savannah resources plc

SAVANNAH RESOURCES PLC

AIM: SAV

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RNS – 26 June 2017

PROJECT PORTFOLIO

MINERAL SANDS
MOZAMBIQUE
(CONSORTIUM AGREEMENT WITH RIO TINTO)

COPPER/GOLD
OMAN

LITHIUM
PORTUGAL AND FINLAND

Savannah Resources Plc

Preliminary Metallurgical Test Work Confirms High Quality Lithium Concentrate

Savannah Resources plc (AIM: SAV) ('Savannah' or 'the Company'), the AIM quoted resource development company, is pleased to announce that preliminary metallurgical test work on a composite lithium sample from the Mina do Barroso project in northern Portugal confirms that a very pure low iron spodumene concentrate can be produced. Savannah has a 75% interest in Slipstream Resources Portugal Unipessol Lda, which is the registered holder of the Mina do Barroso mining licence.

HIGHLIGHTS:

- Metallurgical test work undertaken on a composite sample from Mina do Barroso to determine if lithium bearing minerals can be recovered using commercially available technology to produce a saleable product;
- Work confirms that a high-grade, very pure, low iron spodumene concentrate can be produced;
- Single analysis of the combined sample confirmed a high Li_2O head grade (~1.95% Li_2O) and low Fe_2O_3 head grade (~0.9%);
- Heavy Liquid Separation ('HLS') shows a very pure (~8%) Li_2O product can be produced;
- Floatation results utilising a simple one stage float without any optimisation achieved ~83.7% Li_2O recovery at ~5.9% Li_2O, this is very positive and can be improved through optimisation;
- Microscopy confirmed that the concentrate was almost entirely spodumene with only very minor amounts of petalite;
- Test work confirms that a high quality spodumene concentrate can be produced using conventional commercially available processing technologies; and
- 3,000-5,000m drill programme to commence shortly, focusing on defining a JORC mineral resource estimate to support potential mine development.

Savannah's CEO, David Archer said: "We are delighted with these results as they confirm that a high-grade, low impurity spodumene concentrate can be produced using conventional, well understood processing techniques. Furthermore, based on the quality of the results, we believe that our spodumene concentrate is likely to be highly sought after by manufacturers of battery grade lithium.

"Whilst it is still early days, we are working to highlight what we believe to be the superior characteristics of our Portuguese lithium project, namely:

- Spodumene dominant mineralisation;
- Granted Mining Leases;
- Conventional and well understood processing techniques;
- High-grade, low impurity spodumene concentrates;
- Extensive lithium mineralisation over at least 6km; and
- Excellent regional lithium exploration potential from extensive pegmatite fields.

"All of this is within a premier mining jurisdiction with a government intent on supporting the development of a lithium industry in Portugal. Accordingly, we are highly encouraged with the results received to date and will be moving forward with drilling shortly as we look to define a JORC mineral resource estimate."

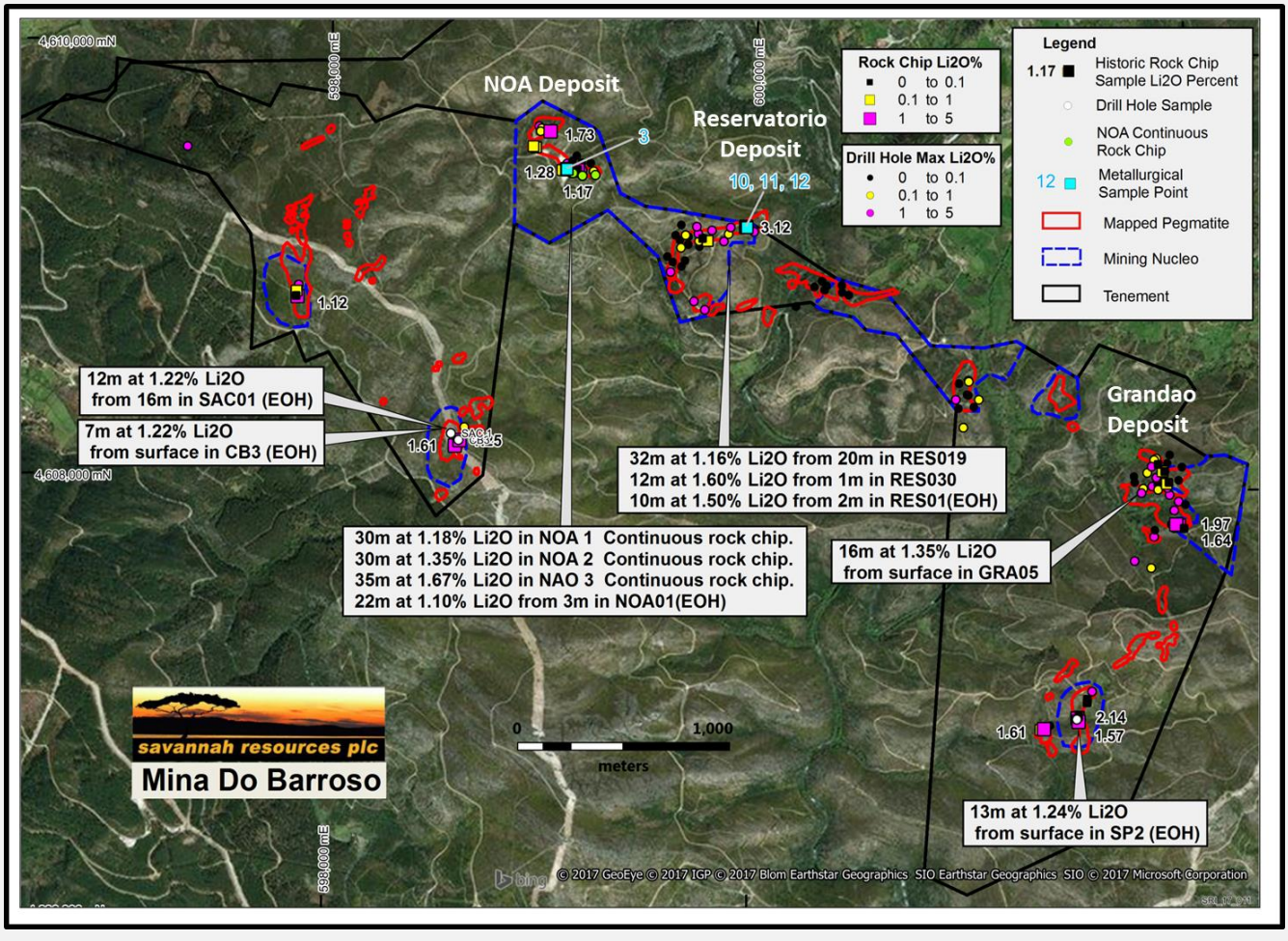

Figure 1. Project Location Map

Technical Data

The scope of work was to conduct preliminary ore characterisation test work on a composite sample from the NOA and Reservatorio Deposits (sample site 3, 10, 11, 12 on Figure 1) on the Mina do Barroso mining lease to determine if the lithium bearing minerals could be recovered from the rock using commercially available technology and a saleable product produced. The work was conducted by lithium specialists Nagrom Metallurgical in Perth, Australia.

The test work is outlined as follows:

- Sample analysis by x-ray fluorescence ('XRF') and inductively coupled plasma ('ICP') to determine lithium grade of the sample and any potential penalty elements;
- Size analysis to determine what size fraction contains the lithium minerals
- Microscopy for mineral identification;
- Heavy Liquid Separation at SG 2.7 to determine if gravity separation can recover the lithium minerals; and
- Single stage floatation test to determine if lithium minerals can be recovered via flotation.

Results

Location data and individual analysis of the samples taken and combined into the preliminary metallurgical test sample is provided below and confirmed the rocks were lithium bearing.

East_UTM29T	Nth_UTM29T	Sample	Li_2O%	Fe%	SnO_2%	Ta_2O_5%	Comments
599112	4609435	3	1.54	0.526	0.011	<0.001	Spodumene-bearing pegmatite in quarry
599957	4609183	10	2.31	0.493	0.007	<0.001	Coarse spodumene mineralisation
599960	4609182	11	1.51	0.269	0.010	<0.001	Coarse spodumene mineralisation
599962	4609179	12	0.58	0.385	0.010	<0.001	Coarse spodumene crystals in granular pegmatite

Single analysis of the combined sample confirmed a high Li_2O head grade (~1.95% Li_2O) and low Fe_2O_3 head grade (~0.9%) as shown below.

Composite ID	Composite Mass	Li_2O	Fe_2O_3
	kg	%	%
Test work Composite	35.9	1.95%	0.902

Dense media separation ('DMS') and HLS test work summarised below was conducted to determine how the mineralisation might respond to conventional gravity concentration methods.

- Rougher DMS at SG 2.7 is suggested as ~60% mass rejection is feasible at ~10% Li_2O loss. DMS Crush size and Cleaner DMS SG to be optimised; and
- HLS shows a very pure (~8%) Li_2O product can be produced.

Test work Composite P100 6.3mm +1mm Heavy Liquid Separation at SG 2.7 and 2.96							
PRODUCT	Yield	Li_2O		Fe_2O_3		SiO_2	
HLS	%	ppm	dist.	%	dist.	%	dist.
SG 2.96 Sinks	9.70%	64820	35.48%	0.28	7.93%	67.37	8.85%
SG 2.96 Float	30.93%	32500	56.72%	0.31	27.25%	76.10	31.88%
SG 2.7 Float	59.37%	2330	7.81%	0.38	64.82%	73.71	59.27%
Calculated Head	100.00%	17722	100.00%	0.35	100.00%	73.83	100.00%

Test work Composite P100 6.3mm -1+0.045mm Heavy Liquid Separation at SG 2.7 and 2.96							
PRODUCT	Yield	Li_2O		Fe_2O3		SiO_2	
HLS	%	ppm	dist.	%	dist.	%	dist.
SG 2.96 Sinks	20.46%	79290	64.34%	0.58	34.99%	63.92	17.85%
SG 2.96 Float	13.46%	44020	23.50%	0.63	24.95%	65.62	12.06%
SG 2.7 Float	66.08%	4640	12.16%	0.21	40.06%	77.69	70.09%
Calculated Head	100.00%	25214	100.00%	0.34	100.00%	73.25	100.00%

- Floatation results below utilising a simple one stage float without any optimisation achieved ~83.7% Li_2O recovery at ~5.9% Li_2O; and
- This is very positive and can be improved through further optimisation.

Test work Composite P80 0.106mm Sighter Three-Stage Flotation Test #1							
PRODUCT	**Yield**	**Li_2O**		**Fe_2O_3**		**SiO_2**	
Flotation	**%**	**ppm**	**dist.**	**%**	**dist.**	**%**	**dist.**
Re-Cl Con 1	11.28%	63010	35.18%	0.752	15.96%	63.446	9.74%
Re-Cl Con 2	6.48%	58590	18.79%	0.737	8.98%	63.874	5.63%
Re-Cl Con 3	7.82%	57350	22.18%	0.669	9.83%	64.044	6.81%
Re-Cl Con 4	3.24%	47200	7.57%	0.580	3.53%	65.600	2.89%
Re-Cl Tail	9.63%	14320	6.82%	0.258	4.67%	72.660	9.52%
Cl Tail	12.28%	1910	1.16%	0.145	3.35%	76.834	12.83%
Ro Tail	39.75%	530	1.04%	0.072	5.38%	80.672	43.61%
-0.02mm	9.52%	15410	7.26%	2.699	48.30%	69.356	8.98%
Calculated Head	100.00%	20212	100.00%	0.532	100.00%	73.531	100.00%

- Microscopy confirmed that the concentrate was almost entirely spodumene with only very minor amounts of petalite confirming that a simple conventional recovery process is likely
- Further metallurgical test work will now be conducted to further optimise the lithium recovery process.

Image 1. Photograph of the re-cleaner 1 Concentrate showing spodumene rich concentrate (source: Company photo).

Competent Person and Regulatory Information

The information in this announcement that relates to exploration results is based upon information compiled by Mr Dale Ferguson, Technical Director of Savannah Resources Limited. Mr Ferguson is a Member of the Australian Institute of Mining and Metallurgy (AusIMM) and has sufficient experience which is 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 December 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code). Mr Ferguson consents to the inclusion in the report of the matters based upon the information in the form and context in which it appears.

This announcement contains inside information for the purposes of Article 7 of Regulation (EU) 596/2014.

****ENDS****

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About Savannah

Notes

Savannah Resources Plc (AIM: SAV) is a growth oriented, multi-commodity, mineral development company.

Mozambique

Savannah operates the Mutamba heavy mineral sands project in Mozambique in collaboration with Rio Tinto, and can earn a 51% interest in the related Consortium, which has an established initial Indicated and Inferred Mineral Resource Estimate of 4.4 billion tonnes at 3.9% THM over the Jangamo, Dongane and Ravene deposits. Under the terms of the Consortium Agreement with Rio Tinto, upon delivery by Savannah of the following will earn the corresponding interest in the Mutamba Project (which currently is 20% following delivery of scoping study in May 2017): pre-feasibility study - 35%; feasibility study – 51%. Additionally, the Consortium Agreement includes an offtake agreement on commercial terms for the sale of 100% of heavy mineral concentrate production to Rio Tinto (or an affiliate).

Oman

Savannah has interests in two copper blocks in the highly prospective Semail Ophiolite Belt in Oman. The projects, which have an Indicated and Inferred Mineral Resource of 1.7Mt @ 2.2% copper and high-grade intercepts of up to 56.35m at 6.21% Cu, with gold credits, provide Savannah with an excellent opportunity to potentially evolve into a mid-tier copper and gold producer in a relatively short time frame. Together with its Omani partners, Savannah aims to outline further mineral resources to provide the critical mass for a central operating plant to develop the deposits and in December 2015 outlined exploration targets of between 10,700,000 and 29,250,000 tonnes grading between 1.4% and 2.4% copper.

Portugal

Savannah holds a 75% interest one mining licence and nine prospective applications for the exploration and development of lithium, covering an area in excess of 1,018km2 in northern Portugal. This includes the highly strategic Mina do Barroso prospect, which with an approved Mining Plan ('MP'), Environmental Impact Assessment ('EIA') and a 30-year mining

concession/Mining Licence ('ML'), means that with a defined JORC resource a development decision could be made as early as Q4 2018.

Finland

Savannah has Reservation Permits over two lithium projects, covering an area of 159km². Geological mapping has highlighted the presence of seven pegmatites with key lithium minerals petalite, spodumene and lepidolite all identified.

APPENDIX 1 – JORC 2012 Table 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg 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.*	• Four approximately 10kg samples were taken from one site on the NOA mineralization and 3 sites on the Reservatorio mineralization and composited into one large sample for testing
	• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*	• Samples were collected in a 2.5m radius around the centre point and every effort was made to obtain a representative sample
	• *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• The material sampled was pegmatite with spodumene and minor petalite. • The bulk sample was crushed and rifle split with a 20kg sample split off for metallurgical test work
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• N/A
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.*	• N/A
	• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*	• Random samples were collected from an area of approximately 5 square metres

Criteria	JORC Code explanation	Commentary
	• *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.*	• NA
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.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Rock chip samples were geologically logged
Sub-sampling techniques and sample preparation	• If core, whether cut or sawn and whether quarter, half or all core taken. • If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	• Samples were collected by hand using a rock hammer
	• For all sample types, the nature, quality and appropriateness of the sample preparation technique.	• Rockchip sampling at least 10kg of representative rock material from a 5m radius around the sample point was collected
	• Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	• NA
	• 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.	• Every effort was made to ensure that the samples were representative and not bias in anyway by randomly picking rocks from the 5 square metre area
	• Whether sample sizes are appropriate to the grain size of the material being sampled.	• The 40kg sample collected is considered appropriate for the rock type and the preliminary nature of the test work
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.	• Sample Receipt and Log (~20kg) • Stage Crush (~20kg) to P_{100} 6.3mm • RSD Blend and Split: - 1x 0.2kg Head Analysis - 1x 0.2kg Mineralogy - 1x 2kg Size by Analysis - 1x 5kg Wet Screen - 1x 1kg Stage Grind

Criteria	JORC Code explanation	Commentary
		- Reserve Remainder • Size by Analysis (2kg) at 5.6, 4.75, 4, 3.35, 2, 1, 0.71, 0.5, 0.425, 0.355, 0.25, 0.15, 0.125, 0.106, 0.09, 0.063, 0.045 and 0.038mm • Conduct Microscopy on each fraction • Wet Screen (5kg) at 1mm and 0.045mm • Dry and Riffle Split +1mm and +0.045mm fraction: - 1x Xkg Analysis - 1x Xkg Heavy Liquid Separation (HLS) - Reserve Remainder • Dry and Riffle Split -0.045mm: - 1x 0.05kg Analysis - Reserve Remainder • HLS at SG 2.7 and 2.96 on -6.3+1mm and -1+0.045mm to produce one (1) Sink and two (2) Float fractions (2 test allowance) • Riffle Split from each fraction: - 1x Xkg Analysis/Microscopy - Reserve Remainder • Stage Grind (1kg) to P_{80} 0.106mm • Filter Press and Cone and Quarter: - 1x 0.1kg Moisture Determination - 1x 0.2kg Particle Size Distribution - 1x 0.45kg Flotation • Particle Size Distribution (0.2kg) at 0.25, 0.18, 0.15, 0.125, 0.106, 0.09, 0.063, 0.045 and 0.038mm • Rougher-Cleaner-Re-Cleaner Spodumene Flotation (0.45kg) at the following conditions to produce four (4) Re-Cleaner Concentrates, one (1) Re-Cleaner Tailing, one (1) Cleaner Tailing, one (1) Rougher Tailing and one (1) -0.02mm fraction: - Inclusive of Deslime Stage at 0.02mm via Wet Screen - Flotation parameters to be confirmed in discussion with Andrew

Criteria	JORC Code explanation	Commentary
		Paterson of Kingston Resources Limited • Dry and Riffle Split each Rougher-Cleaner- Re-Cleaner Flotation fraction: - 1x 0.02kg Analysis/Microscopy - Reserve Remainder • All samples will be analysed via XRF and ICP for Li_2O, Fe_2O_3, Al_2O_3, SiO_2, TiO_2, Mn, S, P, SnO_2, Ta_2O_5, Nb_2O_5, Na_2O, PbO, CaO, MgO, K_2O, Rb and LOI_{1000}.
	• 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.	• Not used.
	• Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	• Standards and duplicates we used and we off acceptable levels of accuracy
Verification of sampling and assaying	• The verification of significant intersections by either independent or alternative company personnel.	• NA
	• The use of twinned holes.	• NA
	• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	• NA
	• Discuss any adjustment to assay data.	• No adjustments are made to the assay data for the purposes of public reporting.
Location of data points	• Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. • Specification of the grid system used. • Quality and adequacy of topographic control.	• The coordinate of each rockchip was taken at the time of collecting using a handheld GPS with an accuracy of 5m. • The grid system used is the Portuguese national ETRS89 – PT-TM06 datum. • Topographic accuracy was +/- 5m

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	• Data spacing for reporting of Exploration Results. • 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. • Whether sample compositing has been applied.	• Samples were collected from representative areas from both NOA and Reservatorio. • The four 10kg samples were composited into one larger sample
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. • 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.	• Unknown due to limited data • Unknown due to limited data
Sample security	• The measures taken to ensure sample security.	• Samples were delivered to a courier and then to the laboratory
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• Internal company auditing

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

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 security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.*	• Mina do Barroso C100, 75% owned by Savannah
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• NA
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The lithium mineralization is predominantly in the form of Spodumene-bearing pegmatites which are hosted in meta-pelitic and mica schists, and occasionally carbonate schists of upper Ordovician

Criteria	JORC Code explanation	Commentary
		to lower Devonian age. The pegmatites are unzoned and vary in thickness from 10m-50m. Lithium is present in most aplite compositions.

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*
		• See table in main release

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.* • *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 of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• NA
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• NA
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*	• Relevant diagrams and maps have been included in the main body of the release.

Criteria	JORC Code explanation	Commentary
	plan view of drill hole collar locations and appropriate sectional views.	
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.*	• All results have been reported.
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.*	• The interpretation of the results is consistent with the observations and information obtained from historical data collected.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Rock chip sampling, channel sampling and RC drilling. Once planning has been completed the detail will be provided