16 September 2014

ASX Release **ASX Code: CXX, CXXO**

DISCOVERY OF SUBSTANTIAL NEW HIGH GRADE ZONE

Highlights

- **A substantial zone of high grade mineralisation from surface is indicated by 10 RC holes in the southern region of the Panda Hill resource**
- **Handheld XRF results indicate that the new zone contains at least 250m strike of high grade mineralisation with widths of 80m to 150m. Assays in this zone are pending.**

Elsewhere in the Panda Hill resource drilling:

- **New result of 78m at 0.83% Nb_2O_5** in **PHRC14** (equivalent to 4 g/t gold or 2.3% copper)[1]
  - Including **32m at 1.27% Nb_2O_5** (equivalent to 6g/t gold or 3.2 % copper)[1]
- **Results from PHRC12 and 13 (twining previous holes) confirm presence of high-grade mineralisation**
  - **97m at 0.57% Nb_2O_5** in PHRC012[2] (equivalent to 2.7 g/t gold or 1.6 % copper)[1]
  - **103m at 0.78% Nb_2O_5** in PHRC013[2] (equivalent to 3.7 g/t gold or 2.2 % copper)[1]

Cradle Resources Limited (ASX: CXX, CXXO) (**Cradle**) is pleased to announce that assay results have been received and validated for a further 2 diamond and 14 RC holes of a 78 hole drill program at Cradle's Panda Hill Niobium Project in Tanzania (see Figures 1 to 6).

In addition, logging and calibrated Niton handheld XRF results[3] indicate the presence of a substantial highly mineralised zone in the southern regions of the resource area, particularly in holes PHRC36, 37 and 40 to 48. This mineralisation is being seen consistently over at least 250m strike in the south with several holes intersecting mineralisation 150m width. Logging indicates the mineralisation is related to magnetite-rich carbonatite bands in predominantly fresh to moderately oxidised material. Assays are pending.

Results from PHRC14 extend high-grade mineralisation along dip in the southern portion of the deposit. Results from PHRC12 and 13 confirm the widths and grade of mineralisation indicated by the 2013 diamond drilling program in the area.

Significant intercepts from this round of assays include:

- **78m at 0.83% Nb_2O_5** (PHRC014) from 0m including:
  - **32m at 1.27% Nb_2O_5**
- **84m at 0.57% Nb_2O_5** (PHDH022) from 33m including:
  - **34m at 0.69% Nb_2O_5**
- **25m at 0.53% Nb_2O_5** (PHDH020) from 0m and **19m at 0.56% Nb_2O_5** from 102m
- Twin hole results[2] of **97m at 0.57% Nb_2O_5** (PHRC012) from surface and **103m at 0.78% Nb_2O_5** (PHRC014) from surface

[1] The metal equivalent grades are shown to illustrate Nb_2O_5 grade data relative to more traditional commodities to aid in the interpretation of the results and are not intended to indicate the presence of Au or Cu credits. Au and Cu equivalent grades have been based upon spot prices of US$1,320/oz and US$7,200/t respectively and a Nb metal price of $40/kg for Nb in FeNB. A recovery factor of 65% for Niobium, 90% for gold and 90% for copper has been used for this comparison. The Niobium recovery is based upon initial testwork reported by Cradle Resources in January 2014. The formula used to estimate the metal equivalents is (A x B x C x Ra)/ (D x Rd). Where A = Nb_2O_5 grade, B is the Nb_2O_5 to Nb oxide conversion (1/1.43), C is the Niobium price per Kg, Ra is the estimated niobium recovery, D is the comparison metal price unit, and Rd is the estimated comparison metal recovery. Meterage have been rounded. [2] These holes are twin holes of PHDH007 and 003 from the 2013 drill program in a mineralised area. [3] A calibrated Niton Gold

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handheld XRF machine is used on site to test certain samples for niobium mineralisation. Reconciliation of these results to date have been reasonably consistent to the laboratory assays, however the zones of mineralisation indicated by the unit should not be considered necessarily of potential economic value until such time as laboratory assaying has been completed.

Further details of the significant intersections are summarised in Table 1.

The new high grade zone of mineralisation (Figures 2, 3, 5 and 6) being seen in recent RC drilling occurs over at least a 250m strike in the south of the drilled region and is supported by both logged geology, handheld XRF readings, and drilling from the 2013 drill campaign. Mineralisation is being encountered from surface and occurs over a width of 80m to 150m. The geological logging indicates the mineralisation is related to both magnetite-rich carbonatite and mixed carbonatite species in predominantly fresh to moderately oxidised material with some lesser weathered material. Handheld XRF analysis is undertaken on each 2m RC sample. It is noted that many of the RC holes have drilled to maximum drillable depth and have terminated in mineralisation (e.g. PHRC 37, 45, 46, 47). Additionally diamond hole PHDH25 intersected the top of this zone and is currently being extended to test the full depth of the zone. Cradle notes that comparisons of the handheld XRF to received laboratory assays for the last 5 received holes have reported to within 10% accuracy. Assay results are pending from this new zone.

Drilling in the central portion of the deposit (see Figures 1 to 6) intersected mineralisation in both carbonatite and weathered carbonatite lithologies. Hole PHRC14 demonstrated the up-dip extent of high-grade mineralisation first encountered in PHDH3 in 2013. Results of twin RC holes (PHRC 12 and 13), which were drilled within 10 metres of diamond holes undertaken in 2013 by Cradle, confirmed the presence of similar lithologies and high-grade mineralisation to that seen by the diamond holes. PHRC13 reported very similar average grade to PHDH3 (0.77% and 0.75% Nb_2O_5 respectively over 105m). PHRC12 reported a slightly higher grade than its diamond twin (PHRC7) of 0.58% versus 0.46% Nb_2O_5 over 97m. PHDH19 intersected a localised vent breccia which interrupted the mineralisation on this section. The vent breccia is interpreted to be limited in extent and is not seen on the adjacent sections.

The bulk of the RC holes received have been in the south-western portion of the deposit and 4 holes in the central portion of the deposit (see Figures 1 to 6). The RC drilling to the south-west intersected mineralisation in both carbonatite and weathered carbonatite lithologies. Several holes intersected significant mineralisation (e.g. PHRC4, 6 and 7) however the western extents of thicker continuous mineralisation was limited by lesser results in holes PHRC5, 8, 9, 10 and 11). Results from hole PHRC4 and the field observations from the calibrated Niton handheld XRF machine on RC samples indicate the presence of a coherent mineralised trend which runs from the south of the deposit over 250m in a north-west strike.

The niobium analysis has been undertaken by SGS Johannesburg using the XRF Borate fusion process. Cradle adheres to industry best-practice in conducting QAQC procedures by inserting blanks and certified niobium standards at a rate of 1:20 samples. The QAQC data for the Project has been reviewed by Cradle's Competent Person, Mr Neil Inwood.

Representative metallurgical samples have been previously been sent to SGS Lakefield in Canada with testwork results announced in early 2014.

Grant Davey, the Managing Director of Cradle, commented: *"The discovery of the new high grade zone is exciting as XRF readings indicate 150m thick zones of high grade mineralisation along a strike length of more than 250m and predominately in rock types expected to yield reasonable recoveries. This exciting new high grade zone, together with the higher grade and widths of the fresh carbonatite drilled in the northern area of the resource, and the confirmation of grades and widths in the central resource area, ensures further confidence in this developing world class resource."*

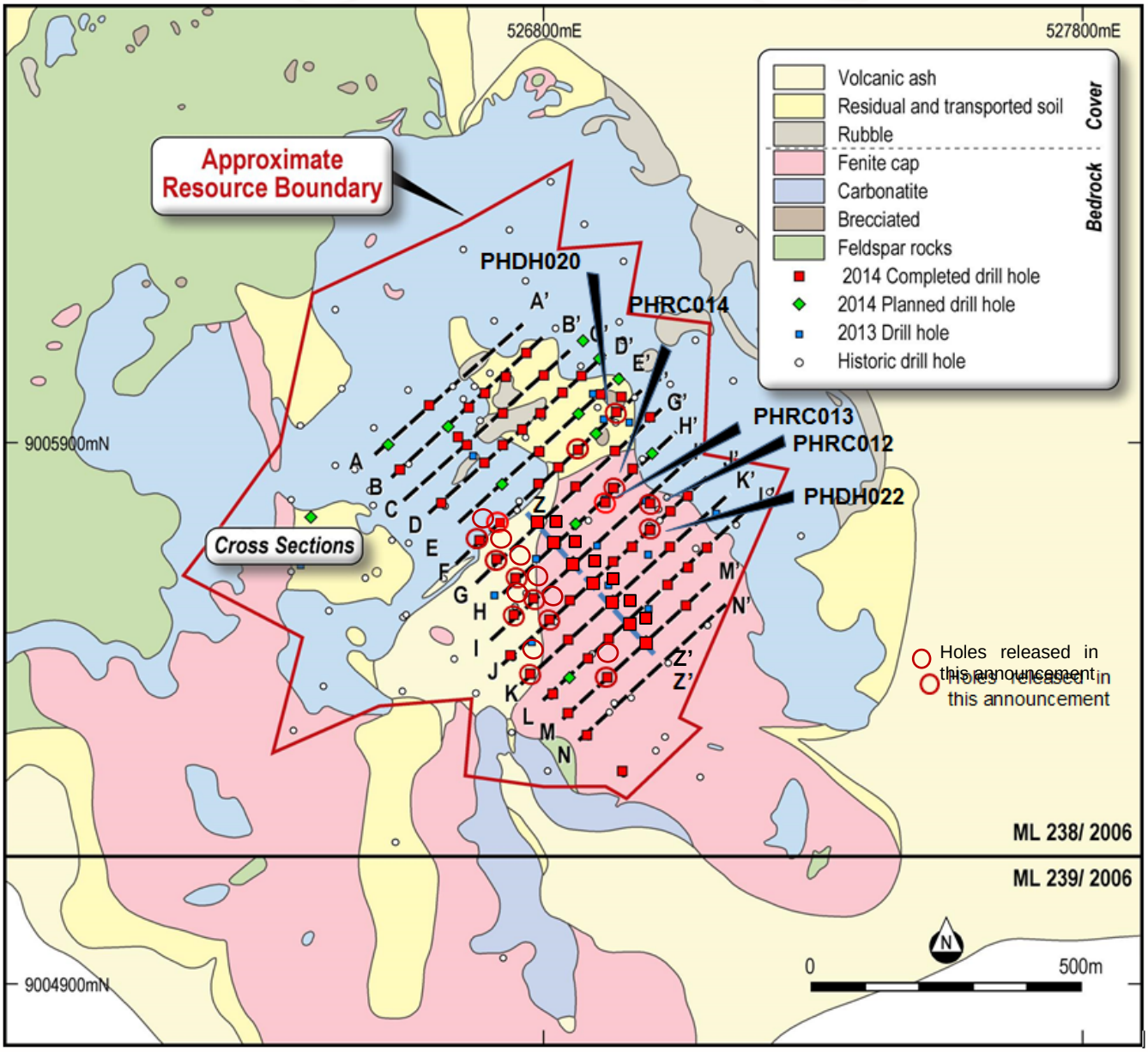

Figure 1: Local geology of Panda Hill showing the location of the 2014 drilled (red) and planned (blue) drillholes. Holes reported in this release have a red circle around them.

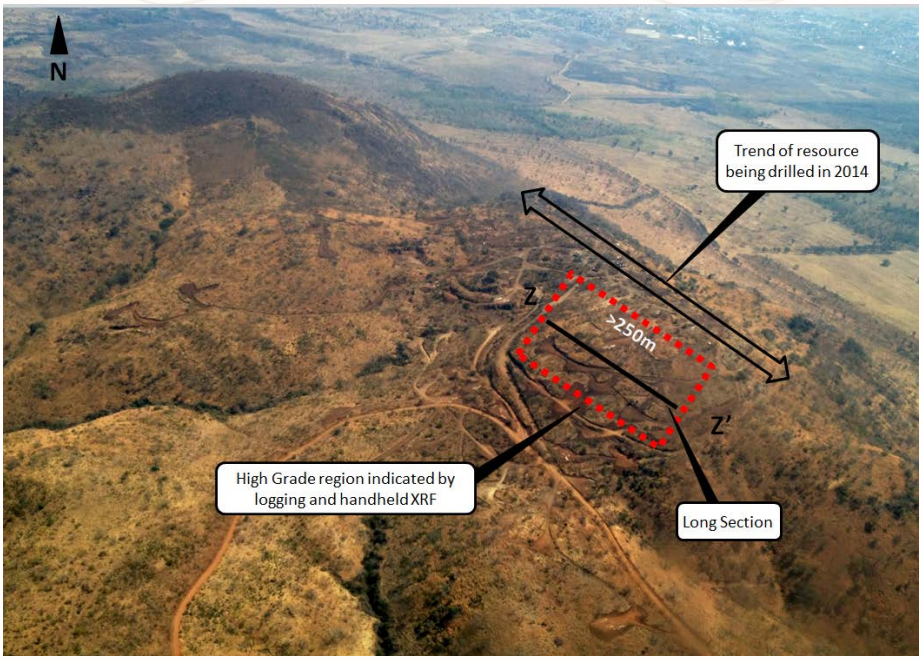

Figure 2: Aerial photograph of Panda Hill showing the region of high-grade mineralisation indicated by recent RC drilling.

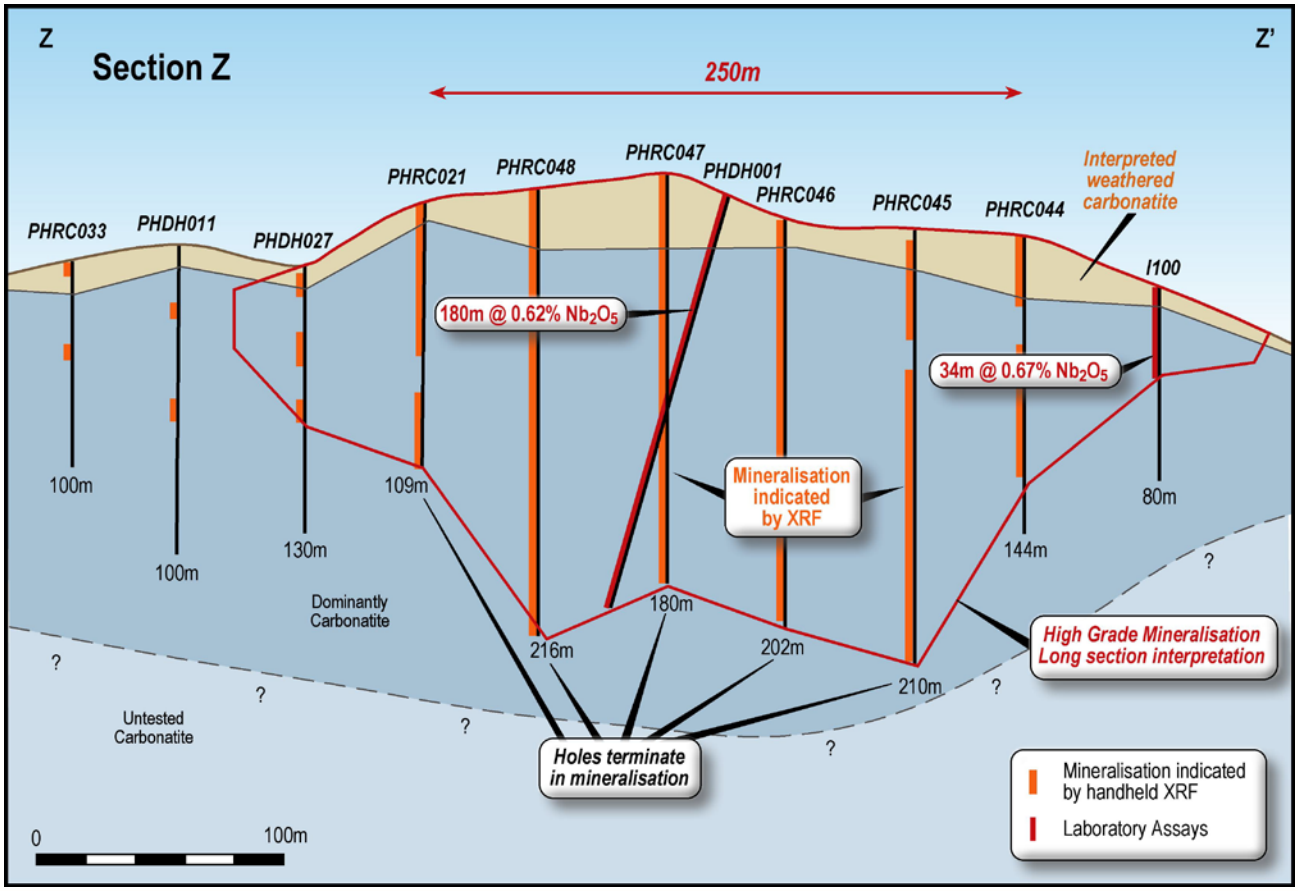

Figure 3: Long-Section showing the region of high-grade mineralisation indicated by recent RC drilling.

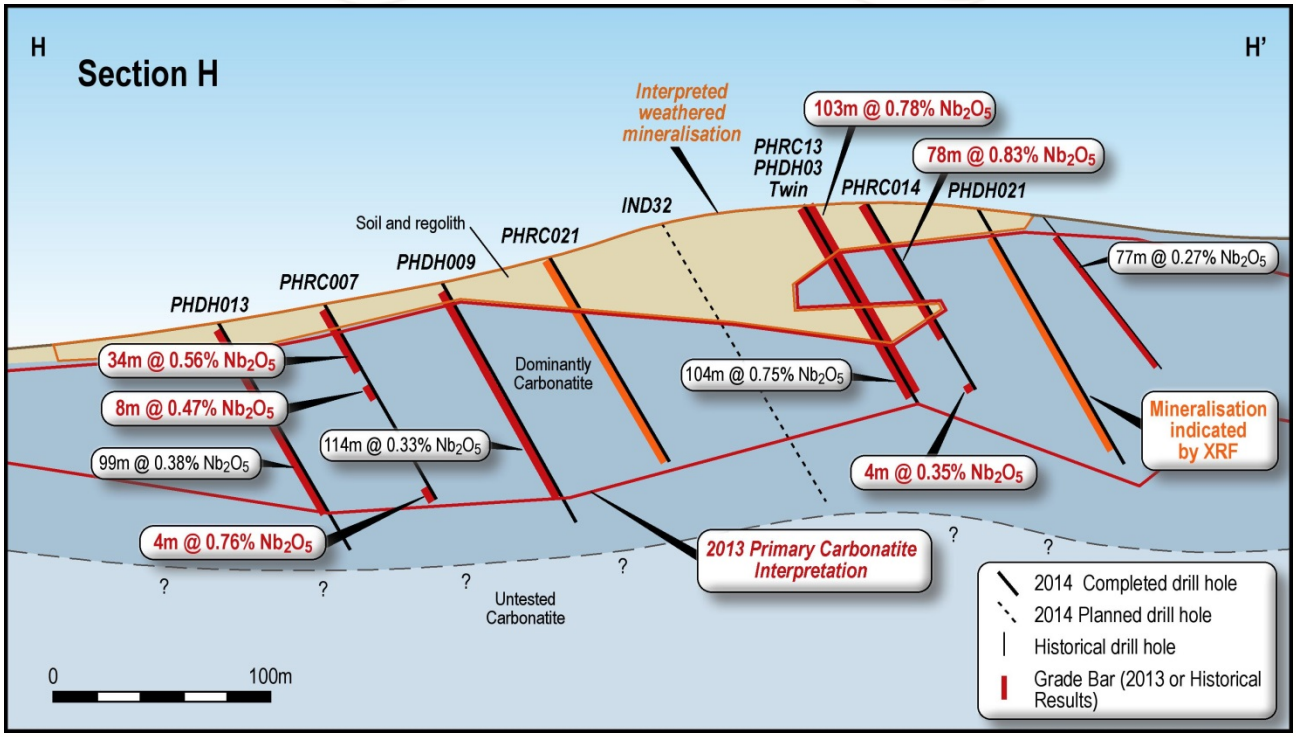

Figure 4: Section H with 2014 drillholes (thick black lines) showing received laboratory significant intercepts (red text), planned holes (dashed lines), zones of mineralisation indicated by handheld XRF[3] (orange bars) and historical drillholes and average intercepts (black lines and text). The 2013 resource boundary is shown as the red dashed line.

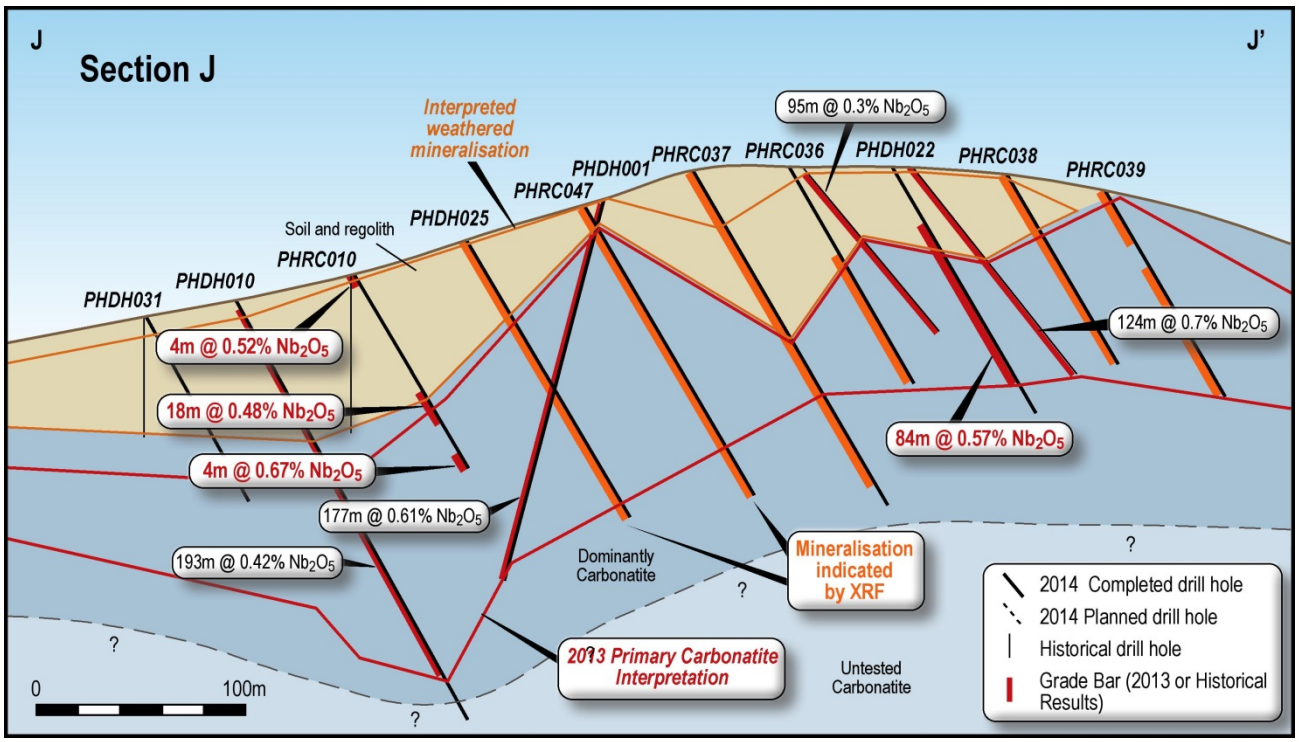

Figure 5: Section J with 2014 drillholes (thick black lines) showing received laboratory significant intercepts (red text), planned holes (dashed lines), zones of mineralisation indicated by handheld XRF[3] (orange bars) and historical drillholes and average intercepts (black lines and text). The 2013 resource boundary is shown as the red dashed line.

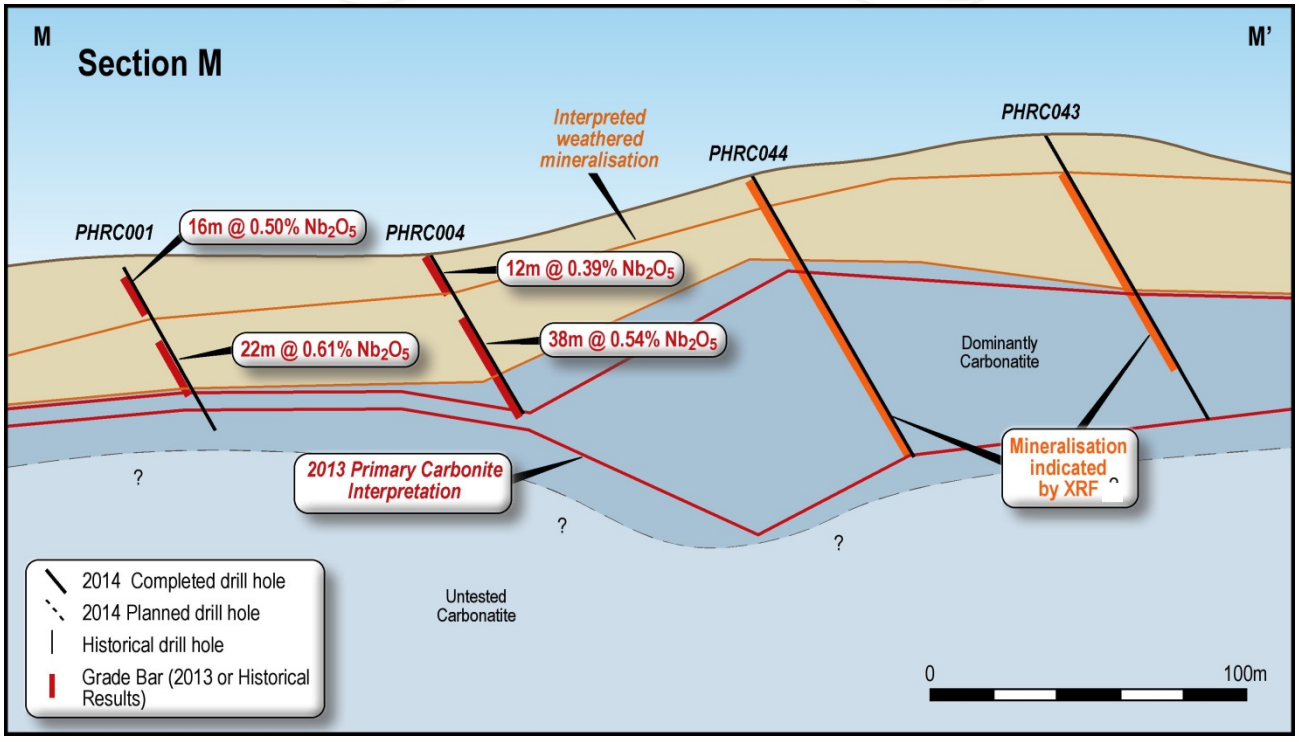

Figure 6: Section M with 2014 drillholes (thick black lines) showing received laboratory significant intercepts (red text), planned holes (dashed lines), zones of mineralisation indicated by handheld XRF[3] (orange bars) and historical drillholes and average intercepts (black lines and text). The 2013 resource boundary is shown as the red dashed line.

Table 1 - Panda Hill Niobium Project

Detailed Significant Intercepts as of 8 September 2014

Hole ID	Easting	Northing	RL	EOH	Dip	Azimuth	From	Length	Nb_2O_5 (%)
PHDH019	526,873	9,005,897	1,531	108	-60	060	4.9	10	0.41
							22.8	3.1	0.40
PHDH020	526,945	9,005,965	1,540	130	-60	060	0	24.9	0.53
						including	**0**	**4.1**	**0.80**
							12	**9.1**	**0.71**
							48.2	2.5	0.55
							78.1	11.9	0.37
							101.8	19.2	0.56
PHDH022	527,007	9,005,747	1,555	130.8	-60	060	33	84.5	0.57
						including	**74.7**	**34.3**	**0.69**
PHRC003	526,784	9,005,477	1,489	104	-60	060	6	18	0.41
							68	6	0.79
PHRC004	526,927	9,005,471	1,501	60	-60	060	0	12	0.39
							22	38	0.54
						including	**44**	**16**	**0.70**
PHRC005	526,722	9,005,692	1,497	100	-60	060	20	8	0.44
							70	6	0.35
PHRC006	526,725	9,005,762	1,498	100	-60	060	0	36	0.43
							42	8	0.41
							72	28	0.57
PHRC007	526,755	9,005,656	1,504	100	-60	060	0	34	0.56
						including	**14**	**18**	**0.73**
							40	8	0.47
							96	4	0.76
PHRC008	526,690	9,005,729	1,485	80	-60	060	22	2	0.36
PHRC009	526,752	9,005,585	1,495	106	-60	060	40	6	0.36
							86	8	0.40
PHRC010	526,823	9,005,582	1,507	100	-60	060	0	4	0.52
							62	18	0.48
						including	**62**	**6**	**0.72**
							96	4	0.67
PHRC011	526,789	9,005,619	1,505	100	-60	060	0	34	0.40
						including	**18**	**6**	**0.63**
							70	6	0.45
PHRC012	527,006	9,005,795	1,555	97	-60	060	0	97	0.57
						including	**16**	**34**	**0.78**
PHRC013	526,924	9,005,795	1,550	103	-60	060	0	103	0.78
						including	**0**	**26**	**1.10**
							84	**22**	**1.21**
PHRC014	526,939	9,005,825	1,551	100	-60	060	0	78	0.83
						including	**4**	**6**	**1.30**
							18	**32**	**1.27**
							88	4	0.35
PHRC015	526,869	9,005,827	1,533	109	-60	060	12	4	0.36
							28	14	0.52

Note: The major intercepts have been tabulated above a nominal 0.35% Nb_2O_5 lower cut-off and less than 4m internal dilution.

Project Background

The Panda Hill Project (Figure 7) is located in the Mbeya region in south western Tanzania 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 is completing the construction of a new international airport.

The Project is covered by three granted Mining Licenses (Figure 7) totalling 22.1km^2, 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.

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.

Cradle completed a 13 hole (1703m) diamond drilling programme in September 2013. This confirmed historical information and enabled Cradle to produce an updated Indicated and Inferred resources estimate. The initial independent Scoping Study undertaken was supported by a Board decision to progress the Project to a definitive feasibility study level.

Cradle entered into a project funding agreement with Tremont through which Tremont is able to acquire 50% of the Project by investing US$20 million to be used towards the definitive feasibility study as well as the initial project development costs. Tremont is an African focussed mining platform backed by Denham Capital, a leading energy and resources global private equity firm. Pangea Exploration, advisors to Tremont, is based in South Africa and led by Rob Still. Over the last 25 years Pangea's team of technical and commercial experts have developed in excess of 16 projects in Southern and Eastern Africa at various stages of project de-risking from exploration through to development and operations, in a variety of commodities including gold, vanadium, copper, titanium and coal.

In November 2011 Tremont raised US$200 million from Denham Capital to establish an African Mining Platform to target a wide range of opportunities in Africa. Denham has over US$7.9 billion of invested and committed capital in the metals and mining, oil and gas, and power sectors.

Cradle expects to complete a definitive feasibility study by 3rd Quarter 2015. The Pre-feasibility Study phase is well underway with completion on track for 1st Quarter 2015.

Panda Hill Niobium Resource

The Panda Hill Niobium Project has a global Indicated and Inferred Resource of 81.8Mt @ 0.52% Nb_2O_5 (76.4Mt @ 0.41% Nb_2O_5 Inferred and 3.2Mt @ 0.52% Nb_2O_5 Indicated above a 0.3% Nb_2O_5 lower cut-off). The Resource was last updated in October 2013 by Coffey Mining and is currently the focus of an infill drilling program to increase the endowment of Indicated Resources. The 2014 field program is expected to produce a resource with a refined lithological and grade model.

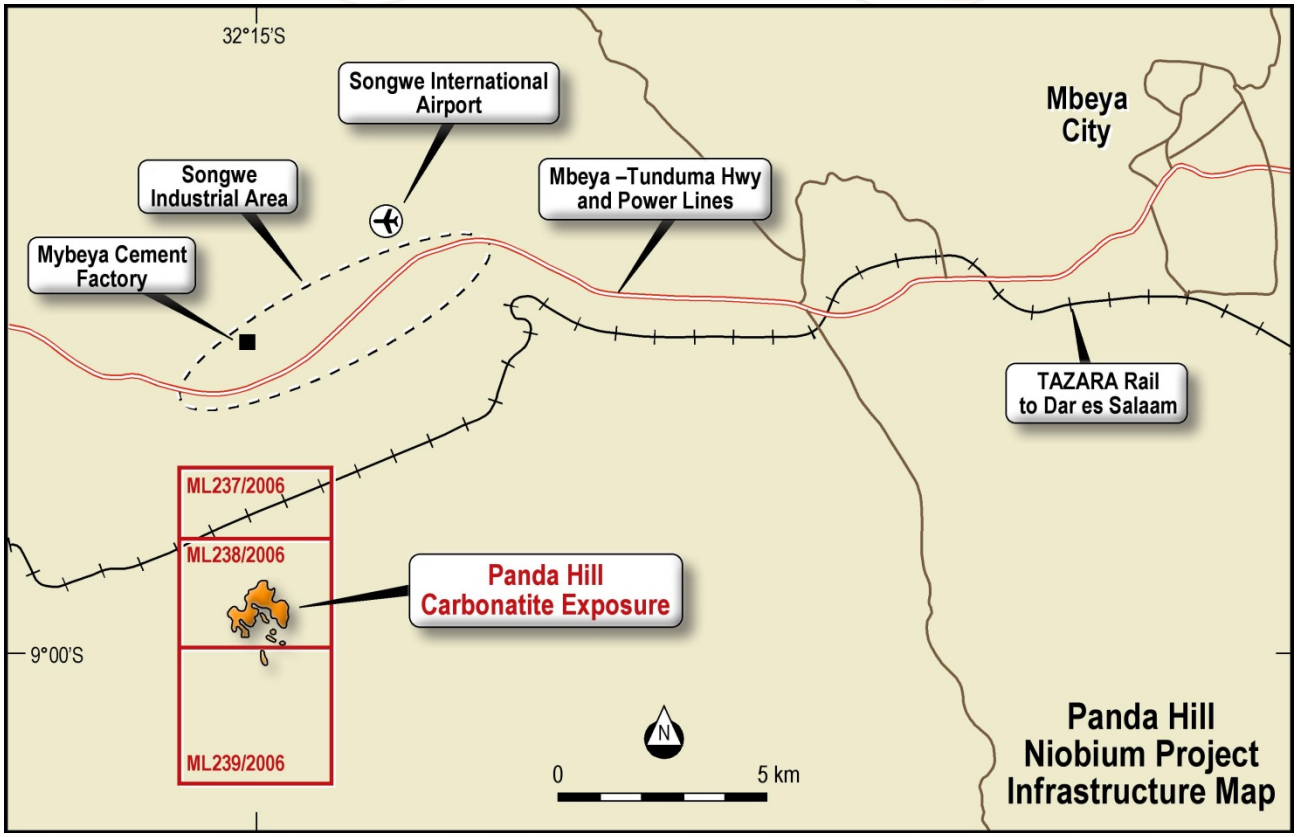

Figure 7: Location of the Project Tenure and Surrounding Infrastructure

By order of the Board

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 Capital Pty Ltd. 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 relating to the Mineral resource is extracted from the report entitled 'Substantial Upgrade to Panda Hill Resource' created on 8th November 2013 and is available to view on 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, in the case of estimates of Mineral Resources or Ore Reserves that all 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.'

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

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The following extract from the JORC Code 2012 Table 1 is provided for compliance with the Code requirements for the reporting of Exploration result.

Section 1 Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
Sampling techniques	▪ Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. ▪ Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. ▪ Aspects of the determination of mineralisation that are Material to the Public Report. ▪ In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1m samples from which 3kg was pulverised to produce a 30g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	• Sample intervals for the 2014 drill core were based on lithological units. Care was taken not to mix different lithologies or weathering types. Sample intervals were nominally 1m length but range from 0.3m to a maximum of 1.5m in barren uniform material. Sample lengths are kept to 1m in mineralised material if possible. • Quarter core samples were taken from the HQ and ½ core from NQ core for assaying. Competent core was cut using a core saw. Friable material was carefully sampled by hand. • RC Samples are split using a cone splitter into 1m samples, then a combined 2m composite is taken using a riffles splitter. RC sample weights are approximately 2kg. • Samples were dispatched to the SGS preparation laboratory in Mwanza, Tanzania, for crushing and pulverising to 85% passing 75 µm. Pulps were then sent to SGS Johannesburg, South Africa, for niobium assay by XRF Borate Fusion. • A calibrated handheld Niton XRF analyser is used to aid in mineralisation identification.
Drilling techniques	▪ Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	• Drilling was conducted by Capital Drilling. Drilling typically started in HQ3 core to allow for safe collaring and to capture sufficient material for metallurgical test work. When difficult drilling conditions were encountered, the HQ rods were left as casing to allow for continuation of drilling using NQ rods. HQ and NQ core is typically taken. • RC Drilling is by a Schram 450 rig drilling with a y a 5.5" diameter bit typically and a 900cfm compressor. No booster compressor was required for RC drilling. • Core orientation is with the reflex orientation tool.
Drill sample recovery	▪ Method of recording and assessing core and chip sample recoveries and results assessed. ▪ Measures taken to maximise sample recovery and ensure representative nature of the samples. ▪ Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	• Core recovery is measured as a % and any cavities or missing intervals are recorded. • Recovery was generally high for all core. Up to 4% voids are reported in some regions. • RC recovery is recorded by visual estimation of recovered sample bags and by weighing all sample rejects from the splitter. Recovery is generally of good quality.
Logging	▪ Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. ▪ Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. ▪ The total length and percentage of the relevant intersections logged.	• Logging of the 2014 drillholes included recording of lithological contacts, weathering contacts, vein/dyke orientations, and the orientation of any observed flow banding. Structural measurements (alpha and beta and dip/strike) were Wet and dry core photos were taken. All core was logged. • Geotechnical logging was completed for all holes by a geotechnical engineer. RQDs, defects, weathering, strength, infill, and jointing were recorded. • Logging is of sufficient quality for current studies.
Sub-sampling techniques and sample preparation	▪ If core, whether cut or sawn and whether quarter, half or all core taken. ▪ If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. ▪ For all sample types, the nature, quality and appropriateness of the sample preparation technique. ▪ Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	• For the 2014 drilling, half core samples were sent to SGS Vancouver for metallurgical testing and quarter core samples were sent to SGS Johannesburg after being sent to SGS Mwanza (Tanzania) for preparation. • All sampling was carefully supervised. Ticket books were used with pre-numbered tickets placed in then sample bag and core tray double checked against the ticket stubs to guard against sample mix ups. • One metre lengths of quarter HQ and ½ NQ core is considered sufficient to provide an adequately representative sample for

Criteria	JORC Code Explanation	Commentary
	▪ Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. ▪ Whether sample sizes are appropriate to the grain size of the material being sampled.	assaying. • Whilst field duplicates were not submitted, a program of coarse reject duplicates is planned. • RC field duplicates are taken.
Quality of assay data and laboratory tests	▪ The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. ▪ For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. ▪ Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	• Coffey conducted an inspection of the Johannesburg laboratory during a site visit in August 2013 and found the laboratory to be of industry standard with no problems noted. • Matrix matched standards are inserted every 20 samples on sample numbers ending in 0 (eg *00, *20, *40 etc). Eight different standards were used. Approximately 10g of standard was used for the XRF Borate fusion analysis samples (note: borate fusion only used ~4g of pulp). Standards were either supplied pre=packaged or were measured into a small paper bag so the standards were not blind. • Blanks were inserted at a 1:50 ratio (i.e. samples *10, *70) and at the start of each batch.
Verification of sampling and assaying	▪ The verification of significant intersections by either independent or alternative company personnel. ▪ The use of twinned holes. ▪ Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. ▪ Discuss any adjustment to assay data.	• Coffey conducted a site visit in August 2013, during the drilling program, observing all drilling procedures. All procedures were considered industry standard, well supervised and well carried out. • Geological data is entered directly into a “tough book” (logging tablet). The data is then downloaded to a computer where it is compiled into an access database. • Assay data is provided as /csv files from the laboratory and extracted through a query into the assay table, eliminating the chance of data-entry errors. Spot checks are made against the laboratory certificates. Datashed is used for final assay importation. • 3 RC holes have been planned to twin the 2013 diamond drilling.
Location of data points	▪ Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. ▪ Specification of the grid system used. ▪ Quality and adequacy of topographic control.	• Collar positions were set out using a Handheld Garmin GPS with reported accuracy of 3m. Two pegs lined up using a Suunto compass were used to align the rig. Historic holes were drilled on the Tanzanian ARC60 grid. Cradle Resources are using WGS84, UTM36S. • Downhole surveys were taken using a Reflex electronic multi shot instrument. Collar surveys were taken using a compass and inclinometer. Whilst there is the possibility of deviations in the recorded azimuth due to the presence of magnetite in the carbonatite, overall the surveys showed only minor deviations in azimuth and dip. There is no apparent trend to the deviations based on drilling direction. • The surface topography used in the resource is derived from the local topography map at 1:3000 scale • A surveyor will be used to locate all drillholes at the end of the program.
Data spacing and distribution	▪ Data spacing for reporting of Exploration Results. ▪ Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. ▪ Whether sample compositing has been applied.	• The drillholes are spaced on a nominal 50m to 100m spacing; with 50m section lines. • The 2014 drilling had a nominal sample length of 1m for diamond and 2m for RC. • The data spacing is considered suitable for resource estimates.
Orientation of data in relation to geological structure	▪ Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. ▪ If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	• The distribution of pyrochlore and hence of niobium within the carbonatite is fairly uniform for the lower grade material. Higher grade areas occur in the steeply dipping schlieren (flow banding), particularly in the magnetite rich zones. The recent drilling has been oriented with a dip of 60° with an azimuth of 045 degrees, which is considered acceptable to test the mineralisation.
Sample security	▪ The measures taken to ensure sample security.	• Samples from the 2014 drilling were placed into small plastic bags with the pre-printed sample number. These bags were

Criteria	JORC Code Explanation	Commentary
		stapled shut in the core yard. The samples were then put into large polyweave or plastic bags with approximately 10 samples per bag. These were sealed shut using tape prior to being transported to the SGS preparation laboratory in Mwanza (northern Tanzania)
Audits or reviews	▪ The results of any audits or reviews of sampling techniques and data.	• Coffey conducted a site visit during the drilling program in August 2013. The sampling techniques were reviewed and found to be of industry standard and entirely appropriate for this type of deposit.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section).

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	▪ Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. ▪ The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	▪ The project area is located on three granted MLs (ML237/2006, 238/206 and 239/2006) located approximately 25km WSW of regional capital of Mbeya, in southern Tanzania. The three MLs cover an approximate area of 22km^2. Cradle Resources holds a 50% interest in all three MLs through its ownership of Panda Hill Mining Pty Ltd (PHM). RECB Ltd (a BVI Company) owns the three Panda Hill MLs, PHM owns 50% of RECB Ltd and has an option to purchase the remaining 50%. It is understood that a 3% royalty may be payable to the Tanzanian Government once mining has started. The licences are not subject to any 3rd party agreements. ▪ The resource and the bulk on ML237/2006 and ML238/2006 are located within a region of designated Prison grounds. The Resource itself is removed from any buildings or infrastructure. As the location of the resource is located within the prison boundaries, only the prison-related community would be directly affected by any potential mining activities. ▪ The three granted MLs are current until 16 November 2016. Department of Prisons approval is required for any work to be conducted on ML237/2006 and ML238/2006. Cradle Resources has obtained permission to operate on these areas and is not aware of any impediment for future operations.
Exploration done by other parties	▪ Acknowledgment and appraisal of exploration by other parties.	▪ The Panda Hill Niobium project has been explored since the 1950s. The Geological Survey of Tanzania (GST) and Mbeya Exploration Company (MBEXCO) drilled 83 diamond drillholes for a total depth of 5,187m in the Panda Hill project area in the 1950's and early 1960's. Yugoslavian company RUDIS, in joint venture with the State Mining Company of Tanzania (STAMINCO), drilled 13 diamond drillholes for a total of 1,305m in the period of 1978 to 1980. These holes were drilled on a 100m x 100m spaced centres on the Tanzanian ARC60 grid. Drillhole logs and assays are available for the historic drilling. Laboratory certificates have been sighted for the GST drilling and original data printouts have been obtained for the RUDIS drilling.
Geology	▪ Deposit type, geological setting and style of mineralisation.	▪ The project is characterised as a carbonatite hosted niobium deposit. The bulk of the Panda Hill niobium mineralisation is found within pyrochlore and lesser columbite. The bulk of the known mineralisation is located within carbonatite lithologies, with Nb_2O_5 grades typically ranging from 0.1% to 1%. Higher-grade niobium mineralisation is noted within flow-banding (schlieren) within the carbonatite and within the surficial weathered cap.
Drillhole	▪ A summary of all information material to the	▪ Drillhole coordinates and orientations are provided in

Criteria	JORC Code explanation	Commentary
Information	understanding of the exploration results including a tabulation of the following information for all Material drillholes: ▫ easting and northing of the drillhole collar ▫ elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar ▫ dip and azimuth of the hole ▫ down hole length and interception depth ▫ hole length ▪ If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	Table 1 of this report. ▪ This statement relates to Exploration Results.
Data aggregation methods	▪ In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. ▪ Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. ▪ The assumptions used for any reporting of metal equivalent values should be clearly stated.	▪ Exploration results have been quoted above a nominal 0.35% Nb_2O_5 cut off, and with less than a nominal 4m of internal dilution. No top-cuts were used as these were not deemed to be required. ▪ Meal equivalents were used to explain the assay results in context to Au and Cu to make it easier for a layperson to understand the potential economic consequences of the results. There is no economic Cu or au in the deposit. The method for estimating metal equivalents is shown on page 1 of the document.
Relationship between mineralisation widths and intercept lengths	▪ These relationships are particularly important in the reporting of Exploration Results. ▪ If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported. ▪ If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	▪ The bulk of the drilling is at right angles to the understood strike of mineralisation and to the dip of the mineralisation. It is estimated that the quoted intercepts would be between 80 and 100% of the true width of the mineralisation. ▪ Considerable surface structural mapping has been undertaken to optimize the drillhole directions.
Diagrams	▪ Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.	▪ A drillhole plan and accompanying cross-sections are provided in Figures 1 and 2 of this report.
Balanced reporting	▪ Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	▪ The exploration results have been reported above a nominal 0.35% Nb_2O_5 lower cutoff and short reporting intervals have been avoided wherever possible. This method results in intervals which should have bearing on potential future economic extraction. Intervals not reported should be considered effectively mineralised to the level of economic interest.
Other substantive exploration data	▪ Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	▪ Detailed geological mapping has been conduction by the Tanganyika Geological Survey in the 1950s and RUDIS in the 1980s. Two papers detailing the geology of the Panda Hill carbonatite were subsequently published in Economic Geology. ▪ Cradle conducted geological mapping at the same time as the drilling program. Both the recent and historic mapping provide information relating to the orientation of the flow banding within the carbonatite. ▪ Metallurgical test work has been conducted by MBEXCO and RUDIS in the past. MBEXCO also conducted trial mining. Cradle has undertaken metallurgical test work on the mineralized carbonatite material. At the time of writing

Criteria	JORC Code explanation	Commentary
		the results are not available, however there is no reason to suspect they will be materially different from the historic test work results.
Further work	▪ The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). ▪ Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	▪ The current drill program is aimed at producing an improved Resource estimate to higher levels of confidence and to enable for e more detailed metallurgical and lithological/weathering model to be generated. ▪ A magnetic survey has been commissioned over the project which will aid in the understanding of the broader structures resent within the deposit.