Tawana Resources NL
(Incorporated in Australia)
(Registration number ACN 085 166 721)
Share code on the JSE Limited: TAW
JSE ISIN: AU0000TAWDA9
Share code on the Australian Securities Exchange Limited: TAW
ASX ISIN: AU000000TAW7
("the Company" or "Tawana")

Mineral Resource Update for Bald Hill Lithium and Tantalum Project

PLEASE NOTE: ALL GRAPHICSHAVE BEEN REMOVED FOR SENS PURPOSES. PLEASE REFER TO TAWANA WEBSITE FOR THE COMPLETE ANNOUNCEMENT**.**

Tawana Resources NL (Tawana) (ASX:TAW) is pleased to announce an updated Indicated and Inferred lithium Mineral Resource for the Bald Hill Lithium and Tantalum Project, located in the Eastern Goldfields region of Western Australia.

Highlights

- Total Inferred and Indicated lithium and tantalum resources above 0.5% Li_2O or 200pm Ta_2O_5 total 25.3 million tonnes (Mt), and comprises:
    - **High-grade lithium resources of 18.9Mt at 1.18% Li_2O and 149ppm Ta_20_5 at a 0.5% Li_20 cut-off; and**
    - **Additional tantalum resources of 6.4Mt at 330ppm Ta_2O_5 at a 200ppm Ta_2O_5 cut-off.**
- The Resource update represents a **47% increase** in total contained lithium.
- The **66% increase** in contained lithium within Indicated resources is expected to result in a Reserve upgrade later in the year.
- The updated Resource covers only 25% of the known southern swarm of lithium pegmatites.
- The lithium processing facility is currently in construction, first lithium shipment targeted for Q1 2018.

Tawana Resources Managing Director Mark Calderwood stated: "*The 25Mt of combined high-grade lithium and tantalum resources represents a solid uplift from about five months of additional drilling. The additional Indicated Resources are likely to result in additional Reserves based on scoping level pit optimisations completed in June to focus the resource conversion drilling. Infill drilling is continuing and we expect to deliver another upgrade to Indicated Resources later this year.*

Due to the fact the resource remains open in several areas I look forward to further step out drilling planned for the new year. Additionally, the recently discovered high grade lithium and tantalum pegmatite located below the starter pit (refer announcement dated 2 August 2017), has not been included in the resource due to insufficient drilling."

Mineral Resource Estimate

CSA Global Pty Ltd ("CSA Global") was commissioned by Tawana to update the lithium and tantalum Mineral Resource estimate for the Bald Hill Project.

The Bald Hill Pegmatite Mineral Resource comprises one large, main, sub horizontal pegmatite body, striking north-south, with a strike length of 1,230 metres, and a width at its widest point of 1,080 metres. This main body is surrounded by several smaller discrete pegmatite bodies, sub-parallel to the main, which result in a total strike length for the whole resource of 2,045 metres, and a total width of 1,800 metres. The Mineral Resource has a total vertical depth of 245 metres, beginning 20 metres below the natural surface and plunging gently to the south along its entire strike length.

The Mineral Resource has been classified as Indicated and Inferred in accordance with the JORC Code, 2012 Edition on a qualitative basis; taking into consideration numerous factors including drill holes spacing, estimation quality statistics (kriging slope of regression), number of informing samples, average distance to informing samples in comparison to the semi-variogram model ranges, and overall coherence and continuity of the modelled mineralisation wireframes. All factors that have been considered have been included in Section 1 and Section 3 of Appendix A.

Table 1 | Bald Hill Project, Resources above 0.5% Li_2O cut-off

Resource Category	Tonnes (Mt)	Grade Li_2O %	Contained Li_2O Tonnes	Grade Ta_2O_5 ppm	Contained Ta_2O_5 (,000) Lbs
Indicated	8.0	1.18	95,000	190	2,800
Inferred	10.9	1.18	128,300	118	2,300
Total	**18.9**	**1.18**	**223,300**	**149**	**5,100**

Table 2 | Bald Hill Project, Resources above 0.5% Li_2O and 200ppm Ta_2O_5 cut-offs

Resource Category	Tonnes (Mt)	Grade Li_2O %	Contained Li_2O Tonnes	Grade Ta_2O_5 ppm	Contained Ta_2O_5 (,000) Lbs
Indicated	2.5	1.20	33,300	315	1,900
Inferred	1.2	1.18	14,500	296	800
Total	**4.0**	**1.20**	**47,800**	**309**	**2,700**

Note

1) The tantalum resources form part of the lithium/tantalum resources reported in Table 1.

Table 3 | Bald Hill Project, Resources below 0.5% Li_2O and above 200ppm Ta_2O_5 cut-offs

Resource Category	Tonnes (Mt)	Grade Ta_2O_5 ppm	Contained Ta_2O_5 (,000) Lbs
Indicated	3.9	342	1,700
Inferred	2.5	313	2,950
Total	**6.4**	**330**	**4,650**

Note

1) The tantalum resources reported in Table 3 are additional to those reported in Tables 1 and 2.

About the Bald Hill Project

The Bald Hill Lithium and Tantalum Mine (**Bald Hill Mine** or the **Project**) is owned by Singapore Exchange-listed Alliance Mineral Assets Limited (AMAL), with ASX-listed Tawana Resources NL (Tawana) holding 50% of the lithium rights. The project is subject to a 50% earn-in to existing infrastructure and tantalum rights by Tawana through the expenditure of A$12.5m on development costs. Following the 50% earn-in by Tawana, a new Joint Venture will become effective and the Work Program and Budget for remaining project expenditure in excess of the A$12.5m will be subject to Joint Venture approval.

A Pre-Feasibility Study (**PFS**) finalised in July 2017 confirmed the technical and financial viability of a low capital cost 1.2Mtpa lithium Dense Media Separation circuit (**DMS**) adjacent to the existing tantalum processing facility (**TPF**) at Bald Hill.

The first shipment of lithium concentrate is scheduled for March 2018.

EPC Group Primero mobilised to the Bald Hill Mine in July 2017 and construction work commenced, with foundations completed and steel work being erected.

Each of Tawana and AMAL executed an offtake agreement in April 2017 for the supply of lithium concentrate from Bald Hill over a five-year term with pricing for 2018 and 2019 of US$880/t (FOB Esperance) for 6% Li_2O. The prepayments from the aforesaid offtake agreement will be used towards the capital costs of the Project. AMAL had on 2 October 2017 entered into a Binding Term Sheet to inter alia, vary certain terms of its offtake agreement entered into in April 2017.

The Project is located 50km south east of Kambalda in the Eastern Goldfields of Western Australia. It is located approximately 75km south east of the Mt Marion Lithium project.

The Project comprises four mining leases, one mining lease application, twelve exploration licenses, eight prospecting licenses and one general purpose lease totalling 790.1km.

Prior Indicated and Inferred lithium Mineral Resources were 12.8 million tonnes at 1.18% Li_2O, and 158ppm Ta_20_5 at a 0.5% Li_2O cut-off for the Project and Reserves currently stand at 4.3Mt at 1.18% Li_2O and 208ppm Ta_20_5, representing a 94% conversion of the June 2017 Indicated Resources above 0.5% Li_2O cut-off[1]. The Project remains significantly underexplored as highlighted by significant exploration drill results post the June resource statement.

ASX Listing Rule 5.8.1 Compliance

Geology and Geological Interpretation

The Bald Hill area is underlain by generally north-striking, steeply dipping Archaean metasediments (schists and greywackes) and granitoids. Felsic porphyries and pegmatite sheets and veins have intruded the Archaean rocks. Generally, the pegmatites cross cut the regional foliation, occurring as gently dipping sheets and as steeply dipping veins.

The pegmatites vary in width and are generally comprised quartz-albite- muscovite-spodumene in varying amounts. Late-stage albitisation in the central part of the main outcrop area has resulted in fine- grained, banded, sugary pegmatites with visible fine-grained, disseminated tantalite. A thin hornfels characterised by needle hornblende crystals is often observed in adjacent country rocks to the pegmatite intrusives. Tantalite generally occurs as fine disseminated crystals commonly associated with fine-grained albite zones, or as coarse crystals associated with cleavelandite.

The geological model developed is based on lithological logging of pegmatites within a metasedimentary host, with occasional hypabyssal intrusions of dioritic composition.

The pegmatites on which this Mineral Resource was defined were domained internally on the basis of a 7,500ppm Li_2O cut-off, which itself was determined from exploratory data analysis as a point of inflection within the Li_2O grade distribution. This resulted in a high-grade core of Li_2O mineralisation surrounded by lower grade pegmatite, and is an interpretation supported by the petrogenetic model for the formation of Li_2O bearing pegmatites.

Drilling Techniques

Drilling supporting the Mineral Resource is predominately Reverse Circulation (RC) with minor diamond core drilling (DD) and RC with diamond core tails (RCD). The Bald Hill deposit database includes 902 drill holes for 92,217.49m of drilling, made up of 873 RC holes (87,193.2m), 17 RCD holes (3,773.85m) and 12 DD holes (1,250.44m). The Mineral Resource is based on assay data from 475 RC holes, 17 RCD holes and 12 DD holes.

All historical holes drilled by Haddington Resources Limited (Haddington) were removed from the estimated as they were only assayed for tantalum. Some recent drilling undertaken by Tawana has been excluded where collar and/or down hole surveys have not been completed, and where final assay results have not been received.

Drilling has been angled to achieve the most representative intersections through mineralisation. All diamond drill holes and approx. 98% of RC drill holes are angled. The remaining holes have been drilled vertically. Drilling has been conducted on a 40m by 40m grid extending to 80m by 80m on the peripheries of the deposit, with a 140m by 80m area in the northern portion of the deposit drilled out at 20m by 20m.

Sampling Techniques

RC cuttings were continuously sampled at 1m intervals from the collar to the end of each drill hole using a riffle or cone splitter on-site to produce a subsample less than 5kg.

DD core was typically continuously sampled at 2m intervals from the collar to the end of hole. Where required by changes in lithology, mineralisation or alteration, core samples may be shorter or longer than the typical 2m. Core was cut into half with one half sent for analysis and the other half stored in the core library at the project site.

Sample Analysis Method

Drill samples were jaw crushed and riffle split to 2-2.5kg for pulverizing to 80% passing 75 microns. Prepared samples are fused with sodium peroxide and digested in dilute hydrochloric acid. The resultant solution is analysed by ICP, by Nagrom Laboratory in Perth.

The assay technique is considered to be robust as the method used offers total dissolution of the sample and is useful for mineral matrices that may resist acid digestions.

Standards and duplicates were submitted in varying frequency throughout the exploration campaign and internal laboratory standards, duplicates and replicates are used for verification.

Estimation Methodology

The Bald Hill MRE uses a Surpac block model dimensions with parent cells of 10m by 10m by 5m (XYZ) sub-celled to 2.5 by 2.5 by 1.25m for resolution of volumes at lithological boundaries. This compares to an average drillhole spacing of 20m within the more densely informed areas of the deposit. Kriging Neighbourhood Analysis (KNA) was conducted within the Supervisor™ software package to test a variety of block sizes across the deposit.

Samples were composited to 1m intervals based on assessment of the raw drill hole sample intervals. Various high grade cuts were used for both Li_2O and Ta_2O_5 based on statistical review of each object.

Li_2O and Ta_2O_5 grades for the main mineralised zones were interpolated using ordinary kriging. High and low grade domains were estimated independently with hard boundaries assumed between domains. A two search pass strategy was employed, with successive searches using more relaxed parameters for selection of input composite data, and a greater search radius. Blocks not informed for any given variable after two passes were assigned the Sichel Mean of the input data from that particular domain.

In situ bulk densities for the Bald Hill Mineral Resource have been assigned on a lithological basis for both mineralisation and waste, based 69 cores samples and values taken from those used in similar deposits and lithologies. Fixed density values assigned into the block model included waste back-fill to 1.8t/m^3, transitional pegmatite to 2.5t/m^3, fresh metasediment waste to 2.74t/m^3, fresh diorite dykes to 2.8t/m^3 and fresh pegmatite to 2.65t/m^3. Additional bulk density analysis is being undertaken utilising DD core.

The resource model was validated both visually and statistically prior to final reporting.

Cut-off Grades

The Bald Hill MRE pegmatite wireframes were generated using logged pegmatite lithologies and a minimum down hole width of 3m, while the internal 'high grade' lithium wireframes were generated using a nominal 7,500ppm cut-off grade and a minimum down hole width of 3m determined from exploratory data analysis as a point of inflection within the Li_2O grade distribution.

The Mineral Resource is reported above a 0.5% Li_2O cut-off (Table 1), which approximates cut-off grade to be applied to run-of-mine ore as determined from the preliminary feasibility study.

Mineral Resource Classification

The Mineral Resource has been classified in the Indicated and Inferred categories, taking into consideration numerous factors including drillholes spacing, estimation quality statistics (kriging slope of regression), number of informing samples, average distance to informing samples in comparison to the semivariogram model ranges, and overall coherence and continuity of the modelled mineralisation wireframes.

Eventual Economic Extraction

The Bald Hill pegmatite deposit has previously been mined for minerals of tantalum pentoxide (Ta_2O_5), however no account for lithium minerals (Li_2O) was undertaken. A positive pre-feasibility study undertaken by Tawana reported that the deposit could be mined economically for lithium via open pit methods. The lithium plant is currently in construction, with first production expected in the first quarter of 2018.

Competent Persons Statement

The information in this news release that relates to Exploration Results is based on and fairly represents information and supporting documentation compiled by Mr Mark Calderwood and Mr Gareth Reynolds, both employees of Tawana Resources NL ("Tawana"). Mr Calderwood is a member of The Australasian Institute of Mining and Metallurgy and Mr Reynolds is a member of the Australian Institute of Geoscientists. Mr Calderwood and Mr Reynolds have sufficient experience relevant to the style of mineralisation under consideration and to the activity which they are 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". Mr Calderwood and Mr Reynolds consent to the inclusion in this report of the matters based on their information in the form and context in which it appears.

Mr Calderwood is a significant shareholder in Tawana. Mr Calderwood and Tawana do not consider these to constitute a potential conflict of interest to his role as Competent Person. Mr Calderwood is not aware of any other relationship with Tawana which could constitute a potential for a conflict of interest.

Mr Reynolds is an employee of Tawana. Mr Reynolds is not aware of any other relationship with Tawana which could constitute a potential for a conflict of interest.

The information in this news release that relates to Resource Estimates (excluding prior estimates) is based on and fairly represents information and supporting documentation compiled by Dr Matthew Cobb and Mr Ralph Porter, both employees of CSA Global Pty Ltd. Dr Cobb is a member of both The Australasian Institute of Mining and Metallurgy and Australian Institute of Geoscientists, and Mr Porter is a member of the Australian Institute of Geoscientists. Both Dr Cobb and Mr Porter have sufficient experience relevant to the style of mineralisation under consideration and to the activity which they are 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". Dr Cobb and Mr Porter consent to the inclusion in this report of the matters based on their information in the form and context in which it appears.

Forward Looking Statement

This report may contain certain forward looking statements and projections regarding estimated, resources and reserves; planned production and operating costs profiles; planned capital requirements; and planned strategies and corporate objectives. Such forward looking statements/projections are estimates for discussion purposes only and should not be relied upon as representation or warranty, express or implied, of Tawana Resources NL. They are not guarantees of future performance and involve known and unknown risks, uncertainties and other factors many of which are beyond the control of Tawana Resources NL. The forward looking statements/projections are inherently uncertain and may therefore differ materially from results ultimately achieved.

Tawana Resources NL does not make any representations and provides no warranties concerning the accuracy of the projections, and disclaims any obligation to update or revise any forward looking statements/projects based on new information, future events or otherwise except to the extent required by applicable laws. While the information contained in this report has been prepared in good faith, neither Tawana Resources NL nor any of its directors, officers, agents, employees or advisors give any representation or warranty, express or implied, as to the fairness, accuracy, completeness or correctness of the information, opinions and conclusions contained in this presentation. Accordingly, to the maximum extent permitted by law, none of Tawana Resources NL, its directors, employees or agents, advisers, nor any other person accepts any liability whether direct or indirect, express or limited, contractual, tortuous, statutory or otherwise, in respect of, the accuracy or completeness of the information or for any of the opinions contained in this announcement or for any errors, omissions or misstatements or for any loss, howsoever arising, from the use of this announcement.

Notes

1. Refer to ASX announcement on 14 June 2017.

11 October 2017

Sponsor
PricewaterhouseCoopers Corporate Finance (Pty) Limited

Appendix A

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.	Drilling consists of ~99% reverse circulation (RC), RC with diamond core tails (RCD) and diamond drilling (DD) for a total 902 holes for 92,217.49m of drilling in the Bald Hill project database. The Bald Hill Mineral Resource is based on assay data from 475 RC holes, 17 RCD holes and 12 DD holes. RC cuttings were continuously sampled at 1m intervals through all pegmatite intercepts including 2m of waste above and below each intercept. DD core is typically continuously sampled at 2m intervals through pegmatite intercepts. Where required by changes in lithology, mineralization, or alteration, core samples may be shorter or longer than the typical 2m.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	The majority of drill hole collars are accurately surveyed using RTK DGPS equipment. Drill samples are logged for lithology, weathering, structure (diamond core), mineralogy, mineralisation, colour and other features. Half diamond core was collected and placed in marked plastic sacks, and shipped to the assay laboratory. RC samples were collected and placed in marked plastic bags which were placed in sacks and then shipped to the assay laboratory.
	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 (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.	Drill samples were jaw crushed and riffle split to 2-2.5kg for pulverizing to 80% passing 75 microns. Prepared samples are fused with sodium peroxide and digested in dilute hydrochloric acid. The resultant solution is analysed by ICP, by Nagrom Laboratory in Perth. The assay technique is considered to be robust as the method used offers total dissolution of the sample and is useful for mineral matrices that may resist acid digestions.
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 oriented and if so, by what method, etc.).	RC was drilled using 4.5-inch (140 mm) rods with a nominal 5.9-inch (150 mm) diameter hole. Diamond core used either PQ, NQ2 or HQ3 diameter core. Core was oriented where possible. All DD holes and ~98% of RC drill holes are angled; the remainder were drilled vertically.

Criteria	JORC Code Explanation	Commentary
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Chip recovery or weights for RC drilling were not recorded. Core recovery is very good through the mineralised zones and estimated to be greater than 90%.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	RC drilling generally utilised an external booster to keep samples dry and maximising recoveries. The majority of RC holes are shallow (<150m) with very few wet samples encountered.
	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.	No relationship between grade and recovery has been identified.
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.	Geological logs exist for all drill holes with lithological codes via an established reference legend. Drill samples were logged for lithology, weathering, structure (diamond core), mineralogy, mineralisation, colour and other features. Logging and sampling has been carried out to "industry norms" to a level sufficient to support the Mineral Resource estimate.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	Drill holes have been geologically logged in their entirety. Where logging was detailed, the subjective indications of spodumene content were estimated and recorded.
	The total length and percentage of the relevant intersections logged.	All drill holes are logged in full, from start to finish of the hole.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	Where sampled, core is cut in half onsite using an industry standard core saw, to produce two identical halves.
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	Dry RC samples were collected at 1m intervals and riffle or cone split on-site to produce a subsample less than 5kg.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Sample preparation is according to industry standard, including oven drying, coarse crush, and pulverisation to 80% passing 75 microns.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Subsampling is performed during the preparation stage according to the assay laboratories' internal protocol.
	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, laboratory standards and laboratory repeats are used to monitor analyses.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample sizes are considered to be appropriate and correctly represent the style and type of mineralisation.
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.	The assay technique is considered to be robust as the method used offers total dissolution of the sample and is useful for mineral matrices that may resist acid digestions.

Criteria	JORC Code Explanation	Commentary
	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.	None were used.
	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.	Standards and duplicates were submitted in varying frequency throughout the exploration campaign and internal laboratory standards, duplicates and replicates are used for verification.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Significant intersections have been verified by alternative TAW personnel and by CSA Global Competent Persons (Ralph Porter and Matthew Cobb). The Ta and Li assays show a marked correlation with the pegmatite intersections via elevated downhole grades.
	The use of twinned holes.	Twinning of holes undertaken to date show reasonable continuity and representivity of the mineralised intervals.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Drill logs exist for all holes as electronic files and/or hardcopy (all 2017 logging has been input directly to field logging computers). Digital log sheets have been created with inbuilt validations to reduce potential for data entry errors. All drilling data has been loaded to a database and validated prior to use.
	Discuss any adjustment to assay data.	For the Mineral Resource estimate, adjustments were made to a number of down hole surveys. These adjustments were made where angled holes were blocked well before the end of hole, or where down hole surveys had not yet been undertaken but surveys had been completed for nearby holes. Where the drill hole was blocked, the last survey was copied to the end of hole depth. Where no down hole survey was completed or the hole was blocked at surface, the down hole surveys from a nearby hole, drilled by the same rig (and preferably same driller), was copied and applied to the hole. Some of these holes may need to be re-entered, cleaned and surveyed in the future. All changes were marked as 'nominal' in the database. In all cases, corrections to down hole surveys were reviewed against surrounding drill holes and pegmatite intervals to ensure error was minimised.
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.	Prior to drilling, collar coordinates are situated using hand held GPS (considered accurate to within 4m). Following drilling, accurate surveying using RTK DGPS is undertaken by trained site personnel.

Criteria	JORC Code Explanation	Commentary
		Hole collars are preserved until completion of down hole surveying. A significant portion of holes are surveyed down hole digital instruments dominated by gyro tools.
	Specification of the grid system used.	Grid used is MGA 94 Zone 51.
	Quality and adequacy of topographic control.	Topographical survey is generated from detailed airborne survey with points generated on a 1m by 1m grid. Areas mined have been defined by final mine surveys.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Drilling has been conducted on a 40m by 40m grid extending to 80m by 80m on the peripheries of the deposit, with a 140m by 80m area in the northern portion of the deposit drilled out at 20m by 20m.
	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 spacing of holes is considered of sufficient density to provide an 'Indicated' or 'Inferred' Mineral Resource estimation and classification under JORC (2012).
	Whether sample compositing has been applied.	There has been no sample compositing.
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.	Drilling has been angled to achieve the most representative intersections through mineralisation. The majority of drilling is angled. Some vertical holes have been drilled in areas where access is limited or the pegmatites are interpreted to be flat lying.
	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 lithium tantalite-bearing pegmatites are generally flat to shallowly dipping in nature. The true width of pegmatites is generally considered 80-95% of the intercept width, with minimal opportunity for sample bias.
Sample security	The measures taken to ensure sample security.	The drill samples are taken from the rig by experienced personnel, stored securely and transported to the laboratory by a registered courier and handed over by signature.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits have been undertaken to date.

Section 2 Reporting of Exploration Results

Criteria	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 Bald Hill Resource is situated on Mining leases M15/400, R15/01 and E15/1212 comprising 4,339Ha. The tenements are 100% owned by Australian incorporated, Singapore Exchange listed Alliance Mineral Assets Limited (AMAL). The Mining lease are subject to an earn-in agreement between AMAL and Tawana Resources Limited. There are no other third-party interests or royalties. Government royalties are 5% for Lithium or Tantalum mineral concentrates.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The portfolio of mineral tenements, comprising mining leases, exploration licences, prospecting licences, miscellaneous licences, a general-purpose lease, and a retention lease are in good standing.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Alluvial tantalite has been mined periodically from the early 1970s. Gwalia Consolidated Limited undertook exploration for tantalite-bearing pegmatites from 1983-1998. Work included mapping, costeaning, and several phases of drilling using RAB, RC, and diamond methods. The work identified mineral resources that were considered uneconomic at the time. Haddington Resources Limited (Haddington) entered agreement to develop the resource and mining • commenced in 2001 and continued until 2005. • Haddington continued with exploration until 2009. Living Waters acquired the project in 2009 and continued with limited exploration to the north of the main pit area.
Geology	Deposit type, geological setting and style of mineralisation.	The Bald Hill area is underlain by generally north-striking, steeply dipping Archaean metasediments (schists and greywackes) and granitoids. Felsic porphyries and pegmatite sheets and veins have intruded the Archaean rocks. Generally, the pegmatites cross cut the regional foliation, occurring as gently dipping sheets and as steeply dipping veins. The pegmatites vary in width and are generally comprised quartz-albite- muscovite-spodumene in varying amounts. Late-stage albitisation in the central part of the main outcrop area has resulted in fine- grained, banded, sugary pegmatites with visible fine-grained, disseminated tantalite. A thin hornfels characterised by needle hornblende crystals is often observed in adjacent country rocks to the pegmatite intrusives. Tantalite generally occurs as fine disseminated crystals commonly associated with

Criteria	Explanation	Commentary
		fine-grained albite zones, or as coarse crystals associated with cleavelandite. Weathering of the pegmatites yields secondary mineralised accumulations in alluvial/elluvial deposits.
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.	Not Applicable – Not reporting exploration results.
	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.	Not Applicable – Not reporting exploration results.
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	Not Applicable – Not reporting exploration results.
	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.	Not Applicable – Not reporting exploration results.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Not Applicable – Not reporting exploration results.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results.	Not Applicable – Not reporting exploration results.
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	The majority of drilling is angled. Some vertical holes have been drilled in areas where access is limited or the pegmatites are interpreted to be flat lying. The lithium tantalite-bearing pegmatites are generally flat to shallowly dipping in nature. The true width of pegmatites are generally considered 85-95% of the intercept width, with minimal opportunity for sample bias.
	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	Not Applicable – Not reporting exploration results.

Criteria	Explanation	Commentary
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 drill hole collar locations and appropriate sectional views.	Not Applicable – Not reporting exploration results
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.	Not Applicable – Not reporting exploration results
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 metallurgical test work for spodumene referred to in the release was undertaken by Nagrom. Nagrom has extensive experience with tantalum and lithium extraction testwork and has ISO9001:2008 accreditation. Results have been reported without interpretation.
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	Further RC and diamond drilling is warranted at the deposit to explore for additional resources and improve the understanding of the current resources prior to mining.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Diagrams have been included in the body of this report.

Section 3 Estimation and Reporting of Mineral Resources (Criteria listed in the preceding section also apply to this section).

Criteria	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.	Logging is completed onto templates using standard logging codes into Toughbook laptops. Analytical results are imported directly into the database by a database specialist. The central database, from which the extract used for Mineral Resource estimation was taken, is managed by Tawana. Upon receipt of the extract, CSA Global validated the database for internal integrity as part of the import process for modelling in Surpac.
	Data validation procedures used.	Data were validated for internal database integrity as part of the import process for use in Surpac. This includes logical integrity checks for data beyond the hole depth maximum, and overlapping from-to errors within interval data. Visual validation checks were also made for obviously spurious collar or downhole survey values, collars which were not assigned a proper RL value, and collars which may lack substantial downhole survey data.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	CSA Global Principal Consultants; Ralph Porter and Matthew Cobb have visited site and reviewed the drilling, sample collection, and logging data collection procedures, along with conducting a review of the site geology. The outcome of the site visits (broadly) were that data has been collected in a manner that supports reporting a Mineral Resource estimate in accordance with the JORC Code, and controls to the mineralisation are well-understood.
	If no site visits have been undertaken indicate why this is the case.	Not Applicable.
Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	The geological model developed is based on lithological logging of pegmatites within a metasedimentary host, with occasional hypabyssal intrusions of dioritic composition. The deposit geology is very well understood based on previous mining history and open pit exposures, and this is reflected in the generally high confidence in both the mineralisation and geological interpretations.
	Nature of the data used and of any assumptions made.	The input data used for geological modelling has been derived from the qualitative and quantitative logging of lithology, alteration, geochemical composition of samples returned from RC and DD drilling.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	The geological model developed has a solid lithological basis, and is controlled by the presence of visually distinct pegmatite within drillholes. Pegmatite structures have been modelled as predominantly low angle / sub-horizontal structures on the basis of a high density of input drillhole

Criteria	Explanation	Commentary
		data and confirmation of the interpretation on the basis of mapping. The data do not readily lend themselves to alternative interpretations, and it is unlikely that such alternatives would yield a more geologically reasonable result.
	The use of geology in guiding and controlling Mineral Resource estimation.	The model developed for mineralisation is geologically driven; controlled by the presence or absence of pegmatite.
	The factors affecting continuity both of grade and geology.	Geological continuity is controlled by the preference for fractionated pegmatitic fluids to follow preferential structural pathways through the host rocks (an intercalated pile of metasediments and metavolcanics. Grade within this pegmatite is controlled by numerous factors such as fluid residence time, degree of fluid fractionation and pegmatite thickness.
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 Bald Hill Mineral Resource comprises one large, main, sub horizontal pegmatite body, striking north-south, with a strike length of 1,230m, and a width at its widest point of 1,080m. This main body is surrounded by several smaller discrete pegmatite bodies, sub-parallel to the main, which result in a total strike length for the whole resource of 2,045m, and a total width of 1,800m. The Mineral Resource has a total vertical depth of 245m, beginning 20m below the natural surface and plunging gently to the south along its entire strike length.
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.	The Bald Hill Mineral Resource has been estimated using ordinary Kriging in a Surpac block model. The variables Li_2O ppm and Ta_2O_5ppm were estimated independently in a univariate sense. The pegmatites on which this Mineral Resource was defined was domained internally on the basis of a 7,500ppm Li_2O cut-off, which itself was determined from exploratory data analysis as a point of inflection within the Li_2O grade distribution. This resulted in a high-grade core of Li_2O mineralisation surrounded by lower grade pegmatite, and is an interpretation supported by the petrogenetic model for the formation of Li_2O bearing pegmatites. Samples were composited to 1m intervals based on assessment of the raw drill hole sample intervals. Various high-grade cuts were used for both Li_2O (ranging from 10,000ppm to 60,000ppm) and Ta_2O_5 (ranging from 300ppm to 4,000ppm) based on statistical review of each object. Composites for some objects remained uncut depending on the statistical review. High and low-grade domains were estimated independently with hard boundaries assumed between domains. Parameters for estimation and search ellipsoids were determined from quantitative kriging analysis performed within the Supervisor™ software package,

Criteria	Explanation	Commentary
		which was also used to define semivariogram models for each variable. The parameters defined for the largest, most populated domains (main mineralised body and its high-grade core) were used to inform all smaller subsidiary domains during estimation. A two search pass strategy was employed, with successive searches using more relaxed parameters for selection of input composite data, and a greater search radius. Blocks not informed for any given variable after two passes were assigned the Sichel Mean of the input data from that particular domain. All geological modelling and grade estimation was completed using Surpac software.
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	This Mineral Resource estimate is an update of the previously reported Mineral Resource estimate released in Q2 2017. The current estimate represents an incremental update based on additional drilling, and is comparable to its predecessor in terms of average grades, with the expected increase in tonnage from extensional drilling. Historic estimates for the Bald Hill deposit focussed on Ta_2O_5 only, and as such are not directly comparable to the current estimate for which Li_2O is the primary target variable.
	The assumptions made regarding recovery of by-products.	The only significant by-product to be considered is Ta_2O_5 which has been estimated within the domains defined by Li_2O.
	Estimation of deleterious elements or other non-grade variables of economic significance (eg. sulphur for acid mine drainage characterisation).	No deleterious elements have been identified or estimated.
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	Block model dimensions used for the Bald Hill Mineral Resource estimate were 10 by 10 by 5m (XYZ) sub-celled to 2.5 by 2.5 by 1.25m for resolution of volumes at lithological boundaries. This compares to an average drillhole spacing of 20m within the more densely informed areas of the deposit. This 20m spacing increases to up to 80m between drillholes in less well informed portions of the deposit. Kriging Neighbourhood Analysis (KNA) was conducted within the Supervisor™ software package to test a variety of block sizes in both well and poorly informed areas of the deposit. The chosen block size represents the smallest block size that yields a robust set of estimation statistics, which are comparable to the results also yielded from larger blocks sizes.
	Any assumptions behind modelling of selective mining units.	No assumptions were made regarding selective mining units.

Criteria	Explanation	Commentary
	Any assumptions about correlation between variables.	The two variables under consideration; Li_2O and Ta_2O_5 are uncorrelated within both the pegmatite as a whole, and within the high-grade domain (correlation coefficient of -0.04). Consequently, no correlation between variables was considered. Both variables were treated in a univariate sense.
	Description of how the geological interpretation was used to control the resource estimates.	The nature of the mineralised body is such that the definition of the pegmatite host also defines the mineralisation. Within that, and based on a combination of petrogenetic process and statistical appraisal, an internal high-grade Li_2O domain was defined.
	Discussion of basis for using or not using grade cutting or capping.	Domained data for both variables were assessed using histogram and log probability plots to define potential top cuts to data. Where the Competent Person observed likely breaks in the continuity of the grade distributions, a top cut was chosen and applied. This was conducted on a per-domain basis.
	The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	The results of estimation into the block model for the Bald Hill Mineral resource were validated visually and statistically. Estimated block grades were compared visually in section against the corresponding input data values. Additionally, trend plots of input data and block estimates were compared for swaths generated in each of the three principal geometric orientations (northing, easting and elevation).
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Tonnages are reported on a dry basis.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	Modelling of mineralisation for the resource was based on a combination of pegmatite lithological logging. Within this mineralisation shape, a higher grade core was defined on the basis of a 7,500 ppm Li_2O cut-off. The Mineral Resource is reported using both a 0.5% Li_2O cut-off, which approximates a reasonable economic cut-off grade used for potential open pit mining as determined from pit optimisation studies.
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 mining 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	The methods used to design and populate the Bald Hill Mineral Resource block model were defined under the assumption that the deposit is likely to be mined via open pit methods.

Criteria	Explanation	Commentary
	explanation of the basis of the mining assumptions made.	
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 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.	The material targeted for extraction predominantly comprises the mineral spodumene, for which metallurgical processing methods are well established. No specific detail regarding metallurgical assumptions have been applied in the estimation the current Mineral Resource, however at the current level of detail available, the Competent Person believes with sufficient confidence that metallurgical concerns will not pose any significant impediment to eventual economic extraction.
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 reasonable 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 impacts, particularly for a greenfields 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.	No assumptions have been made regarding waste products, however the Mineral Resource has previously been mined by open pit methods with a processing facility, stacked waste dumps and tailings storage facilities on site. It is reasonable to assume that in the presence of this infrastructure, the creation and storage of waste products on site will not be of concern for future mining activities.
Bulk density	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.	In situ bulk densities for the Bald Hill Mineral Resource have been assigned on a lithological basis for both mineralisation and waste, based on historical values derived from mining and values taken from those used in similar deposits and lithologies. The Competent Person considers the values chosen to be suitably representative.
	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 the deposit.	Densities have been assigned on a lithological basis based on a total of 44 metasediment and 25 pegmatite core samples measured at the Nagrom laboratory and values derived from surrounding deposits and rock types.
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	Bulk densities have been applied on a lithological unit basis. Values assigned were as follows: • Fresh pegmatite mineralisation 2.65 t/m^3 • Transitional pegmatite 2.5t/m^3 • Fresh diorite 2.8t/m^3 • Transitional diorite 2.6t/m^3 • Fresh metasediments 2.74t/m^3 • Transitional metasediments 2.6t/m^3

Criteria	Explanation	Commentary
		• Oxide metasediments 2.2t/m^3 • Waste fill 1.8t/m^3 additional bulk density testwork utilising drill core across the mineralised zones and less common waste units is recommended for future estimates.
Classification	The basis for the classification of the Mineral Resources into varying confidence categories.	The Mineral Resource has been classified as Indicated and Inferred on a qualitative basis; taking into consideration numerous factors such as drillhole spacing, estimation quality statistics (kriging slope of regression), number of informing samples used in the estimate, average distance to informing samples in comparison to the semivariogram model ranges, and overall coherence and continuity of the modelled mineralisation wireframes.
	Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	The classification reflects areas of lower and higher geological confidence in mineralised lithological domain continuity based on the intersecting drill sample data numbers, spacing and orientation. Overall mineralisation trends are reasonably consistent within the various lithology types over numerous drill sections.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	The Mineral Resource estimate appropriately reflects the Competent Person's views of the deposit.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	Internal audits were completed by CSA Global which verified the technical inputs, methodology, parameters and results of the estimate. The current model has not been audited by an independent third party
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 stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.	The Mineral Resource accuracy is communicated through the classification assigned to the deposit. The Mineral Resource estimate has been classified in accordance with the JORC Code, 2012 Edition using a qualitative approach. All factors that have been considered have been adequately communicated in Section 1 and Section 3 of this Table.
	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.	The Mineral Resource statement relates to a global estimate of in-situ tonnes and grade.
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	The deposit has been historically mined for tantalum (Ta_2O_5), however no accounting for Li_2O had been undertaken, and therefore no production records are available for comparison to the current estimate.