

30 January 2015

ASX Release

ASX Code: CXX

DECEMBER 2014 QUARTERLY ACTIVITY REPORT

Highlights

- **Pre-Feasibility Study on schedule for 1st quarter 2015**
- **Mineral Resource confidence substantially upgraded**
- **Metallurgical testwork optimisation in line with expectations**
- **Tremont exercises 2nd tranche of US\$5 million financing**

Pre-Feasibility Study

The Pre-Feasibility Study (PFS) for the Panda Hill Niobium Project in south western Tanzania (see Figure 8 below) has continued as planned during the December 2014 quarter. The core activities for the PFS have progressed well, with the finalisation of the December drilling program to define the Measured Resource completed, and the metallurgical optimisation program to define the optimal process route for the various material types nearing completion. Mine planning and design studies have started based upon the results of the newly announced mineral resource.

The high level schedule for the PFS is shown below in Figure 1. The study is on target for completion in Q1 2015.

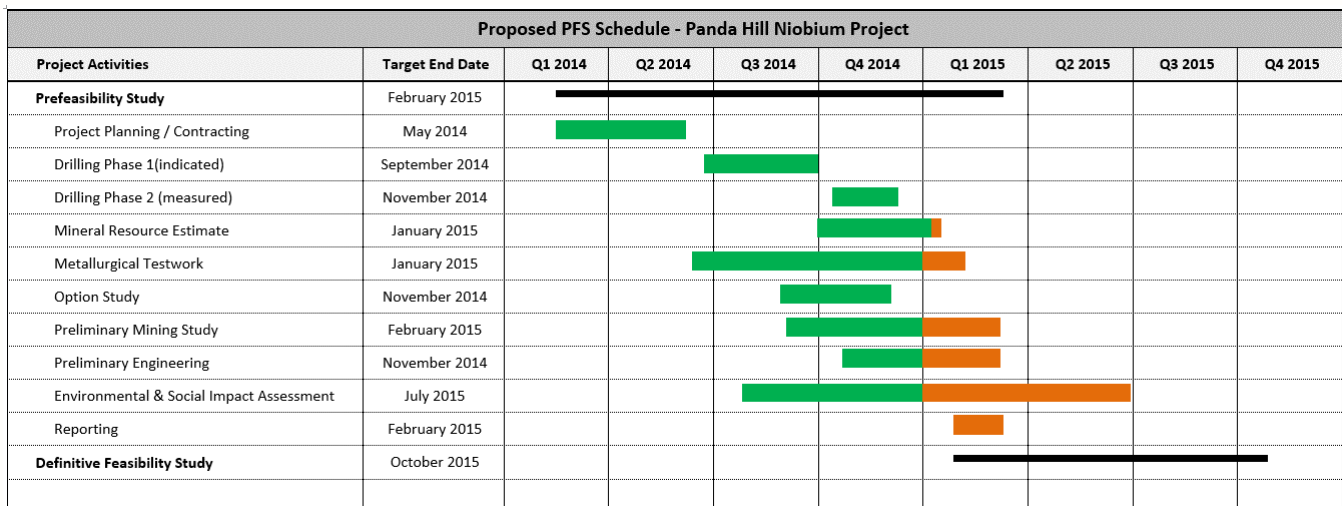


Figure 1: Panda Hill Pre-Feasibility Study Schedule

The following points are to be noted:

- The drilling required to produce a measured resource has been completed and the majority of the bench scale metallurgical testing required to complete the process development has also been completed. This additional work will allow a rapid ramp-up of the key mining and engineering activities in the Definitive Feasibility Study (DFS) and reduced timeframe for completing the study.

- Based upon the Option Study work completed in the quarter, a single-stage flotation process with a throughput of 2Mtpa RoM has been chosen as the optimal case for the project. The PFS study is now focussed on further defining the various inputs for this preferred option, mine planning, generating capital and operating costs and developing the execution strategy for subsequent phases.
- The work required for the Environmental and Social Impact Assessment (ESIA) will not be constrained by the timelines of the PFS and will carry on through the PFS / DFS interface with the aim of having the environmental licence approved at the end of the DFS.

Other Technical Activity

Panda Hill December Resource Update

On 20 January 2015, an updated Mineral Resource was announced for the project. Although this update was reported in January 2015, the substantive work for the update was undertaken in the December 2014 Quarter. The 2014 Mineral Resource incorporated the results of 21 diamond and 51 RC holes drilled in June to October 2014, with 5,171 samples taken for the 9,365 metres drilled, but did not include the results from any drilling undertaken in November and December 2014.

The 2014 Mineral Resource was undertaken by the independent mining consultants Coffey Mining based in Perth, Western Australia, and was reported in accordance to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, The JORC Code 2012 Edition (JORC).

The updated total Resource (Weathered and Primary Carbonatite, Indicated and Inferred) contained **96.3Mt at 0.52% Nb₂O₅** for 503 Kt of contained Nb₂O₅ reported at a 0.3% Nb₂O₅ cut off, and is based predominantly on new drilling undertaken in 2013 and 2014. The Multiple Indicated Kriging (MIK) method was used to estimate the resource. This method incorporates increased mining selectivity and internal dilution for a planned Selective Mining Unit (SMU) and is expected to have a positive effect on the head grades of the future feasibility studies.

The first phase drilling of 2014 enabled a significant increase in the endowment of the expected high-recovery Primary Carbonatite mineralisation to **88.4Mt at 0.52% Nb₂O₅** for 459Kt of Nb₂O₅ which represent a 37% increase in metal and 10% increase in grade to the 2013 estimate. The increase in Primary Carbonatite mineralisation incorporates depth extensions due to drilling in the Angel Zone, as well as extensions on strike to the North of the deposit.

The additional drilling has also enabled better definition and classification of Weathered Material, which has effectively decreased the amount and grade of this material. The Weathered Material generally has poorer metal recoveries and is not expected to play a significant role in the initial mining schedule. There are plans to upgrade this material by gravity separation enabling treatment of the upgraded material in the same circuit as the Primary Material, however this will remain an option for later study and development

The updated 2014 Mineral Resource is summarised below in Table 1 by weathering type and the area of the resource is shown in Figure 2.

Panda Hill Niobium Resource - December 2014 Reported Above a 0.3% Nb ₂ O ₅ Lower Cut-off			
Combined			
Classification	Million Tonnes	Nb ₂ O ₅ %	Nb ₂ O ₅ Content (KT)
Indicated	41.0	0.54	223
Inferred	55.3	0.51	280
Total	96.3	0.52	504
Primary Carbonatite ¹			
Classification	Million Tonnes	Nb ₂ O ₅ %	Nb ₂ O ₅ Content (KT)
Indicated	35.9	0.54	194
Inferred	52.5	0.51	265
Total	88.4	0.52	459
Weathered Carbonatite ²			
Classification	Million Tonnes	Nb ₂ O ₅ %	Nb ₂ O ₅ Content (KT)
Indicated	5.1	0.59	30
Inferred	2.8	0.53	15
Total	7.9	0.57	45
<p>Note: Figures have been rounded. ¹ Primary Carbonatite is defined as a region of fresh to Moderately Oxidised material dominated by carbonatite lithologies. This material is expected to have a higher metallurgical recovery. ² Weathered Carbonatite is a region dominated by strongly oxidised material dominated by weathered carbonatite with other mixed lithologies. This material is expected to have a lower recovery than the Primary carbonatite material.</p> <p>Grade estimates were generated for parent blocks of size 25m(X) by 25m(Y) by 5m(Z) with sub-blocks of 5m(X) by 5m(Y) by 1m (Z). The estimation method was Multiple Indicator Kriging (MIK). MIK grade estimation with change of support has been applied to produce 'recoverable' Nb₂O₅ estimates for a range of cut-off grades targeting a selective mining unit (SMU) of 6.25m x 12.5m x 5m.</p>			

Table 1 - In Situ Mineral Resource (December 2014) using Preferred Cut-off (0.3%)

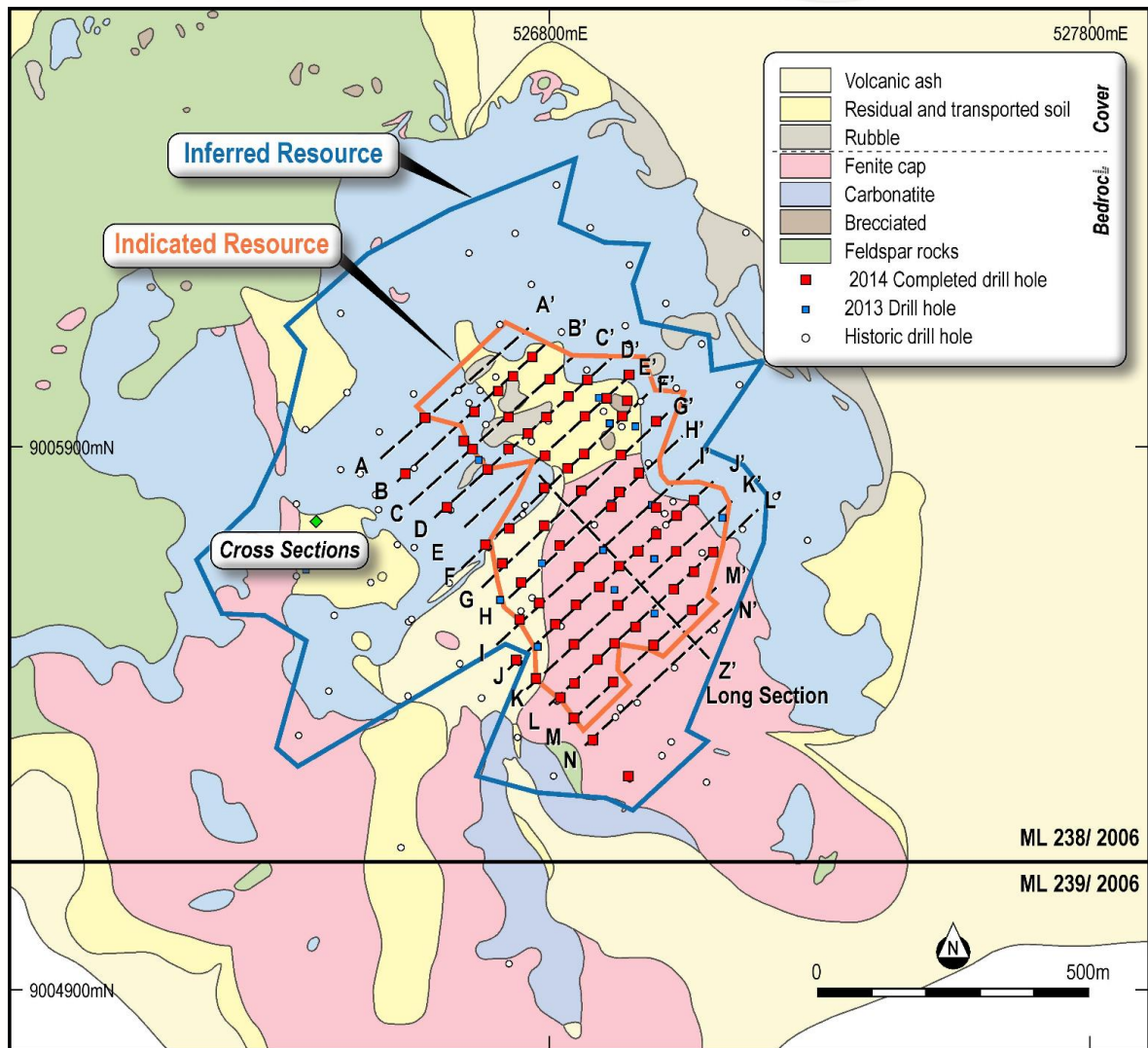


Figure 2: Geology plan showing the December 2014 Resource regions and drilled section lines. The regions in blue (carbonatite) and pink (Fenite Cap) are both highly prospective with field mapping showing carbonatite and magnetite-carbonatite outcrop contained with many of these areas.

Exploration and Mineral Resource Activity

The focus of field activities for the December quarter was on the implementation of a 9,324m RC and DDH drill program that would allow for the first Measured Resource to be reported for the project. In addition to this the program was developed so as to allow a better understanding of the lateral extensions of the ore body and to define the material types to a higher level of detail.

The scoped drilling program was submitted to a number of Tanzanian drilling companies for quote. Kuchumba Drilling was selected to be the RC provider and Bamboo Rock drilling was selected for the diamond drilling.

A local contractor was awarded the site preparation contract which commenced in November. Drilling commenced in the first week of November 2014 with 47 RC holes for 7,778 metres and 10 diamond holes and tails for 1,545 metres completed by mid-December.

The drilling focussed on infilling the main core of the recently discovered Angel Zone and the region directly to the north (Figure 3), the northern region is associated with fresh-ovite material and magnetite-rich flows and the broad southern region is associated with transitional to fresh carbonatite. Both zones are open at depth Figures 4 to 7 show example sections through the deposit with the results of the 2014 drilling shown where received.

Samples for assay were initially sent to SGS in Mwanza for crushing and pulverisation. The pulps were subsequently sent to SGS Johannesburg for analysis of niobium by XRF borate fusion.

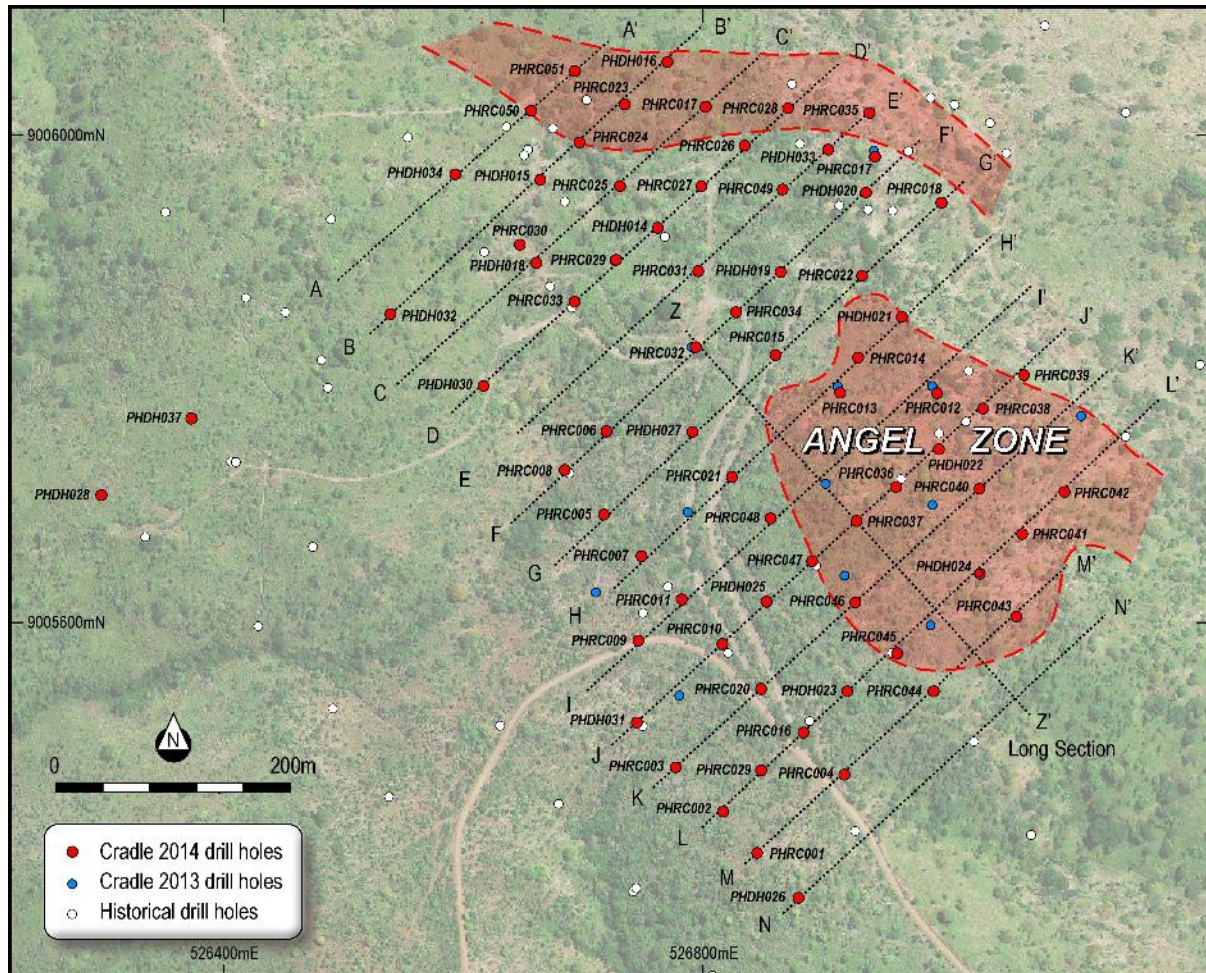


Figure 3: Panda Hill resource drilling region showing the location of drillholes reported in this release, 2014 holes are shown in red and 2013 drillholes are shown in blue. Refer to section lines for subsequent figures. The approximate surface projection of the Angel Zone is shown in red to the south. Other mineralised zones inside the resource area are omitted for clarity.

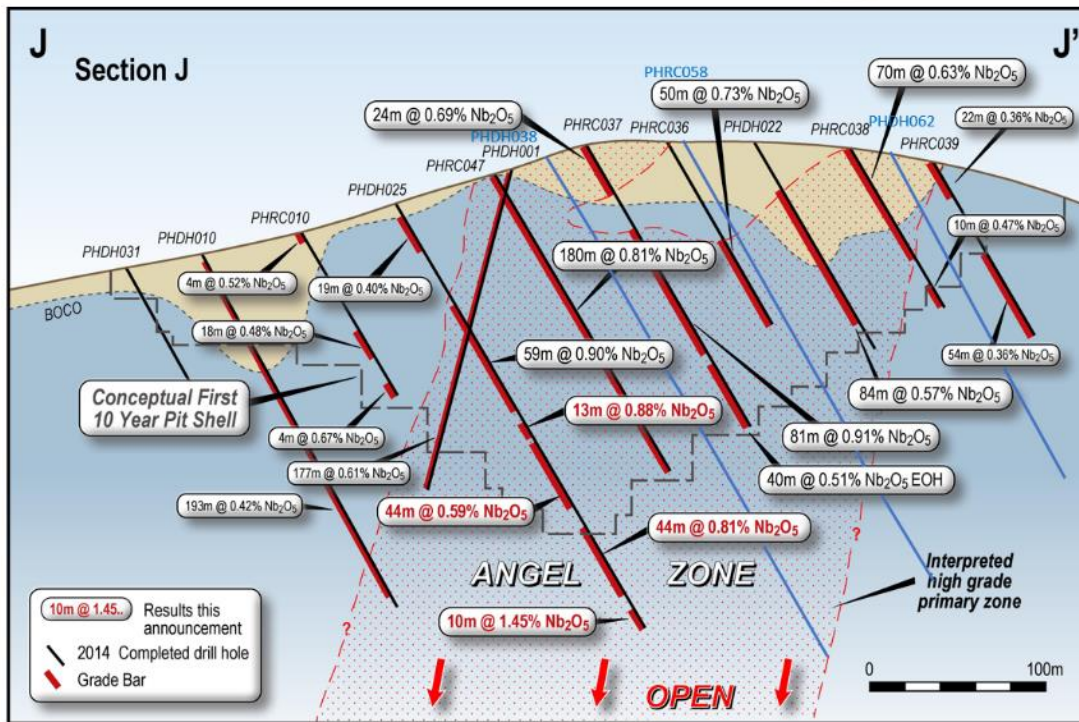


Figure 4: Section J with 2014 drillholes (thick black lines) showing returned results and newly drilled holes (blue lines).

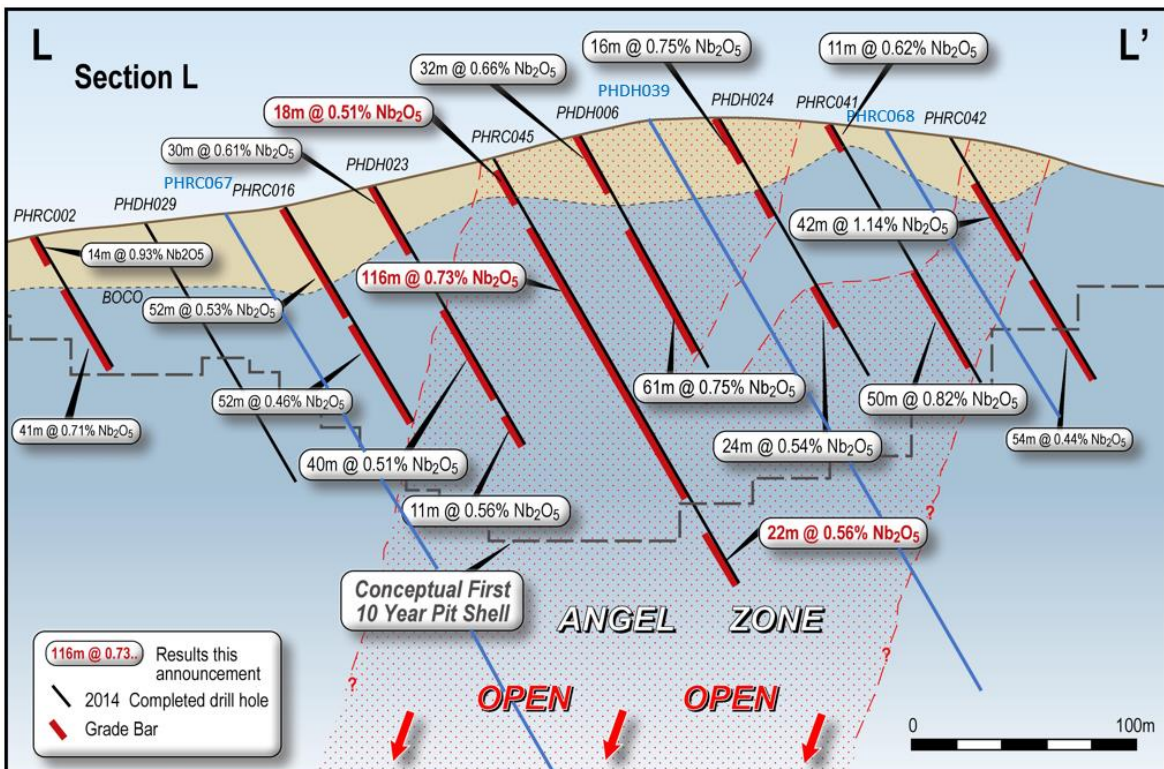


Figure 5: Section L with 2014 drillholes (thick black lines) showing returned results and newly drilled holes (blue lines).

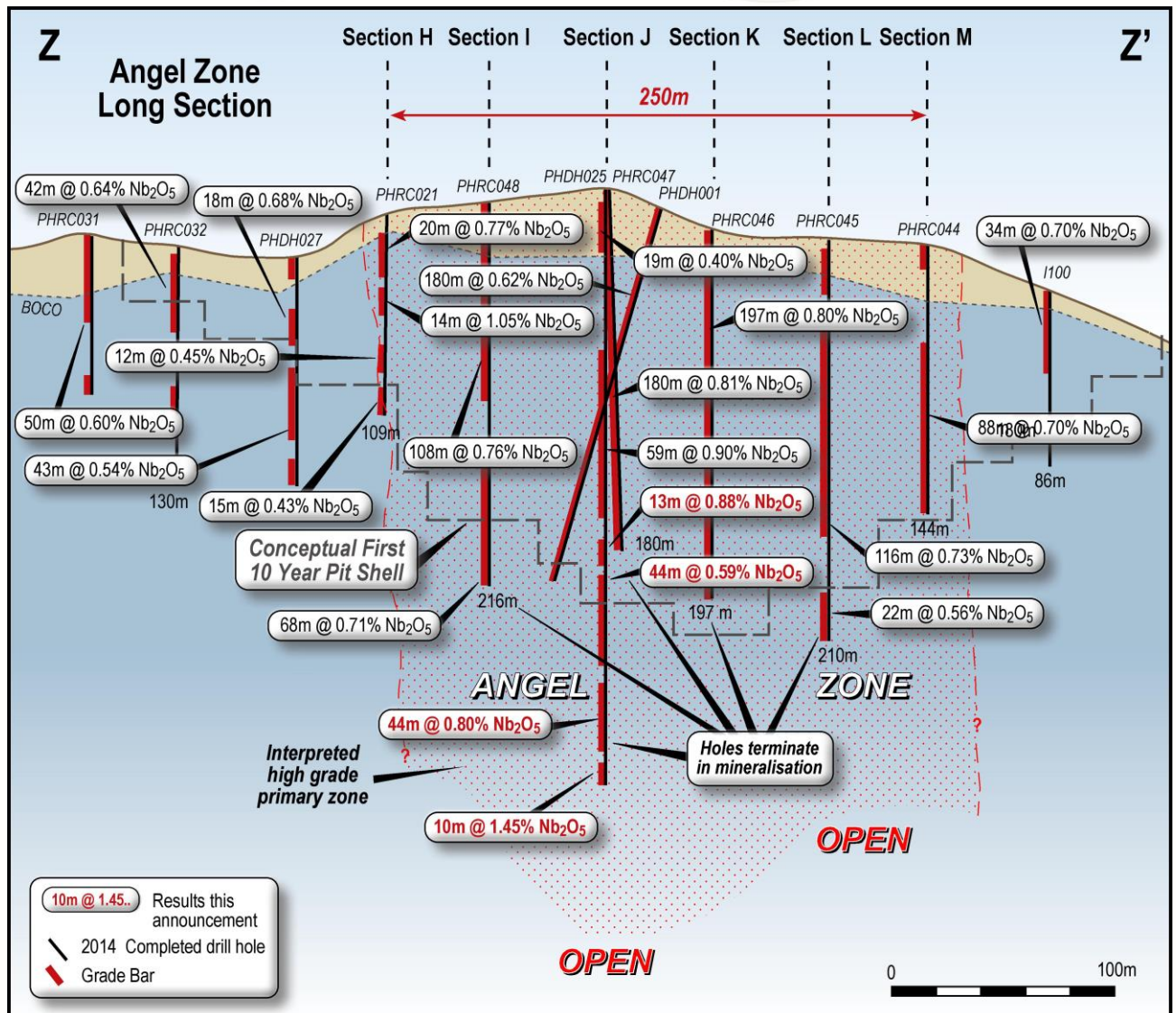


Figure 6: Long-Section showing projection of the Angel Zone.

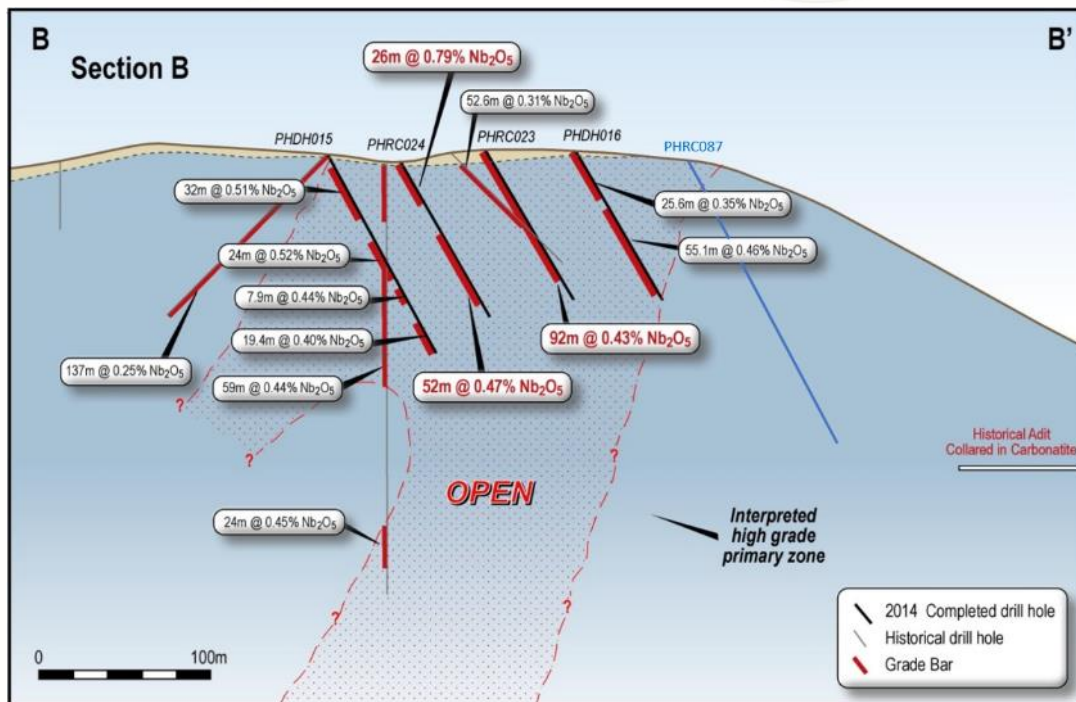


Figure 7: Section B in northern part of the drilling area showing 2014 and historical drillholes with intercepts (grey lines and text) and newly drilled holes (blue lines).

Mining and Engineering Activity

The work carried out in this quarter focused on the metallurgical testwork program, the option study to select the preferred go-forward option and preliminary engineering and cost estimates for the selected option. Geotechnical work was also undertaken alongside the drill program work. Specifically the following activities were undertaken during the period:

Metallurgical Testwork

- The first phase development program was brought to a close with 86 open circuit tests, 8 locked cycle tests, and gravity/magnetic separation tests completed on 8 different material types that make up the 3 mineral zones in the deposit
- The second phase optimisation program kicked-off with the work focused on optimising the selected direct flotation process. This work was done on 3 blends of samples, each one representing one of the 3 mineral zones.
- 42 open circuit tests were completed as part of this program along with 3 locked cycle test. The testwork focused on niobium recoveries, reagent simplification and concentrate quality

Mining & Geotechnical

- Geotechnical logging of the diamond core from the new drilling program
- Geotechnical reporting of the areas defined for the plant, tailings facility and access roads. Identification of potential borrow pit material was also undertaken
- Preliminary Whittle pit optimisations based on the new indicated resource model

Hydrology & Hydrogeology

- Geochemical testing is continuing on a range of sample types (ore, tailings and waste)
- Ground water modelling for the area is being undertaken
- Surface water investigations and the development of a site wide water balance are ongoing

Engineering (Plant & Infrastructure)

- Option Study to select the preferred processing route has been completed with the selection of the direct flotation process the preferred option
- Input data for operating and capital cost estimates are being collated
- Logistic requirements for reagent transportation are being defined
- Process flow diagrams (BFDs) for the go-forward case have been developed and equipment lists generated
- Site layouts have been developed including preferred locations for TSF, plant, waste rock dumps, access roads etc.
- General arrangement drawings (GAs) have been done and material take-offs well progressed
- A pyrometallurgical study into the ferroniobium converter process has been completed
- Layouts and designs for the tailings facility have been developed, along with preliminary cost estimates

The activities for the next period will focus on:

- Completing the metallurgical testwork optimisation program and finalising the metallurgical recoveries for the various material types
- Complete the pit optimisations and finalise the mine design, production schedules and mining cost estimates
- Complete preliminary engineering design work on the go-forward case
- Capital and operating cost estimates for the go-forward case
- Finalise infrastructure requirements
- Financial analysis
- Pre-feasibility Study Reporting

Social and Environmental Activities

During the December 2014 quarter, the field activities for the dry season baseline study were completed. The data was collated and reviewed with the reporting of the results well advanced. No critical issues were identified as part of this study.

The planning for the wet season baseline study, which will take place in March 2015 during the Tanzanian wet season, has started. The ESIA activities will run concurrently with these baseline studies and the target date for the completion of the ESIA work is July 2015.

Corporate Activity

During the December quarter, Tremont Investments Limited (**Tremont**) exercised its right to acquire a further 12.5% of the Panda Hill Niobium Project for a further US\$5 million (AUD\$6.32m) investment (taking Tremont to 25% ownership in the Panda Hill niobium project). Tremont initially invested US\$5 million in June 2014, which was used to de-risk the Project through an in-fill and extensional drilling program and extensive metallurgical work. The mandate from Tremont is to proceed with ongoing Project development work. Under the agreement with the Company, Tremont has the right to contribute a further US\$10 million to acquire a further 25% interest in the Panda Hill Niobium Project (taking Tremont to 50% in total), which will be used to finalise the feasibility studies and other development activities.

The Company's Annual General Meeting was held on 28 November 2014, at which all resolutions were unanimously passed, including approval of the grant of 2,000,000 unlisted options exercisable at 25 cents each on or before 31 October 2018 to the Company's non-executive directors. The board of directors of the Company resolved to issue the options in December 2014.

Tenement Summary

As at 31 December 2014, the Company holds the following interests in tenements:

Project	Tenement Number	Percentage Interest
Panda Hill Niobium, Tanzania	ML237/2006	50%
Panda Hill Niobium, Tanzania	ML238/2006	50%
Panda Hill Niobium, Tanzania	ML239/2006	50%
Wyloo, Western Australia	E08/2142	100%

Panda Hill Niobium Project Overview

The Panda Hill Niobium Project (Figure 8) is located in the Mbeya region in south western Tanzania, near the borders with Zambia and Malawi, and approximately 650km west of the capital Dar es Salaam. The industrial city of Mbeya is situated only 35km from the Project area and will be a significant service and logistics centre for the Project. Mbeya has a population of approximately 280,000 people and has recently completed the construction of a new international airport.

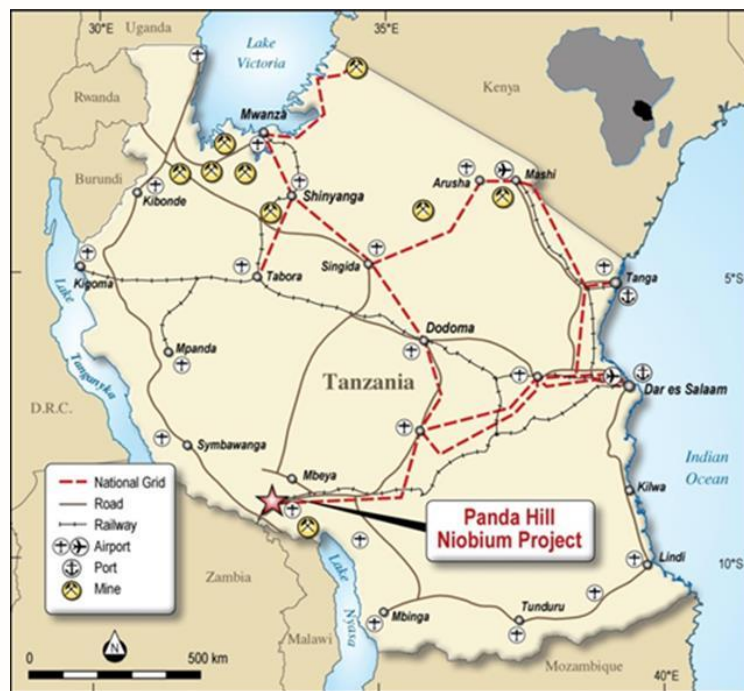


Figure 8: Location of the Panda Hill Niobium Project

The Project is covered by three granted Mining Licenses (Figure 9) totalling 22.1km², which will enable a quick transition from the study and development phases, through construction and into operation. The area has excellent access to infrastructure, with existing roads, rail, airports and power available in close proximity. The three granted Mining Licenses are due for renewal in November 2016, and under Tanzanian mining legislation can be renewed for a further 10 year period on completion of the approved work programs on the Project.

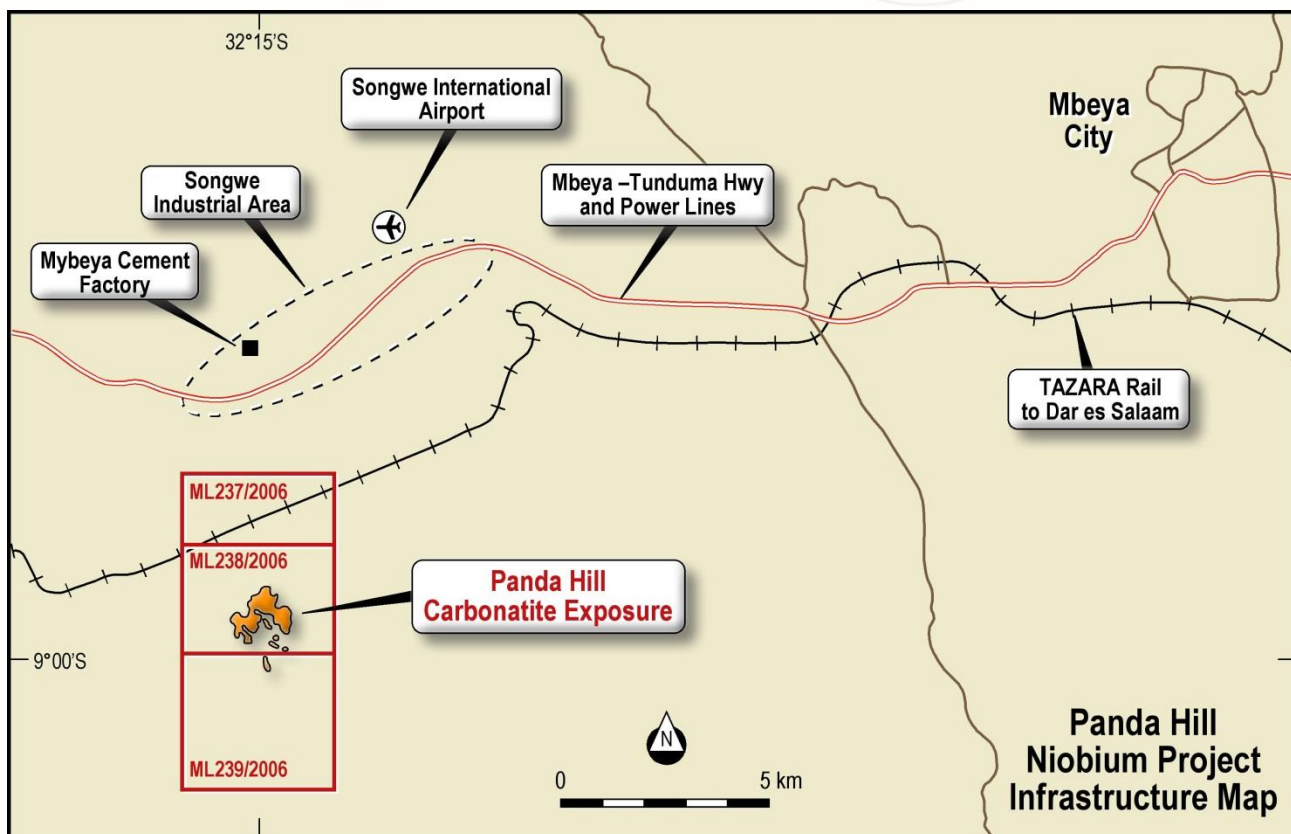


Figure 9: Mining Licenses and Local Infrastructure

Competent Person's Statement

The information in this document that relates to Exploration Results and Resources is based on information compiled or reviewed by Mr Neil Inwood who is a Fellow of The Australasian Institute of Mining and Metallurgy and a Member of the Australian Institute of Geoscientists. Mr Inwood is a full time employee of Verona. Mr Inwood has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Inwood consents to the inclusion in this document of the matters based on his information in the form and context in which it appears.

The information in this Quarterly Report relating to the Panda Hill Resource Estimate is extracted from the announcement entitled 'Significant Resource Upgrade for Panda Hill Niobium Project' dated 20 January 2014 and is available to view on <http://www.cradleresources.com.au>. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that, in the case of Mineral Resources or Ore Reserves, all the material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

The information in this Quarterly Report regarding Scoping Study results is extracted from the announcement entitled 'Panda Hill Project – Highly Positive Scoping Study Results' dated 30 January 2014 and is available to view on <http://www.cradleresources.com.au>. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement. The Company confirms that all the material assumptions and technical parameters underpinning the production targets and the forecast financial information derived from the production targets in the Scoping Study continue to apply and have not materially changed.

Cautionary Statement concerning Scoping Study Results including Inferred Resources

The Company advises that the Scoping Study results and production targets reflected in Quarterly Reports are preliminary in nature as conclusions are drawn from partly from Indicated Mineral Resources and partly from Inferred Mineral Resources. The Scoping Study is based on lower level technical and economic assessments and is insufficient to support estimation of Ore Reserves or to provide assurance of an economic development case at this stage, or to provide certainty that the conclusions of the Scoping Study will be realised. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised.

By order of the Board

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

CRADLE RESOURCES LIMITED

ABN

60 149 637 016

Quarter Ended ("Current Quarter")

31 DECEMBER 2014

Consolidated statement of cash flows

		Current Quarter \$A'000	Year to Date (6 months) \$A'000
Cash flows related to operating activities			
1.1	Receipts from product sales and related debtors	-	-
1.2	Payments for (a) exploration & evaluation	(4,379)	(6,567)
	(b) development	-	-
-	(c) production	-	-
	(d) administration	(516)	(1,182)
1.3	Dividends received	-	-
1.4	Interest and other items of a similar nature received	6	8
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Other :		
	(a) reclaim of exploration and evaluation costs	3,908	8,028
	(b) refund of research and development rebate	-	121
Net Operating Cash Flows		(981)	408
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 (cash acquired through business combination)	-	-
Net investing cash flows		-	-
1.13	Total operating and investing cash flows (carried forward)	(981)	408

1.13	Total operating and investing cash flows (brought forward)	(981)	408
	Cash flows related to financing activities		
1.14	Proceeds from issues of shares, options, etc.	-	200
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 (capital raising cost)	-	-
	Net financing cash flows	-	200
	Net increase (decrease) in cash held	(981)	608
1.20	Cash at beginning of quarter/year	3,902	2,054
1.21	Exchange rate adjustments to item 1.20	63	322
1.22	Cash at end of quarter	2,984	2,984

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	182
1.24	Aggregate amount of loans to the parties included in item 1.10	-

1.25 Explanation necessary for an understanding of the transactions.

Amounts include Directors fees and reimbursements relating to travel, corporate and administrative costs incurred during the period.

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

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

Following the receipt of the second tranche of funding of US\$5 million from Tremont Investments Limited, the Company's interest in Panda Hill Tanzania Ltd reduced to 75%, and the interest of Tremont Investments Limited increased to 25%.

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	-	-
3.3 Convertible note	-	-

Estimated cash outflows for next quarter

	\$A'000
4.1 Exploration and Evaluation (funded by Tremont Investments)	1,500
4.2 Development	-
4.3 Production	-
4.4 Administration	155
Total	1,655

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	2,984	3,902
5.2 Deposits at call	-	-
5.3 Bank overdraft	-	-
5.4 Other (provide details)	-	-
Total: cash at end of quarter (item 1.22)	2,984	3,902

Changes in interests in mining tenements

		Tenement Reference and Location	Nature of Interest (note (2))	Interest at beginning of quarter	Interest at end of Quarter
6.1	Interests in mining tenements held at the end of the quarter and their location	ML237/2006, Tanzania ML238/2006, Tanzania ML239/2006, Tanzania E08/2142, Western Australia	N/A	49% 49% 49% 100%	50% 50% 50% 100%
6.2	Interests in mining tenements relinquished, reduced or lapsed and their location	N/A	N/A	N/A	N/A
6.3	Interests in mining tenements acquired or increased and their location	ML237/2006, Tanzania ML238/2006, Tanzania ML239/2006, Tanzania	Exercise of option to acquire additional 1% interest	49% 49% 49%	50% 50% 50%
6.4	Beneficial percentage interests held in farm-in or farm-out agreements	N/A	N/A	N/A	N/A
6.5	Beneficial percentage interests in farm-in or farm-out agreements acquired or disposed of	N/A	N/A	N/A	N/A

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, buy-backs, redemptions				

7.3	*Ordinary securities	128,727,617	72,477,617 (56,250,000 shares unquoted and escrowed until 31/7/15)		
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>			Exercise Price	Expiry Date
		17,947,506 CXXO	17,947,506 CXXO	\$0.2667	24 Jan 2015
		7,687,500 Unlisted Options	Nil	\$0.2667	31 May 2016
7.8	Issued during quarter	2,000,000 Unlisted Options	Nil	\$0.25	31 October 2018
7.9	Exercised during quarter				
7.10	Expired during quarter				
7.11	Debentures <i>(totals only)</i>				
7.12	Unsecured notes <i>(totals only)</i>				
7.13	Performance Shares				
		18,750,000 Class B Performance Shares	Nil	Issued as part consideration for the acquisition of the issued share capital of Panda Hill Mining Pty Ltd. Escrowed until 31/7/15	Nil

7.14	Performance Rights	1,837,500 Performance Rights	Nil	Nil exercise price	1,050,000 expire 30/9/16 787,500 expire 30/9/17
	(a) Converted to ordinary shares during the quarter				

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 give a true and fair view of the matters disclosed.

Sophie Raven

Sign here:

Date: 30 January 2015

SOPHIE RAVEN, COMPANY SECRETARY

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 applies 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.