Kibaran Resources Limited: Battery Graphite Flowsheet Optimised Planned Output Trebled to 20,000tpa

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Battery Graphite Flowsheet Optimised
Planned Output Trebled to 20,000tpa

Kibaran Resources Limited ("Kibaran" or the "Company") (ASX: KNL), is pleased to announce that it has completed the additional optimisation testwork for the recently announced[1] purification process in relation to the production of battery (spherical) grade graphite from its Epanko Graphite Project ('Epanko'). The Company has also varied the terms of reference for the feasibility study to incorporate the benefits of the new purification process and has trebled its planned output, based on positive feedback from its strategic partners.

HIGHLIGHTS

- Optimisation testwork completed to validate new process flowsheet.

- Proprietary graphite purification method uses non-toxic chemicals, eliminating the typical use of hydrofluoric acid.

- First product from new flowsheet to be assessed by leading anode manufacturer in Asia.

- Positive customer feedback and increased demand has led to a trebling of battery (spherical) grade graphite.

- Feasibility study base case production rate to ramp-up from 6,000tpa initial start up to 20,000tpa.

- Low capital and operating costs expected from the unique purification with feasibility study expected to be finalised during December quarter.

- Comprehensive demand model of world leading anode manufacturers completed.

- Discussions advancing with other leading major battery anode manufacturers in Asia.

The optimisation testwork recently completed confirms the positive results of Kibaran's new purification process, using simple chemicals that are readily available in Tanzania and without the need for hydrofluoric ('HF') acid, an acid currently used by producers of battery natural spherical graphite globally.

The commercial significance of this new development has the potential to double the value of Epanko, given every lithium-ion battery that uses purified natural graphite will have been subjected to HF. HF is a highly toxic, corrosive and environmentally dangerous chemical due to the fluoride ion readily penetrating the skin, causing destruction of deep tissue layers and bone.

A product sample has now been produced using this new flowsheet process and the results have exceeded the specifications required by leading major battery anode manufacturers in Asia.

Andrew Spinks, Managing Director stated: "The purification results are revolutionary given the elimination of hydrofluoric acid. We remain confident that this will significantly assist the company to secure a major share of the market and given expected growth, this will lead to a significant increased growth at both the mine and battery manufacturing facility."

[1] Refer to ASX Announcement 26 September 2017.

Table 1 - XP-SPG 14.5 Product - Physical results:

Grade	SPG 14.5
Carbon Content	99.98%
Ash	0.02%
Moisture	0.10%
d10	9.8 micron
d50	14.8 micron
d90	22.3 micron
SSA	7.8 m2/g
Tap Density	0.95 g/ml

Kibaran has increased the planned production rate of battery graphite, which will ramp-up from 6,000tpa to reach 20,000tpa based on the battery anode demand model completed after receiving positive feedback during recent meetings with major anode manufacturers in Asia.

This expansion is supported by the major Japanese and Korean anode manufacturers expected future demand requirements, where growth is expected to be between 300% to 400% by 2020. The Company is targeting future production sufficient to supply 30% of this demand, based on the positive feedback and interest it has received from prospective customers.

The Company's battery (spherical) grade graphite is now being assessed by major battery anode manufacturers which represent over 90% of the battery market. Domestic demand from within China is expected to double by 2018 which will be another catalyst for additional production that meets battery anode specifications outside of China.

Kibaran believes an eco-friendly production process for battery graphite will be a key future requirement from anode material and battery producers and it is now well positioned to lock in further agreements to allow the processing to ramp up efficiently.

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