# ASX Release 6th August 2012

## **Corporate Details**

ASX Code:	STB
Germany:	SO3-Fra
OTC/ADR:	SBMSY
Share Price:	\$0.88
Market Cap:	\$111M
Shares on issue:	126.7M
STB Options: (\$14.7M)	16.7M
Cash/NTA:	\$25.8M
Top-40	

shareholders: 65%

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## **Listed Equity Holdings**

	0
(ASX: MZM)	5.382M
(ASX: AVZ)	0.400M
(ASX:LTX)	1.016M
(ASX: BUX)	1.610M
(BUX options)	0.750M
(CDNX: CNI.V)	0.121M
(CDNX: SMP.V):	2.500M
Auvex (Pte):	0.500M

## More high-grade assays highlight potential to boost resources, enhance economics at Colluli Potash Project

Latest results return highest grades to date of up to 45% KCl

South Boulder Mines Ltd (ASX:STB) is pleased to announce that recent drilling has returned some of the highest grades to date from its world-class **Colluli Potash Project** in Eritrea, highlighting the potential to grow its resources further and improve project economics.

The new assays – from resource extension HQ-diamond drilling (holes Col-052 – 062, *Figure 1 & Table 1*) – continue to highlight potential extensions to the current JORC/NI 43-101 Compliant Resource.

The best of the latest assays, recorded in Hole Col-054, was:

# 4.26m of Sylvinite @ 34.46% KCl from 70.24m *including* 1.98m of Sylvinite @ 44.92% KCl from 70.24m.

Assays from drilling at the Central target zone also returned consistent shallow high-grade Sylvinite mineralisation from holes Col-057, 058, 060 & 062. The Central target zone is interpreted to be a direct continuation to the west of the Area B Deposit.

The best hole, Col-062, returned the following intersection:

## > 2.84m of Sylvinite @ 31.22% KCl from 63.53m.

The results indicate there could be substantial growth to the high-grade Sylvinite resource that underpins the start-up mining plans for Colluli. The current JORC/NI 43-101 Compliant Resource contains 115Mt @ 28.56% KCl or 18.04%  $K_2O$  of Sylvinite within a much larger total resource of 1,079Mt @ 17.97% KCl or 11.35%  $K_2O$ .

In addition to these new results, recent metallurgical in-fill drilling has confirmed the presence of extensive shallow high-grade potash at Area A *(see ASX announcement dated 18 July 2012).* This drilling, which was completed on a nominal grid spacing of 600m, consistently intersected high-grade mineralisation.

The combination of new results from Areas A & B clearly demonstrates the potential to increase the high-grade resource inventory. The new drilling has also intersected extensive Carnallite and Kainite mineralisation zones, as is typical throughout the Colluli evaporite sequence (*Table 1*).



The resource extension drilling is being undertaken in parallel with metallurgical in-fill, hydrogeological and geotechnical drilling which is being completed as part of the Colluli Definitive Feasibility Study. The Study is due for completion next year, enabling South Boulder to be in production by no later than 2016.

The previous Scoping Study, which indicates that the Colulli Project is expected to be technically and economically feasible and has the potential to be a long-life project capable of delivering attractive investment returns, was based on annual production of **one million tonnes of potash**. However, this figure could be increased in line with further expansion in the project's JORC resource.

South Boulder's Managing Director, Lorry Hughes, said recent drilling had delineated consistent widths of high-grade shallow potash, providing significant encouragement to the project team about the ability to reduce the overall risk to the evolving mine plan.

"There is real potential to improve project economics and reduce the payback period with hits like these," Mr Hughes said.

"Very early on hole Col-004 intersected 3.5m @ 44% KCl from 33m depth at Area A. These new results are pretty similar and located up to 7.5km away. This shows very clearly that the Colluli resource is world-class.

"I think the start-up pit will still be at Area A, however with continued drilling we may just find a sweeter spot to get started," he added. "We are now eagerly awaiting the results of the revised engineering Scoping Study, due later this quarter, which will be based on mining and processing the Sylvinite and Carnallite mineralisation together.

"Having the high-grade Sylvinite mineralisation overlying the thicker Carnallite is certainly strategically important for the project in terms of payback. Further optimisation of the mining schedule to determine which parts are best to mine first will now be important.

"We have the right team in place to find, define and mine Colluli in the most cost efficient manner."





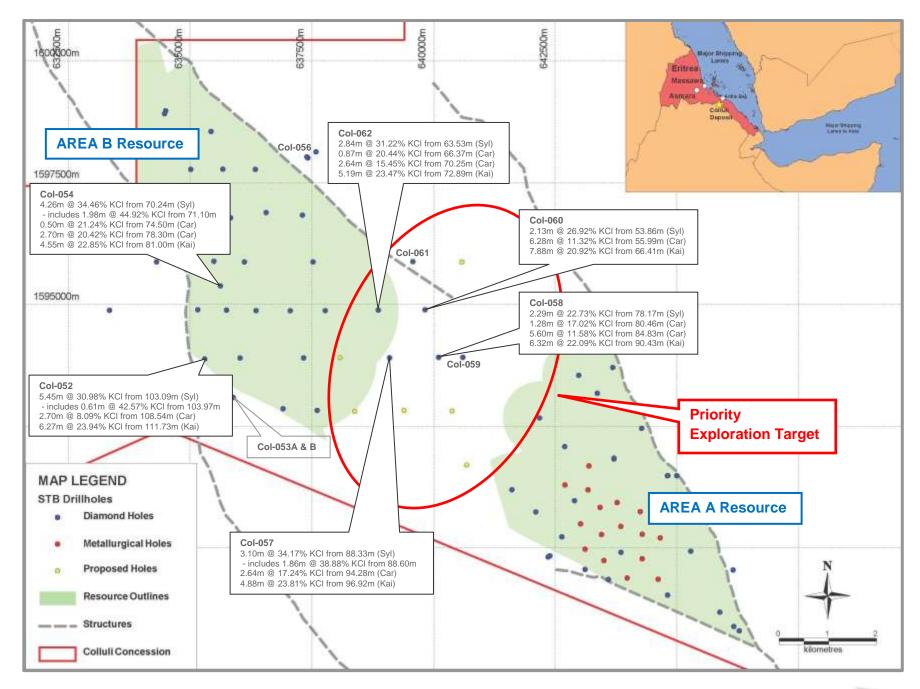


Figure 1: Colluli Project JORC/NI43-101 Compliant Mineral Resource Estimate and Resource Drilling Plan with recent highlights.



	Hole No.	East (m)	North (m)	RL (m)	Azi. (degr.)	Dip (degr.)	E.O.H.	From	То	Interval (m)	KCI (%)	Comment	
	Col-052	635303	1593885	-124	000	-90	120.00	100.31	101.26	0.95	10.47	Area B – Sylvinite (Resource hole)	
								103.09	108.54	5.45	30.98	Area B – Sylvinite (Resource hole)	
			In	cludes				103.97	104.58	0.61	42.57	Area B – Sylvinite (Resource hole)	
								108.54	111.73	2.70	8.09	Area B – Carnallite, kieserite dominated (Resource hole)	
	)							111.73	118.00	6.27	23.94	Area B – Kainitite (Resource hole)	
	Col-053A	635889	1593089	-124	000	-90	126.00					Area B – hole abandoned	
	Col-053B	635863	1593105	-124	000	-90	162.00					Area B – hole to be deepened	
	Col-054	635626	1595386	-122	000	-90	87.00	68.37	69.31	0.94	18.31	Area B – Sylvinite (Resource hole)	
シ								70.24	74.50	4.26	34.46	Area B – Sylvinite (Resource hole)	
			In	Includes 71.10 73.08 1.98 44.92				44.92	Area B – Sylvinite (Resource hole)				
5								74.50	75.00	0.50	21.24	Area B – Carnallite (Resource hole)	
								78.30	81.00	2.70	20.42	Area B – Carnallite (Resource hole)	
2								81.00	85.55	4.55	22.85	Area B – Kainitite (Resource hole)	
7	Col-055	637059	1594872	-122	000	-90	96.00	86.48	93.00	7.94	23.69	Area B – Kainitite (Resource hole)	
9	Col-056	637399	1598033	-118	000	-90	30.00		Area B – No Significant mineralisation		Area B – No Significant mineralisation		
_	Col-057	639101	1593907	-121	000	-90	105.00	88.33	91.43	3.10	34.17	Area B – Sylvinite (Resource hole)	
		Includes		88.60	90.46	1.86	38.88	Area B – Sylvinite (Resource hole)					
))								94.28	94.28 96.92 2.64 17.24		17.24	Area B – Carnallite (Resource hole)	
								96.92	101.80	4.88	23.81	Area B – Kainitite (Resource hole)	
	Col-058	640107	1593916	-120	000	-90	99.00	78.17	80.46	2.29	22.73	Area B – Sylvinite (Resource hole)	
$\mathbf{D}$								80.46	81.74	1.28	17.02	Area B – Carnallite (Resource hole)	
$\leq$								84.83	90.43	5.60	11.58	Area B – Carnallite (Resource hole)	
2)								90.43	96.75	6.32	22.09	Area B – Kainitite (Resource hole)	
	Col-059	640607	1593916	-119	000	-90	57.00	Area B – No Significant mineralisation		Area B – No Significant mineralisation			
5	Col-060	639828	1594893	-118	000	-90	75.00	53.86	55.99	2.13	26.92	Area B – Sylvinite (Resource hole)	
ノ								55.99	66.41	6.28	11.32	Area B – Carnallite (Resource hole)	
$\mathcal{D}$								66.41	74.29	7.88	20.92	Area B – Kainitite (Resource hole)	
	Col-061	639585	1595874	-116	000	-90	63.00				Area B – No Significant mineralisation		
	Col-062	638864	1594887	-120	000	-90	81.00	63.53	66.37	2.84	31.22	Area B – Sylvinite (Resource hole)	
$\neg$								66.37	67.24	0.87	20.44	Area B – Carnallite (Resource hole)	
))								70.25	72.89	2.64	15.45	Area B – Carnallite (Resource hole)	
								72.89	78.08	5.19	23.47	Area B – Kainitite (Resource hole)	

Table 1: Table of recent potash assay results (All intervals are true-width intervals).

\*KCl is commonly expressed as  $K_2O$  according to the formula (KCl \* 0.6317 =  $K_2O$ ). The recent KCl contract FOB price is estimated at around US\$ 500/t.



### **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. South Boulder has a 90% interest in the Colluli Potash Project in Eritrea and a 100% interest in the Duketon Gold Project in Western Australia.

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% 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 for a total 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); **This includes higher grade Sylvinite of 114.60Mt @ 28.56% KCl or 18.04% K<sub>2</sub>O**. 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 generating a Pre-tax NPV<sub>12</sub> of US\$1.33bn. 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.

### 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, W.A 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 19<sup>th</sup> of November. A Maiden JORC Compliant Mineral Resource Estimate has been compiled for the Rosie deposit; please refer to the Company's 25<sup>th</sup> January 2012 ASX Announcement for details.

### More information:

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Lorry Hughes	Kerry Rudd	Liam Cornelius	Flavio Garofalo	Dr. Chris Gilchrist
CEO/Managing Director	Executive Assistant	Executive Director	CFO	Non-Exec 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% 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. 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 other than the current Mineral Resource Estimate and it is uncertain if further exploration will result in the determination of a Mineral Resource Estimate other than the current 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. Mr Hughes is a full-time employee of the company. Mr Rauche and Mr van der Klauw are employed by the Ercosplan Group of Companies.

#### 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-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.

