: cash at end of quarter (item 1.22)	1,323	1,792

### Changes in interests in mining tenements

		1	1
Tenement	Nature of interest	Interest at	Interest at
reference	, , , , , ,	beginning	
		of quarter	quarter

<sup>+</sup> See chapter 19 for defined terms.

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6.1	Interests in mining tenements relinquished, reduced or lapsed	E51/1075	100% owned tenement (sold to Toro Energy Limited)	100%	0%
		E51/1072	20% interest held via the YB Nickel Joint Venture (sole to Toro Energy Limited)	20%	0%
6.2	Interests in mining tenements acquired or increased				

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 (description)				
7.2	Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buybacks, redemptions				
7.3	+Ordinary securities	117,403,328	117,403,328		
7.4	Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buybacks				
7.5	+Convertible debt securities ( <i>description</i> )				

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<sup>+</sup> See chapter 19 for defined terms.

7.6	Changes during quarter (a) Increases through issues (b) Decreases through securities matured, converted			
7.7	Options (description and conversion factor)	Number 150,000 100,000 150,000 150,000 150,000 3,150,000 250,000	 Exercise price 15 cents 20 cents 20 cents 20 cents 25 cents 25 cents 30 cents 40 cents	Expiry date 31 July 2012 31 July 2012 31 July 2013 31 May 2014 31 July 2012 31 July 2013 31 July 2012 31 July 2012
7.8	Issued during quarter			
7.9	Exercised during quarter			
7.10	Expired during quarter			
7.11	Debentures (totals only)	NIL		
7.12	Unsecured notes (totals only)	NIL		

## **Compliance statement**

- 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: ...... Date: 17 January 2012

(Company secretary)

Print name: James Cooper-Jones

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<sup>+</sup> See chapter 19 for defined terms.

#### **Notes**

- 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.
- 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.
- 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.
- 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.
- 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.

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<sup>+</sup> See chapter 19 for defined terms.