# KALIUM

#### **ASX** Release

21 November 2017

## **Beyondie SOP Project and Company Update**

Kalium Lakes Limited (KLL or the Company) is pleased to provide an update on progress at the Beyondie Sulphate Of Potash Project (Beyondie) as well as other business activities.

Following the release of the results the Pre-Feasibility Study for Beyondie together with the announcement of the Maiden Probable Reserve of 2.66 Mt @ 14,210 mg/l Sulphate Of Potash (SOP) at a cut-off grade of 3,500mg/l K for Beyondie, the Company has:

- commenced work on the Bankable Feasibility Study for the Project:
- continued operation of the large scale pilot evaporation ponds, which are currently following the expected brine concentration / salt crystallisation sequence developed by DSB International, K-UTEC AG Salt Technologies (K-UTEC) and DRA Global (see images below);
- purchased a small salt harvester (similar to image below) to trial salt collection methods when working with the large scale pilot ponds, which have accumulated salts to a depth of between 20-80 mm in less than three months of operation;
- estimated that more than 3,000 tonnes of salts have precipitated in the large scale pilot evaporation ponds which equates, after harvesting and purification, to approximately 170 tonnes of SOP;
- commenced steps to start purification plant trials at K-UTEC in Germany during the next quarter using recently harvested salts from the large scale pilot ponds;
- prepared for the EcoMag Limited (EcoMag) pilot trial to recover Hydrated Magnesium Carbonate (HMC) from the waste bitterns, with testing anticipated to commence during the first quarter of the 2018 calendar year:
- lodged the required Environment Protection and Biodiversity Conservation Act 1999 (Cth) and Environmental Protection Act 1986 (WA) submissions for the next phase of the Project;
- continued to actively pursue off-take MOUs, particularly following discussions with interested parties at the 2017 International Fertilizer Association Conference in Shanghai;
- completed a number of benchmarking site visits to international brine operations;
- announced the appointment of Frederick Kotzee as Chief Financial Officer and appointed BurnVoir Corporate Finance to commence the process of arranging project financing for the development of the Project; and
- initiated site works at the Carnegie Project, Kalium Lakes' joint venture potash exploration project with BC Iron Limited, following the receipt of necessary approvals to allow site exploration activities to be undertaken.

Managing Director, Brett Hazelden, observed: "With the completion of a robust Pre-Feasibility Study, the establishment of a Maiden Probable Reserve and the large scale pilot ponds producing the anticipated volume of salts in the planned sequence, Kalium Lakes is set to move rapidly through the next development phases of the Project and deliver its near-term goal of becoming the first Australian SOP producer.

"The pilot scale activities are providing vital information that will be incorporated into the Bankable Feasibility Study and we will also be able to expand those activities for the full scale development requirements.

"Everyone at the Company remains focussed on implementing Kalium Lakes' development strategy and each small achievement contributes to further de-risking the Project.

"We are pleased that Kalium Lakes has continued to demonstrate its capacity to meet or exceed requirements needed to develop a world class project, obtain statutory approvals and efficiently install and operate purpose-built infrastructure in order to achieve its goals," Mr Hazelden said.





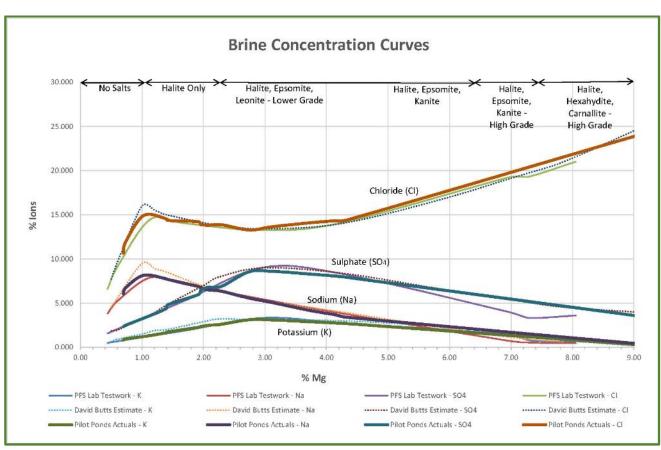
Large Scale Pilot Evaporation Ponds North-Western View – November 2017



Large Scale Pilot Evaporation Ponds South-Eastern View – November 2017



**Brine Concentration Graph** 



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### Pilot Scale Purification Facilities – K-UTEC (Germany)





Small Salt Harvester (Similar Model)



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#### Shallow Surface Trench and Production Bore with Pumps





#### **Compliance Statement**

The information in this document that relates to Mineral Resource and Ore Reserve Estimates has been extracted from the report(s) listed below.

 3 October 2017: Pre-Feasibility Study with Maiden Ore Reserve Confirms Low Cost, Long Life and High Margin Beyondie SOP Project. (Including the attachment, JORC (2012) and NI 43-101 Technical Report, compiled by German Potash Experts and Competent Persons, K-UTEC AG Salt Technologies (K-UTEC)).

The report(s) are available to be viewed on the website at: www.kaliumlakes.com.au

Kalium Lakes confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and, in the case of estimates of Mineral Resources and 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.

#### **Cautionary Statement Regarding Forward-Looking Information**

Statements regarding plans with respect to the Company's mineral properties may contain forward looking statements. Statements in relation to future matters can only be made where the Company has a reasonable basis for making those statements. This announcement has been prepared in compliance with the current JORC Code 2012 Edition and the current ASX Listing Rules. The Company believes it has a reasonable basis for making the forward-looking statements in this announcement (the information of which has been extracted from the Pre-Feasibility Study announcement dated 3 October 2017), including any production targets, based on the information contained in the announcement and in particular the JORC 2012 and NI 43-101 Technical Report.

All statements, trend analysis and other information contained in this document relative to markets for Kalium Lakes, trends in resources, recoveries, production and anticipated expense levels, as well as other statements about anticipated future events or results constitute forward-looking statements. Forward-looking statements are often, but not always, identified by the use of words such as "seek", "anticipate", "believe", "plan", "estimate", "expect" and "intend" and statements that an event or result "may", "will", "should", "could" or "might" occur or be achieved and other similar expressions. Forward-looking statements are subject to business and economic risks and uncertainties and other factors that could cause actual results of operations to differ materially from those contained in the forward-looking statements. Forward-looking statements are based on estimates and opinions of management at the date the statements are made. Kalium Lakes does not undertake any obligation to update forward-looking statements even if circumstances or management's estimates or opinions should change. Investors should not place undue reliance on forward-looking statements.

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#### Corporate Profile (as at 21 November 2017)

Kalium Lakes Limited is an exploration and development company, focused on developing the Beyondie Sulphate Of Potash Project in Western Australia with the aim of producing Sulphate of Potash (SOP) for the domestic and international markets.

The Beyondie SOP Project comprises 15 granted exploration licences and a miscellaneous licence covering an area of approximately 2,400 square kilometres. This sub-surface brine deposit will supply an evaporation and processing operation located 160 kilometres south east of Newman.

The results of the Pre-Feasibility Study (PFS), announced on 3 October 2017, confirmed that the Project, is technically and financially robust. The key outcomes of the PFS are:

- Indicated Resource of 4.37 Mt @ 14,000 mg/l SOP at a cut-off grade of 3,500mg/l K and an Inferred Resource of 13.74 Mt @ 12,788 mg/l SOP at a cut-off grade of 3,500mg/l K.
- Maiden Probable Reserve of 2.66 Mt @ 14,210 mg/l SOP at a cut-off grade of 3,500mg/l K based solely within the Stage 1 Approval Footprint, which represents ~21% of total lake surface area within the tenement package.
- Development base case of 150 ktpa SOP, with the option to incrementally phase the project, through a ramp up from 75 ktpa to 150 ktpa SOP, to minimise operational and financial risks.
- Development base case pre-tax NPV<sub>10</sub> of A\$388M, IRR of 28.7%, average EBITDA of A\$83 Mpa, EBITDA margin of 62%, a payback period of 3.7 years and Life of Mine (LOM) free cash flows of more than +\$1B, based on an initial 21 year LOM and a US\$500/t SOP sales price @ \$A/\$US exchange rate of 0.75.
- Estimated LOM Operating Cash Cost of A\$244-253/t SOP FOB Geraldton or Fremantle Port. This places the BSOPP in the lowest quartile cost of global SOP production.
- Pre-production Capital Cost of A\$220 million including a 78 kilometre gas pipeline for the base case or A\$124 million for the phased ramp-up scenario.
- Potential additional revenue associated with recovery of magnesium by-products which have not been included in the current financial outcomes.

The Company is also a Joint Venture partner with BC Iron Limited (BCI) in the Carnegie Potash Project, a potash exploration project located approximately 220 kilometres north-east of Wiluna. Carnegie comprises one granted exploration licence and two exploration licence applications covering a total area of approximately 1,700 square kilometres.

#### Kalium Lakes Limited

ABN: 98 613 656 643

ASX: KLL

Ordinary Shares on Issue: 135,030,035

Board of Directors: Chief Financial Officer

Mal Randall Non-Executive Chairman Frederick Kotzee

Brett Hazelden Managing Director

Rudolph van Niekerk Executive Director Company Secretary:

Brendan O'Hara Non-Executive Director Gareth Widger

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