

## ASX Release

11 December 2014

### Company Details

ASX Code:	STB
Share Price	\$0.18
Market Cap	\$25M
Shares on issue	139M
Company options	28M
Cash at Bank	\$9M

### Contact Details

#### Managing Director

Paul Donaldson

#### Address

Ground Floor, 31 Ventnor Avenue  
West Perth WA 6000

PO Box 970  
West Perth WA 6872

#### Telephone

+61 8 6315 1444

#### Facsimile

+61 8 9486 7093

#### Email & Web Page

info@southbouldermines.com.au  
www.southbouldermines.com.au

## Pilot Testing Begins for Colluli Potash Project

South Boulder Mines (ASX: STB) ("South Boulder" or "the Company") is pleased to advise it has commenced pilot testing of the Colluli process design at the Saskatchewan Research Council in Saskatoon, Canada.

The testing is being conducted under the supervision of Global Potash Solutions. This work follows pre-feasibility design testwork, which was done as bench scale testing (refer to ASX announcement dated 6<sup>th</sup> October 2014).

The pilot plant will provide the following critical information:

1. Confirmation of the potassium sulphate (SOP) tonnes per seawater tonne
2. Confirmation of decomposition kinetics
3. Confirmation of precipitation kinetics and retention time
4. Enhancement of particle size
5. Samples for marketing

Importantly, the pilot plant will utilise potassium bearing salts from the Colluli resource. Samples were dispatched to the test facility and preparation for pilot plant testing has been completed.

South Boulder Managing Director, Paul Donaldson, said:

"We are pleased that we have been able to develop the test program and commence its execution well ahead of the pre-feasibility study completion. This will allow a seamless integration of the pilot plant data with the definitive feasibility study design and final costings.

"Given the process is relatively simple, and commercially proven, the pilot plant is simply an exercise to ensure all of the plant equipment is correctly sized for the final process."

Commercial grade SOP was produced at the Saskatchewan Resource Council from Colluli salts in October (refer to ASX announcement dated 22<sup>nd</sup> October 2014).

South Boulder expects the Colluli PFS to be complete in February 2015.

#### More information:

**Email:** info@southbouldermines.com.au

**Website:** www.southbouldermines.com.au

**South Boulder Mines Limited:** Telephone +61 8 6315 1444

**ABN:** 56 097 904 302

Paul Donaldson  
**MANAGING DIRECTOR**

Amy Just  
**COMPANY SECRETARY**

## About South Boulder Mines Ltd

South Boulder is an ASX-listed (ASX: STB) resources company currently developing the emerging, world-class Colluli Potash Project located in Eritrea, Africa. The Colluli Potash Project is located in the Danakil Depression region of Eritrea ~65km from the coast comprising approximately 500km<sup>2</sup>. South Boulder Mines Limited has been actively exploring for potash at the Colluli Potash Project in Eritrea since 2009. Colluli is the world's shallowest potash deposit (starting at 16m), facilitating the low capex open pit mining and favourably positioned to supply the world's fastest growing markets.

The JORC/NI43-101 Compliant Mineral Resource Estimate for the flagship Colluli Potash Project now stands at 1.08 billion tonnes @ 18% KCl for 194Mt of contained potash. Substantial project upside exists in higher production capacity and market development for other contained products. Engineering Scoping Study (ESS) results were favourable, proving that an economic 2Mt p.a. potash mine can be built at a materially lower cost than typical potash development. The start-up capital cost for Colluli is one of the lowest in the industry; couple this with cheap expansion capability via open pit mining methods, excellent infrastructure and location, and it becomes even more attractive, ensuring South Boulder gains a high level of investment interest for the long term. South Boulder Mines Ltd is working steadily towards developing the world's first, modern, open pit potash mine.

## Competent Persons and Responsibility Statement

The Colluli Potash Project has a current JORC/NI43-101 Compliant Measured, Indicated and Inferred Mineral Resource Estimate of 1,079.00Mt @ 17.97% KCl or 11.35% K<sub>2</sub>O (total contained potash of 194.09Mt KCl or 122.61Mt K<sub>2</sub>O). The resource contains 261.81Mt @ 17.94% KCl or 11.33% K<sub>2</sub>O of Measured Resources, 674.48Mt @ 17.98% KCl or 11.36% K<sub>2</sub>O of Indicated Resources and 143.50Mt @ 18.00% KCl or 11.37% K<sub>2</sub>O of Inferred Resources.

This information was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported by independent consultants ERCOSPLAN and announced by South Boulder on 16 April 2012.

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Greg Knox using estimates supplied by South Boulder Mines Ltd under supervision by Ercosplan. Dr Henry Rauche and Dr Sebastiaan Van

Der Klauw are co-authors of the JORC and NI43-101 compliant resource report. Greg Knox is a member in good standing of the Australian Institute of Mining and Metallurgy and Dr.s' Rauche and Van Der Klauw are members in good standing of the European Federation of Geologists (EurGeol) which is a "Recognised Overseas Professional Organisation" (ROPO). A ROPO is an accredited organisation to which Competent Persons must belong for the purpose of preparing reports on Exploration Results, Mineral Resources and Ore Reserves for submission to the ASX.

MrKnox, DrRauche and Dr Van Der Klauw are geologists and they have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they have undertaken to qualify as a Competent Person as defined in the 2004 Edition of the "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Knox, Dr Rauche and Dr Van Der Klauw consent to the inclusion in the report of the matters based on information in the form and context in which it appears.

## Quality Control and Quality Assurance

South Boulder Exploration programs follow standard operating and quality assurance procedures to ensure that all sampling techniques and sample results meet international reporting standards. Drill holes are located using GPS coordinates using WGS84 Datum, all mineralisation intervals are downhole and are true width intervals. Assay values are shown above a cut-off of 6% K<sub>2</sub>O. The samples are derived from HQ diamond drill core, which in the case of carnallite ores, are sealed in heat sealed plastic tubing immediately as it is drilled to preserve the sample. Significant sample intervals are dry quarter cut using a diamond saw and then resealed and double bagged for transport to the laboratory. Halite blanks and duplicate samples are submitted with each hole. Chemical analyses were conducted by Kali-UmwelttechnikGmbH Sondershausen, Germany utilising flame emission spectrometry, atomic absorption spectroscopy and ionchromatography. Kali- Umwelttechnik (KUTEC) Sondershausen<sup>1</sup> have extensive experience in analysis of salt rock and brine samples and is certified according to DIN EN ISO/IEC 17025 by the Deutsche AkkreditierungssystemPrüfwesen GmbH (DAR). The laboratory follow standard procedures for the analysis of potash salt rocks chemical analysis (K<sup>+</sup>, Na<sup>+</sup>, Mg<sup>2+</sup>, Ca<sup>2+</sup>, Cl<sup>-</sup>, SO<sub>4</sub><sup>2-</sup>, H<sub>2</sub>O) and X-ray diffraction (XRD) analysis of the same samples as for chemical analysis to determine a qualitative mineral composition, which combined with the chemical analysis gives a quantitative mineral composition.