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ASX Release

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MARCH 2014 QUARTERLY ACTIVITY REPORT

Highlights

- **Scoping Study released confirms robust economics**
- **Planning activities for the next stage of feasibility study is well advanced**
- **The Company commences project financing for the next stage of feasibility study**

Scoping Study

The Scoping Study for the Panda Hill Niobium Project in south western Tanzania (see Figure 2 on page 4 below) was completed during the March quarter, with positive results across all areas and no major technical risks identified.

The Study was started in July 2013 with the work split in various programs. Lycopodium Minerals Pty Ltd acted as the Lead Study Consultant, with the other specialist consultants used in the Study described below in Table 1.

Table 1: Scoping Study Consultants

Consultant	Study Input
Lycopodium Minerals Pty Ltd	Study Manager / Process Plant / Infrastructure / Capital & Operating Costs (exc. Mining)
Bamboo Rock Ltd	Exploration Drilling Program
Coffey Mining Pty Ltd	Mineral Resource / Mining / Mining Costs
SGS Canada Inc.	Metallurgical Testwork
MTL Consulting Co. Ltd	Environmental
Knight Piesold Pty Ltd	Tailings Storage Facility
Penrita Pty Ltd	Financial Model
CAMET Metallurgy Inc.	Marketing

The Study results indicate potential for a highly economic project generating substantial cash flow at current niobium prices for a relatively low capital outlay, subject to completion of a formal feasibility study.

The Study was undertaken by Lycopodium and Coffey Mining Pty Ltd with metallurgical testing by SGS Lakefield and additional support from a variety of independent specialist consultants.

The Mineral Resource estimate used for the Study totals 81.8Mt at 0.52% Nb₂O₅ for 423kt of contained Nb₂O₅ with 76.4Mt at 0.51% Nb₂O₅ of Inferred material and 5.4Mt at 0.62% Nb₂O₅ of Indicated material. The Resource was reported in accordance with the JORC Code (2012). The final conceptual optimised pit consists of approximately 9%

Indicated Resource and 91% Inferred Resource; however over the 3 year payback period considered in the base case study approximately 55% of the material is Indicated and 45% of the material is Inferred.

The base case considered a 2Mtpa operation based on a mine schedule that prioritised the Indicated Resource for plant feed. A staged case starting with 1Mtpa and ramping up to 2.3Mtpa after the first 3 years of production was investigated at a high level. The summary financials for the two options are shown below in Table 2. The base case processing and G&A operating cost estimates were generated by Lycopodium to an accuracy of $\pm 30\%$ and a niobium price of US\$44/kg used in the analysis.

Table 2: Summary Financial KPIs (100% Project Basis).

Option	Mill Throughput	Capex (US\$)	Average Niobium Production	Average Site Cash Cost (US\$/kg Nb) ¹	Mine Life	Payback	EBITDA (US\$)
Base Case	2Mtpa	~185M	4.80M kg pa	\$16.67	28yrs	2.8yrs	\$2,600M
Staged Case	1 to 2.3Mtpa	~125M	2.65M / 5.46M kg pa	\$19.86 / \$16.17	27yrs	4.5yrs	\$2,700M

The current Resource is open at depth and the project area offers substantial potential to expand the current Mineral Resource inventory. The intention of the next phase of site work is to continue with the exploration program, while at the same time carrying out an infill drilling program for the area currently contained within the conceptual pit shell limits.

In addition, the technical studies in the next work phase will focus on the selection of a preferred mining option and the optimisation of the flotation process through a comprehensive testwork program and targeted studies including mining and infrastructure requirements.

The Pre-feasibility Study, which incorporates the activities described above, is planned to start in Q2 2014 and is estimated to take approximately 7 months to complete.

Corporate Activity

During the quarter, 15,000 ordinary shares were issued on the exercise of listed options.

The Company commenced project financing activities in February 2014 for the next stage of its feasibility study, and since that time has been the subject of various in-depth and time-consuming due diligence investigations by various interested private equity and high net worth groups. Due to the advanced nature of certain finance proposals, the Company was placed into voluntarily suspension from official quotation on 4 March 2014 until the Company finalises its next financing. This financing process is well advanced and ongoing.

At the end of the March quarter, Skye Equity Pty Ltd, an entity related to the Company's chairman, Craig Burton, agreed to advance to the Company loan amounts to cover all expected working capital requirements. The loan amounts are unsecured and bear interest at eight percent (8%) per annum. Skye Equity has agreed that it will not demand repayment of the loan amounts until such time that the Company has raised sufficient working capital to repay the outstanding loan amounts and continue to meet its other debts as and when they fall due.

¹ Cash cost at mine gate

Technical Activity

General Project Update

Study costs were managed closely and were in-line with forecasts. The high level schedule for the Study is shown below in Figure 1.

Panda Hill Niobium Project.										
Study Activities	Target End Date	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March
Study Kick-off	01/07/2013	◆								
Resource Drilling Program	04/09/2013	■	■	■						
Core sampling & assaying	04/10/2013		■	■	■					
Geology & Mine Planning	30/11/2013			■	■	■	■			
Metallurgical Testwork	30/11/2013			■	■	■	■			
Engineering	19/12/2013				■	■	■	■		
Reporting	31/01/2014						■	■	■	
Study Complete	31/01/2014								◆	

Figure 1: Panda Hill Preliminary Economic Assessment Schedule

During February the planning activities for the next stage of the Project (the Pre-feasibility Study) were started with specific emphasis on developing scopes of work to improving the accuracy of the key data.

Exploration and Mineral Resource Activity

Due to the onset of the wet season, only limited field activities were undertaken in the March quarter. Two site visits were undertaken and additional metallurgical samples were bagged from existing core.

Mining and Engineering Activity

No further mining or engineering activities took place during the March quarter. The work carried out in this quarter focused on completing the project economic analysis, collating the information and the write-up of the Scoping Study Report. This was done in conjunction with Lycopodium, the lead study and engineering consultant for the Project, with the final report being issued during February. The report findings confirmed our key assumptions for the Panda Hill Project, which indicate robust project economics.

Planning for the next stage of the project development, the Pre-feasibility Study (PFS) was initiated during the period. An overall high level project strategy was agreed and based on this, and the consultant's recommendations from the Scoping Study, the scopes of work for each of the work packages were developed.

The main activities to be undertaken during this next phase of work include:

- An infill drilling program (~7000 metres)
- Mineral Resource Estimate focused on delivering 15 to 20Mt of indicated resource
- Comprehensive metallurgical testwork program on all major material types identified
- Preliminary mine design, including pit optimisation and mine scheduling
- Preliminary engineering to develop a Class 4 cost estimate (plant and infrastructure)
- Baseline studies for ESIA
- Economic assessment of the project viability

A short list of preferred consultants for each of the work packages was drawn up and the relevant scopes of work issued to each of them. The consultants were selected based on a number of criteria including:

- Experience in developing projects in Tanzania

- Experience in the mineral types, processes and technologies associated with niobium
- Any previous history with Cradle Resources

The Request for Proposals, including the scopes of work, were sent to the consultants at the beginning of March with a deadline for receiving their proposals set for early April. It is expected that the selection of the consultants, the finalisation of the scopes of work and the setting of the baseline budget and schedule for the PFS will be completed in the first part of next quarter.

Social and Environmental Activities

The Environmental and Social Impact Assessment (ESIA) Scoping Study and ESIA Terms of Reference (ToR) were completed last quarter and were submitted to the Tanzanian National Environmental Management Council (NEMC) for approval. Approval of the ToR for the ESIA work was received on the 31 December 2013. Planning for the ESIA activities were completed during this quarter and the work will start with the Baseline Studies (dry season and wet season). The majority of activities associated with these studies will be undertaken during the course of this year, but with some overrun into early next year so as to cover the Tanzanian wet season.

Tenement Summary

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

Project	Tenement Number	Percentage Interest
Panda Hill Niobium, Tanzania	ML237/2006	49%
Panda Hill Niobium, Tanzania	ML238/2006	49%
Panda Hill Niobium, Tanzania	ML239/2006	49%
Wyloo, Western Australia	E08/2142	100%

Panda Hill Niobium Project Overview

The Panda Hill Niobium Project (Figure 2) 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, located on the main highway to the capital Dar es Salaam, and has recently completed the construction of a new international airport.

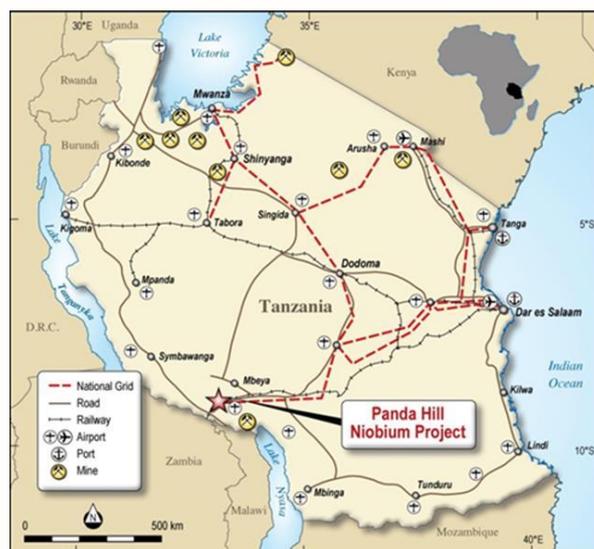


Figure 2: Location of the Panda Hill Niobium Project

The Project is covered by three granted Mining Licenses (Figure 3) totalling 22.1km², which will enable a quick transition to the study and development phases, and has excellent access to infrastructure, with existing roads, rail, airports and power available in close proximity to the Project area. 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.

A significant historical technical database on the Project was acquired by Panda Hill, including drill core, mapping and assay data from campaigns undertaken in the 1950-1980s. This work has contributed to the resource information for an initial JORC Inferred resource estimate.

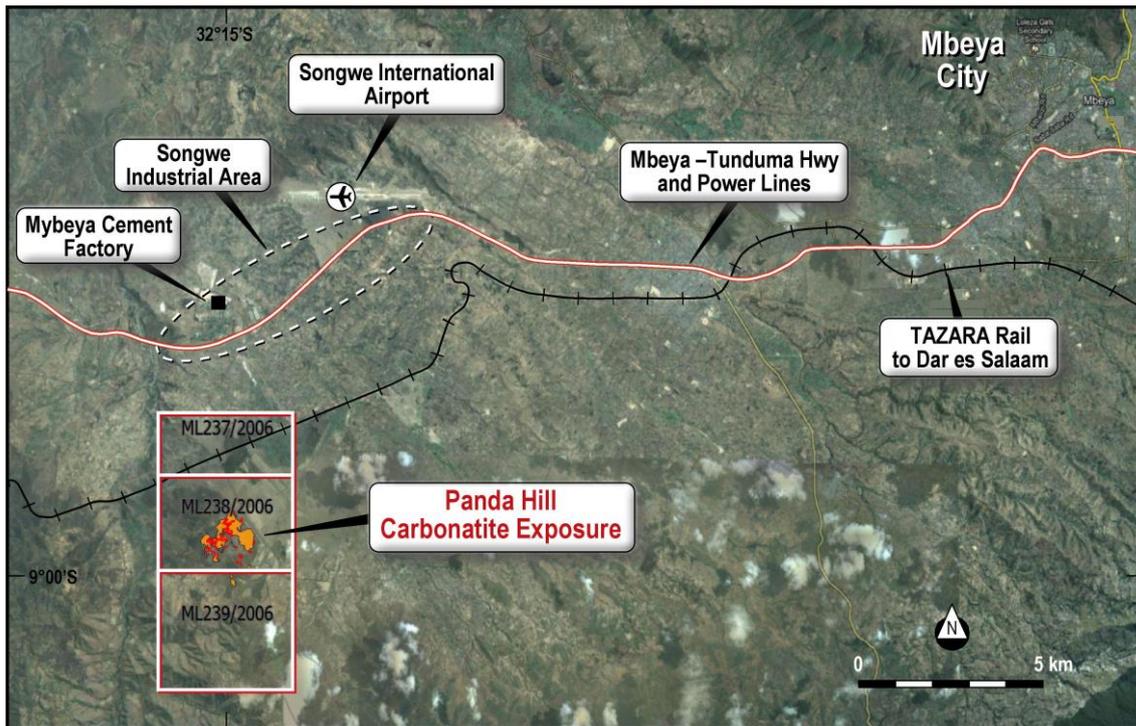


Figure 3: Mining Licenses and Local Infrastructure

Historical Work

The Panda Hill carbonatite has been subject to multiple phases of exploration work since the 1950's. This work has targeted the Niobium and Phosphate endowment of the deposit. From 1953 to 1965, the Geological Survey of Tanzania (GST) undertook mapping, diamond drilling and trenching (17 diamond holes for 1,405m) to assess the Niobium and Phosphate potential of the deposit.

From 1954 to 1963, the MBEXCO joint venture was formed between N. V. Billiton Maatschappij (Billiton) and Colonial Development Corporation, London. MBEXCO drilled 66 diamond holes for 3,708m, excavated numerous pits, sunk two shafts and undertook trial mining and constructed a trial gravity and flotation plant on site. Concentrate from site was sent to Holland for further processing, with positive early metallurgical test-work results noted.

From 1978 to 1980 a Yugoslavian State Enterprise (RUDIS) undertook a joint study in collaboration with the Tanzanian Mining Industrial Association and State Mining Corporation (STAMICO). This work included mapping, diamond drilling and pitting (13 diamond holes for 1,306m) to test the Niobium endowment of the deposit. Detailed reports have been secured from this program.

Panda Hill Niobium Resource

The 2012 resource was undertaken by Coffey Mining in Perth in July 2012 (Table 3). The Coffey Inferred Resource targeted carbonatite mineralisation and the mineralised fenite and surficial weathered material was not directly targeted. The resource estimate was based upon grade and lithological information derived from 96 historical diamond holes which was initially reviewed and validated by Verona Capital in 2012. The resource was constrained within a 3D wireframe based upon a nominal 0.2% Nb₂O₅ lower cutoff. Ordinary Kriging was used to estimate Nb₂O₅ using 2m down-hole composites with a 2.5% Nb₂O₅ upper cut applied.

Table 3 - Panda Hill Inferred Mineral Resource, 03 July 2012 (Preferred cut-off 0.3% Nb₂O₅)*

Lower Cut-off (Nb₂O₅ %)	Tonnage (Mt)	Grade (Nb₂O₅ %)	Contained Mineral (Nb₂O₅ tonnes)
0.2	72	0.45	322,000
0.3	56	0.50	280,000
0.4	38	0.58	220,000

Note: Figures have been rounded. Reported using a Dry Bulk density of 2.75t/m³ and a 2.5% Nb₂O₅ top cut. Ordinary Kriged Estimate with a 25mX by 25mY by 5mZ block size

*The Competent Person for the resource estimation and classification is Ms Ellen Maidens who is a full time employee of Coffey Mining. The Competent person for the resource database is Mr Neil Inwood, who is a full time employee of Verona Capital. Both Ms Maidens and Mr Inwood are members of the AIG and have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which was undertaken to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. The detailed JORC Competent Persons statement is located below.

Geology of Panda Hill Complex

The Panda Hill carbonatite is a mid-Cretaceous volcanic intrusion which has intruded into gneisses and amphibolites of the NE-SE trending mobile belt. It forms a steeply dipping, near-circular plug of approximately 1.5 km diameter and is partly covered by fenitised and weathered country rocks and residual soil material. The Fenite and weathered material forms a "cap" or roof over the south of the carbonatite complex, and is partially overlain by residual and transported soils. Volcanic ash over part of the complex suggests a later stage of volcanic activity. It is apparent that portions of fenite, ash and soil cover are underlain by carbonatite and these areas are only lightly explored.

In the main exposed portion of the carbonatite historical workers suggested three stages of carbonatite activity outwards from the center of the plug. An early-stage calcite carbonatite forms the core, while intermediate and late-stage carbonatites, composed of more magnesian-rich and iron-rich carbonates, form the outer parts of the plug. Later stage apatite-magnetite rich rocks and ferro-carbonatite dykes are also found in the complex. Fenitisation of the pre-existing gneisses led to the development of potassium-rich rocks containing K-feldspar and phlogopite.

Mineralogy

The Sovite carbonatite from Panda Hill is composed mainly of calcite, which forms an average of 60-75% by volume. The fresh Sovite carbonatite may contain up to 5% Apatite, with pyrochlore, magnetite, phlogopite and quartz. Dolomite-rich carbonate (Rauhaugite) and ankerite/siderite-rich carbonatites (Beforesite) are also present and can be mineralised.

Mineralisation

The bulk of the Panda Hill niobium mineralisation is found within pyrochlore and lesser columbite. The bulk of the known mineralisation is within carbonatite, with Nb₂O₅ grades typically ranging from 0.1% to 1%. Higher-grade material is noted within flow-banding (schlieren) within the carbonatite. The weathered cap material is noted to contain elevated grades of up to 2% Nb₂O₅.

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 Company confirms that there have been no material changes to the Resources and Scoping Study for the Project since the January 2014 announcements. Refer to <http://www.cradleresources.com.au/investors.asp?ref=announcements> for details on exploration and Scoping Study results.

By order of the Board