

ASX Release

21 July 2014

Company Details

ASX Code:	STB
Share Price	\$0.16
Market Cap	\$21M
Shares on issue	129M
Company options	21M
Cash at Bank	\$9M

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Company Update

South Boulder Mines (ASX: STB) is focused on developing the Colluli Potash Project in Eritrea. The project is a 50/50 joint venture with the Eritrean National Mining Company (ENAMCO). STB and ENAMCO each own 50% of the joint venture company known as the Colluli Mining Share Company (CMSC).

This announcement has 3 main objectives.

1. To consolidate and summarize the important information released to the market over the past 12 months about the development plan for the Colluli Potash Project including information about the significant positive change in strategic direction.
2. To give an overview of the work program for the next 12 to 18 months during which the important development milestones of prefeasibility and definitive feasibility study will be completed.
3. Address some common misunderstandings/misapprehensions with regard to the relationship between ENAMCO and South Boulder.

During the 2013/2014 financial year many important and positive steps were taken by CMSC for the development of the Colluli resource. These include the finalisation of the CMSC shareholders agreement, re-evaluation of resource development options for the project, and the allocation of the transport corridor and land for the product export facility.

Our belief in the robust and attractive nature of the Colluli Potash Project is based on a thorough understanding of the joint venture relationship, and on some very positive undeniable facts about the Colluli deposit.

- It is a very large, long life, at surface deposit that is highly amenable to open pit mining methods.
- It is in close proximity to the Red Sea shipping corridor. Only 75km separates the mine site and the coastline.

- It is close to existing in country port facilities. Only 180km separates Colluli and the Massawa port in Eritrea and the areas are mostly linked by the unsealed coastal highway.
- The climate and topography at Colluli and between the deposit and the coast are extremely favorable for an open pit mining operation, solar evaporation and easy transportation.

These attributes and the unique combination of potassium bearing salts at Colluli, mean that the deposit is highly suitable for a modular development approach, producing a premium potash product under which up front capital costs and early development stage risks can be well managed.

South Boulder and ENAMCO have recently commenced discussions with a number of 3rd parties interested in becoming involved in the Colluli Potash Project. These discussions are at an early stage or subject to confidentiality agreements.

The Colluli Potash Project

The Colluli resource is a unique combination of potassium bearing salts suitable for the production of potassium fertilisers commonly known as potash. The resource itself is very large at 1 billion tonnes of potassium salts and has a current JORC Compliant Measured, Indicated and Inferred Mineral Resource Estimate comprised of 261.81Mt @ 17.94% KCl or 11.33% K₂O of Measured Resources, 674.48Mt @ 17.98% KCl or 11.36% K₂O of Indicated Resources and 143.50Mt @ 18.00% KCl or 11.37% K₂O of Inferred Resources for a total of 1,080 Mt @ 18.0% KCl or 11.35% K₂O (total contained potash of 194.09Mt KCl or 122.61Mt K₂O).^[1]

Occurrence	Tonnes (Mt)	Equivalent KCl	Contained KCl (Mt)
Sylvinite(KCl.NaCl)	110	28.4%	31
Polysulphate(K ₂ SO ₄ .NaCl.MgSO ₄ .H ₂ O)	65	10.8%	7
Carnallite(KCl.MgCl ₂ .H ₂ O)	309	12.3%	38
Kainitite(KCl.MgSO ₄ .H ₂ O)	597	19.8%	118
Total	1,080	18.0%	194

Table 1: Colluli JORC-Compliant Mineral Resource Estimate by potash mineral

Note: The information above 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 on ASX by South Boulder on 16 April 2012.

There are two dominant potash forms traded in the global fertiliser market. These are:

- potassium chloride, commonly known as Muriate of Potash (**MOP**); and
- potassium sulphate, commonly known as Sulphate of Potash (**SOP**).

These potash types have different purposes and supply-demand dynamics. Potassium chloride (MOP), the more common form of potash, is primarily used for staple foods such as cereals and maize, whereas potassium sulphate (SOP) is suited to chloride intolerant crops such as fruit, vegetables and coffee. Potassium sulphate (SOP) sells at a substantial premium to potassium chloride (MOP). The current premium is over \$300 per tonne (approximately twice the MOP price). SOP has limited production centres relative to MOP.

The original development path for Colluli focussed on the production of potassium chloride (MOP) from the most common salt mineral used for its production, sylvinite. With reference to Table 1, Sylvinite represents only 10% of the potassium bearing salts and 16% of the potassium chloride within the resource.^[1]

Our revised approach, which focusses on full resource exploitation, considers all potassium bearing salts within the resource. The composition of the resource allows not only the production of potassium chloride (MOP), but by mining and combining all potassium bearing salts the production of potassium sulphate (SOP), which of itself, is a more suitable product to be produced from the resource. This combination substantially reduces mining strip ratios and materially reduces mining costs (over \$100 per tonne of product relative to the original feasibility study case). Coupled with the premium for potassium sulphate (SOP), the increased revenue per tonne of product sold and the lower mining costs, should substantially improve the project economics relative to the initial development case.^[2]

Following various studies on the new development approach over the past 12 months, we have engaged appropriate industry consultants to execute process testing to support the design of a plant capable of processing all salts. Upon completion of the process test work, we intend to complete a pre-feasibility study allowing us to marry the processing costs with the revised mine planning work.

This work is progressing well and expected to be completed by the end of this calendar year.

^[1] ASX Announcement, 21st March, 2013 'Colluli Potash Project, Updated Economics'

^[2] ASX Announcement, 6th February 2014, 'Positive Results from Colluli Processing Review'

Work Program over the next 12 to 18 months

Feasibility work has commenced to support the alternate processing strategy. This includes laboratory testing of specific components of the processing plant, infrastructure and mining design. Terms of reference are currently being formulated for pilot testing of the process design.

Key items to be addressed over the next 12 months include:

1. Liberation and mineralisation tests
2. Laboratory scale processing tests
3. Finalisation of the process plant design
4. Piloting relevant sections of the processing plant
5. Transfer of the resource model from Ercosplan to AMC Consultants
6. Finalisation of the mining method based on material characterisation work
7. Infrastructure design
8. Capital and operating costs versus processing plant size (pre-feasibility and feasibility level)
9. Submission of baseline environmental studies

Of particular importance is the consolidation of the management of all of the project work streams to Perth which has an immediate cost benefit and has positively impacted delivery times.

Colluli Mining Share Company – Joint Venture

In November 2013 South Boulder Mines and ENAMCO finalised the terms of the joint venture shareholders agreement establishing and governing the operation of CMSC which is responsible for the development of the Colluli Project.

The JV Company, CMSC is owned

South Boulder	50%
ENAMCO	50%

and regulated by a shareholders' agreement.

The structure of the joint venture agreement and South Boulder's obligations is commonly misunderstood and the following question and answer set has been provided to clarify the arrangement.

1. Is South Boulder Mines responsible for funding the development costs of the project?

The joint venture company will seek to fund the initial project development costs with a mixture of debt (up to 70%) and equity. The debt will be on appropriate market terms. Any shortfall in the debt component will be underwritten by STB on market terms with repayment and security consistent with third party debt.

The 30% equity component is an obligation of STB. After third party debt is serviced (including any STB underwritten debt), 50% of the equity contribution of STB will be preferentially repaid to it from 50% of cash flow. The remaining 50% will then be split across the joint venture owners.

The funding situation after first commercial production is referred to in point 2.

Any perception that STB is putting up all the capital and not having this repaid other than out of its share of profit is manifestly wrong.

2. What happens after first commercial production?

Once commercial production commences, future funding, as the project moves through its modular stages is the responsibility of the Joint Venture Company as a whole.

3. Why is this arrangement different to other mining arrangements in Eritrea based on the Eritrean Mining Proclamation?

This was a deal that was negotiated based on the scale and strategic nature of the project, the desire of ENAMCO to constructively participate and where appropriate, facilitate key aspects of the development. We see Colluli as a platform for growth to become a major production center of significance and this alliance with ENAMCO will give substantial impetus in this regard.

4. How is the relationship between South Boulder Mines and ENAMCO?

We have a strong and effective relationship with ENAMCO, with each partner having real roles of contribution.

The Colluli Mining Share Company board comprises 5 members, 3 from South Boulder (including the chairmanship) and 2 from ENAMCO. The benefits of the relationship are becoming more apparent as we commence discussions on surrounding key infrastructure such as supply roads, and funding avenues for the first phase of the project.

In summary:

- Colluli is a large potassium bearing resource containing over 1 billion tonnes of mineralised potassium salts
- The shallow mineralisation gives the project a significant advantage with regard to upfront capital development costs
- The resource is in close proximity to a significant shipping corridor
- The resource is suitable for the production of potassium sulphate which carries a substantial premium to potassium chloride
- The revised development strategy of processing all forms of potassium bearing salts reduces mining costs significantly
- Process testing of salts from Colluli has commenced to determine the most suitable processing circuit
- This work will be used to complete a pre-feasibility study which will be followed by a definitive feasibility study
- Our relationship with ENAMCO is excellent and we are working together through the Colluli Mining Share Company board to develop the project as soon as possible
- We believe that the project has a positive future and will be a significant platform for growth



Seamus Cornelius
Chairman



Paul Donaldson
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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 500km². 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% K₂O (total contained potash of 194.09Mt KCl or 122.61Mt K₂O). The resource contains 261.81Mt @ 17.94% KCl or 11.33% K₂O of Measured Resources, 674.48Mt @ 17.98% KCl or 11.36% K₂O of Indicated Resources and 143.50Mt @ 18.00% KCl or 11.37% K₂O 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.

Mr Knox, Dr Rauche 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% K₂O. 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-Umwelttechnik GmbH Sondershausen, Germany utilising flame emission spectrometry, atomic absorption spectroscopy and ionchromatography. Kali- Umwelttechnik (KUTEC) Sondershausen¹ have extensive experience in analysis of salt rock and brine samples and is certified according by DIN EN ISO/IEC 17025 by the Deutsche Akkreditierungssystem Prüfwesen GmbH (DAR). The laboratory follow standard procedures for the analysis of potash salt rocks chemical analysis (K⁺, Na⁺, Mg²⁺, Ca²⁺, Cl⁻, SO₄²⁻, H₂O) 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.