

ASX Code : STB  
Berlin : SO3-Ber  
Frankfurt : SO3-Fra

Share Price: \$4.40

Market Cap: \$376M

Shares on issue: 85.5M

Cash at Bank: \$12.2M  
ASX/TSX listed shares: \$5.1M

Top 40 shareholders – 66%

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**LISTED EQUITY HOLDINGS**

(ASX: MZM) - 4.994m shares  
(ASX: AVZ) - 0.400m shares  
(ASX: BUX) - 1.610m shares  
(unlisted options) 0.750m options  
(ASX: UNX) - 0.800m shares  
(CDNX: CNI.V) - 130,000 shares  
Lithex (Pte) - 1.016m shares  
Auvex (Pte) - 1.000m options

## MORE POTASH ASSAY RESULTS RETURNED AND SCOPING STUDY UPDATE

South Boulder Mines Ltd (ASX; STB) is pleased to report that significant preliminary potash assays have been returned from drilling conducted within the current JORC/43-101 compliant Mineral Resource estimate area in holes Col-006 and 007. The results continue to confirm previous visual field estimates of mineralisation and provide encouragement that an economic open pit mine can be developed. Extensive mineralisation has been defined to date as detailed in the ASX release dated 19<sup>th</sup> January 2011.

In addition significant potash mineralisation has been intersected in new diamond drilling to the southeast of the current resource (Figure 1). Drilling is continuing as part of a 5,000m exploration program designed to define and extend known resources. The results will be incorporated into the current engineering scoping and feasibility studies.

Hole Col-006 intersected a total thickness of 24.49m of potash with a combined 17.55% KCl including;

- 0.77m of sylvinitite @ 23.40% KCl from 48.00m and;
- 3.44m of sylvinitite @ 34.31% KCl from 51.12m and;
- 1.04m of carnallitite @ 20.19% KCl from 54.56m and;
- 7.16m of carnallitite @ 11.53% KCl from 70.60m and;
- 9.73m of kainitite @ 18.90% KCl from 77.76m.

Hole Col-007 intersected a total thickness of 16.81m of potash with a combined 16.44% KCl including;

- 0.39m of sylvinitite @ 19.35% KCl from 24.98m and;
- 7.10m of carnallitite @ 13.65% KCl from 38.29m and;
- 9.32m of kainitite @ 18.43% KCl from 45.39m.

The best intervals of new potash mineralisation intersected outside the current resource are as follows;

Hole Col-021B intersected a total thickness of 29.19m of potash including;

- 16.47m of carnallitite from 84.94m and;
- 12.72m of kainitite from 101.41m.

Collar details and potash mineralisation intersected for all new drill holes are shown in Table 1. Geological details of previously drilled holes with assays outstanding are available in the December quarterly report lodged with the ASX on the 31<sup>st</sup> of January 2011.

Further to the new assay and visual potash results, holes Col-018, 019, 019B and 020 (Table 1) were drilled and intersected minor potash and sulphate mineralisation which is currently interpreted to be part of a “dissolution front” that has effectively dissolved the majority of the potash minerals in these areas. The dissolution front is thought to form an irregular intermittent boundary to the deposit. Further drilling is required to the west of the interpreted dissolution front (Figure 1) to determine if additional potash mineralisation is present and to determine the extent and regularity of the boundary. The geological interpretation of the potash mineralisation and the evaporite basin will evolve with the completion of additional planned exploration activities.

Downhole geophysical logging of all holes is expected to begin in April and this information will be invaluable for the orebody interpretation and resource estimate update. It will be comprised of drill hole contour, rock density, rock sound wave velocity, rock H<sub>2</sub>O content, rock natural gamma ray emission and rock temperature logging.

A trial ground gravimetric survey completed in January was determined to be successful in delineating structures that could be related to potash mineralisation intersected to date. As a result of this trial, an extensive follow-up survey was commissioned over the southwestern part of the tenement. This survey was completed in mid March and the data is currently being processed and interpreted. Once this is complete the work should provide exploration targets in new areas to conduct further drill testing.

The engineering scoping study on the economics of an open cut potash mine at Colluli is progressing well with some key initiatives commenced and planned. A site visit was conducted by the entire engineering team and The Board of South Boulder to Colluli in late February. Project meetings were held at the site and the team inspected the site. The visit inspected the potash deposit area, the historic transport route and abandoned railway from the current resource area to potential sites for a port facility near Mersa Fatma. The team was encouraged by potential simple project aspects which should allow the study to progress quickly.

As part of the engineering scoping study Knight Piesold Consulting from Ontario Canada were engaged to commence environmental, hydrogeological and social impact studies (EHSIS). Knight Piesold are a leading global consulting group in this field and have recent experience conducting environment impact studies for more advanced gold and copper resource projects within Eritrea.

The EHSIS work is due to commence with a site visit in May and will provide a high-level description of the environmental setting, a description of a proposed environmental baseline program and the Eritrean environmental review process, complete with cost estimates and a completion schedule. To compliment this work South Boulder’s project team is due to install a weather station at the Colluli site in April and is undergoing preparation to conduct hydrogeological assessment drilling under the direction of Knight Piesold. The report will identify any long-lead requirements that may have a bearing on the Project’s development schedule.

South Boulder is also conducting advanced discussions with industry groups in order to define a potash industry marketing study to be incorporated into the engineering scoping study. This will be used to determine appropriate potash product volume and pricing levels to be economically evaluated.

Outstanding assay results and details on further exploration drilling will be released as they come to hand.

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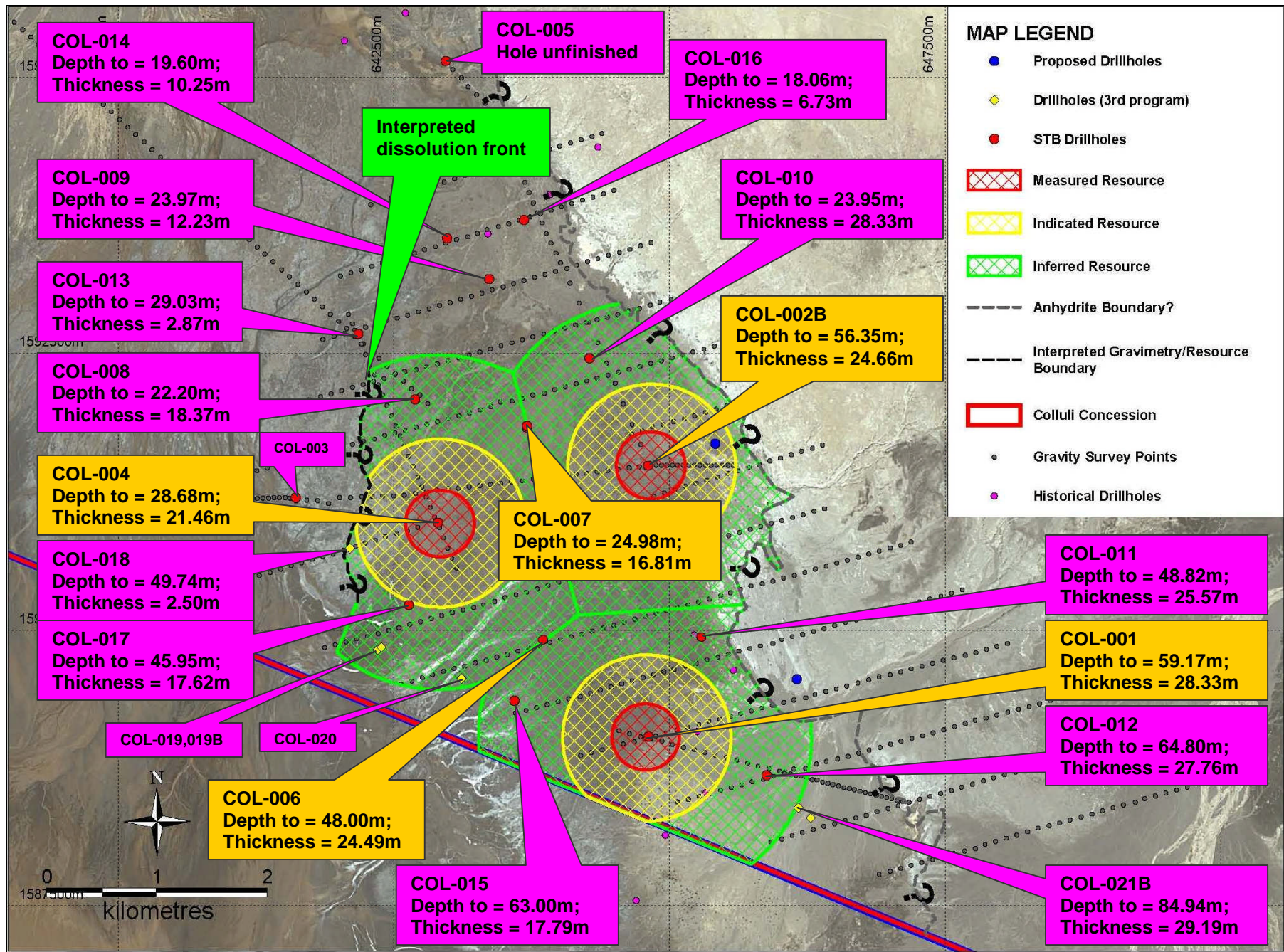


Figure 1: Colluli Project plan showing drilling, current JORC resource area and trial gravimetric survey data points.

Hole No.	East (m)	North (m)	RL (m)	Azi. (degr.)	Dip (degr.)	E.O.H.	From	To	Interval (m)	KCl (%)	Comment					
<b>Col-006</b>	643853	1589912	-119	000	-90	91.60	48.00	48.77	0.77	23.40	Sylvinitite					
							51.12	54.56	3.44	34.31	Sylvinitite					
											<b>INCLUDES</b>	51.59	54.56	2.97	35.65	Sylvinitite
												54.56	55.60	1.04	20.19	Upper carnallitite
												70.60	77.76	7.16	11.53	Lower carnallitite
											77.76	87.49	9.73	18.90	Kainitite	
<b>Col-007</b>	643708	1591828	-117	000	-90	60.10	24.98	25.37	0.39	19.35	Sylvinitite					
							38.29	45.39	7.10	13.65	Lower carnallitite					
							45.39	54.71	9.32	18.43	Kainitite					
<b>Col-007B</b>	643710	1591845	-117	000	-90	27.10					Stratigraphic hole, no samples taken					
<b>Col-008</b>	642696	1592083	-120	000	-90	52.60					Assays awaited, approximate thickness 18.37m					
<b>Col-009</b>	643367	1593178	-113	000	-90	40.60					Assays awaited, approximate thickness 12.23m					
<b>Col-010</b>	644278	1592455	-118	000	-90	60.60					Assays awaited, approximate thickness 28.33m					
<b>Col-011</b>	645288	1589934	-119	000	-90	93.10					Assays awaited, approximate thickness 25.57m					
<b>Col-012</b>	645881	1588680	-112	000	-90	106.60					Assays awaited, approximate thickness 27.76m					
<b>Col-013</b>	642179	1592673	-118	000	-90	37.60					Assays awaited, approximate thickness 2.87m					
<b>Col-014</b>	642986	1593545	-117	000	-90	34.60					Assays awaited, approximate thickness 10.25m					
<b>Col-015</b>	643596	1589355	-115	000	-90	94.60					Assays awaited, approximate thickness 17.79m					
<b>Col-016</b>	643683	1593710	-115	000	-90	28.60					Assays awaited, approximate thickness 6.73m					
<b>Col-017</b>	642638	1590227	-118	000	-90	72.10					Assays awaited, approximate thickness 17.62m					
<b>Col-018</b>	642104	1590740	-116	000	-90	55.60					Assays awaited, approximate thickness 2.50m					
<b>Col-019</b>	642356	1589817	-125	000	-90	61.00					No samples taken					
<b>Col-019B</b>	642391	1589841	-125	000	-90	80.00					No samples taken					
<b>Col-020</b>	643114	1589559	-102	000	-90	147.00					No samples taken					
<b>Col-021A</b>	646281	1588298	-80	000	-90	51.00					Collapsed hole, no samples taken					
<b>Col-021B</b>	646170	1588388	-82	000	-90	117.10					Assays awaited, approximate thickness 29.19m					

Table 1: Colluli Project table of recent drill hole collar details and results.

## 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.southbouldermine.com.au](http://www.southbouldermine.com.au).

## 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 100% 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/43-101 Compliant Measured, Indicated and Inferred Mineral Resource Estimate of **547.62Mt @ 18.58% KCl (total contained potash of 101.73Mt); Includes 119.21Mt @ 23.14% KCl**; and an exploration target of **750Mt – 1.25 billion tonnes @ 18-20% KCl**. An engineering scoping study into open pit mining and processing to produce up to 10Mt p.a of potash is underway.

Within the Duketon Gold Project area, South Boulder entered a farm-out Joint Venture (JV) Agreement with Independence, whereby Independence can earn a 70% interest in the nickel rights on JV 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 Nickel Joint Venture

The Duketon Nickel JV has had recent success at The Rosie and C2 Nickel sulphide prospects where drilling has defined intercepts of **5.20m @ 9.13% 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 resource definition and exploration drilling program and scoping study into an open pit mine at C2 and an underground mine at Rosie is underway.

## More information:

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## Disclaimer

The potential quantity and grade of the Colluli exploration target is conceptual in nature and there has been insufficient exploration to define a Mineral Resource (outside the area shown in Figure 1) and it is uncertain if further exploration will result in the determination of a Mineral Resource (outside the area shown in Figure 1).

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 43-101 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 organization 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% 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 to 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.