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ASX Release

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PROJECT UPDATE – PANDA HILL NIOBIUM PROJECT

Highlights

- **Project is on schedule, with completion of the preliminary economic assessment study on target for Quarter 1 2014**
- **Visible niobium bearing mineralization seen in several drill holes**
- **First 11 holes submitted to SGS for sample preparation**
- **Assay results expected to be received in September 2013**
- **Metallurgical samples have also been submitted to SGS**

Cradle Resources Limited (ASX: CXX) (**Cradle** or **Company**) is pleased to announce that its first drilling program at the Panda Hill niobium project has been completed ahead of schedule and the metallurgical and engineering activities have already commenced.

Project Update

The Panda Hill niobium preliminary economic assessment is running to program, with the latest schedule indicating a study completion date of Q1 2014, in line with the original project timeline. The planned diamond drilling has been completed, and the majority of the samples have already been submitted to SGS's laboratories for assaying. Based on the geological logs, hand-held XRF results and the deposit's weathering profile, over 600kg of metallurgical samples across five material types have been collected and are currently being shipped to SGS Lakefield for the detailed metallurgical testwork program.

As soon as results become available from the testwork program, engineering work will start with the flowsheet development and process design criteria.

Documentation for the registration of the project with the Tanzanian National Environmental Management Council has been completed, and approval for the first steps in the development of the project's Environmental and Social Impact Assessment (ESIA) is expected in the next week.

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						■			
Project Complete	14/03/2014									◆

Table 1: Preliminary Economic Assessment (PEA) Timeline (progress shown in green)

Grant Davey, Managing Director of Cradle, said “with the completion of a highly successful drilling program, we are in an excellent position to move quickly into our metallurgical testing and process design phases. I am confident that this work will lead to a metallurgical process that meets all of our preliminary criteria.”

Drilling Program

The drilling program consisted of 14 HQ and NQ drill holes for a total of 1,702m. The program was designed to achieve the following:

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

Initial interpretation on the geological logging indicates similar lithologies have been encountered as to those described by previous workers, however a full geological interpretation will be completed in October 2013. Notably, coarse pyrochlore mineralisation with up to 3% of 3mm to 8mm diameter pyrochlore grains has been identified in hole PHDH008 from 39-41m and 45-49m (Figure 1)¹.

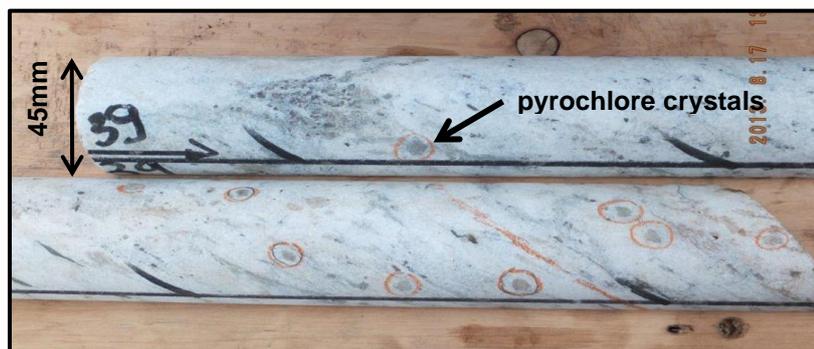


Figure 1 – Coarse-grained pyrochlore in Hole PHDH008 from 39-39.5m

¹ Although individual pyrochlore crystals can be expected to contain up to 50% Nb₂O₅ by mass, the field observation of the pyrochlore crystals should only be treated as an indication of possible niobium mineralisation in the core runs until such time as laboratory assaying has been finalised.

Grant Davey, Managing Director of Cradle, has further commented that “the early results from the program are encouraging and our initial observations are that the historical drill hole and mapping data can be mostly repeated. We look forward to receiving our assay results throughout the month of September.”

The coordinates and orientation of the holes are shown in Table 1 below and Figure 2. The three main sections of drilling are also shown in Figures 3 below. *(Note: the geological interpretation for these sections is based solely on the historical drill hole information, as re-interpretation of the geology based upon the latest drilling information has not been finalised).*

Hole ID	Easting	Northing	RL	Depth (in metres)	Dip	Azimuth
PHDH001	526927	9005641	1540	182.8	-70	270
PHDH002	526909	9005719	1554	122.5	-60	60
PHDH003	526923	9005804	1548	107.4	-60	60
PHDH004	527130	9005776	1530	101.1	-60	60
PHDH005	527001	9005701	1553	84.3	-60	90
PHDH006	527000	9005600	1540	116.2	-60	60
PHDH007	526999	9005800	1555	170.9	-60	45
PHDH008	526898	9006001	1527	110.2	-60	60
PHDH009	526792	9005692	1516	125.3	-60	60
PHDH010	526785	9005538	1495	239.2	-50	50
PHDH011	526797	9005837	1516	121.8	-60	220
PHDH012	526351	9005681	1486	100.0	-60	225
PHDH013	526710	9005620	1504	121.0	-60	50

* All coordinates are in WGS 84 UTM36S

Table 1 - Panda Hill Drill Hole Coordinates and Orientation

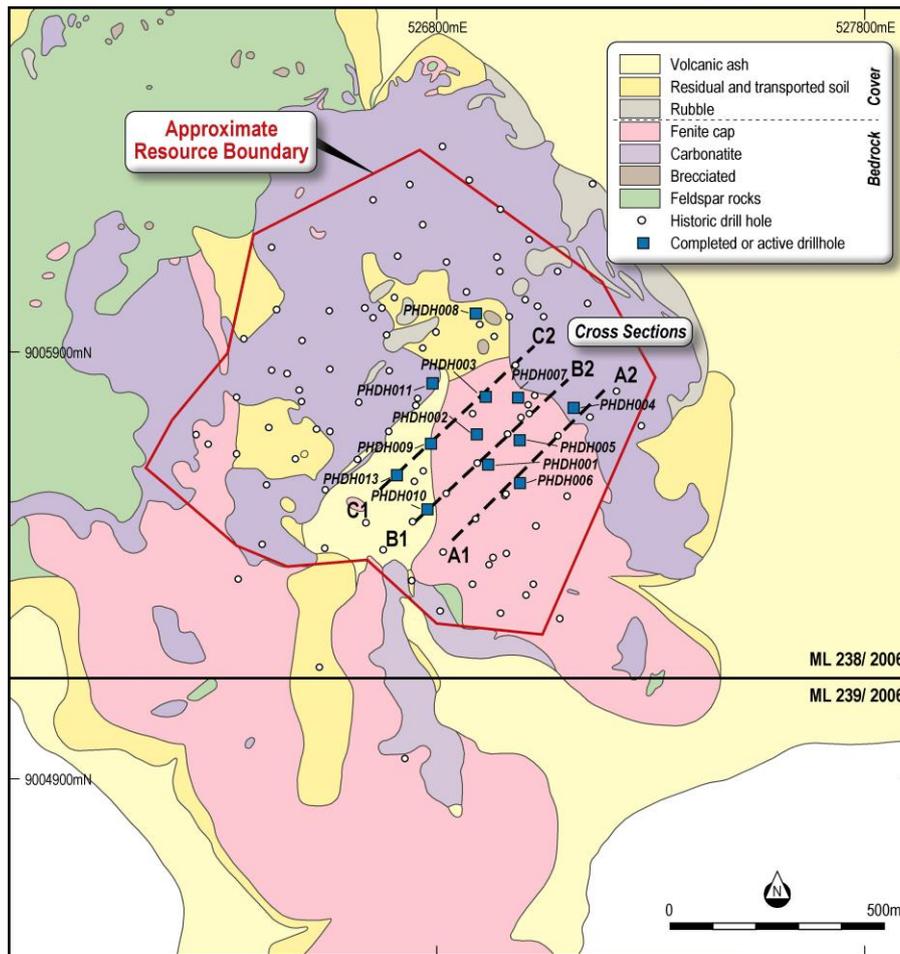
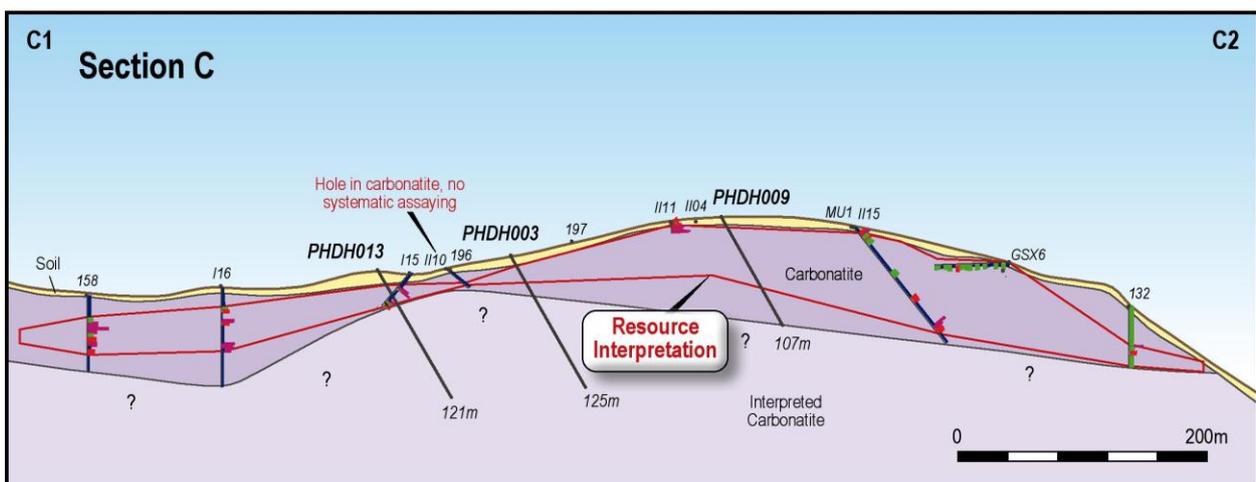
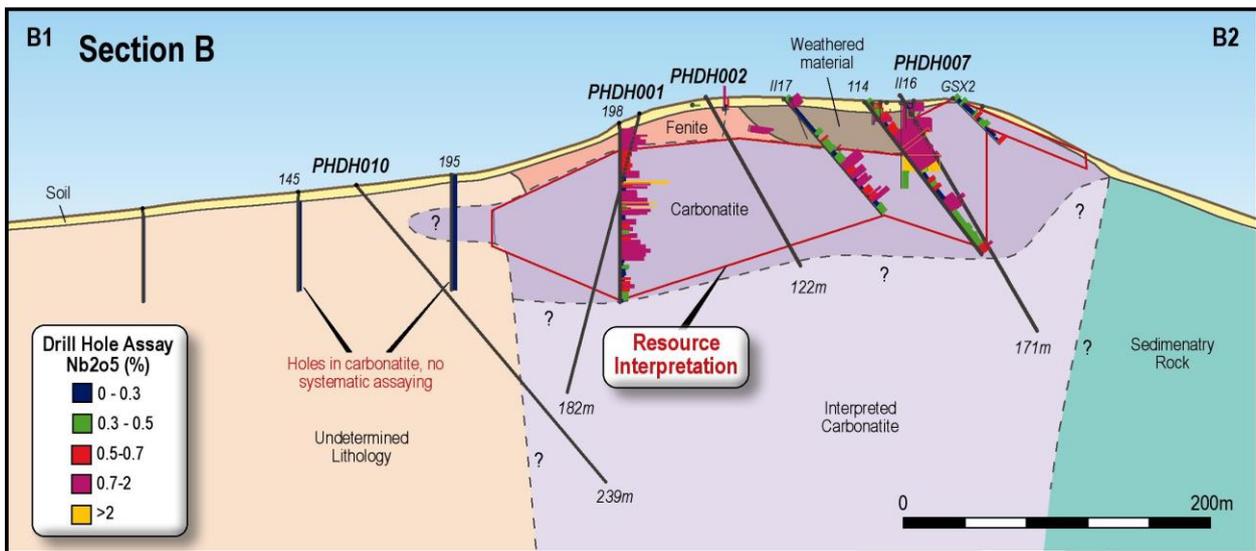
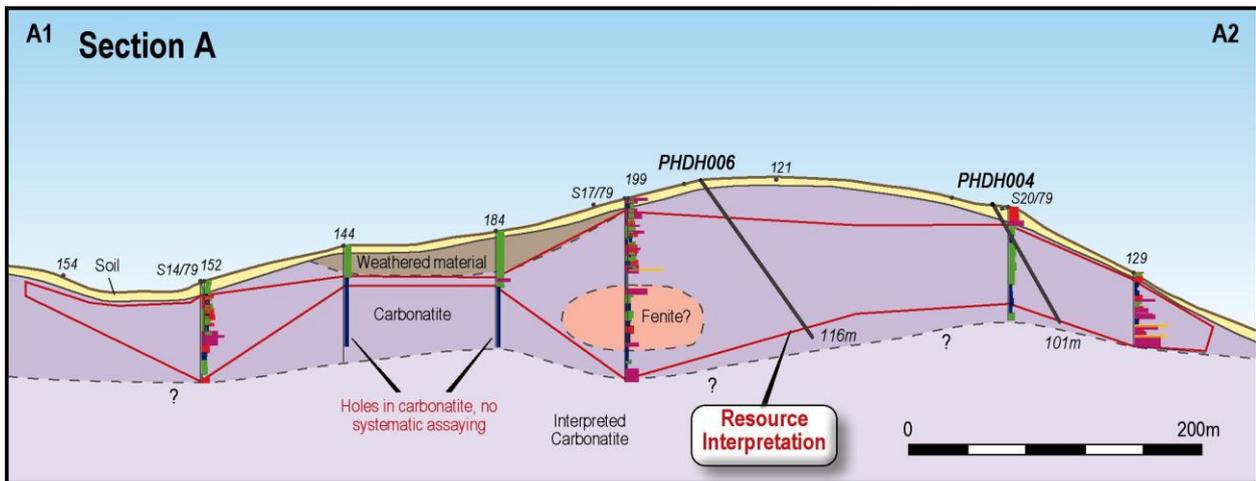


Figure 2: Local Geology of Panda Hill showing approximate boundary of 2012 Inferred Resources and the location of the final 2013 drill holes (blue).



Figures 3: Oblique sections A, B and C with current drill holes (black lines), geological interpretation, 2012 resource outline (red) and historical drilling & down hole niobium grade histograms

About the Panda Hill Niobium Project

Panda Hill Niobium Resource

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.

The initial niobium resource update was undertaken by Coffey Mining in Perth in July 2012 (Table 2 below). The Coffey Inferred Resource targeted the carbonatite mineralization, while the mineralized fenite cap-material was not included in the resource studies.

The resource estimate was based upon grade and lithological information derived from 96 historical diamond holes which were 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 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'. The detailed JORC Competent Persons statement is provided 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 and is located on the main highway to Dar es Salam. A recently completed international airport is located close by.

The Project is covered by three granted Mining Licenses totaling 22.1km². This, along with the existing roads, rail, airport and power which are all available in close proximity to the Project area, will enable a quick transition from the study and development phases to an operating plant. 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 programs of work within the Project.

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:

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