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ASX Release

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June 2016 Quarterly Activity Report

Highlights

- **Cradle Definitive Feasibility Study (DFS) announced**
- **Strategic Board restructuring – Ian Middlemas and Robert Behets appointed as non-executive directors**
- **Capital raising of \$2.76M to sophisticated and strategic investors completed**
- **Panda Hill maiden Ore Reserve Estimate declared**
- **Front-end Engineering and Design (FEED) activities have commenced**
- **Debt financing and negotiation of off-take agreements in progress**

Definitive Feasibility Study

The results of Cradle's DFS on the Panda Hill project were announced on 20 April 2016. The DFS assumes that the Project commences at a throughput of 1.3 million tonnes per annum (Mtpa) and is ramped up to 2.6 Mtpa after four years production, with this ramp up funded by Project cash flows. The total mine life is 30 years with total throughput being 72.4 Mt of ore at a strip ratio of 1.5 to 1.

The estimated initial construction capital cost including pre-production requirements is US\$196M (excluding working capital). Average life of mine operating costs for the process are estimated at US\$21.34/kg Nb including royalties and marketing. Positive financial metrics are generated for the Project with a projected NVP_8 (after tax) of US\$542M, a pre-tax IRR of 32%, and a nominal pay-back period of only 4.75 years (from fully funded and inclusive of the expansion capital).

Ore Reserve Estimate

The maiden Ore Reserve Estimate for the project was announced on the 13 June 2016. The Ore Reserve statement declared 20.6 Mt of Proven and Probable Reserves at an average grade 0.68% Nb₂O₅. Importantly, all mill feed within the first 10 years of the planned production schedule are now classified as Ore Reserves. The details concerning the Ore Reserve Estimate are presented in the announcement entitled 'Ore Reserves for Panda Hill Declared' which is available to view on www.cradleresources.com.au.

Front End Engineering and Design (FEED)

A comprehensive FEED program was developed and the accounting and cost reporting system finalised. The FEED program was accepted by the Board of Panda Hill Tanzania Ltd (PHT) and a revised FEED budget approved.

The following consultants have been appointed to support the FEED program:

- MDM (Amec Foster Wheeler) – FEED Management and detailed engineering design
- Sound Mining Services – Mining and Mineral Resource Management activities
- SLR Consulting – tailings dam design and water management
- ProProcess Consultants – leaching design

- Minopex – plant operation and maintenance

Marketing

Marketing and product off-take agreements are being coordinated by the Denham-backed Pangea team out of South Africa.

Marketing and off take discussions are underway with parties across four separate regions. It is anticipated that the off take agreements will be finalized in the next few months subsequent to review by the lenders and the PHT Board.

Financing

Debt financing for the project is also being coordinated by the Pangea team. The PHT Board approved the budget proposed to obtain the financing for the project.

The PHT Board also approved the appointment of a project debt arranger in respect of senior loans of up to approximately US\$100M. The work has commenced on the process which is to be executed in three phases being (1) the submission of a detailed indicative term sheet, (2) the agreement of a final term sheet, and (3) the application and approval process.

An independent engineer has been appointed to execute the lenders' due diligence. Site visits by the Environmental, Social, Mining and Resource consultants were undertaken at the end of June. Legal and other advisers will be appointed at the appropriate stage.

PHT will continue to work with other potential financiers to develop a fall-back position should the current process not be concluded successfully.

Prison Relocation

Discussions and meetings continue between PHT and the Ministry of Energy and Minerals and the Tanzanian Prison Services in order to relocate the Songwe Prison.

Technical Activity during the Quarter

Mining and Engineering Activity

The work carried out in the quarter focused primarily on the planning and initiation of activities associated with the FEED process. Specifically the following occurred during the period:

Engineering

The FEED proposal from MDM has been received and accepted. MDM have identified and mobilized a project manager and dedicated team of processing, engineering and civil staff to work on the project.

Initial activities are focused on the bulk earthworks and civil designs and front end of the plant. A site visit was done to finalise ROM pad layout design, including primary crusher and surface stockpile layouts. Identification of adequate sources for aggregate, sand and cement were also undertaken.

Long lead mechanical equipment tender documents are under review and will be finalized for issuing in the next period.

Tailings and Water

The FEED proposal from SLR has been received and accepted. Specifically the following work has been undertaken during the period:

- Feasibility Study TSF optimisation

- Geotechnical foundation site investigation
- Continuation of conceptual TSF layout modelling
- Start of the high level costing of the conceptual TSF layouts
- Discussions with geotechnical laboratories with respect to samples being delivered to the laboratory
- Inclusion of the TSF supernatant water pool variation over LOM utilising HydroCad in the design of the TSF wall.
- Start of the collapse potential modelling based on the PFS, FS and FEED geotechnical investigational work.
- Start of the modelling of the perched water table and foundation conditions.
- Further discussions with regards to water abstraction from Songwe River and a ground water well field.
- Liaison with MDM with regards to the mine water balance.
- Modelling of a conceptual plant PCD within the allocated MDM area.

Mining

Sound Mining Solutions have been engaged to act as the owner's team for the project execution. During the period the geological model was reviewed. Planning has started for the optimisation of the pit as well as the haul road. This will result in a tactical mine plan for implementation as well as for the final mining contractor tender.

Mine Site Activities

A site visit was conducted by a surveying company to set out all pillar beacon positions for construction purposes. A total of five beacons were constructed at required positions.

A site visit was arranged for MDM project personnel, to familiarize themselves with the site and to finalise the ROM pad, primary crusher layout and surface stockpile position, identify suitable borrow pit material for terracing construction.

Additional FEED test pits were identified within the TSF and east of the mining lease area to obtain a better understanding of the material across these two areas. A total of twenty test pits were excavated in both areas. In addition, twenty two test pits were excavated in the new prison area for civil design and construction purposes.

The independent engineer visited site as part of the lenders due diligence process and met with the required governmental departments, including Songwe ward and council members.

Site preparation for the water bores was completed. The drilling contractor will mobilize equipment to site after all approval processes have been completed. Six water bores are planned.

Environmental, Social and Community Activities

Water flow sampling was conducted. All dust sampling has been stopped as the base line has now been determined and this will not be affected until construction commences.

Various community and stakeholder meetings were held during the June quarter, including meetings with the Mbeya National Environmental department, and various Mbeya local government, ward and council representatives so as to continue PHT's social and community involvement.

Corporate Activity during the Quarter

During the June quarter, the following corporate activity took place:

- Following release of the Cradle DFS results on 20 April 2016, of which one of the key financial results demonstrated was an NPV₁₀ (post-tax) of US\$404M, 18,750,000 Class B Performance Shares and 1,050,000 Performance Rights were converted into ordinary shares.

- On 6 May 2016, Cradle agreed to issue 750,000 unlisted options exercisable at 25 cents each on or before 31 October 2018 for part remuneration of services.
- Ian Middlemas and Robert Behets joined the Cradle board as Non-Executive Directors, bringing extensive skills and experience to the Board, and James Kelly moved from being a Non-Executive Director to an Executive Director. As part of the Board restructure, Evan Cranston and Didier Murcia stepped down from the Board.
- The Company completed a capital raising of \$2,160,000 through the issue of 8,000,000 ordinary shares at 27 cents each to sophisticated investors, and further raised an additional \$600,000 through the issue of 2,000,000 ordinary shares at 30 cents each to a strategic investor who will assist the Company with its future international marketing and development capital raising endeavours. As part of the placement terms, the Company agreed to issue at no additional cost 2,000,000 unlisted options exercisable at 30 cents each on or before 30 June 2018. This capital raising ensures that Cradle is sufficiently funded to meet its likely working capital requirements until the Panda Hill project secures expected debt and equity funding and a decision to mine, including the final instalment of consideration owed to the project vendor due to be paid in September 2016 (Cradle's 50% share is US\$1.5M).

Tenement Summary

As at 30 June 2016, Panda Hill Tanzania Ltd, the joint venture company owned 50% by Cradle and 50% by Tremont Investments Limited, held the following interests in tenements:

| Project | Tenement Number | Percentage Interest |
|------------------------------|-----------------|---------------------|
| Panda Hill Niobium, Tanzania | ML237/2006 | 100% |
| Panda Hill Niobium, Tanzania | ML238/2006 | 100% |
| Panda Hill Niobium, Tanzania | ML239/2006 | 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 and has recently completed the construction of a new international airport.

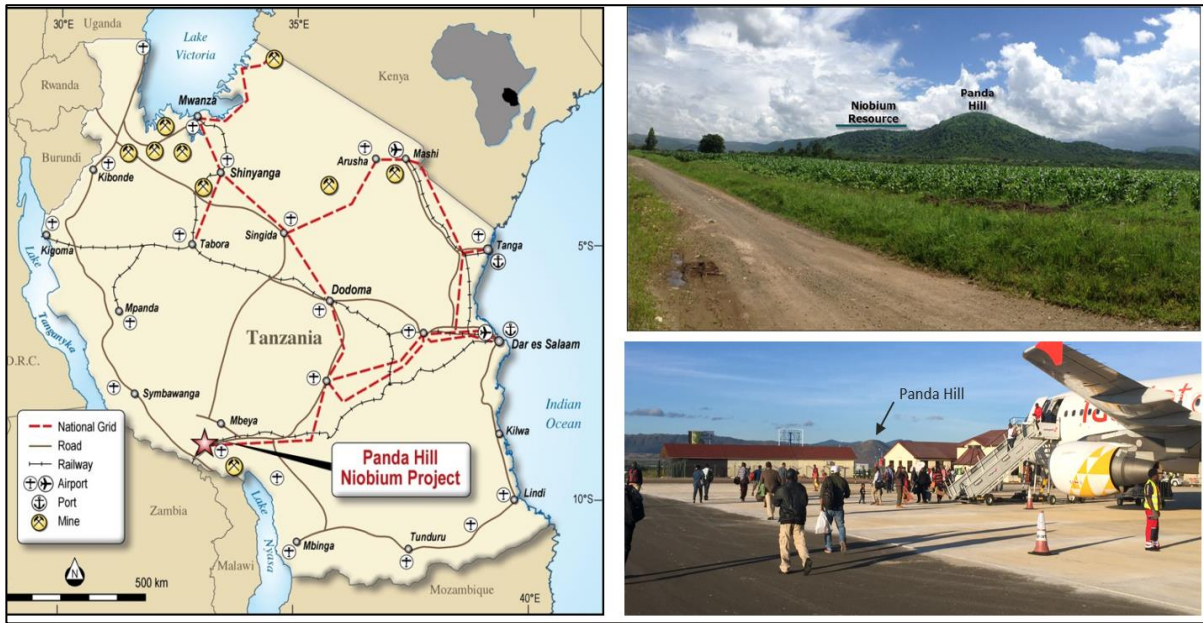


Figure 2: Location of the Panda Hill Niobium Project

The Project is covered by three granted Mining Licences (Figure 3) 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 were all renewed in the December 2015 quarter for a further 10 year period (valid until November 2026).

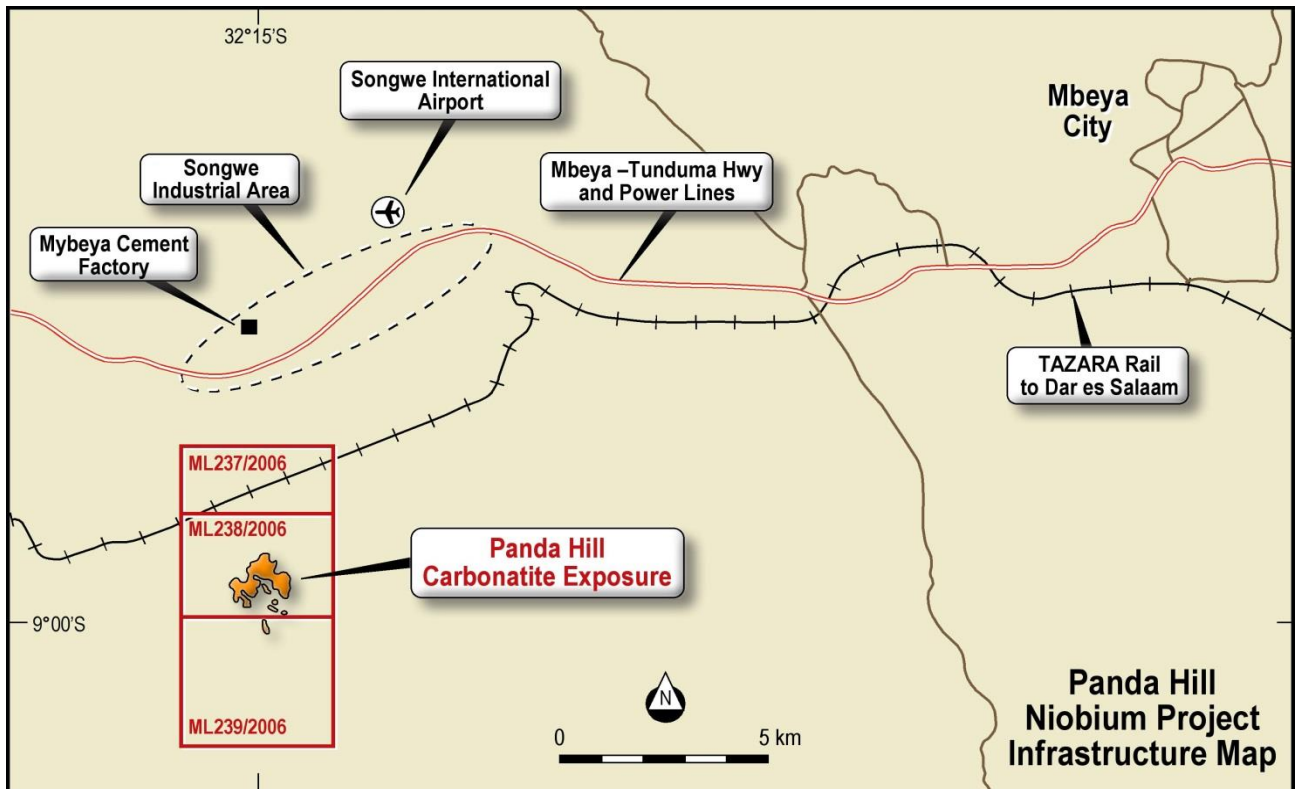


Figure 3: Mining Licences and Local Infrastructure

Competent Person's Statement

The information in this document relating to the Panda Hill Mineral Ore Reserve is extracted from the announcement entitled 'ORE RESERVES FOR PANDA HILL DECLARED' dated 12 June 2016 and is available to view on www.cradleresources.com.au. The information in this document relating to the Panda Hill Definitive Feasibility Study is extracted from the announcement entitled 'DEFINITIVE FEASIBILITY STUDY ON PANDA HILL' dated 20 April 2016 and is available to view on www.cradleresources.com.au. The information in this document relating to the Panda Hill Mineral Resources is extracted from the announcement entitled 'Significant Resource Upgrade for Panda Hill Niobium Project' dated 30 April 2015 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 announcements 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 announcements.

By order of the Board