ASX Release

Corporate Details		
ASX Code:	STB	
Germany:	SO3-Fra	
OTC/ADR:	SBMSY	
Share Price:	\$0.390	
Market Cap:	\$49M	
Shares on issue:	126.8M	
STB Options:	16.6M	
Cash/NTA:	\$21.7M	
Top 40		

Top 40 shareholders: 65%

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Listed Equity Holdings

(ASX: MZM)	5.382M
(ASX: AVZ)	0.400M
(ASX: LTX)	1.016M
(ASX: BUX)	2.012M
(BUX options)	0.170M
(ASX: IXR)	0.448M
(CDNX: SMP.V):	2.500M
Auvex (Pte):	0.500M





CARNALLITE SCOPING STUDY COMPLETED FOR COLLULI POTASH PROJECT AND ENAMCO UPDATE

<u>Definitive Feasibility Study remains focused on 1Mtpa potash</u> production from Sylvinite mineralisation

South Boulder Mines Ltd (ASX: STB) ("South Boulder" or "The Company") is pleased to announce the completion of a positive Engineering Scoping Study ("ESS-2") on the technical aspects of the potential to mine and process the underlying Carnallite mineralisation at its Colluli Potash Project in Eritrea.

The previous Engineering Scoping Study ("ESS-1"), released in November 2011, focused on the Sylvinite mineralisation only, which forms the basis of the current Definitive Feasibility Study (DFS) scheduled for completion in 2013.

The results of ESS-2 have provided the Company with significant encouragement to conduct further assessment into the economic viability of open pit mining and processing of the Carnallite mineralisation (which is located below the Sylvinite mineralisation) to produce muriate of potash ("MOP").

While the results of ESS-2 are encouraging and highlight potential future expansion options for the Project, the scope of the current DFS will remain focused on mining and processing only the Sylvinite at a production rate of 1Mtpa of MOP. This will have lower capital intensity and a greater prospect of attracting finance.

ESS-2 has identified a number of areas that demonstrate positive technical aspects that could allow economic mining and processing of Carnallite to produce MOP as part of a potential future expansion of the Colluli Project. These include:

- Carnallite can be processed utilising solar decomposition and standard froth flotation to produce standard MOP;
- KCI recovery rates of up to 90 per cent may be achieved;
- If both Carnallite and Sylvinite are mined and processed together, the waste-to-ore strip ratio can be significantly reduced;
- Access to Carnallite could allow a significant increase in MOP production above the planned 1Mtpa; and
- Port and transport infrastructure can be expanded to allow increased capacity.

ESS-2 has been completed to a scoping level of detail in order to assess future development and potential expansion scenarios above the initial targeted production capacity of 1Mtpa of MOP from the overlying Sylvinite mineralisation. Further work on these options is planned after completion of the DFS.

In addition to the Sylvinite and Carnallite mineralisation, there is substantial Kainitite mineralisation of 597Mt at 19.8% KCl (Table 1). The Kainitite resource is subject to ongoing study to determine the most effective method of processing and marketing to produce either a K-Mg-SO₄ fertilizer or potassium sulphate ("SOP"). Production of SOP from Kainitite remains a longer term prospect, requiring a technical solution to enable processing of the ore into a saleable product.

Occurrence	Tonnes (Mt)	Equivalent KCl	Contained KCI (Mt)
Sylvinite KCI.NaCI	110	28.4%	31
Polysulphate K ₂ SO ₄ .NaCl.MgSO ₄ .H ₂ O	65	10.8%	7
Carnallite KCI.MgCl ₂ .H ₂ O	309	12.3%	38
Kainitite KCI.MgSO4.H2O	597	19.8%	118
Total	1,080	18.0%	194

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

 Note: Please see Competent Persons and Responsibility Statement on final page.

Independent potash consultants ERCOSPLAN assisted in completing ESS-2 and are lead consultants for the current DFS. ESS-2 has been completed to a +/- 40% level of accuracy. A summary of the results of ESS-2 are detailed below. The November 2011 ESS-1 results have been provided as a comparison to ESS-2 and it should be noted that ongoing DFS activities continue to refine and update all ESS-1 estimates. Opportunities have been identified to improve operating cost estimates in relation to mining selectivity and processing recoveries.

Item	ESS-1	ESS-2
	November 2011	November 2012
	Sylvinite Only	Sylvinite & Carnallite
Annual Steady State MOP	1.00	2.00
production (Mt)		
Mining Method	Open Pit	Open Pit
Processing Method	Flotation	Solar decomposition &
		flotation
Mine Life	17 Years	26 Years
Recovery (%)	80	90
Pre-production Capital USD	0.74 Bn	1.52 Bn
(incudes 15% Contingency)		
Average LOM Strip Ratio	13.7 : 1.0	6.4 : 1.0
(Waste : Ore)		
Average LOM C1 Operating	263 ¹	187 ¹
Cost USD/t		

Table 2: Colluli ESS-2 and ESS-1 comparison results.

Note: KCl is often expressed as K₂O according to the formula (KCl * 0.6317 = K₂O). The recent KCl (or MOP) contract price is estimated at around US\$ 470/t.) 1. Operating costs exclude contingency. Note operational costs in ESS-1 in early years are significantly lower than average LOM costs largely due to lower initial strip ratios

South Boulder's Managing Director Lorry Hughes said the results of ESS-2 clearly demonstrate the potential of the Colluli Project to expand above the initial targeted production level of 1Mtpa outlined in the DFS.



"The study shows that there are suitable technologies to extract potash from Carnallite mineralisation and the Project could expand under the right economic conditions. However, given the significant additional capital requirements of introducing Carnallite processing and current market conditions, the Company has decided to pursue a staged approach to development where Carnallite expansion options are only reviewed in more detail following completion of the current DFS," Mr Hughes said.

"Key findings from ESS-2 will be used and applied to the DFS to design stockpiling of waste and tailings from Sylvinite mining and processing operations so as to retain maximum optionality to pursue future expansion opportunities.

"The processing of Carnallite, which has a magnesium chloride content as well as potassium chloride, requires a slightly different treatment method to that of Sylvinite. Firstly, the ore is dissolved and the resulting brine is transferred to a series of solar evaporation ponds. Upon evaporation of water in the first pond KCI and NaCI crystallise until the brine reaches Carnallite Saturation. At this point the brine is transferred to the next pond and the KCI/NaCI crystal crop from the first pond is harvested and washed and then enriched to 95 % KCI in a similar flotation circuit as the Sylvinite ore.

"ESS-2 has demonstrated that this approach may work, but the Company will need to conduct the relevant test work to confirm its technical and economic viability.

"I am comfortable that South Boulder is taking a prudent approach by focussing on the 1Mtpa project configurations in the DFS. This allows a more achievable development size and more aggressive project timelines. ESS-2 has shown the scalability of the Colluli Potash Project and, in addition to the current DFS, South Boulder is focused on defining the scale of the Stage 1 development to find the optimum mix of capital expenditure versus commercial potash production.

"The Colluli Project is one that could evolve over many decades to include potential production from different potash minerals. However, at this stage South Boulder is firmly focussed through its DFS on the definition of an economically viable mine over the short to medium term which is capable of being financed on competitive terms."

ENAMCO UPDATE

Further to its ASX Announcement of 5 November 2012, South Boulder advises that negotiations with the Eritrean National Mining Company ("ENAMCO") are continuing regarding the Company's participation interest in the Colluli Potash Project.

In discussions ENAMCO has made it clear that it fully supports the development of the Colluli Potash Project by South Boulder and is keen to conclude negotiations to enable licensing and development to proceed in a timely and expeditious manner.

South Boulder is looking forward to negotiating a commercial deal structure for the mutual benefit of the Eritrean people and South Boulder shareholders.

Further information will be provided as it comes to hand.

-ENDS-



Investor Coverage

Recent investor relations, corporate videos and broker/media coverage on the Company's projects can be viewed on the website in the "Media Centre" and "Investor Centre" sections by following the links www.southbouldermines.com.au and www.abid.co.

About South Boulder Mines Ltd

Listed in 2003, South Boulder Mines (ASX: STB) is a diversified explorer focused on potash, nickel and gold.

The Colluli Potash Project 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 1,079.00Mt @ 17.97% KCl or 11.35% K₂O (total contained potash of 194.09Mt KCl or 122.61Mt K₂O). **This includes higher grade Sylvinite of 114.60Mt @ 28.56% KCl or 18.04% K₂O**. The current resource is included in an Exploration Target of 1.25 – 1.75 billion tonnes @ 18-20% KCl ## (see disclaimer below).

An Engineering Scoping Study for the production of 1Mt p.a. of potash demonstrated an estimated capital cost of US\$0.74bn. A Definitive Feasibility Study into open pit mining and processing of the resource is underway with initial production scheduled for 2016 or sooner. South Boulder has strong support from the Eritrean Government to build a long term, economically and environmentally sustainable resource project.

Within the Duketon Gold Project area, South Boulder entered a farm-out Joint Venture (JV) Agreement with Independence Group NL, whereby Independence can earn a 70% interest in the nickel rights on select tenements held by South Boulder in the Duketon Project, by the completion of a Bankable Feasibility Study within 5 years of the grant of the relevant tenement.

South Boulder plans to undertake a demerger of its non-potash assets, including listed investment as well as cash of \$1m, to be held in Duketon Mining Limited. The Demerger will be via in-specie distribution of 100% of the shares of Duketon Mining Limited to shareholders of South Boulder on a one for four basis, comprising about 31 million Duketon Shares to be issued.

About the Duketon Nickel Joint Venture

The Duketon Nickel Joint Venture (DNJV) has had recent success at the Rosie and C2 Nickel sulphide prospects where drilling has defined intercepts of 5.20m @ 9.2% Ni, 1.09% Cu, 0.21% Co and 7.09g/t PGE's at Rosie and 50m @ 0.92% Ni including 37m @ 1.05% Ni at C2. The deposits are located approximately 120km NNW of Laverton, WA in the Duketon Greenstone Belt. The deposits are approximately 2km apart and the mineralisation at both prospects is considered open in most directions. A Mining Lease was granted over the Rosie and C2 deposits on the 19th November 2010. A Maiden JORC Compliant Mineral Resource Estimate has been compiled for the Rosie deposit; please refer to the Company's 25th January 2012 ASX Announcement for details.

For more information Email <u>info@southbouldermines.com.au</u> or Telephone +61 8 6315 1444 Lorry Hughes, Managing Director

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. The current Mineral Resource Estimate is included in the current exploration target of 1.25 – 1.75 billion tonnes @ 18-20% KCl. The potential quantity and grade of the total current exploration target which includes the current Mineral Resource Estimate is conceptual in nature and there has been insufficient exploration to define a Mineral Resource than the current Mineral Resource Estimate and it is uncertain if further exploration will result in the determination of a Mineral Resource Estimate.

This ASX release has been compiled by Lorry Hughes using information on exploration results and Mineral Resource 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. Lorry Hughes 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 Hughes, Mr Rauche and Mr 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 Hughes, Mr Rauche and Mr van der Klauw consent to the inclusion in the report of the matters based on his 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 camalite 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.

