ASX Announcement

Aus Tin Mining Limited (ASX: ANW)

16 June 2016

Lithium Mineralisation Identified at Taronga & Torrington Tin Projects

Highlights

- **Lithium mineralisation (zinnwaldite) reported at several locations within the Torrington exploration licences (north east of Taronga Tin Deposit within the East Grampians Corridor).**
- **Pegmatite target generated within the Southern Zone of the Taronga Tin Deposit based on pervasive occurrence of beryl.**
- **Elevated rubidium levels reported for the Taronga Tin Project.**

The Directors of Aus Tin Mining Limited (**the Company**) are pleased to announce that a review of its NSW exploration tenements has identified at least three locations where historic mining activities coincide with the reported presence of the lithium bearing mica mineral, zinnwaldite. The work also identified a zone within the Taronga Tin Deposit (**Taronga**) that is considered to be prospective for pegmatites often associated with lithium mineralisation. Lithium rich minerals lepidolite and spodumene occur in pegmatites, but are yet to be identified at Taronga.

Zinnwaldite is reported as having been identified at three historic mines (McCowans Mica Lode, Goggitts Shaft and Heffernans Mine – refer **Figure 1**). Zinnwaldite is a lithium silicate mineral in the mica group and occurs in greisens, pegmatites and quartz veins, and is commonly associated with topaz, cassiterite (tin mineral), wolframite (tungsten mineral) and beryl, all of which are known in the Taronga area and to the north in the Torrington area.

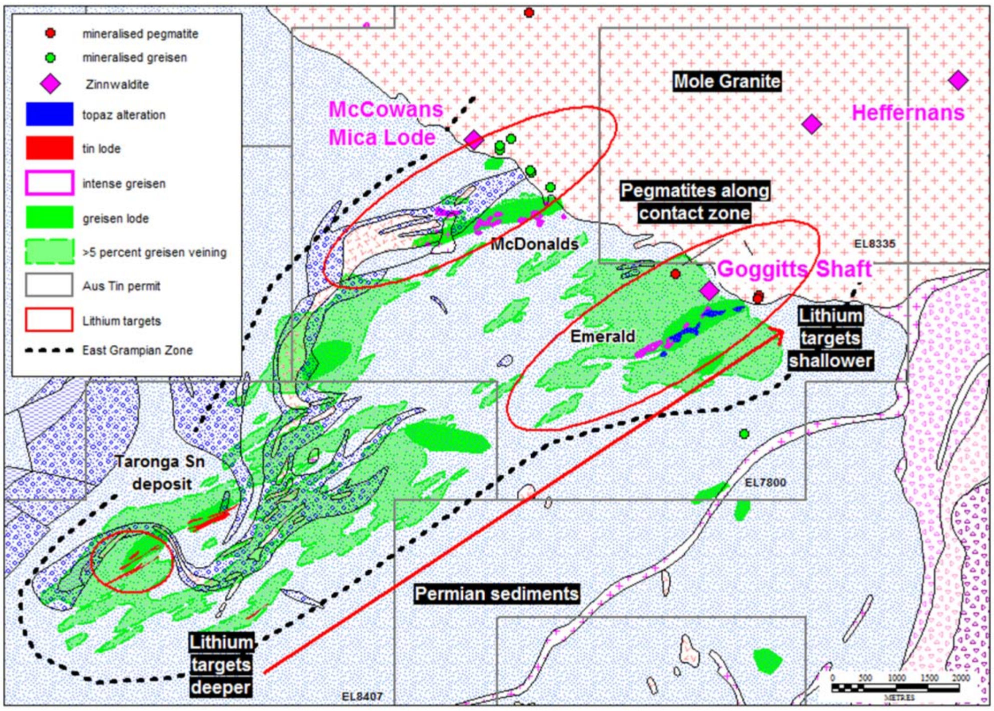

Figure 1 – Location of historic Zinnwaldite occurrences along strike from Taronga Tin Project.

The three historic mines north east of Taronga and within the Company's tenements were worked variously from 1887 to 1972 and comprised shallow underground working and pits to exploit cassiterite, tungsten and/or emerald, and which contain recorded zinnwaldite occurrences. McCowans and Goggitts occur on the contact with the Mole Granite. The New England geological setting is dominated by the intrusion of highly differentiated granites (locally the Mole Granite) into an acid volcanic and meta sediment pile. Both rock types are above crustal abundance in rubidium, cesium and lithium and the metals silver, molybdenum, tin, tantalum and tungsten. The Company considers the contact between the Mole Granite and sediments to be prospective for zinnwaldite and this will be a focus for future exploration (**Figure 2**). Zinnwaldite is documented at a number of historic mining locations around the world, notably Erzgebirge and Cinovec in eastern Germany.

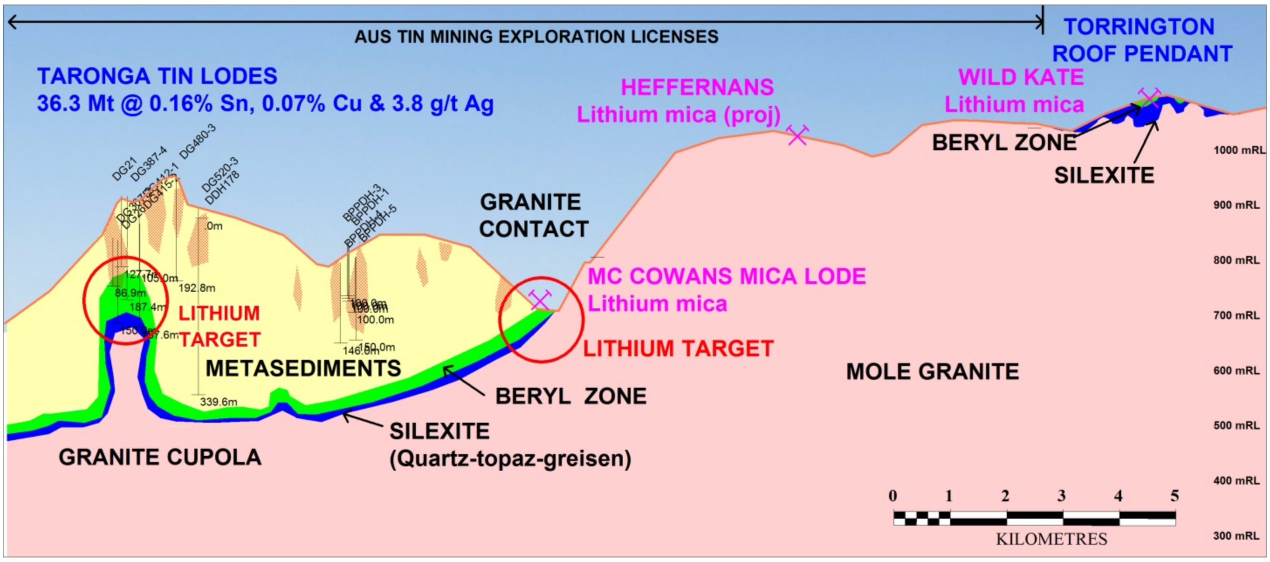

Figure 2 –Pegmatite (lithium) target based on logged beryl occurrences (long section).

The Company also considers Taronga prospective for lithium based on a significant level of muscovite in the deposit, the presence of beryl and anomalous lithium results of up to 540ppm (refer **Table 1 & Appendix 1**), coupled with the presence of zinnwaldite at McCowans Mica Lode and Goggitts (Taronga, McCowans and Goggitts are all located within the East Grampians Structural Corridor). It is thought at Taronga that zinnwaldite and possibly lepidolite may be associated with the muscovite that forms within the mica selvage beside quartz veins containing cassiterite (tin mineral). Of particular interest is a section of the Southern Zone (**Figures 3A & 3B**) where significant levels of beryl logged by a previous operator[1] may be an indication of pegmatite, and will be a focus for future exploration. Beryl and lithium pegmatites are well documented at a number of mining locations around the world, including both Wodgina and Greenbushes in Western Australia.

[1] Newmont Holdings Pty Ltd on behalf of the Newmont Joint Venture, 1977 - 1984

AusTinMining

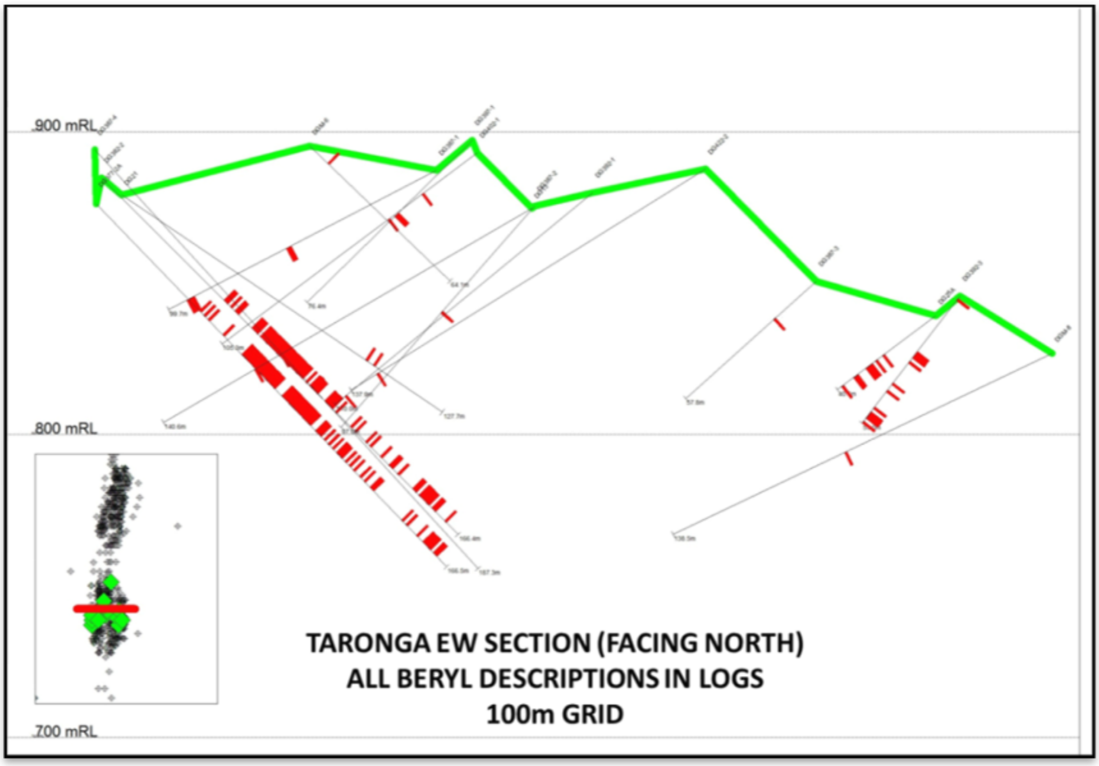

Figure 3A –Pegmatite (lithium) target at Taronga Deposit based on logged beryl occurrences (cross section).

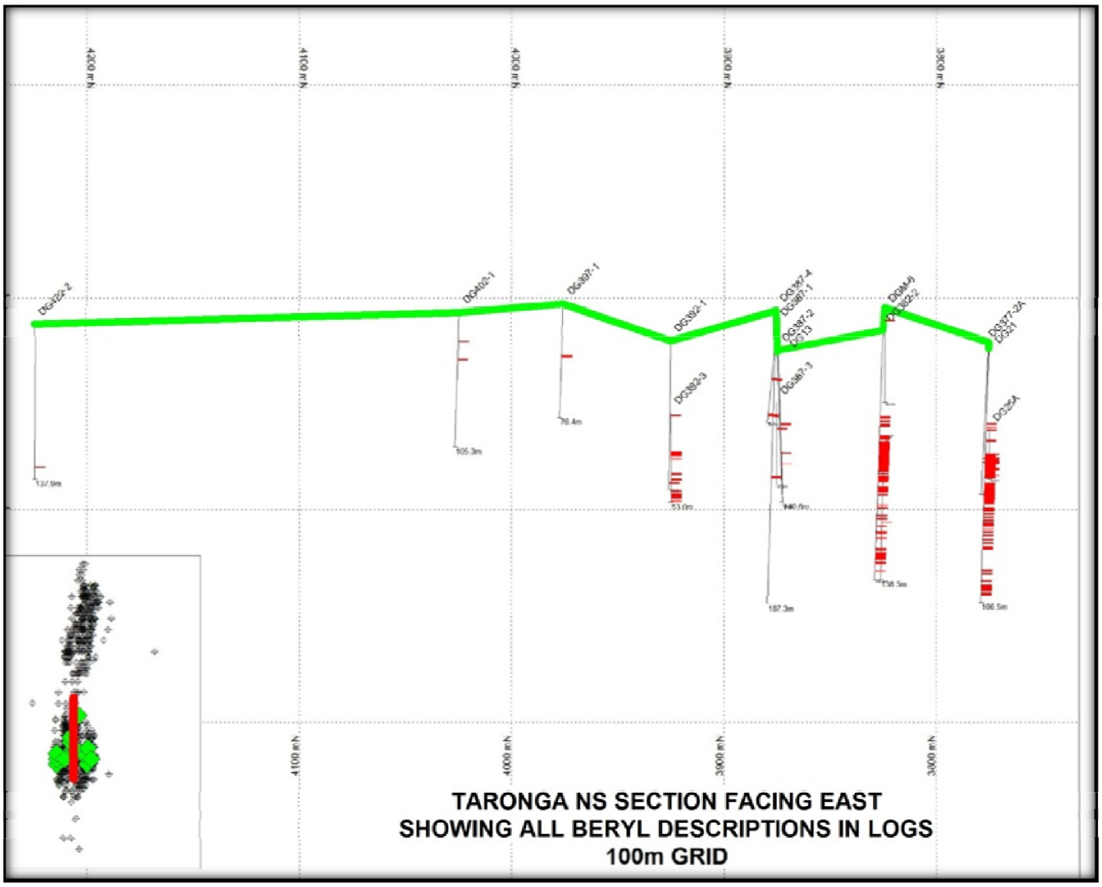

Figure 3B –Pegmatite (lithium) target at Taronga Deposit based on logged beryl occurrences (long section).

The Company also considers that Taronga may be prospective for the specialty metal rubidium (Rb) based on anomalous rubidium results of up to 920ppm (**Table 1**) from previous drill hole results. Rubidium is also considered to be associated with the muscovite and is considered to indicate a geochemical environment in which lithium may also concentrate. The global consumption of rubidium is currently very limited but its photo-emissive properties make it ideal for motion sensor devices and photoelectric cells (solar panels). Rubidium is a high value metal with a current reported price[2] of US$1,472/100gm. Rubidium is mostly recovered as a by-product from the extraction of cesium and lithium and global resources are estimated at 80,000 tonnes of which 15 percent is in Canada and 75 percent in Africa.

Neither lithium nor rubidium have yet been identified as potential by-product credits at the Taronga Tin Project, and the Company intends to investigate the presence, grade and recoverability of a lithium/rubidium enriched mica concentrate in conjunction with mining of the tin resource (Indicated Resource of 36.3Mt @ 0.16%Sn, 0.07%Cu, 3.8g/tAg). The Company's investigations will focus on known mica and beryl rich zones in the Taronga deposit and deep greisen and pegmatite zones targeted beneath Taronga. Mineralogical analysis completed by a previous operator[1] estimated the overall deposit to contain 12 percent muscovite, as well as contained topaz, fluorite and tourmaline.

Chief Executive Officer, Peter Williams said "the identification of lithium minerals within Aus Tin Mining's existing exploration licences provides an exciting catalyst for a broader exploration program in a highly prospective area but for which tin has previously been almost the sole focus".

On behalf of the Board
KM Schlobohm
Company Secretary

Competent Persons Statement

The information in this presentation that relates to Exploration Results is based on information compiled by Mr Nicholas Mather B.Sc (Hons) Geol., who is a Member of The Australian Institute of Mining and Metallurgy. Mr Mather is employed by Samuel Capital Pty Ltd, which provides certain consultancy services including the provision of Mr Mather as a Director of Aus Tin Mining. Mr Mather has more than five years experience which is relevant to the style of mineralisation and type of deposit being reported 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, Minerals Resources and Ore Reserves' (the JORC Code). This public report is issued with the prior written consent of the Competent Person(s) as to the form and context in which it appears.

The information in this Announcement that relates to Mineral Resources is based on information extracted from the report entitled "Maiden JORC Resource Estimated for the Taronga Tin Project" created on 26th August 2013 and is available to view on www.austinmining.com.au Aus Tin Mining confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

Email: info@austinmining.com.au

Electronic copies and more information are available on the Company website: www.austinmining.com.au

For further information contact:

Peter Williams
CEO, Aus Tin Mining Limited
Ph: 07 3303 0611

Karl Schlobohm
Company Secretary, Aus Tin Mining Limited
Ph: 07 3303 0661

[2] Source USGS Mineral Commodities Series (2016)

							Interval			Assay				
Hole Number	Local Easting	Local Northing	RL (m)	Azimuth	Declination	Total Depth (m)	from (m)	To (m)	Interval (m)	Sn (%)	Ag (ppm)	Cu (ppm)	Li (ppm)	Rb (ppm)
DG387-4	4598.5	3875.4	898	88.15	-47.5	187.4	62	64	2	0.62	20.1	3530	202	261
							64	66	2	0.03	8.9	1430	384	640
							66	67	1	0.05	10.3	1880	449	820
							116	119	3	0.24	0.3	19.6	292	530
							119	123	4	0.01	0.3	20.5	330	620
							123	126	3	0.04	1.0	136	430	720
							126	128	2	0.02	4.5	1265	440	760
							128	130	2	0.06	1.1	227	449	760
							130	132	2	0.11	2.0	380	374	650
							132	133	1	0.07	3.1	697	440	700
							133	135	2	0.53	12.8	3030	412	680
							135	137	2	0.03	2.4	578	540	920
							137	139	2	0.13	1.7	315	394	700
							141	144	3	0.13	7.5	1355	449	770

Table 1 - Drill hole details and assay results for selected intervals of historical diamond drilling at Taronga (refer Appendix 1)

Appendix 1

JORC Code, 2012 Edition – 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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *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.*	• Diamond drilling was used to obtain 1m samples of core which was sawn in half longitudinally and longitudinally again. The quarter core was crushed then ground to 500 microns. This is industry standard 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).*	• Diamond drill holes were collared HQ. Triple tube drilling was employed to maximise core recovery and minimise the loss of cassiterite. Core was not oriented.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of*	• Diamond drilling core recovery was measured by length or by sample mass. Triple tube drilling was used to maximise core recovery. Core recoveries were generally high and no systematic core losses were recorded.

Criteria	JORC Code explanation	Commentary
	fine/coarse material.	
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.*	• Diamond drill core and percussion chips were logged to a level of detail which was adequate to support the 2014 Mineral Resource estimation. • Core logging was qualitative and quantitative in nature. • 19,567m of relevant intersections were made and 100% of the intersections were 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.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Diamond drill core was sawn in half and half again. The quarter core was crushed then ground to 500 microns from which a 100g sample was split and pulverized to less than 75 microns. • Sample sizes of diamond drill core and percussion were appropriate to the grain size of the material being sampled.
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.* • *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.* • *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.*	• All Sn assays were analyzed for Sn using oxidizing fusion with XRF finish at ALS Brisbane. Analysis for Ag, Cu, Li, Rb were completed using four acid digestion and ICP.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Newmont made geological interpretations using cross-sections and level plans. The Northern Zone 101 and the Southern Zones of Payback, Payback Extended, Hillside and Hillside Extended were interpreted on cross-sections reported in a Pre-feasibility Study prepared by Newmont Holdings Pty Ltd ("Newmont") in 1982. • For 2013 Mineral Resources, the Newmont interpretation for Zone 101 was accepted, and an outer Northern Zone and the four Southern Zones were

Criteria	JORC Code explanation	Commentary
		interpreted based on the Newmont cross-sectional interpretations and threshold Sn grades determined for the zones based on statistical analysis of the Sn assay data. • No twinned holes were drilled at Taronga. • No adjustments were made to assay data.
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.*	• Drill hole collars were located by theodolite traverses by surveyors. • Holes were surveyed down-hole for azimuth and dip using down-hole cameras. Given the generally non-magnetic nature of the mineralisation and the host rocks, this was a reasonable survey method. • A local grid parallel to the strike of the mineralisation was used. Local grid north has a bearing of 045^{O} true. A 3.5km baseline was surveyed with surveyed cross-lines at 100m intervals. • Topographic maps at 1:1000 scale were prepared by Australian Aerial Mapping. The maps were related to the local grid.
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.*	• Drilling was nominally on a 50m X 50m pattern with 25m infill drilling in some areas. • Data spacing is sufficient to establish the geological and grade continuity appropriate for the Mineral Resource estimation and classification procedures applied for this report. • Samples were nearly all taken over 1m intervals. Samples were composited to 1m intervals.
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.*	• Holes were drilled perpendicular to the general strike of the mineralised zones at dips of about -40^{O} to -60^{O}. The mineralised zones have a near vertical dip and the orientation of the drill holes was appropriate.
Sample security	• *The measures taken to ensure sample security.*	• Samples of drill core and percussion chips were bagged and tagged and shipped to the assay laboratory by independent third party transport.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• None known.

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 licence to operate in the area.*	• The drill hole is located within EL 8407 held 100% by Aus Tin Mining . • No plan of operations for mining has been submitted for approval, but no impediments are known to exist to such an operation.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Previous work was done and reported by Newmont Holdings Pty Ltd.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The mineralisation is classified as a sheeted vein mineralised system hosting tin, copper, silver and other metals. The better grades are expected to be controlled by discrete structures.
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:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth* o *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.*	• Refer Table 1 for data relating to reported Sn, Ag, Cu, Li, Rb intersections • Beryl occurrences are reported for those intervals where beryl was logged in the drill logs prepared by Newmont Holding Pty Ltd. No quantitative analysis for beryl has been undertaken.

Criteria	JORC Code explanation	Commentary
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.*	• Refer Table 1 data relating to reported Sn, Ag, Cu, Li, Rb intersections • Significant beryl occurrences are deemed to be drill holes where beryl is reported in at least 50 percent of individual drill intervals, as reported in the drill logs prepared by Newmont Holding Pty Ltd. No quantitative analysis for beryl has been undertaken.
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').*	• Results are reported down hole data relating to reported Sn, Ag, Cu, Li, Rb intersections
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.*	• Refer Figures 3A and 3B
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.*	• For data relating to reported Sn, Ag, Cu, Li, Rb intersections, only results for DG387-4 are reported, being the only hole available within the vicinity of the Southern Zone exploration target in the, all other core having been destroyed.
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.*	• Refer 2013 Mineral Resource.
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*	• Subject to obtaining the necessary approvals, drilling will be undertake to test the exploration target.

Criteria	JORC Code explanation	Commentary
	main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	