

2 August 2013

ASX Release

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DRILLING PROGRAM AND PRELIMINARY ECONOMIC ASSESSMENT ACTIVITIES UNDERWAY ON THE PANDA HILL NIOBIUM PROJECT

Highlights

- Commencement of 1500m diamond drill program on schedule
- Preliminary Economic Assessment (PEA) initiated with completion scheduled for first quarter 2014
- Key project consultants and contractors appointed for metallurgy and PEA activities
- Experienced in house Cradle project team appointed to manage the PEA program

Cradle Resources Limited (ASX: CXX) (Cradle or Company) is pleased to announce that drilling has commenced at its Panda Hill niobium project, located in the Mbeya region in south western Tanzania (Figure 1). This marks the beginning of operational activities on the project following the successful completion of the Panda Hill transaction.

The current program comprises up to 15 diamond drill holes to an average 100m depth within the resource area (Figure 2, see below), and has been designed to achieve the following:

- Confirm historic assay and lithologic data;
- Obtain representative bulk samples for metallurgical test work;
- Commence drilling of three sections within the core of the resource area at a 100m spacing; and
- Collect geotechnical information.

Drill holes will be completed using both HQ and NQ diameter core. Initial drilling will focus on the centre of the resource (Figure 2) and key resource sections (Figure 3).

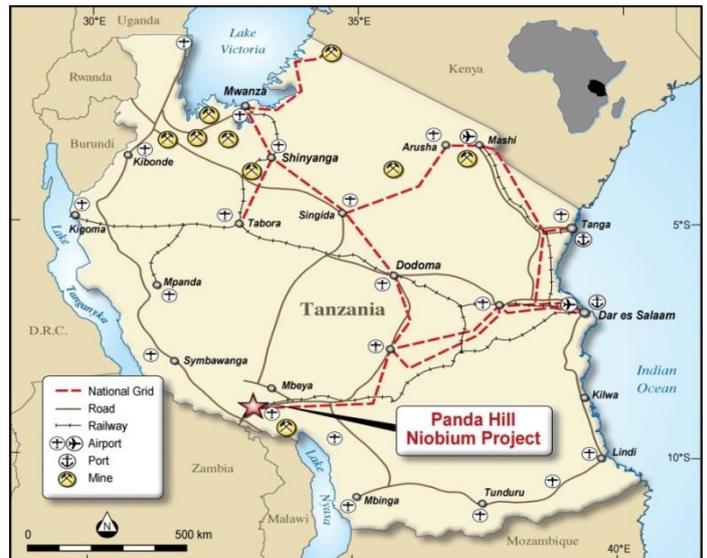


Figure 1: Panda Hill Location Plan

Drilling commenced on 8 July 2013, and drilling is proceeding according to schedule. The first batch of samples from the first hole (PHDH005) have been received at the SGS laboratory in Mwanza, Tanzania where they will be prepared for final analysis at the SGS laboratory in Johannesburg.



Panda Hill Diamond Drilling July 2013

Initial observations from the drilling program to date are that pyrochlore (niobium ore mineral) bearing carbonatite has been intersected over expected intercept lengths in all holes drilled, and the Company is encouraged by the visual results.

As the Panda Hill project is located close to the newly built Songwe International Airport, samples dispatched can reach the preparation lab in Mwanza overnight. Sample preparation and analysis is expected to take between three to five weeks after dispatch, with niobium and multi-element analysis undertaken and reported from SGS Johannesburg.

Metallurgical samples will be selected to characterise the main deposit rock types. The majority of the test work will be carried out on sovite type carbonatite which is the predominant calcite rich mineral type in the deposit. Tests however will also be performed on rauhaugite and ankerite types of carbonatite which also make up significant parts of the deposit.

The testwork program will be undertaken at SGS in Lakefield, Canada and will consist of detailed mineralogy, standard comminution tests, open circuit flotation tests and a series of locked cycle flotation tests to confirm metallurgical recoveries. In addition to this, concentrate cleaning and preliminary pyrometallurgical tests will also be performed to demonstrate the production of ferroniobium, the marketable product of the proposed process.

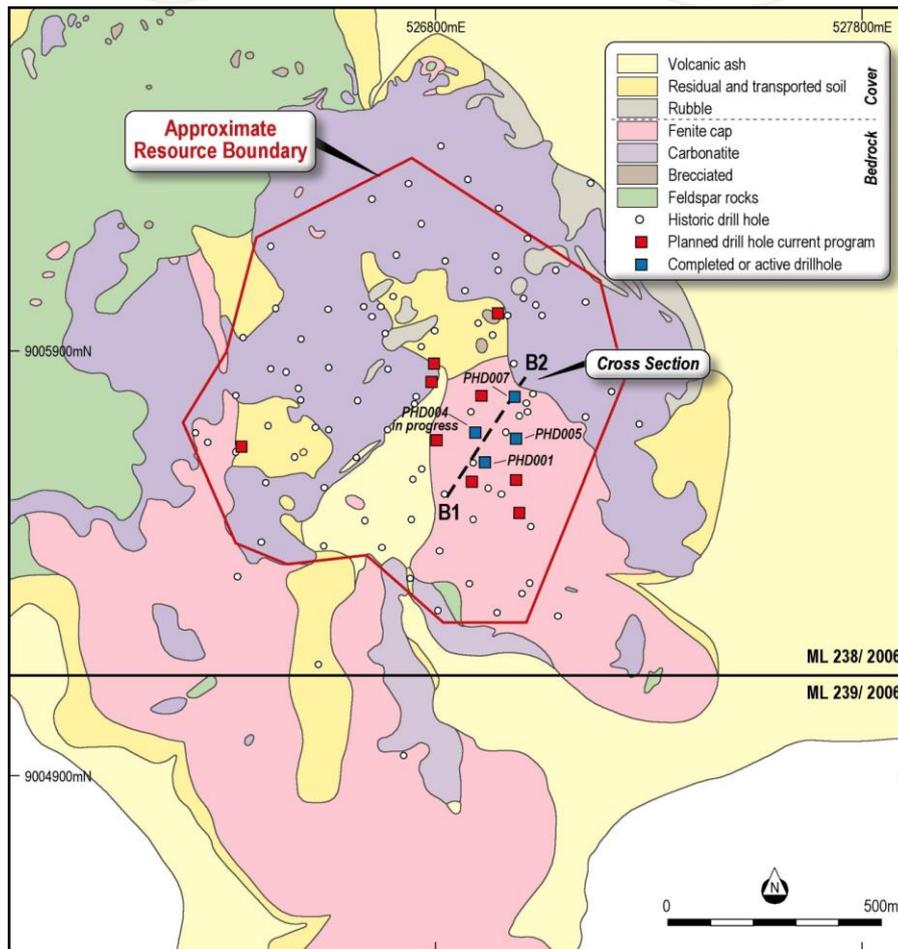


Figure 2: Local Geology of Panda Hill showing approximate boundary of 2012 Inferred Resources and the location of the planned 2013 drill holes (red), and completed or active holes (blue).

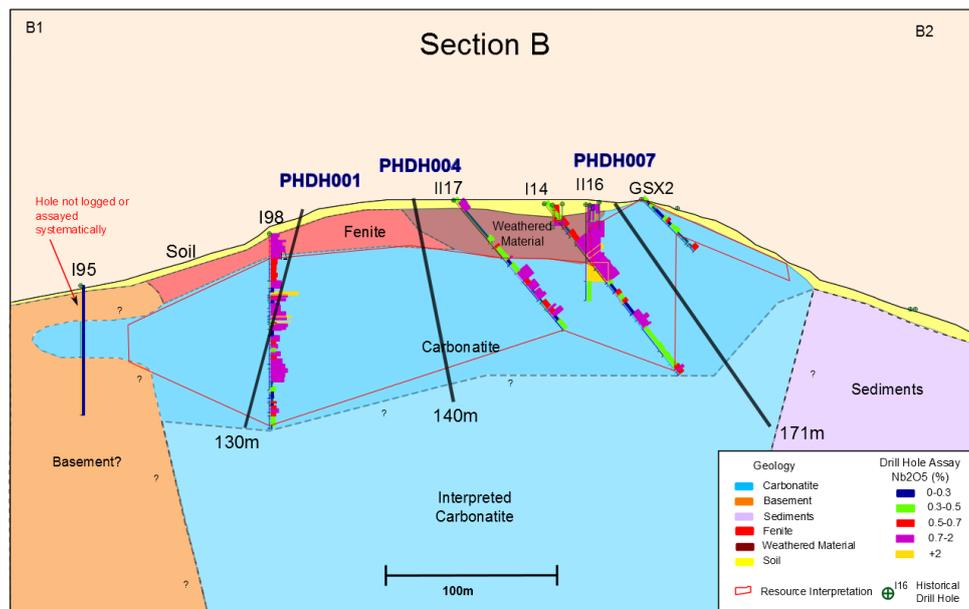


Figure 3: Oblique section B-B with current drill holes, geological interpretation, 2012 resource outline and historical drilling & down hole niobium grade histograms

The following key consultants have been appointed to commence work on the preliminary economic assessment of the project, which is scheduled to be delivered in the first quarter 2014 (Table 1):

- Coffey Mining, consultants based in Perth, will undertake revision of the resource model and updated the mining plan;
- SGS Lakefield will undertake metallurgical test work on carbonatite drill core material received from the current drilling program. Test work will consist of comminution tests for mill circuit design, mineralogy investigations, bench scale flotation tests, locked cycle flotation tests, concentrate cleaning, and preliminary Ferro niobium converter tests;
- Lycopodium have offices in Perth and Canada and have extensive development experience in Tanzania will be providing process engineering and design as well as capital expenditure and operating expenditure estimates for the project. Lycopodium consultants have niobium consulting experience having been involved in the Niobec operations as well as the Anglo American's Catalao operation in Brazil; and
- MTL Consultants, based in Tanzania, who have previously worked on the Panda Hill Project, will update the social and environmental plans

Panda Hill Niobium Project.										
Project Activities	Target End Date	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March
Scoping Study Kick-off	01/07/2013	◆								
Resource Drilling Program	16/09/2013									
Core sampling & assaying	18/10/2013									
Metallurgical Testwork	20/12/2013									
Reporting	14/03/2014									
Scoping Study Complete	14/03/2014									◆

Table 1: Preliminary Economic Assessment (PEA) Timeline

A strong in-house project team will lead the preliminary economic assessment program:

Managing Director: Grant Davey, is a mining engineer with over 20 years of senior management and operational experience in the construction and operation of gold, platinum and coal mines in Africa, Australia, South America and Russia. More recently, he has been involved in venture capital investments in several exploration and mining projects and he has been instrumental in developing the Panda Hill niobium opportunity which Cradle announced to the market on 3 April 2013.

Project Director: Keith Bowes, is a project and operations manager with a metallurgical background and experience in flotation, leaching and roasting of base metals and gold. Mr Bowes's metallurgical experience on roasting and flotation as well as his African project experience make him invaluable to the Panda Hill niobium project development.

Project Consultant: Russell Bradford is an experienced metallurgist with extensive pyrometallurgy and flotation experience. Mr Bradford was the project director on the Tanzanian Mantra Uranium project, and has strong operational experience in the country.

Chief Geologist: Neil Inwood, a professional geologist, has 18 years' multi-commodity experience in Australia, Africa, USA, Hungary, South America and Central Asia. He has been the Qualified Person (TSX) or Competent Person (ASX) for a variety of international uranium, gold, nickel, base metal, and iron ore projects. He was a Principal Resource Consultant at Coffey Mining, and has also held senior exploration and other technical positions with Barrick Gold and Maxwell Geoservices.

Corporate and Strategy: Craig Burton has co-founded numerous development companies, with a focus on the resources, oil and gas, mining services and agribusiness sectors. He was a co-founder of two ASX 200 companies, Mirabela Nickel Ltd and Panoramic Resources Ltd as well as Capital Drilling.

Panda Hill Niobium Project

Panda Hill Niobium Resource

The resource update was undertaken by Coffey Mining in Perth in July 2012 (Table 2). The Coffey Inferred Resource targeted fresh carbonatite mineralisation and the mineralised fenite cap material has not yet been included in any resource studies.

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.

Lower Cut-off (Nb ₂ O ₅ %)	Tonnage (Mt)	Grade (Nb ₂ O ₅ %)	Contained Mineral (Nb ₂ O ₅ 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

Table 2 - Panda Hill Inferred Mineral Resource, 03 July 2012² (Preferred cut-off 0.3% Nb₂O₅)

**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.*

Project Description

The Panda Hill Project is located in the Mbeya region in south western Tanzania approximately 650km west of the capital Dar es Salam. 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 Salam and is completing the construction of a new international airport.

The Project is covered by three granted Mining Licenses (Figure 4) 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 220kV 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 has been 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.

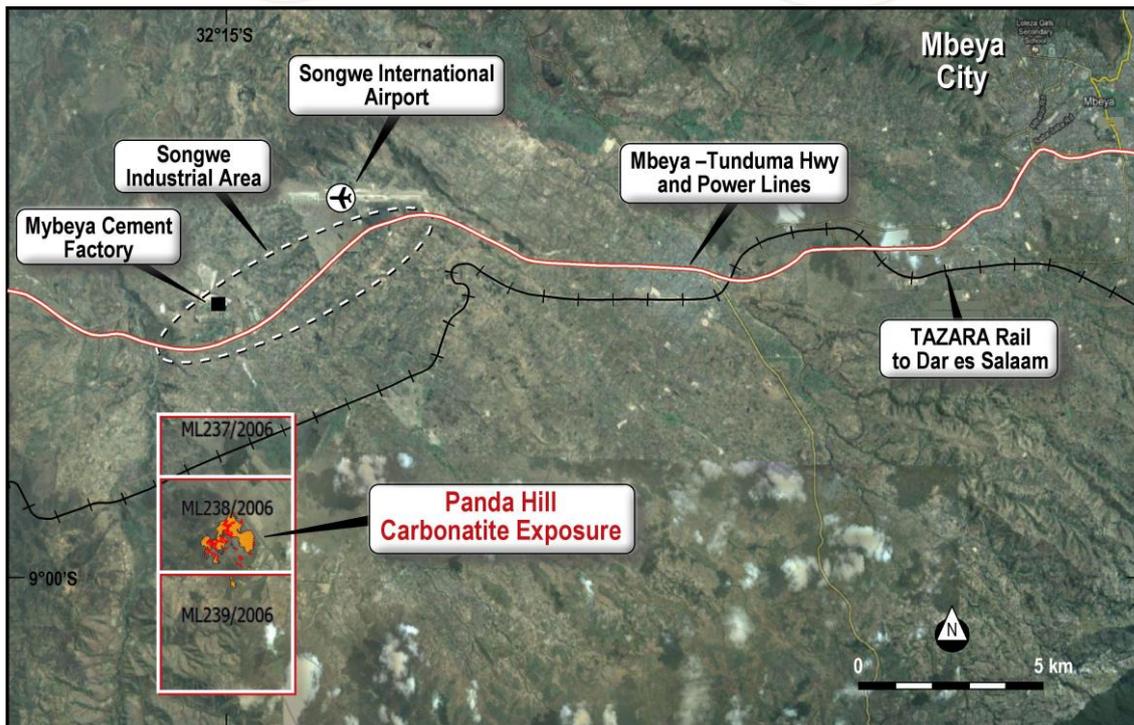


Figure 4: Location of the Project Tenure and Surrounding Infrastructure

The Panda Hill carbonatite intrusion has been subject to multiple phases of exploration work since the 1950s. 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 Maatschapij (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.

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 country rocks and residual soil material. The Fenite forms a "cap" or roof over the south of the carbonatite complex, and is in turn 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 evidence supports 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.

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.

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

By order of the Board

Competent Person's Statement

The information in this document that relates to Exploration Results 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 competent person for the JORC Resource estimate and classification is Ms Ellen Maidens who is a Member of the Australian Institute of Geoscientists. Ms Maidens is a full time employee of Coffey Mining and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which she 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'. Ms Maidens consents to the inclusion in this document of the matters based on her information in the form and context in which it appears.

For further information, please visit www.cradleresources.com.au or contact:

Grant Davey	Managing Director	Tel: +61 8 9389 2000
Sophie Raven	Company Secretary	Tel: +61 8 9389 2000