ASX Release

25 February 2015

Company Details

ASX Code:	STB
Share Price	$0.24
Market Cap	$36M
Shares on issue	149M
Company options	28M
Cash at Bank	$8.5M

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

Colluli Review Delivers Mineral Resource Estimate of 1.289Bt

Highlights

- Mineral resource of **1.289Bt**, average grade 10.76% K_2O
- Contained K_2SO_4 (Potassium Sulphate) equivalent[1] of **260Mt**
- Resource uplift of **210Mt** mineralised material
- **97%** of mineral resource in **Measured** and **Indicated** categories
- The Colluli deposit comprises:

  Measured mineral resource: **303Mt** at 10.98% K_2O

  Indicated mineral resource: **951Mt** at 10.89% K_2O

  Inferred mineral resource: **35Mt** at 10.28% K_2O
- Pre-feasibility study for Potassium Sulphate (SOP) production on track for completion in February 2015

South Boulder Mines (ASX:STB) ("South Boulder", "STB", or "the Company") is pleased to announce the JORC 2012 Mineral Resource estimate for the Colluli potash project in Eritrea, East Africa.

The total Mineral Resource estimate comprises 1,289 Million tonnes (**Mt**) at an average grade of 10.76% K_2O.

The Mineral Resource estimate was conducted and completed by AMC Consultants (AMC) at the request of South Boulder, and is a review of previous work conducted by Ercosplan Ingenieurgesellschaft Geotechnik und Bergbau mbH (Ercosplan).

The review was carried out in preparation for the allocation of the Maiden Reserve for the Colluli potash project, which will also be completed by AMC.

South Boulder Managing Director, Paul Donaldson said "This is an excellent outcome. As well as 210 million tonnes of uplift in the Mineral Resource estimate, 97% of the Mineral Resource now sits in the Measured and Indicated categories."

"There is no question about the size and potential of the Colluli resource. It will form the backbone of what will become a significant project in the future. This work verifies this as one of the largest potassium sulphate resources globally," he said.

"It is also appropriate that we change our resource grade reporting from % KCl to % K_2O at this juncture, due to the combination of salts in the resource which favour the production of potassium sulphate (SOP) and is the focus of our pre-feasibility study."

---

[1] 100% recovery basis of potassium contained in total resource

The estimate is based on drillhole assay data from the original exploration drilling campaign conducted from 2010 to 2012, with additional QAQC drilling in late 2014. The 2014 drilling was for data validation purposes only and was not directly used in the Mineral Resource estimate. Geological interpretation was carried out by South Boulder and AMC, with Mineral Resource estimation and reporting by AMC.

The local geology is dominated by an extensive evaporite sequence, formed when the Red Sea was connected by a seaway to the Danakil depression. The mineralisation at Colluli is a layered evaporite sequence, covering an area of approximately 10km north to south by 5km east to west and is defined by two deposits, Area A (south) and Area B (north).

AMC reinterpreted the mineralisation and produced a set of wireframed shapes to represent the geological and mineralisation boundaries. These wireframes were used to develop a three-dimensional block model.

AMC validated the data and requested four diamond drillholes to be twinned for QAQC purposes, and audited previous data, data collection processes and operational procedures for this resource estimate.

A total of twelve rock units have been interpreted in the current model, with six of these identified as potential economic resource. These are Upper, Middle, and Lower Sylvinite members, Upper and Lower Carnallitite members and the Kainitite member.

A block volume model was created using the wireframed mineralisation interpretation and estimated grade for K, Mg, Na, Cl, Ca, SO_4, KCl, K_2O, Sylvite, Carnallite, Kainite, Polyhalite, Halite, Bischofite, Kieserite, and Anhydrite into the model. The selection of the estimation parameters was based on studies of the statistics and variography of the input drillhole assay data. All grades were estimated into parent cells, with sub-cells receiving the same grade as its parent. Sub-cells were allowed to form in order to honour the interpreted wireframe volume for each domain. Estimation was completed by using ordinary kriging.

The Mineral Resource estimate prepared has been classified and reported under the guidelines of the 2012 JORC Code as Measured, Indicated and Inferred material. The tonnes and grade reported by AMC are shown below.

Area	Rock Unit	Measured		Indicated		Inferred		Total	
		Mt	K_2O Equiv %	Mt	K_2O Equiv %	Mt	K_2O Equiv %	Mt	K_2O Equiv %
Area A	Sylvinite	66	12	38	11	10	8	115	11
	Carnallitite	55	7	190	9	6	16	251	9
	Kainitite	86	12	199	11	1	10	285	11
Area B	Sylvinite	24	15	122	13	5	12	150	13
	Carnallitite	25	6	114	7	8	7	147	7
	Kainitite	48	13	289	13	4	13	341	13
Total	**Sylvinite**	**90**	**13**	**160**	**13**	**15**	**9**	**265**	**12**
	Carnallitite	**80**	**7**	**303**	**8**	**15**	**11**	**398**	**8**
	Kainitite	**133**	**12**	**488**	**12**	**5**	**12**	**626**	**12**

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 which is currently developing the Colluli Project in partnership with the Eritrean National Mining Company (ENAMCO). The project is located in the Danakil Depression region of Eritrea, East Africa and is ~75km from the Red Sea coast, making it one of the most accessible potash deposits globally. The resource is favourably positioned to supply the world's fastest growing markets.

Since exploration commenced in 2009 over 1 billion tonnes of potassium bearing salts have been identified. The combination of salts within the resource makes it suitable for high yield, low energy input production of potassium sulphate, which is also known as sulphate of potash or SOP. SOP is a specialty fertiliser that carries a substantial price premium relative to the more common potassium chloride, which is the most common potassium salt known as potash.

Mineralisation within the Colluli resource commences at just 16m, making it the world's shallowest potash deposit. The resource is amendable to open pit mining, which allows higher overall resource recovery to be achieved, is generally safer than underground mining and is highly advantageous for modular growth.

The JORC 2012 Compliant Mineral Resource Estimate for the Colluli Potash Project now stands at 1.289 billion tonnes @ 10.76% K_2O for 260Mt of contained SOP. Substantial project upside exists in higher production capacity and market development for other contained products such as potassium magnesium sulphate, potassium chloride, rocksalt and magnesium chloride.

Our vision is to bring the Colluli project into production using the principles of risk management, resource utilisation and modularity, using the starting module as a growth platform to develop the resource to its full potential.

Competent Persons and Responsibility Statement

Colluli has a JORC 2012 Compliant Measured, Indicated and Inferred Mineral Resource Estimate of 1,289Mt @ 10.76% K2O. The resource contains 303Mt @ 10.98% K2O of Measured Resources, 951Mt @ 10.89% K2O of Indicated Resources and 35Mt @ 10.28% K2O of Inferred Resources.

The information in this report relating to the Colluli Mineral Resource was compiled by Mr. John Tyrell, under the supervision of Mr. Stephen Halabura M.Sc. P. Geo. Fellow of Engineers Canada (Hon), Fellow of Geoscientists Canada, and a geologist with over 25 years' experience in the potash mining industry.

Mr. Tyrell is a Member if the Australasian Institute of Mining and Metallurgy and a full time employee of AMC. Mr. Tyrell has more than 25 years' experience in the field of Mineral Resource estimation.

Mr. Halabura is a member of the Association of Professional Engineers and Geoscientists of Saskatchewan, a Recognised Professional Organisation (RPO) under the JORC Code and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code).

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. 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-UmwelttechnikGmBHSondershausen, 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 AkkreditierungssystemPrüfwesen 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.

APPENDIX 1

JORC Table 1

Section 1 : Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling Techniques	*Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.*	The Colluli deposit was sampled using diamond core from surface. A total of 103 diamond holes were drilled into the deposit. 102 of the 103 holes had geological logging, assaying or geophysical logging and were available for the resource estimate. The total metres of drilling for the project were 6,409 at the date of the resource estimate. Drilling by STB occurred from June 2010 until October 2012. Borehole geophysical logging in the form of gamma ray – density measurements were made on 22 drillholes in Area B and the results interpreted to determine density of the various rock units. Holes were drilled on an approximate UTM grid (WGS84, Zone37N) with a grid direction of approximately 050 degrees magnetic in Area A and 090 degrees in Area B, both at a dip of -90 degrees. The drill collar positioning was a nominal 500m x 500m spacing in X and Y at Area A and a 700m x 1000m grid spacing at Area B.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Drillhole collars were originally set out using hand held GPS and on completion the collars were surveyed by survey contractors using high precision GPS. Downhole surveys were not completed as all holes were drilled at 90 degrees down-dip and were almost all less than 150m depth. Diamond core was half-core sampled at regular intervals and generally constrained to geological boundaries where appropriate.
	Aspects of the determination of mineralisation that are Material to the Public Report.	Diamond core was drilled predominantly at HQ size. Diamond core samples were cut and bagged and sent to TUC in Germany where they were crushed, split and pulverised and assayed for a suite of cations and anions using a liquid ion chromatography technique. Sample pulps were then sent to K-Utec for check assaying using a similar process.
Drilling Techniques	*Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face sampling bit or other type, whether core is orientated and if so, by what method, etc.)*	Diamond drillholes account for 100% of the drill metres and comprises HQ sized core. All holes were drilled as diamond holes from surface, with HW 4" casing employed at the top of the holes due to poor ground conditions in the over burden unit. No core orientation was recorded.

Criteria	JORC Code explanation	Commentary
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	Diamond core recovery was assessed by comparison of the interval of core presented in the core tray against the driller's core blocks. Analysis showed that more than 93% of core intervals had 90% or better recoveries, with 96% of core having recoveries of 80% or better. Core recoveries in the uppermost unit, the overburden, were very poor and many losses occurred. Recoveries in this domain ranged between 0-60%. These reduced recoveries were not associated with mineralisation and as such are not considered material.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Diamond drilling utilised triple-tube techniques and constantly monitored drilling fluids in order to assist with maximising recoveries PVC tubing, HW 4" pipe and HQ rods were used in the uppermost unit, with the tri-salt mud balance constantly monitored for viscosity and density to reduce core dissolution whilst drilling. Core depths are checked against the depth given on the core blocks and rod counts are routinely carried out by the drillers. Recovered core was measured and compared against driller's blocks. Sections of two resource drillholes were drilled using diesel as drilling fluid, to ensure maximum recovery of the most highly soluble units in the geological sequence (especially in the Bischofite member). An additional four drillholes were drilled for QAQC purposes in late 2014, with diesel fuel used as the primary drilling fluid.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	Assessments on the effect of low recoveries were completed for the diamond drilling and found that there was not likely to be any material impact or bias on the reported assay results as a result of the reduced recoveries. All of the mineralised domains had recoveries in excess of 80%, and generally with less than 15% of the recorded recoveries being less than 90%.

Criteria	JORC Code explanation	Commentary
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	Diamond core was geologically logged using pre-defined lithological, mineralogical and physical characteristics (such as colour, weathering, fabric) logging codes. In addition structural measurements of major features were collected. The logging was completed at the company core shed by the responsible geologist and checked by the Senior Geologist once completed. All of the drilling was logged onto paper and has recently (late 2014) been transferred to a digital form and loaded into a Microsoft Access drillhole database. The latest geotechnical and QAQC twinned drillhole logging was completed directly onto a laptop in the field using Microsoft Excel spreadsheets with drop-down boxes to restrict values entered. Logging information was reviewed by the Senior Geologist prior to final load into the database. All core trays were photographed. Given the nature of the mineralisation at Colluli (crystalline salts) the core was not photographed wet, unless photos were taken on-site as soon as the core was removed from the barrel after drilling. Geotechnical logging of all diamond core consisted of recording core recovery, RQDs, amount of dissolution, core state (ie whole, broken) and bedding to core angle for laminations, bedding, veining or fracture structures. In addition in late 2014, twelve diamond holes (GT-A1-GT-A12) were drilled specifically for geotechnical staff and then STB geologists after initial training. Four of these holes (GT-A6, GT-A8, GT-A11, and GT-A12) were planned to be assayed as twinned holes for comparison with the existing Colluli drillhole database. All holes also had downhole geophysical logging completed for natural gamma, hole diameter, neutron log, sonic log, temperature and conductivity (calibrated to 25^{o}C). 22 of these holes also had downhole density logging recorded.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Logging was both qualitative and quantitative in nature, with general lithology information recorded as qualitative and most mineralisation records and geotechnical records being quantitative. Core photos were collected for all diamond drilling.
	The total length and percentage of the relevant intersections were logged.	All recovered intervals were geologically logged, apart from four drillholes (COL-005, COL-019B, COL-020, COL-042) that had no potash intersections and one hole (COL-063A) that was abandoned at 54m downhole due to poor core recovery.

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	Diamond core was cut in half using a diesel powered core saw. No water was used for lubrication or dust suppression as core dissolution would have occurred. The material being cut is relatively soft and this has not proved to be an issue. Sample intervals were marked on the core by the responsible geologist considering the lithological and structural features. Core selected for duplicate analysis was further cut as quartered core with both quarters submitted individually for analysis.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	No non-core samples were taken.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	The sample preparation techniques employed for the diamond core samples follow standard potash industry best practice. To avoid dissolution by reacting with the water in the air, all samples were double bagged at the drill rig, opened for logging and re-bagged immediately and heat sealed prior to transport to the laboratory. Samples were crushed by hammer, within the plastic liner, to a grain size of approximately 1cm or less. The entire sample was then transferred to a PVC vessel and homogenised by shaking. Approximately one third of the homogenised sample was then taken and crushed inside a polythene bag by hammer to a grain size of 5mm or less. About 100g of this homogenised sample was then pulped by disk swing-mill for 120 seconds. Three grams of this pulp was prepared for XRD analysis and ten grams dissolved in 990ml distilled water and agitated for 24 hours prior to ion chromatography. The insoluble portion remaining from the dissolution was removed by a membrane filter (0.45 micron) and weighed.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	For the initial drilling at Colluli, to hole COL-099, field QAQC procedures included the field insertion of “blanks” taken from the Upper Rock salt domain, as the main minerals of economic interest were KCl and MgSO4. These were inserted into the sample stream at a rate of approximately 1 in 15 samples. Coarse field duplicates were taken by quarter cutting the core at a rate of approximately 1 in 20 samples. Certified reference materials (standards) were not added to the sample stream by STB, as there are no commercially available CRM’s for potash. The primary assay laboratory, TUC, also periodically inserted “blanks” in the form of clean distilled water. TUC also assayed their own internal standards (TUCEV-HA and TUCEV-HK) at a rate of 1:15 samples. Pulp duplicates were taken and re-assayed by a secondary assay laboratory, K-Utec, using a mixture of flame emission spectrometry, atomic absorption spectroscopy and ion chromatography. These were taken at a rate of approximately one in 40 samples.

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	*Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.*	Field duplicates from core samples generally showed an excellent correlation between original and duplicates, however other measures of spread such as Half Absolute Relative Difference (HARD) showed some variance in some of the minor elements such as Ca and SO_4. Pulp repeat samples from the secondary laboratories also showed excellent correlation between original and repeat samples.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Current industry standard sampling is used and deemed appropriate. All of the salts are coarse crystalline and are dissolved completely prior to analysis.
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	Primary assaying for the diamond core was completed by TUC using their proprietary method for ion chromatography. TUC are recognised internationally for their work in potash and have a good reputation. Their methods are however, confidential and AMC has no details of the exact process used. Pulp duplicates were taken from three of the original drillholes and assayed at K-Utec laboratories in Germany. AMC requested STB to drill four twinned drillholes to test the reliability of the TUC assaying. These were to be assayed at K-Utec and pulp repeats tested at both TUC and SRC in Canada. K-Utec uses a combination of flame spectrometry, atomic absorption spectroscopy and ion chromatography for analysis of potash salts.
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	Downhole geophysical readings were taken for 45 of the STB drilled diamond holes. Data collected included hole diameter, neutron logs, conductivity, temperature, natural gamma, sonic logs and density. Only 22 holes had density readings taken, due to breakages of the gamma-gamma probe. The work conducted was performed by Abitibi Terratec using the following probes suspended from a 4-conductor cable: • Electromind T-Cd-GR • Electromind 3-arm calliper • RG Neutron-neutron probe • RG Gamma-gamma probe • ALT Sonic-Full Wave probe Density measurements were validated by taking readings while the probe was in an aluminium block and in a container of water. There were three readings taken from each material. AMC is unsure if any other calibration was undertaken for the other probes used and if any factors were applied to the raw data collected.

Criteria	JORC Code explanation	Commentary
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	According to the Ercosplan resource report of April 2012, TUC performed internal QAQC using its own internal standards and blanks (water). They also apparently take part in round-robin testing regularly and have a good reputation internationally in the potash industry. STB included blanks (halite from the Upper Rock Salt unit) and coarse duplicates in the sample streams sent to TUC and K-Utec and had pulp repeat assaying completed at K-Utec. Limited QAQC reporting from the AMC recommended twin hole program is available at the time of writing this report, however, the results that have been returned show no material issues.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	Diamond core photographs have been reviewed for the recorded sample intervals. AMC Senior Geologist, John Tyrell visited the Colluli project site and the STB head office and core shed in Eritrea in October 2014. Whilst there he viewed the drillhole collars on-site and the remaining core (full, half or quarter) at the core shed in Asmara. Selected sections of drillholes were examined in detail in conjunction with the geological logging and assaying.
	The use of twinned holes.	AMC requested four drillholes be twinned for the purpose of testing the veracity of the logging and assaying at Colluli. The holes were sampled using the same intervals (where possible) to the original drillholes in order to compare the logging and assaying as directly as possible. The results for the twin hole assaying and QAQC programme are in progress at the time of this report, however the results that have already been returned show no material issues.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All primary geological data (prior to 2014) was collected using paper logs and transferred into Excel spreadsheets. This was checked by the Chief Geologist for data entry error. Assay results were returned from the laboratories as electronic data (Excel spreadsheets and PDF files). Geophysical data was recorded as log ASCII standard (LAS) files and survey and collar location data was stored as spreadsheet files. In late 2014, all of the primary data was collected and imported into a Microsoft Access relational database, keyed on borehole identifiers and assay sample numbers. The data was verified as it was entered and checked by the STB Chief Geologist.

Criteria	JORC Code explanation	Commentary
	Discuss any adjustment to assay data.	The primary and secondary assay laboratories reported results from the assaying process as weight % values of the assayed cations (Mg^{2+}, Ca^{2+}, Na^{+}, K^{+}) and anions (Cl^{-}, SO_4^{2-}). KCl and K_2O values were also reported. The assays for K were multiplied by a factor of 1.90668 to report KCl and multiplied by a factor of 0.6317 to report K_2O. The raw assay values were also converted to mineral weight percentages using a "Normative Mineralogy" conversion scheme. This scheme relies upon the XRD results for the mineralogy of every sample. This was a two-step process which is listed below: Step 1 – Combine cations and anions to simple salts according to the following scheme: • Combine with Cl, in the following order: Na, K, Mg, Ca • Combine with SO_4 in the following order: Ca, Mg, K, Na • Based on experience with potash deposits, the analyses should be either $MgCl_2$ or K_2SO_4 normative, meaning if $CaCl_2$ or Na_2SO_4 results from these combinations, the analysis is suspect. Step 2 – Combine the simple salts to salt mineralogy according to the following simplified scheme: • All NaCl is Halite • If $MgCl_2$ is present, it is combined 1:1 with KCl to form Carnallite • If $MgCl_2$ > KCl, remaining $MgCl_2$ to Bischofite • If K_2SO_4 is present, combine with $CaSO_4$ and $MgSO_4$ to form Polyhalite • If KCl > $MgCl_2$ and $MgSO_4$ available, combine remaining KCl 1:1 to Kainite • If remaining KCl>$MgSO_4$, remaining KCl after Kainite to Sylvite, otherwise remaining $MgSO_4$ to Kieserite and • Remaining $CaSO_4$ to Anhydrite The resulting salt percentages are combined with the measured insoluble component and should sum to 100% (+3 to -5%). As other potash mineral occur in nature and are not taken into account, this scheme is at best indicative and the results are checked against the logging and core. The results are also checked to ensure over estimation of Kainite content and under estimation of the Sylvite and Kieserite does not occur.

Criteria	JORC Code explanation	Commentary
Location of data points	*Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	All of the drillhole collar positions were initially positioned using hand held GPS. In September 2012, the state run Eritrean Mapping and Information Centre (EMC) completed a program to position five survey control points at and around the project site. These were positioned using Leica system 1200 differential global positioning system (DGPS) equipment with an accuracy of +/-5mm. All of the collar positions at site are now surveyed using DGPS referencing the control point nearest to Colluli, BM-1 (1594828.511mE, 644029.0546 mN, -101.3126 mRL, UTM). The collars are surveyed in campaigns by an external contractor after the holes are drilled.
	Specification of the grid system used.	The grid projection used for Colluli is WGS84, UTM37N. All reported coordinates are referenced to this grid.
	Quality and accuracy of topographic control.	Topography data for Colluli has been generated from a series of contours taken from data provided by the NASA Shuttle Radar Topography Mission in February 2000. A wireframe was produced from the 2m contour data. AMC believes that the topography data is adequate for the project at this stage.
Data spacing and distribution	*Data spacing for reporting of exploration results.*	Drilling at Colluli has been focussed on two deposits. Area A and Area B. The drillhole spacing at Area A is approximately 500m x 500m in easting and northing in the better drilled parts of the deposit, increasing to 1000m x 1000m at the peripheries. The grid pattern is aligned at approximately 050 degrees magnetic. There is a cruciform pattern of close-spaced drilling in the centre of the deposit designed to check short scale variability, which has a spacing of nominal 50m. At Area B, the drillhole spacing is a nominal 650-700m in easting by 1000m in northing, with the grid direction approximately east-west. The spacing increases to approximately 1000m in easting and northing at the peripheries.
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	The degree of geological and grade continuity demonstrated by the data density is sufficient to support the definition of Mineral Resources and the associated classifications applied to the Mineral Resource estimate as defined under the 2012 JORC Code. Variography studies have shown very little variance in the data for most of the estimated variables and ranges in the order of several kilometres.
	Whether sample compositing has been applied.	No compositing was applied to the exploration results prior to assaying. All samples were composited to common lengths after being assayed, prior to their use in the Mineral Resource estimate.

Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	The mineralisation is interpreted to be very shallow dipping, roughly planar with stratiform bedding striking approximately east-west and dipping at less than 0.5 degrees to the southwest in Area A and less than 1.0 degrees to the southwest in Area B. The diamond drilling is exclusively conducted at -90 degrees, producing drillhole intersections with the mineralisation at effectively 90 degrees.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	The orientation of drilling with respect to mineralisation is not expected to introduce any sampling bias.
Sample Security	*The measures taken to ensure sample security.*	Samples were collected onsite under supervision of a responsible geologist and any potential soluble samples were sealed with taped double bags prior to taking form the rig site. The samples were then stored in lidded core trays and closed with straps before being transported by road to the company core shed in Asmara. Only certified company drivers were allowed to transport the core. Once logging was completed the samples for assay were re-bagged and put into double plastic bags, which were heat sealed with the correct sample number inside the outer bag. The samples were then placed into heavy plastic drums, which were sealed ready for transport overseas for assaying. As the samples were travelling overseas for assay, the drums may have been opened by customs both in Eritrea and at their destination. AMC does not believe this to be an issue, as individual samples are in heat sealed bags and are not easily tampered with. Despatch sheets were compared against received samples and discrepancies reported and corrected.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	A review of the sampling techniques and data was completed by Ercosplan in 2012 and by Snowden in 2013, neither found any material error. AMC also reviewed the data in the course of preparing the Mineral Resource estimate. A review of the method used by the primary assay laboratory, TUC, was not available due to the proprietary nature of their potash assaying process. AMC believes that the data integrity and consistency of the drillhole database shows sufficient quality to support resource estimation.

Section 2 : Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	*Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	The Colluli Project is located wholly within an exploration concession granted by the State of Eritrea in 2009, which encompassed an area of approximately 857km^2, bordered to the West by the Ethiopian state border (as defined by the Eritrea-Ethiopia Boundary Commission in 2002). In 2010, the concession area was reduced via re-surveying of its eastern boundary by approximately 225km^2 to its current area of approximately 633km^2. STB owns a 50% interest in the project, with the remaining 50% owned by the state of Eritrea. AMC is unaware of any other joint venture, native title, environmental, national park or other ownership agreements on the concession area.
	The security of the tenure held at the time of the reporting along with any known impediments to obtaining a license to operate in the area.	The concession area is in good standing and no known impediments exist.
Exploration done by other parties	*Acknowledgement and appraisal if exploration by other parties.*	Previous exploration in the wider Dallol region of the Danakil Depression has been undertaken since the early 1900's, with extensive drilling (approx. 300 holes), geophysical surveys, geological and topographic mapping and hydrogeological works undertaken from 1959 to 1968. At the concession area proper, previous exploration was undertaken by a number of parties since 1969. The first drilling at Colluli was undertaken by the Ethiopian Potash Company Inc. (EPC), who carried out exploration drilling and chemical analyses for potash in five sub-areas in the border region Eritrea-Ethiopia (N of Dallol) up to the Buri Peninsula (S of Massawa). The sub-area named "Colluli" at the border region between Eritrea and Ethiopia was reported to contain two distinct zones of potassium and magnesium minerals in a thick section of Halite in the western part of the sub-area (EPC Engineering Division Mine, 1984). Approximately eight other companies have reported mineralisation considered (by them) mineable in the area (all now in Ethiopia), but none at the actual Colluli Project site until STB started exploration on the concession in 2010.
Geology	*Deposit type, geological setting and style of mineralisation.*	The Colluli Project area is located in the Danakil Depression, which strikes NW-SE with an extension of more than 200km from Lake Bada in the NW to Lake Acori in the SE. The structure of the Danakil Depression widens to the South, beginning with 10km width in the North and widening up to 70km in the South. The northern part is the deepest and has elevations as low as 50m to 128m below sea level. The depression is flanked by the Danakil Alps to the northeast and the Ethiopian Highlands to the southwest. These consist of Precambrian gneisses and phyllites as well as Jurassic sediments, Palaeozoic granites and intruded Neogene basalts.

		Locally at Colluli the landscape is dominated by flat lying sediments and is approximately 120 metres below sea level. The mineralisation in the project area is bound to the northeast by Pliocene to recent anhydrite/gypsum, halite and clays. The mineralisation is hosted by a potash sequence overlain by clastic sediments comprised of sands and silts. Underlying the clastic sequence is a sequence of salts consisting of a discrete sub-members including the "Upper and Lower Rock Salt", "Sylvinite", "Upper and Lower Carnallitite", "Bischofite", "Kainitite" and finally the "Black Clay" at the base of the drilled sequence. The bedding is very shallow dipping (less than 0.5 degrees) to the southwest and bound by faults to the northeast and southwest. These faults are steep, with interpreted throws of approximately 20m. A major fault with a throw of approximately 50 to 100m separates the mineralised Area A from Area B. The interpreted fault line track along the course of the Zariga River system. The mineralisation is in the form of coarse crystalline salts, predominantly in the form of sylvinite, carnallitite, kainitite, and rock salt, containing the mineral types Sylvite (KCl), Carnallite ($KMgCl_3.6(H_2O)$) and Kainite ($MgSO_4.KCl.3H_2O$)), with common interbedded halite ($NaCl$) and kieserite ($MgSO_4.H_2O$).
Drillhole Information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:* *Easting and northing of the drillhole collar* *Elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar* *dip and azimuth of the hole* *down hole length and interception depth* *hole length.*	No exploration results have been reported in this release, therefore there is no drillhole information to report. This section is not relevant to reporting Mineral Resources.
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.*	No exploration results have been reported in this release, therefore there is no drillhole intercepts to report. This section is not relevant to reporting Mineral Resources.

Criteria	JORC Code explanation	Commentary
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples if such aggregations should be shown in detail.	No exploration results have been reported in this release, therefore there is no drillhole intercepts to report. This section is not relevant to reporting Mineral Resources.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No exploration results have been reported in this release, therefore there is no drillhole intercepts to report. This section is not relevant to reporting Mineral Resources.
Relationship between mineralisation widths and intercept lengths	*If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.*	No exploration results have been reported in this release, therefore there is no drillhole intercepts to report. This section is not relevant to reporting Mineral Resources.
Diagrams	*Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.*	No exploration results have been reported in this release, therefore there is no drillhole intercepts to report. This section is not relevant to reporting Mineral Resources.
Balanced Reporting	*Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	No exploration results have been reported in this release, therefore there is no drillhole intercepts to report. This section is not relevant to reporting Mineral Resources.

Criteria	JORC Code explanation	Commentary
Other substantive exploration data	*Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	No exploration results have been reported in this release, therefore there is no drillhole intercepts to report. This section is not relevant to reporting Mineral Resources.
Further work	*The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*	The decision as to the necessity for further exploration at Colluli is pending completion of the mining technical studies on the currently available resource.

Section 3 : Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database Integrity	*Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.*	All of the drilling was logged onto paper and has recently (late 2014) been transferred to a digital form and loaded into a Microsoft Access drillhole database. The latest geotechnical and QAQC twinned drillhole logging was completed directly onto a laptop in the field using Microsoft Excel spreadsheets with drop-down boxes to restrict values entered. Logging information was reviewed by the senior geologist prior to final load into the database. The data is now stored in a single Microsoft Access database for the Colluli project.
	Data validation procedures used.	Prior to 2014, the data validation was initially completed by the responsible geologist logging the core and marking up the drillhole for assaying. The paper logs were transferred to Excel spreadsheets and compared with the originals for error. Assay dispatch sheets were compared with the record of samples received by the assay laboratories. All of the electronic files were stored in directories for each data type and labelled by drillhole identifier, allowing for easy recognition of missing data. Since late 2014, all of the drillhole data has been collected and input into a Microsoft Access database, keyed on drillhole identifier (BHID) and assay sample number. All of the data was verified at the time of import to Access and any error was corrected. Both internal (STB) and external (Ercosplan, Snowden and AMC) validations were/are completed when data was loaded into special software for geological interpretation and resource estimation. AMC checked the data for overlapping intervals, missing samples, FROM values greater than TO values, missing stratigraphy or rock type codes, downhole survey deviations of +/- 10^{o} in azimuth and +/- 5^{o} in dip, assay values greater than or less than expected values and several other possible error types when loading the data into CAE Studio 3 (Datamine) software. Furthermore each assay record was examined and mineral resource intervals were picked by the Competent Person. QAQC data and reports are normally also checked. Ercosplan and Snowden both reported briefly on the available QAQC data for Colluli and AMC instigated a drilling program of four twinned drillholes for geological and assay data validation purposes. AMC produced a QAQC report on the results of this program.
Site Visits	*Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	AMC Senior Geologist, John Tyrell visited the Colluli project site in late 2014 and inspected the Area A and Area B deposits. Whilst on site he witnessed the drilling of validation drillholes and their geological logging and sampling preparation for assaying. The geology, sampling, sample preparation and transport, data collection and storage procedures were all reviewed whilst at the project site and at the STB office and core shed in Asmara. AMC used this knowledge to aid in the preparation of this Mineral Resource Estimate for the Colluli Area A and Area B deposits.
	If no site visits have been undertaken indicate why this is the case.	

Criteria	JORC Code explanation	Commentary
Geological interpretation	*Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*	The Colluli potash mineralisation is one of only a few shallow potash deposits documented globally. Detailed mapping, geophysical (including seismic and gravity studies) and mineralogical studies have been completed by STB geologists and contracted specialists between 2011 and 2014. These data and the relatively closely-spaced (for potash) drilling have led to a good understanding of the mineralisation controls. The mineralisation is hosted within very shallow dipping bedded evaporite units (potash salts and halite) which are areally extensive and continuous. There is an obvious change in the sequence at the edges of the mineralisation, explained by faulting in the order of 20m or so. Ercosplan had interpreted internal faulting in their 2012 report and model, but the vertical offsets are very small and thus have not been included in the current interpretation for the resource model as they would unnecessarily complicate the stratigraphy. Over the spacing of the drillholes, the difference in RL is negligible and they do not appear to materially affect the distribution of the potash units. There is no obvious alteration in the mineralised units.
	Nature of the data used and if any assumptions made.	No assumptions are made.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	Neither alternative interpretations nor estimations were undertaken by AMC.

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td rowspan="2"></td><td>The use of geology in guiding and controlling Mineral Resource estimation.</td><td>Geological observation has underpinned the resource estimation and geological model. Rock type and geochemistry (assayed anion and cation values as well as normative mineralogy) were used to define the footwall and hanging wall boundaries for each unit. The geological model was developed as an iterative process of checking against logging and photography as needed during the interpretation.
The extents of the geological model were constrained by drilling. Geological boundaries had only minimal extrapolation beyond drilling in line with the resource classifications of indicated or inferred.
The domain coding for the Colluli project (Areas A & B) is as follows:
<table>
<tr><th>Lithology/Member</th><th>Rock Code</th><th>Numeric Domain Code</th></tr>
<tr><td>Overburden</td><td>OVBD</td><td>1000</td></tr>
<tr><td>Upper Rock Salt</td><td>URST</td><td>2000</td></tr>
<tr><td>Marker Beds</td><td>MBED</td><td>3000 (reserved for future use)</td></tr>
<tr><td>Upper Sylvinite</td><td>USYL</td><td>4100</td></tr>
<tr><td>Middle Sylvinite (low grade)</td><td>MSYL</td><td>4200</td></tr>
<tr><td>Lower Sylvinite</td><td>LSYL</td><td>4300</td></tr>
<tr><td>Upper Carnallitite</td><td>UCRT</td><td>5000</td></tr>
<tr><td>Bischofitite</td><td>BSFT</td><td>6000</td></tr>
<tr><td>Lower Carnallitite</td><td>LCRT</td><td>7000</td></tr>
<tr><td>Kainitite</td><td>KANT</td><td>8000</td></tr>
<tr><td>Lower Rock Salt</td><td>LRST</td><td>9000</td></tr>
<tr><td>Clay</td><td>CLAY</td><td>10000</td></tr>
</table></td></tr>
<tr><td>The factors affecting continuity both of grade and geology.</td><td>Key factors that are likely to affect the continuity of grade are:
The down-hole variability of the geological units; the potash units are commonly interbedded with other halite and evaporite salts
The variability at deposit scale due to complete or partial non-deposition, dissolution of erosion of a salt layer
Internal faulting at a scale that is too small to be defined at the current drill spacing.</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
Dimensions	*The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan, width, and depth below surface to the upper and lower limits of the Mineral Resource.*	The deposit at Area A strikes approximately 7kms and is approximately triangular being approximately 4kmat its widest point. The mineralised units dip less than one degree towards 170-180 degrees azimuth. The mineralised sequence (excluding the Upper Rock Salt) ranges in thickness from 10m to 50m and is approximately 20 – 60m below surface. At Area B the units also dip less than one degree towards 170-180 degrees and strike for a distance of nearly 8km. Area B mineralisation is about 5km at its widest point and 3kms at its narrowest (across strike). The mineralised sequence ranges in thickness from 10-20m and is 9 to 150m below surface. Areas A and B are separated by an apparent fault with an interpreted offset of 20 to 100m.
Estimation and modelling techniques	*The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points.* *If a computer assisted estimation method was chosen include a description of computer software and parameters used.*	Grade estimation was completed using ordinary kriging (OK) for the Mineral Resource estimate. Datamine software was used to estimate grades for K, Mg, Na, Cl, Ca, SO4, KCl, K_2O, Sylvite, Carnallite, Kainite, Polyhalite, Halite, Bischofite, Kieserite and Anhydrite using parameters derived from statistical and variographic studies. The majority of the variables estimated have coefficients of variance less than 1.0. Drillhole spacing varies from approximately 500m x 500m at Area A to 750m x 750 – 1000m at Area B. Drillhole sample data was flagged with numeric domain codes unique to each mineralisation domain. Sample data was composited to 1m, 1.5m, 2m or single intercept (domains 4100 and 5000, Area A) downhole lengths, with the resulting composite length adjusted to retain residuals. The influence of extreme sample outliers was reduced by top-cutting where required. The top-cut levels for each mineralisation domain were determined using a combination of grade histograms, log probability plots, and decile and percentile analysis. Grade was estimated into six mineralisation domains and four waste (although Upper Rock Salt may form a resource with additional work) domains. The key mineralisation domains had downhole and directional variography performed where the number of samples permitted it. The waste domains and low sample number mineralisation domains used the variograms from the mineralisation domain with the closest mineralogy type. All variograms were scaled to the variance of the individual domains. Grade continuity varied from several meters in the vertical direction, to kilometres in the along and across strike directions. All estimated elements in the mineralisation domains had major search axes lengths of approximately 2/3 the longest variograms range, with the other search axes scaled according to their corresponding variograms. The vertical (minor) search axis ranges were multiplied by a factor of ten, to a minimum of 20m, due to the proportionally extreme lengths of the major and semi-major ranges.
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral	A previous Mineral Resource estimate was reported for Colluli in April 2012 which was completed by German potash expert company Ercosplan. This was classified and reported under Canadian National Instrument 43-101 (NI 43-101) Guidelines but would not be reportable under JORC 2012. The estimate used a polygonal-type estimation process, the "Radius of Influence" method, which uses cylinders of equal grade and thickness

	Resource estimate takes appropriate account of such data.	influence to arrive at a weighted average derived tonnage in each resource and uses a cylindrical classification surrounding each drillhole. The 2014 Mineral Resource estimate is a completely new block model, using interpreted wireframes to define a volume and grade estimated by kriging based on variographic studies. Classification takes into account grade and geological continuity between drillholes rather than within a set radius and/or volume surrounding them.
	The assumptions made regarding recovery of by-products	No assumptions were made regarding recovery of by-products.
	Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation)	No estimates were undertaken for any non-grade variables.
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	The Colluli block models use a parent cell size of 500m in northing, 500m in easting and 2m in RL. This corresponds to approximately half the average drillhole spacing at Area B and slightly smaller than the widest drill spacing at Area A. Sub-celling was allowed to occur down to 50m in easting, 50m in northing and 0.02m in RL for all domains. After completion of the volume model it was optimised to reduce the sub-cells whilst keeping the domain codes intact. This allowed for accurate volume representation of the interpretation whilst keeping the overall model size down. Grade was estimated into parent cells, with all sub-cells receiving the same grade as their relevant parent cell. Discretisation was set to 10 by 10 by 2 in X, Y and Z respectively for all domains. Search ellipse dimensions for each domain were based on variography. Three search passes were used for each estimate in each domain. The first search allowed a minimum of 10 and a maximum of 25 composites. For the second pass, the first pass search ranges were expanded by 2.5 times. A minimum of 5 composites and a maximum of 25 composites were allowed. The third pass search ellipse dimensions were extended by 4 times. A minimum of 2 composites and a maximum of 30 composites were allowed for this pass. A limit of 3 composites from a single drillhole was permitted.
	Any assumptions behind modelling of selective mining units.	Upon direction of STB it was assumed for modelling purposes that the deposit would be mined in its entirety by the open pit method so no selective mining units were assumed in this estimate. Model block sizes were determined primarily by drillhole spacing and statistical analysis of the effect of changing block sizes in the final estimates.
	Any assumptions about correlation between variables	All elements within a domain used the same sample selection routine for block grade estimation. No co-kriging was performed at Colluli.

	Description of how the geological interpretation was used to control the resource estimates.	The geological interpretation is used to define the mineralisation domains. All of the mineralisation domains are used as hard boundaries to select sample populations for variography and grade estimation.
	Discussion of basis for using or not using grade cutting or capping.	Statistical analysis showed that the domains included outlier values that required top-cut values to be applied. Top-cut values are chosen based on statistical parameters for that element in each domain and a visual check of the location of any possible outlier values. Usually the log probability plots and histogram plots are used to determine the final value used. The top-cuts generally only affect one or two samples. In some cases, the percentage of the weighted average mass of mineralised material was cut, due to extreme high value in relatively poorly sampled domains.
	The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.	Validation of the block model consisted of; • Volumetric comparison of the mineralisation wireframes to the block model volumes • Visual comparison of estimated grades against composite grades • Comparison of block model grades to the input data using swathe plots As no mining has taken place at Colluli to date, there is no reconciliation data available.
Moisture	*Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	All mineralisation tonnages are estimated on a dry basis. The moisture content in mineralisation is considered low, however there is moisture content of up to 40% in the overlying burden unit.
Cut-off parameters	*The basis of the adopted cut-off grade(s) or quality parameters applied.*	No grade cut-off has been used to report the Mineral Resource at Colluli. Consideration of mining, metallurgical and pricing assumptions, suggest that any of the currently interpreted mineralised material has a reasonable prospect for eventual economic extraction.

Criteria	JORC Code explanation	Commentary
Mining factors or assumptions	*Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential minimg methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	AMC Consultants is currently preparing mining reports to support a pre-feasibility study (PFS) and definitive feasibility study (DFS) for Colluli on behalf of STB. Scenarios being considered are conventional open pit using mechanised mining techniques such as continuous surface mining. AMC has assumed, based on initial work, that the Colluli deposits are amenable to open-pit mining methods.
Metallurgical factors or assumptions	*The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when*	Metallurgical studies are well advanced and have delivered highly encouraging results to date. Studies are ongoing as part of the DFS work.

	reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	
Environmental factors or assumptions	*Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reaosnbale prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental imapcts, particularly for a greenfield project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	Environmental studies are underway as part of the PFS/DFS work

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td>Bulk Density</td><td>Whether assumed or determined. If assumed, the basis for the assumptions.
If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</td><td>Bulk density has been estimated from density measurements collected as down-hole LAS survey data (completed by Abitibi-Terratec). The 0.01m readings were composited to 1m intervals for use in the estimate. Top and bottom cutting of outlier values was performed as required.

No direct core measurements have been taken to date.</td></tr>
<tr><td></td><td>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.,) moisture and differences between rock and alteration zones within deposit.</td><td>The water immersion method is not appropriate for potash deposits, owing to their solubility and collecting perfectly cylindrical core is also difficult.
The down-hole geophysical collection of density data is most appropriate for Colluli, with adequate validation and porosity factors applied.</td></tr>
<tr><td></td><td>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</td><td>The bulk density values applied at Colluli are:
<table>
<tr><td>LITHOLOGY</td><td>OVBD</td><td>URST</td><td>USYL</td><td>MSYL</td><td>LSYL</td><td>UCRT</td><td>BSFT</td><td>LCRT</td><td>KANT</td><td>LRST</td><td>CLAY</td></tr>
<tr><td>DOMAIN</td><td>1000</td><td>2000</td><td>4100</td><td>4200</td><td>4300</td><td>5000</td><td>6000</td><td>7000</td><td>8000</td><td>9000</td><td>10000</td></tr>
<tr><td>MEAN DENSITY</td><td>1.40</td><td>2.16</td><td>2.15</td><td>2.22</td><td>2.15</td><td>2.12</td><td>2.09</td><td>2.07</td><td>2.13</td><td>2.16</td><td>2.19</td></tr>
</table>

All values are in t/m^3</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
Classification	*The basis for the classification of the Mineral Resources into varying confidence categories.*	Classification for Colluli is based upon continuity of geology, mineralisation and grade, considering drillhole and density data spacing and quality, variography and estimation statistics (number of samples used and estimation pass).
	Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of data).	At Colluli, the core of the modelled Area A deposits is generally well drilled for a potash deposit with a nominal 500m x 500m drillhole spacing in easting and northing directions. There is also a localised cruciform drilling pattern in the centre of the deposit, designed to test slightly wider in the better drilled parts of the deposit, averaging 600m to 700m spacing. In general, the estimates have been classified as Measure Resource where a cluster of drillholes are within 600m of each other, the holes have been assayed and geophysically logged and the confidence in the estimate is high. Areas classified as Indicated Resource generally have clusters of drillholes within 1.5km of each other and the remaining areas of the models are classified as Inferred.
	Whether the result appropriately reflects the Competent person's view if the deposit.	AMC believes that the classification appropriately reflects its confidence in and the quality of the grade estimates.
Audit or reviews	*The results of any audits or reviews of Mineral Resource estimates.*	The previously reported Mineral Resource estimate (Ercosplan 2012) has not been audited, however it has been reviewed by Snowden Group consultants in 2013 in an unpublished report.
Discussion of relative accuracy/confidence	*Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within the stated confidence limits, or, if such an*	The Mineral Resource classification applied to each deposit implies a confidence level and level of accuracy in the estimates.

	approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.	
	The statement should specify whether it relates to global or local estimates, and, if, local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used	These levels of confidence and accuracy relate to the global estimates of grade and tonnes for the deposit.
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	These ranges relate to the global estimates of grade and tonnes for the deposit.