

PROSPECT PRODUCES BATTERY GRADE LITHIUM CARBONATE FROM ARCADIA PETALITE

LITHIUM CARBONATE PILOT PLANT CONSTRUCTION UNDERWAY

Highlights:

- **Battery grade >99.5% lithium carbonate produced in Prospect Resources' custom laboratory, Kwekwe, Zimbabwe**
- **Notable metallurgical high lights:**
 - *In-house Ion Exchange process being optimised*
 - *7.8 kg of crude lithium carbonate and just under 1 kg of battery grade lithium carbonate produced to date*
 - *Ongoing process optimisations are being implemented in the design of the pilot plant*
- **The Prospect lithium carbonate pilot plant construction is well underway with commissioning expected by end of 2017**
- **The pilot plant is expected to produce around 100 kg per month of battery grade lithium carbonate from petalite rich ores mined at the Prospect Arcadia Mine**

About the Arcadia Lithium Deposit: Arcadia is the largest JORC Code reported lithium deposit in Africa, comprising ~808 000t contained lithium oxide (over ~2 000 000t contained lithium carbonate equivalent or LCE).

Prospect Resources has been modifying an existing laboratory complex at the Chaka Mine in the Kwekwe area for the past four months. The laboratory mandate is as follows:

- To recruit and train a suitably qualified team of assayers, chemists and engineers proficient in all aspects of lithium identification, sampling and assaying in preparation for a grade control situation in the production environment;
- To develop the in-house capacity to carry out various lithium oxide floatation and recovery processes with a view to continually optimise recoveries of our concentrates;
- To develop and implement a laboratory scale lithium carbonate production process to demonstrate the amenability and viability of converting the Arcadia 4% Petalite concentrates into battery grade lithium carbonate;
- To build and optimise a 100kg per month lithium carbonate pilot plant converting petalite concentrates into lithium carbonate.

The company is delighted to announce these results which demonstrate the success of the programme.

In response to these results, Mr Hugh Warner (Chairman) had the following to say: "As far as we are aware, this is the first time battery grade lithium carbonate has been produced in Zimbabwe, or anywhere else in southern Africa. Achieving a battery grade within such a short period of time is exceptional. This is a great validation of the technical capability of our team."

Figure 1 - Battery Grade Lithium Carbonate



Figure 2 – Decrepitated Petalite Rich Ore Prior To Milling



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Competent Person's Statement

The information in this announcement that relates to the production of lithium carbonate and the process plant design is based on information compiled by or under the supervision of Mr Lee W John, General Manager. Mr John is registered as a Competent Person who is a fellow of The Australasian Institute of Mining and Metallurgy (FAusIMM CP) and is Fellow with The South African Institute of Mining and Metallurgy (FSAIMM) and is registered as a Professional Engineer with the Engineering Council of South Africa (Pr. Eng. ECSA). Mr John is also the Principle Engineer of BioMetallurgical and has sufficient experience which is relevant to the project under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code. Mr John consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.