ASX ANNOUNCEMENT

8 May 2019

Manono Confirmed as the Largest Measured and Indicated Lithium Resource in the World

UPGRADED MEASURED AND INDICATED MINERAL RESOURCE FOR THE ROCHE DURE PEGMATITE IS NOW REPORTED AS 269Mt WITH GRADES OF 1.65% Li_2O, 816ppm Sn AND 36ppm Ta

HIGHLIGHTS:

- A 41.7% increase in combined Measured and Indicated Resources, up from 189.8Mt to 269.0 Mt grading 1.65% Li_2O, 816 ppm Sn and 36 ppm Ta
- Overall tonnage remains unchanged but the Mineral Resource confidence improves significantly with 67% of total Mineral Resources now classified as Measured & Indicated, up from 47% previously
- Improved Resource category provides further certainty to production schedules & financial modelling for the 5Mtpa Scoping Study due for completion in the near term
- Reduction in average Fe_2O_3 content (a potentially deleterious element) from 0.99% to 0.96% Fe_2O_3
- Drilling at Roche Dure is now completed, with the exception of geotechnical and hydrogeological drilling and future resource drilling from the pit floor once de-watered
- The reported Measured and Indicated Lithium Resource of 269Mt at 1.65% Li_2O also includes tin and tantalum at 816ppm Sn (220kt Sn in cassiterite) and 36ppm Ta (9.6kt Ta as Ta_2O_5)
- Confidence in the Tin and Tantalum Resource, combined with anticipated metallurgical test work, should allow tin and tantalum production to be included in future financial modelling of the Manono Project

AVZ Minerals Limited
Level 2, 8 Colin Street,
West Perth WA 6005
Australia

T: + 61 8 6117 9397
F: + 61 8 6118 2106
E: admin@avzminerals.com.au
W: www.avzminerals.com

ABN 81 125 176 703

Market Cap
$92 M

ASX Code: AVZ

AVZ Minerals Limited (ASX: AVZ) is pleased to advise that it has confirmed the increased resource confidence levels of its 60% owned Manono Lithium and Tin Project ("Manono Project") in the DRC's Tanganyika Province after announcing a significant upgrade in the current Mineral Resource.

The Mineral Resource stated at 400Mt with an average grade of 1.65% Li_2O (spodumene) is categorised into Measured, Indicated and Inferred Mineral Resources as shown in Table 1.

This Mineral Resource includes assay data from 86 drill holes on 1,600m of strike length, and geological data from a further 5 drill holes (Figure 1), to enable interpretation of a geological model. Drill holes MO18DD001-MO18DD83 were completed in 2018 and 4 holes which were drilled in 2017. A total of 27,466m of diamond core drilled was used in the Mineral Resources estimate.

Category	Tonnes (Millions)	Li_2O %	Sn ppm	Ta ppm	Fe_2O_3 %	P_2O_5 %
Measured	107	1.68	836	36	0.93	0.31
Indicated	162	1.63	803	36	0.96	0.29
Inferred	131	1.66	509	30	1.00	0.28
Total	**400**	**1.65**	**715**	**34**	**0.96**	**0.29**

Table 1: Roche Dure Main Pegmatite Mineral Resource at a 0.5% Li_2O cut-off

AVZ's Managing Director Mr Nigel Ferguson said: "This resource upgrade represents another major step forward in the Company's plans for development of the Manono Project. This update provides further assurances as to the demonstrated world-class scale, grade and nature of the Manono Project. We are encouraged by the results of the upgrade in resource categories which were expected given the results of the drilling program. This ongoing work shows us that Manono will continue to grow significantly and will be underpinned by a high grade Measured and Indicated Mineral Resource for the majority of the Roche Dure pegmatite drilled to date. The greatly increased confidence level in sections of the Roche Dure Mineral Resource is more than sufficient to support the production schedules and financial modelling within the 5Mtpa scoping study, which is now close to completion."

"The reported Mineral Resource of 400Mt at a grade of 1.65% Li_2O also contains tin at an average grade of 715ppm (in cassiterite) and tantalum at a grade of 34ppm (in tantalite). There is now a better understanding on the distribution of these minerals with low and high grade zones being defined. The reported Measured and Indicated Lithium Mineral Resource below the weathered pegmatite includes grades of 816ppm Sn (220Kt Sn in cassiterite) and 36ppm Ta (9.6Kt Ta as Ta_2O_5). Additionally, a Tin and Tantalum Mineral Resource is reported in the weathered pegmatite zone close to surface. MSA reported a Mineral Resource above a cutoff grade of 500 ppm in the weathered pegmatite containing 18Mt grading at 1,162ppm Sn and 46ppm Ta. Metallurgical core samples have arrived in Fremantle and once offloaded will be sent to Nagrom for the planned test work including reporting of Tin and Tantalum recoveries which are expected to benefit the bottom line when both recovered tin and tantalum estimates are included in future financial modelling. Other key elements of the Feasibility Study are already well underway, and we look forward to providing further information going forward."

"With Manono confirmed as the world's largest lithium deposit, we are increasingly confident that the Project will continue to develop into production and potentially become a world leading source of lithium and tin."

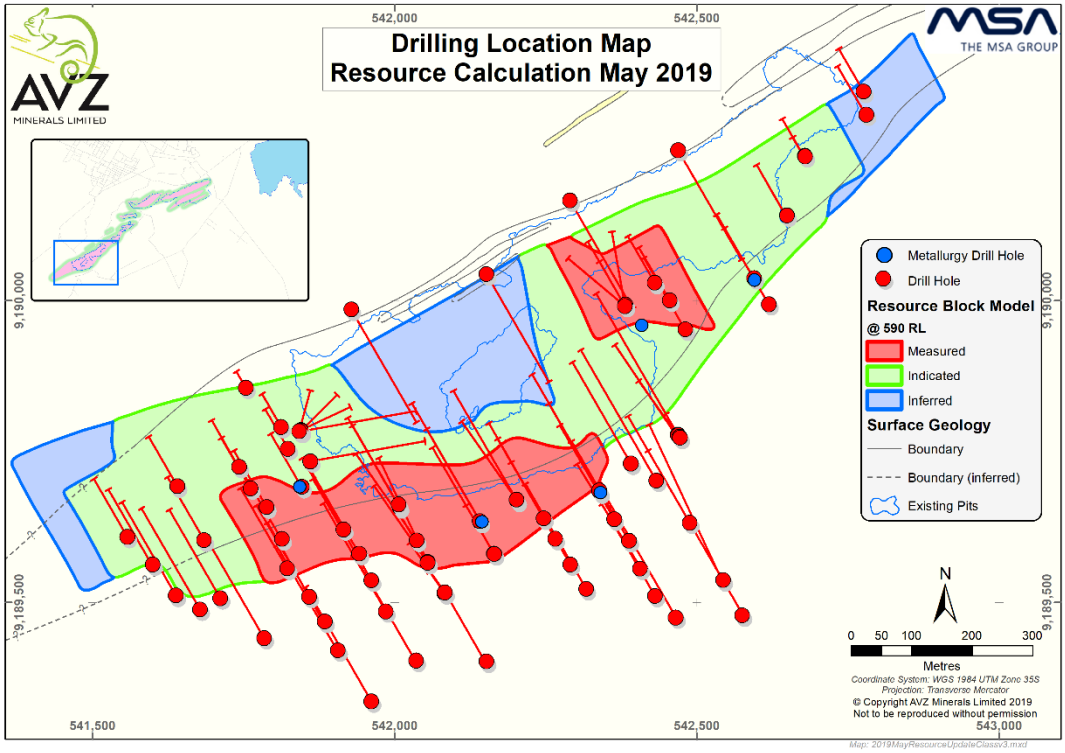


Figure 1. Schematic of Drill Hole Locations at Roche Dure used in the Resource Estimation and Classification Categories at 590m elevation

Receipt of the last drill hole assay data and inclusion in the new resource modelling has significantly increased the level of confidence in the central portion of the Roche Dure pegmatite, given the significant conversion of Inferred Resources to Indicated and Indicated Resources to Measured; an increase of some 41.7%. Only Measured and Indicated Resources can be converted to mineable reserves under the JORC Code (2012).

Additional drilling will be undertaken within the Roche Dure pit once the pit has been dewatered and after access is gained to the pit floor later this year. This will allow the potential upgrade of the Inferred Resources contained within the "wedge", that sits beneath the pit floor which is not currently accessible to drilling, to Indicated or Measured once drilling is completed and thus allow inclusion of the "wedge" in the mining production schedules from commencement of mining operations.

Whilst approximately 95% of the strike of Roche Dure and the depth extent of the pegmatite to approximately 480m below surface have been drill tested, the bulk of the down-dip extensions of the entire 1,600m strike length remains to be tested, indicating that the down dip extension of the Roche Dure pegmatite is still under explored.

Additionally, AVZ has still not drill tested the M'Pete and Tempete pegmatites at the Kitotolo Sector just north of Roche Dure where potentially shallow (surface to 150m below surface) mineralised pegmatites exist. The Company reported earlier this year on the first six wide spaced drill holes at the Carriere de l'Este pegmatite at the northern Manono sector, where significant high grade mineralisation was intersected. A small additional program of drilling is being planned to continue the testing of this pegmatite with the view to possibly have a second, near surface Mineral Resource as a potential high-grade stock feed or surge stockpile for any production operations at Roche Dure.

Definitive Feasibility Study Update

Management continues to progress the Definitive Feasibility Study ("DFS") and provides the following update.

Work is proceeding on site with geotechnical, hydrogeological and environmental impact assessment investigations whilst pit dewatering will be undertaken. In addition, the JORC Mineral Resource is expected to be upgraded further on the back of several in-pit, drill holes to be completed once the Roche Dure pit has been dewatered over the coming months. It is likely that these holes will be drilled via RC drilling, which is both cheaper and faster than diamond drilling. These drill holes will also be utilised for future grade control drilling during mining. Additionally, geotechnical investigations will be commenced for all planned plant and tailings storage facilities on site.

As previously advised, the Company has been awaiting receipt of some 13 tonnes of metallurgical core sample from five drill holes completed at Roche Dure. This material has now arrived in Western Australia and is undergoing customs and quarantine inspections which are particularly stringent on materials imported from Africa. However, the planned test-work of this material is obviously now overdue given its late departure from the DRC caused by transport issues associated with the wet season and the recent country-wide elections. Additionally, receipt of the Transport Study for the extended Scoping Study work was delayed in its presentation to the Company.

The planned met test work and the Transport Study are both critical path items for completion of the DFS and the delays incurred have impacted the schedule by approximately three months. The DFS is thus now planned for completion in Q1/2020 and allowance has been made in the overall project planning for an additional Quarter in case of further unforeseen delays. This buffer may not be required.

The Company continues to make every effort to reduce the period required for completion of the DFS and will provide continual updates to the schedule as results become available in due course.

Mineral Resource Estimation according to JORC 2012 Guidelines

The Mineral Resource estimate was carried out by The MSA Group ("MSA"), an independent consultancy, based in Johannesburg, South Africa (www.msagroupservices.com).

The following is an extract from the MSA resource report

The Roche Dure Mineral Resource occurs over approximately 1,600 m of strike length that has been drilled and sampled. The pegmatite dips at approximately 45° to the southeast. Li_2O, Sn and Ta grades have been estimated by ordinary kriging, with all other assayed variables and density estimated by inverse distance weighting to the power of 2. Areas have been classified as Measured, Indicated or Inferred Resources in accordance with the guidelines of the JORC Code (2012) as shown in Table 2, Table 3, Table 4 and Figure 2.

The Mineral Resource is classified as Measured where blocks are within a drill-hole spacing of 100 m by 50 m and occur less than 25 m downdip of the nearest drill-hole. Indicated Mineral Resources are defined as those blocks within a drill-hole spacing of 100 m by 100 m and are within 75 m of the nearest drill-hole. Inferred Mineral Resources are extrapolated to approximately 125 m from the general drilling grid.

The Mineral Resource drilling extended to a maximum depth of approximately 550 m below surface, beneath which there is insufficient information with which to model the mineralisation and therefore the Mineral Resource can be considered to be open at depth. Although a detailed economic study has not been conducted, it is envisaged that the Mineral Resource could be extracted by means of open pit mining to this depth given the thickness of the pegmatite and low potential ore:waste strip ratio.

The Mineral Resource is reported above a cut-off grade of 0.5% Li_2O. This cut-off grade is consistent with that of similar lithium projects, but has not been tested by an economic assessment. The Mineral Resource comprises of 400 million tonnes of spodumene-rich pegmatite at a grade of 1.65% Li_2O (Table 3). The Mineral Resource is further reported into the tin estimation domains in Table 3. Weathered pegmatite has not been reported as part of the lithium Mineral Resource as it is generally below the cut-off grade.

Table 2: Roche Dure Pegmatite Mineral Resource at a 0.5% Li_2O cut-off grade as at 01 May 2019

Category	Tonnes (Millions)	Li_2O %	Sn ppm	Ta ppm	Fe_2O_3 %	P_2O_5 %
Measured	107	1.68	836	36	0.93	0.31
Indicated	162	1.63	803	36	0.96	0.29
Inferred	131	1.66	509	30	1.00	0.28
Total	**400**	**1.65**	**715**	**34**	**0.96**	**0.29**

All tabulated data have been rounded and as a result minor computational errors may occur.
Mineral Resources which are not Mineral Reserves have no demonstrated economic viability.
Fe_2O_3 and P_2O_5 are potentially deleterious elements.

Table 3: Roche Dure Pegmatite Mineral Resource at a 0.5% Li_2O cut-off grade reported based on tin domains as at 01 May 2019

Category	Tonnes (Millions)	Li_2O %	Sn ppm	Ta ppm	Fe_2O_3 %	P_2O_5 %
Low Grade Tin Domain						
Measured	14	1.70	191	28	0.95	0.30
Indicated	34	1.73	177	27	1.01	0.29
Inferred	77	1.65	171	24	1.03	0.28
Total	**125**	**1.68**	**175**	**26**	**1.01**	**0.28**
High Grade Tin Domain						
Measured	93	1.68	932	37	0.92	0.31
Indicated	128	1.60	967	38	0.94	0.29
Inferred	54	1.67	996	37	0.96	0.28
Total	**275**	**1.64**	**962**	**38**	**0.94**	**0.29**

All tabulated data have been rounded and as a result minor computational errors may occur.
Mineral Resources which are not Mineral Reserves have no demonstrated economic viability.
Fe_2O_3 and P_2O_5 are potentially deleterious elements.

A Tin-Tantalum Mineral Resource in the weathered pegmatite is reported as shown Table 4. In determining reasonable potential for eventual economic extraction, it was considered that the weathered pegmatite would necessarily be mined in order to extract the Lithium Mineral Resource below. Given the marginal costs involved in mining the weathered material, the generally low cost of creating a high value tin concentrate from weathered cassiterite bearing rock and the additional value that could be derived from tantalum, it is considered to have economic potential. The Tin Mineral Resource in the weathered pegmatite is reported above a cut-off grade of 500 ppm, and the average grade is comparable to other projects of this nature.

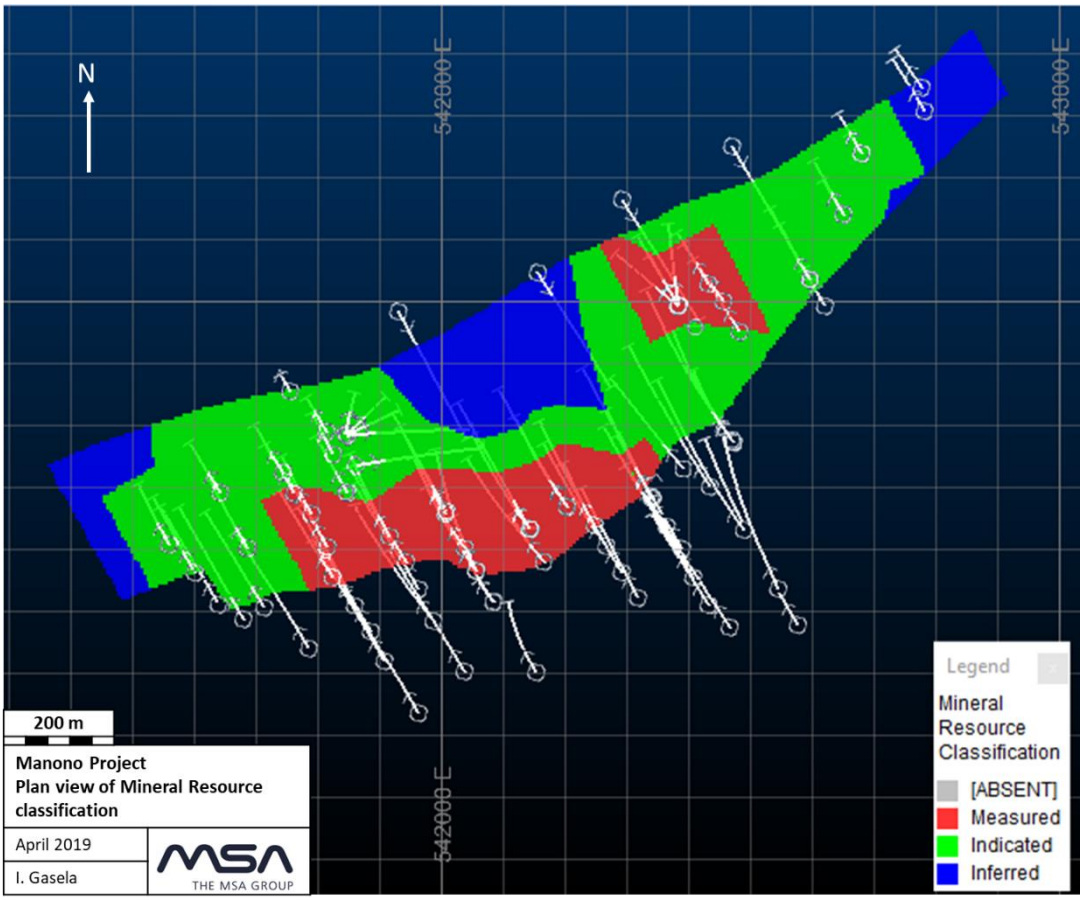
Table 4: Roche Dure Weathered Pegmatite Tin and Tantalum Mineral Resource at a 500 ppm Tin cut-off grade as at 01 May 2019

Category	Tonnes (Millions)	Sn ppm	Li_2O %	Ta ppm	Fe_2O_3 %	P_2O_5 %
Measured	3	956	0.28	46	0.74	0.10
Indicated	10	1,186	0.34	46	0.78	0.11
Inferred	5	1,238	0.35	44	0.77	0.09
Total	**18**	**1,162**	**0.33**	**46**	**0.77**	**0.10**

All tabulated data have been rounded and as a result minor computational errors may occur.
Mineral Resources which are not Mineral Reserves have no demonstrated economic viability.
Fe_2O_3 and P_2O_5 are potentially deleterious elements.

Figure 2

Plan view of Roche Dure Pegmatite showing the Mineral Resource classification relative to the location of the drillholes. Plan level 590 RL



Drilling of five metallurgical test holes has been completed and the results are pending.

Deleterious Elements

Deleterious elements namely iron, phosphorous and fluorine are contained within minerals such as apatite, lithium micas and black tourmaline which are accessory minerals within the pegmatite. Trace amounts of iron can also be included in spodumene crystals. In addition to Sn, Ta and Li_2O, MSA has also estimated the P_2O_5 and Fe_2O_3 as deleterious elements. Fe_2O_3 is a potential deleterious element in the production of spodumene concentrates for the glass and ceramics industry. Fluorine, also a deleterious element, was assayed in 85 samples which have an average grade of 998 ppm and a minimum and maximum grade of 630 ppm and 1,420 ppm, respectively.

For further information, visit **www.avzminerals.com.au** or contact:

Mr. Leonard Math
Company Secretary
AVZ Minerals Limited
Phone: +61 8 6117 9397
Email: admin@avzminerals.com.au

Media Enquiries:
Mr. Luke Forrestal
Media + Capital Partners
Phone: +61 411 479 144

Competent Persons Statement

The information in the document that relates to the geology of the Roche Dure pegmatite is based upon information compiled by Mr Michael Cronwright, who is a fellow of The Geological Society of South Africa (GSSA) and is a registered professional with the South African Council for Natural Scientific Professions (SACNSAP). Mr Cronwright is a Principal Consultant with The MSA Group (Pty) Ltd (an independent consulting company). Mr Cronwright has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the JORC Code.

The Mineral Resource estimate has been completed by Mrs Ipelo Gasela (BSc Hons, MSc (Eng)) who is a geologist with 14 years' experience in mining geology, Mineral Resource evaluation and reporting. She is a Senior Mineral Resource Consultant for The MSA Group (an independent consulting company), is registered with the South African Council for Natural Scientific Professions (SACNASP) and is a Member of the Geological Society of South Africa (GSSA). Mrs Gasela has the appropriate relevant qualifications and experience to be considered a Competent Person for the activity being undertaken as defined in the 2012 edition of the JORC Code.

On behalf of:

THE MSA GROUP

Michael Cronwright Pr. Sci. Nat.

Principal Consultant – The MSA Group

Ipelo Gasela Pr. Sci. Nat.

Senior Mineral Resource Consultant – The MSA Group

JORC 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 (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.* • *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 (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.*	• Diamond drilling, producing drillhole core has been utilised to sample the pegmatite below ground surface. This method is recognised as providing the highest quality information and samples of the unexposed geology. • Supplementing the drilling data, surface samples were collected from outcrops by utilising channel sampling from trenches and point-source sampling of scattered outcrops. Due to the known limitations of data derived from these types of samples, the data has not been incorporated in defining the Mineral Resource. • Drilling and sampling practices followed normal industry standards. The pegmatite has been sampled from the hanging wall contact continuously through to the footwall contact. In addition, the host-rocks extending from the contacts have also been sampled. • Diamond drilling has been used to obtain core samples which have then been cut longitudinally in half. Intervals submitted for assay have been determined according to geological boundaries. Samples were taken at 1 m intervals. • The submitted half-core samples typically have a mass of 3 to 4 kg.
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).*	• The drilling was completed using diamond drilling rigs with PQ used from surface to sample through weathered to fresh-rock and HQ sized drill rods used after the top-of-fresh-rock had been intersected. Most holes are angled between 50° and 75°. All collars were surveyed after completion. All holes were downhole surveyed using a digital multi-shot camera at about 30 m intervals. Apart from drillholes MO17DD001, MO17DD002, MO18DD001 and MO18DD008, all cores were orientated.
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 fine/coarse material.*	• Drill core recovery attained >99% in the pegmatite. • Based upon the high recovery, AVZ did not have to implement additional measures to improve sample recovery and the drill core is considered representative and fit for sampling. • For the vast majority of drilling completed, core recovery was near 100% and there is no sample bias due to preferential loss or gain of fine or coarse material.

Criteria	JORC Code explanation	Commentary
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Drillhole cores were logged by qualified geologists using a data-logger and the logs were then uploaded into Geobank which is a part of the Micromine software system. The cores were logged for geology and geotechnical properties (RQD & planar orientations). A complete copy of the data is held by an independent consultant. The parameters recorded in the logging are adequate to support appropriate Mineral Resource estimation. • All cores were logged, and logging was by qualitative (lithology) and quantitative (RQD and structural features) methods. All cores were also photographed both in dry and wet states, with the photographs stored in the database. • The entire length of all drillholes were logged for geological, mineralogical and geotechnical data.
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.*	• Cores were cut longitudinally in half and sampled at a nominal 1 m length. • All the exploration drilling was carried out using diamond core drilling. • The sample preparation for drillhole core samples incorporates standard industry practice. The half-core samples were prepared at ALS Lubumbashi and the ALS sample preparation facility on site at Manono, with holes from MO18DD021 onwards being prepared at Manono. • At AVZ's onsite sample preparation facility the half-core samples of approximately 4-5 kg are oven dried, crushed to -2 mm with a 500 g sub-sample being split off. This 500 g sub-sample is then pulverised to produce a pulp with 85% passing -75um size fraction. A 120 g subsample is then split from this. The certified reference material, blank and duplicate samples are inserted at appropriate intervals and then the complete sample batch is couriered to Australia for analysis. • Standard sub-sampling procedures are utilised by ALS Lubumbashi and ALS Manono at all stages of sample preparation such that each sub-sample split is representative of the whole it was derived from. • Duplicate sampling was undertaken for the drilling programme. After half-core samples were crushed at the ALS Lubumbashi and ALS Manono preparatory facility, an AVZ geologist took a split of the crushed sample which was utilised as a field duplicate. The geologist placed the split into a pre-numbered bag which was then inserted into the sample stream. It was then processed further, along with all the other samples. The drilling produced PQ and HQ drill core, providing a representative sample of the pegmatite which is coarse-grained. Sampling was mostly at 1 m intervals, and the submitted half-core samples typically had a mass of 3-4 kg.

Criteria	JORC Code explanation	Commentary
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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	• Diamond drillhole (core) samples were submitted to ALS Lubumbashi and ALS Manono (DRC) where they were crushed and pulverised to produce pulps. These pulps were couriered to Australia and analysed by ALS Laboratories in Perth, Western Australia using a sodium peroxide fusion of a 5g charge followed by digestion of the prill using dilute hydrochloric acid thence determination by AES or MS, i.e. methods ME-ICP89 and ME-MS91. Samples from the drilling completed in 2017 i.e. MO17DD001 and MO17DD002, were assayed for a suite of 24 elements that included Li, Sn, Ta & Nb. Samples from the drilling completed in 2018 were assayed for a suite of 12 elements; Li, Sn, Ta, Nb, Al, Si, K, Fe, Mg, P, Th and U, with Li reported as Li_2O, Al as Al_2O_3, Si as SiO_2, K as K_2O, Mg as MgO, Fe as Fe_2O_3 and P as P_2O_5. • Peroxide fusion results in the complete digestion of the sample into a molten flux. As fusion digestions are more aggressive than acid digestion methods, they are suitable for many refractory, difficult-to-dissolve minerals such as chromite, ilmenite, spinel, cassiterite and minerals of the tantalum-tungsten solid solution series. They also provide a more-complete digestion of some silicate mineral species and are considered to provide the most reliable determinations of lithium mineralisation. • Sodium peroxide fusion is a total digest and considered the preferred method of assaying pegmatite samples. • For the drilling, AVZ incorporated standard QAQC procedures to monitor the precision, accuracy and general reliability of all assay results from assays of drilling samples. As part of AVZ's sampling protocol, CRMs (standards), blanks and duplicates were inserted into the sampling stream. In addition, the laboratory (ALS Perth) incorporated its own internal QAQC procedures to monitor its assay results prior to release of results to AVZ. The Competent Person is satisfied that the results of the QAQC are acceptable and that the assay data from ALS is suitable for Mineral Resource estimation. • AVZ utilised Nagrom in Perth for external laboratory checks to compare results received from ALS Perth. The Competent Person is satisfied that the results from the umpire laboratory are acceptable and that the assay data from ALS is suitable for Mineral Resource estimation. • Geophysical instruments were not used in assessing the mineralisation.

Criteria	JORC Code explanation	Commentary
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.*	• MSA observed the mineralisation in the majority of cores on site, although no check assaying was completed by MSA. • MSA observed and photographed several collar positions in the field, along with rigs that were drilling at the time of the site visit. • Twinned holes for the verification of historical drilling, were not required. Short vertical historical holes were drilled within the pit but are neither accessible nor included within the database used to define the Mineral Resource. • Drilling data is stored on site as both hard and soft copy. Drilling data is validated onsite before being sent to data management consultants in Perth where the data is further validated. When results are received they are loaded to the central database in Perth and shared with various stakeholders via the cloud. QC results are reviewed by both independent consultants and AVZ personnel at Manono. Hard copies of assay certificates are stored in AVZ's Perth offices. • AVZ has not adjusted any 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.*	• The drillhole collars have been located by a registered surveyor using a Hi-Target V30 Trimble differential GPS with an accuracy of +/- 0.02 m. • All holes were downhole surveyed using a digital multi-shot camera at approximately 30 m intervals, except MET02 and MET03 which were drilled vertically. • AVZ provided high resolution topographic contours, surveyed at 50 cm elevation differences. . • For the purposes of geological modelling and estimation, the drillhole collars were projected onto this topographic surface. In most cases adjustments were within 1 m (in elevation). • Coordinates are relative to WGS 84 UTM Zone 35M.
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.*	• Drillhole were completed on sections 100 m apart, and collars were 50 to 100 m apart on section where possible. In situations of difficult terrain, multiple holes were drilled from a single drill pad using differing angles for each drillhole. • In the Competent Person's opinion, the spacing is sufficient to establish geological and grade continuity consistent with Measured, Indicated and Inferred Mineral Resources. • Samples were composited to 1 m intervals, since it was the most occurring sample length.

Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *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 drillhole orientation was designed to intersect the Roche Dure Pegmatite at, or nearly at, 90° to the plane of the pegmatite. • No material sampling bias exists due to drilling direction.
Sample security	• *The measures taken to ensure sample security.*	• When utilizing ALS Lubumbashi, chain of custody was maintained by AVZ personnel on-site to Lubumbashi. Samples were stored on-site until they were delivered by AVZ personnel in sealed bags to the laboratory at ALS in Lubumbashi. The ALS laboratory checked the received samples against the sample dispatch form and issued a reconciliation report. • At Lubumbashi, the prepared samples (pulps) were sealed in a box and delivered by DHL to ALS Perth. • ALS issued a reconciliation of each sample batch, actual received vs documented dispatch. • The ALS Manono site preparation facility was managed indepedently by ALS who supervised the sample preparation. Prepared samples were sealed in boxes and transported by air to ALS Lubumbashi and were accompanied by an AVZ employee, where export documentation and formalities were concluded. DHL couriered the samples to ALS in Perth.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• The sampling techniques were reviewed by the Competent Person during the site visit. • The Competent Person considers that the exploration work conducted by AVZ was carried out using appropriate techniques for the style of mineralisation at Roche Dure, and that the resulting database is suitable for Mineral Resource estimation.

Section 2 Reporting of Exploration Results

(Criteria listed in the previous 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 Manono licence was awarded as Research Permit PR13359, issued on the 28th December 2016 to La Congolaise d'Exploitation Miniere SA (Cominiere). It is valid for 5 years. On the 2nd February 2017, AVZ formed a joint-venture (JV) with Cominiere and Dathomir Mining Resources SARL (Dathomir) to become the majority partner in a JV aiming to explore and develop the pegmatites contained within PR 13359. Ownership of the Manono Lithium Project is AVZ 60%, Cominiere 30% and Dathomir 10%. • All indigenous title is cleared and there are no other known historical or environmentally sensitive areas.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Within PR13359, exploration of relevance was undertaken by Gecamines which completed a programme of drilling between 1949 and 1951. The drilling consisted of 42 vertical holes drilled to a general depth of around 50 - 60 m. Drilling was carried out on 12 sections at irregular intervals ranging from 50 - 300 m, and over a strike length of some 1,100 m. Drill spacing on the sections varied from 50 - 100 m. The drilling occurred in the Roche Dure Pit only, targeting the fresh pegmatite in the Kitotolo sector of the project area. • The licence area has previously been mined for tin and tantalum through a series of open pits over a total length of approximately 10 km excavated by Zairetain SPRL. More than 60 Mt of material was mined from three major pits and several subsidiary pits focused on the weathered upper portions of the pegmatites. Ore was crushed and then upgraded through gravity separation to produce a concentrate of a reported 72% Sn. There are no reliable records available of tantalum or lithium recovery as tin was the primary mineral being recovered. • Apart from the mining excavations and the drilling programme, there has been very limited exploration work within the Manono region.

Criteria	JORC Code explanation	Commentary
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Project lies within the mid-Proterozoic Kibaran Belt - an intracratonic domain, stretching for over 1,000 km through Katanga and into southwest Uganda. The belt strikes predominantly SW-NE and is truncated by the N-S to NNW-SSE trending Western Rift system. The Kibaran Belt is comprised of a sedimentary and volcanic sequence that has been folded, metamorphosed and intruded by at least three separate phases of granite. The latest granite phase (900 to 950 million years ago) is assigned to the Katangan cycle and is associated with widespread vein and pegmatite mineralisation containing tin, tungsten, tantalum, niobium, lithium and beryllium. Deposits of this type occur as clusters and are widespread throughout the Kibaran terrain. In the DRC, the Katanga Tin Belt stretches over 500 km from near Kolwezi in the southwest to Kalemie in the northeast comprising numerous occurrences and deposits of which the Manono deposit is the largest. The geology of the Manono area is poorly documented and no reliable maps of local geology were observed. Recent mapping by AVZ has augmented the overview provided by Bassot and Morio (1989) and has led to the following description. The Manono Project pegmatites are hosted by a series of mica schists and by amphibolite in some locations. These host rocks have a steeply dipping penetrative foliation that appears to be parallel to bedding. There are numerous bodies of pegmatite, the largest of which have sub-horizontal to moderate dips, with dip direction being towards the southeast. The pegmatites post-date metamorphism, with all primary igneous textures intact. They cross-cut the host rocks but despite their large size, the contact deformation and metasomatism of the host rocks by the intrusion of the pegmatites seems minor. The absence of significant deformation of the schistosity of the host rocks implies that the pegmatites intruded brittle rocks. The pegmatites constitute a pegmatite swarm in which the largest pegmatites have an apparent en-echelon arrangement in a linear zone more than 12 km long. The pegmatites are exposed in two areas; Manono in the northeast, and Kitotolo in the southwest. These areas are separated by a 2.5 km section of alluvium-filled floodplain which contains Lake Lukushi. At least one large pegmatite extends beneath the floodplain. The pegmatites are members of the LCT-Rare Element group of pegmatites and within the pegmatite swarm there are LCT albite-spodumene pegmatites and LCT Complex (spodumene sub-type) pegmatites.

Criteria	JORC Code explanation	Commentary

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 Appendix 1.

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.* • *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.*	• Exploration Results are not reported, therefore no data was aggregated for reporting purposes. • No equivalent values are used or reported.
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 (e.g. 'down hole length, true width not known').*	• Exploration Results are not reported. • There is no relationship between mineralisation width and grade. • The geometry of the mineralisation is reasonably well understood however the pegmatite is not of uniform thickness nor orientation. Consequently, most drilling intersections do not represent the exact true thickness of the intersected pegmatite, although intersections are reasonably close to true thickness in most cases.
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.*	• The relevant plans and sections are included in this document and in Appendix 2.
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.*	• Exploration Results are not 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.*	• No other exploration data is available.

Criteria	JORC Code explanation	Commentary
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).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Diamond drill testing beneath the pit will be carried once the pit has been drained of water. • Further mining studies are planned.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary

Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.*
	• *Data validation procedures used.*
		• The geology, grade and bulk density data were checked by the Competent Person.
		• The data validation process used during Mineral Resource estimation consisted of:
		  ○ Examination of the assay, collar survey, downhole survey and geology data to ensure that the data were complete and usable for all drillholes.
		  ○ Examination of the desurveyed data in three dimensions to check for spatial errors.
		  ○ Examination of the assay data in order to ascertain whether they were within expected ranges.
		  ○ Checks for "FROM-TO" errors, to ensure that the sample data did not overlap one another or that there were no unexplained gaps between samples.

Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• One of the Competent Persons for the Mineral Resource, Mr Michael Cronwright, conducted a site inspection in April 2018 to inspect the cores, review the exploration processes and further his understanding of the Roche Dure mineralisation. The Competent Person considers that the exploration work conducted by AVZ was carried out using appropriate techniques for the style of mineralisation.

Criteria	JORC Code explanation	Commentary
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• The quantity and spacing of drilling is sufficient to define the shape and extents of the pegmatite to a high level of confidence. • Surface mapping was used to constrain the interpretation of the pegmatite outcrop on surface. The pit is currently filled with water and it is not possible to either map the geology or drill beneath the pit. Therefore, confidence in geological interpretation in areas immediately below the flooded pit is relatively low. • Geological logging and assay data were used to define estimation domains within the pegmatite i.e. Weathered Pegmatite, Transitional Pegmatite, Low-grade Hangingwall Contact Pegmatite, Main Pegmatite, Low-grade Footwall Contact Pegmatite and Internal Low-grade Pegmatite. • Geological logging was used to define the host rock domains i.e. Overburden, Hangingwall and Footwall. A dyke, which intersected the pegmatite at depth was also modelled. • Tin and tantalum wireframes were modelled in Leapfrog Geo based on the spatial grade distributions in the pegmatite. Tin and tantalum mineralisation showed distinct zones of lower and higher grades within the pegmatite. • No alternative geological models are likely given the geological and grade continuity of the pegmatite.
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 area defined as a Mineral Resource is approximately 1,600 m along strike by approximately 700 m on dip and is limited by data extents to a maximum depth of approximately 550 m below surface. • The Mineral Resource is between approximately 170 m and 370 m thick. • The Roche Dure Pegmatite dips approximately 45° to the southeast and outcrops on surface within the Manono project area. • The pegmatite is weathered to varying depths from 0 m to 100 m below surface. The transitional zone has been modelled to depth of approximately 130 m below surface.

Criteria	JORC Code explanation	Commentary
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 availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	• Leapfrog Geo 4.4.0 was used to model the geology and weathering states. • Datamine Studio RM was used to estimate grades. • Samples were composited to 1 m intervals using length weighting. • The geological wireframes were filled with blocks of 25 mN by 25mE by 10 mRL and coded according to the geological zone. • The blocks were sub-celled to a minimum of 5 mN by 5mE by 0.25 mRL to accurately fill the geological model. • The different pegmatite domains were estimated separately from each other using hard boundaries due to distinct grade and orientation differences between the sub-domains. • Top cuts were applied to the tail of the different variable grade distributions, where outliers were identified. • Li_2O_pct, Al_2O_3_pct, Fe_2O_3_pct, K_2O_pct, MgO_pct, P_2O_5_pct, SiO_2_pct, Nb_ppm, Sn_ppm, Ta_ppm, Th_ppm, U_ppm, SG were estimated into the block model. • The Li_2O grades were estimated into the modelled pegmatite domains using ordinary kriging. All other grades (except tin and tantalum) and density were estimated using inverse distance weighting (power 2). • Tin and tantalum grades were estimated into their respective domains based on the modelled wireframes. • Search ellipses were roughly aligned with the range of the Li_2O semi-variogram model and are within the maximum semi-variogram range. • The search ellipse was aligned in the plane of the pegmatite. A search distance of 75 m along strike, 50 m down dip and 15 m across plane was used for all variables. A minimum of 14 and maximum of 24 composites were used to estimate a block, with the maximum number per hole used to estimate being 12. Should enough samples not be collected in the first search, then the search was expanded two times, and finally 15 times to ensure all model blocks were estimated. The majority of the Mineral Resource is estimated within the first and second search volumes. • Estimates were validated using visual checks of the drillhole grades against the model and statistical comparisons of the input data and output estimated grades.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnages were estimated on a dry basis.

Criteria	JORC Code explanation	Commentary
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• A cut-off grade of 0.5% Li_2O has been applied for the reporting of the Mineral Resource. This is based on other hard rock lithium projects but will be required to be investigated in future through economic assessments. • The parameters used in the assessment of Reasonable Prospects for Eventual Economic Extraction (RPEEE) are not definitive and should not be misconstrued as an attempt to estimate an Ore Reserve for which economic viability would be required to be demonstrated.
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 explanation of the basis of the mining assumptions made.*	• It is assumed that the Mineral Resource will be extracted using an open pit mining methodology. • A high-level observation is that the entire Mineral Resource could likely be extracted from an open pit with a worst case final waste:ore stripping ratio of 1:1. Due to this observation the Mineral Resource is reported to a depth of 550 m below surface as it is reasonable to expect economic extraction to this depth. • The potential economic viability of extracting the Tin Mineral Resource is premised upon this weathered low Li_2O grade material being mined in order to be able to access the high grade Lithium Mineral Resource beneath it.
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.*	• Mineral characterisation and metallurgical studies have demonstrated that the economically significant lithium mineral present is spodumene, with negligible quantities of other lithium species present. • Metallurgical test work was carried out on bulk samples derived from the complete Main Pegmatite intersections of drillholes, and tests can therefore be considered representative. • Mineral characterisation work covered selected samples chosen to verify mineral species in, for example, varying grades of mineralisation, hydrothermally altered spodumene and greisen. • It is assumed that the cassiterite in the Tin Mineral Resource will be extractable by low cost gravity separation techniques. The weathered material containing the cassiterite is assumed to have similar metallurgical characteristics to that extracted during the operational period of the historical tin mine.
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.*	• MSA is not aware of the details of any environmental studies that have been carried out.

Criteria	JORC Code explanation	Commentary
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.* • *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.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• A total of 3,137 bulk density measurements have been carried out on Roche Dure drillhole core. • Most of these measurements were completed on Main Pegmatite material by the Archimedes principal of weighing the full assay sample (one metre) in air and then submerged in water. • A calliper was used to measure and calculate the volume of drillhole core that was too weathered to submerge in water. This material was then weighed and the density calculated from its volume and mass. • In-situ bulk density was estimated into the block model for pegmatite domains using inverse distance to the power of 2. Average bulk density values were applied to other domains as well to blocks that were not estimated.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• The data that inform the grade estimate were derived from AVZ drillholes only and no historical data were used. In the Competent Person's opinion, these data have been collected using industry acceptable practices and are reliable. • The Mineral Resource is classified as Measured in areas where the drillhole spacing is 100 m by 50 m and are not extrapolated more than 25 m downdip from assay data. • Indicated Mineral Resources are defined in areas where the drillhole spacing is 100 m by 100 m and are not extrapolated more than 75 m away from assay data. • Inferred Mineral Resources are extrapolated to approximately 125 m from the drilling grid. • The classification reflects the Competent Persons view of the deposit.

Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• The following review work was completed by MSA during a site visit in April 2018:
		  ○ A site-based review of the drillhole data processes and data collection protocols,
		  ○ Inspection of the AVZ cores used in the Mineral Resource estimate,
		  ○ A complete inspection of all drilling data available at the time.

Criteria	JORC Code explanation	Commentary
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 statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• Quantification of relative accuracy was not carried out. • Due to the almost normal distribution of Li_2O grade values in the Main Pegmatite, it is reasonable to assume that the estimate of Li_2O grades in the Main Pegmatite of high confidence in the Measured areas. • Caution should be placed on the Inferred estimates as they are based on limited data and are not suitable to support technical and economic studies at a Pre-Feasibility level. These are global estimates. • Recoverable resource estimates were not carried out. • No production data are available.