MINERALS LIMITED

ASX ANNOUNCEMENT
14 July 2021

JORC Ore Reserves increase by 41.6% at Roche Dure

Highlights

- JORC Proved and Probable Ore Reserves now estimated at 131.7Mt – an increase of 41.6% from the 93Mt reported in April 2020 DFS
- Average lithium grade increased by 3.1% from 1.58% to 1.63% Li_2O while tin grade of 990 ppm remains the same but reports a 41% increase in contained tin metal to 130.3kt.
- Ore Reserve estimate contains 65.0Mt of Proved Category and 66.6Mt of Probable Category Ore Reserves
- Life of Mine extended to 29.5 years based on a 4.5Mtpa operation underpinned by the Ore Reserves - an increase of 47.5% from April 2020 DFS
- The Roche Dure ore deposit continues to impress as potentially the largest standalone global hard rock lithium asset based on Proved and Probable Ore Reserves

AVZ Minerals Limited (ASX:AVZ, "**the Company**") is pleased to announce the completion of an upgraded JORC Code compliant Ore Reserve estimate for the Manono Lithium and Tin Project ("Manono Project"), as the Company transitions its Manono Project into development.

AVZ's Managing Director, Mr. Nigel Ferguson, said: "This is a fantastic result for the Manono Project, with a 41.6% increase in mineable reserves, a 3% increase in head grade from 1.58 to 1.63% Li_2O and a 47.5% increase in the Life of Mine ("LoM"), which was essentially capped at just under 30 years due to limitations predicting economic factors beyond this time frame.

"Just one third of the mineral resources at Roche Dure is converted to Ore Reserves and extracted over the LoM, largely due to the lack of data and costings for replacing processing equipment and certainty forecasting SC6 prices beyond the current LoM".

"Improvements in both CAPEX and OPEX figures from our optimised engineering studies have also contributed to this significant Ore Reserve increase, with details on these study areas to be reported soon."

"In addition, ongoing studies are allowing us to fine-tune the quantum of necessary funds required to bring the mine into production."

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Market Cap
$611M

ASX Code: AVZ

"The upgraded JORC Ore Reserve estimates along with our optimised engineering studies and ongoing funding studies, have delivered a major step forward for the Company as we strategically advance the Manono Project towards a full bankable status in the near future."

The Ore Reserve estimate was prepared by experienced and prominent mining engineering consultancy, CSA Global.

The Ore Reserve has been estimated in conjunction with the optimised DFS for the project and is underpinned by that study.

The Ore Reserve Estimate for the Manono Project at July 2021, compared to April 2020, is outlined in Table 1 below:

Reserve category (July 2021)	**Tonnes (Mt)**	**Grade Li_2O (%)**	**Contained Li_2O (Mt)**	**Grade Sn (g/t)**	**Contained Sn (kt)**
Proved	65.0	1.64	1.07	942	61.2
Probable	66.6	1.61	1.07	1,037	69.1
Total	**131.7**	**1.63**	**2.14**	**990**	**130.3**
Reserve category (April 2020)	**Tonnes (Mt)**	**Grade Li_2O (%)**	**Contained Li_2O (Mt)**	**Grade Sn (g/t)**	**Contained Sn (kt)**
Proved	44.6	1.62	0.72	958	42.7
Probable	48.5	1.54	0.75	1016	49.3
Total	**93.0**	**1.58**	**1.47**	**988**	**92.0**

Table 1: Roche Dure Ore Reserve Statement

Notes:
Mining dilution by elevation has been applied to represent the changing quantities of waste dilution existing on each bench of the pit:

- *Surface to the 565RL has 5% mining dilution applied*
- *565RL to the 505RL has 2% mining dilution applied*
- *505RL to the 435RL has 1% mining dilution applied*
- *Below the 435 RL has 0% mining dilution applied, as the whole bench is ROM.*

A variable mining recovery has also been applied:

- *Surface to 565RL has 98% mining recovery applied*
- *Below the 565RL has 99% mining recovery applied.*

The Ore Reserve estimate has been based on a cut-off of > US$0.00 block value comprising an economic block by block calculation.
Figures above may not sum due to rounding.

As the increase in the Ore Reserve is deemed to be material, further specific information is required under ASX listing rules Section 5.9.1 Chapter 5 and JORC (2012) reporting requirements and are included here from Chapter 4 of CSA Global's Manono Lithium and Tin Project Ore Reserve Report no. 240.2021. This data is included in Appendix 1 whilst further explanatory notes are in Appendix 2.

This release was authorised by Nigel Ferguson, Managing Director of AVZ Minerals Limited.

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Competent Person Statement

The information that relates to Ore Reserves is based on information compiled by Mr Daniel Grosso who is an employee of CSA Global Pty Ltd. Mr Grosso takes overall responsibility for the Report as Competent Person. Mr Grosso is a Member of the Australasian Institute of Mining and Metallurgy and has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking, to qualify as Competent Person in terms of the JORC (2012 Edition). The Competent Person, Daniel Grosso has reviewed the Ore Reserve statement and given permission for the publication of this information in the form and context within which it appears.

Forward-looking Statements

Certain statements contained in this document, including information as to the future financial or operating performance of AVZ and its projects may also include statements which are 'forward-looking statements' that may include, amongst other things, statements regarding targets, estimates and assumptions in respect of mineral resources and anticipated grades and recovery rates, production and prices, recovery costs and results, capital expenditures and are or may be based on assumptions and estimates related to future technical, economic, market, political, social and other conditions. These forward-looking statements are necessarily based upon a number of estimates and assumptions that, while considered reasonable by AVZ, are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies and involve known and unknown risks and uncertainties that could cause actual events or results to differ materially from estimated or anticipated events or results reflected in such forward- looking statements.

Forward-looking statements can generally be identified by the use of forward looking words such as "likely", "believe", "future", "project", "should", "could", "target", "propose", "to be", "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "continue", and "guidance", and other similar words and expressions, which may include, without limitation, statements regarding plans, strategies and objectives of management, expected exploration costs for the Company and indications of, and guidance on future earnings or financial position or performance. Any such forward-looking statement also inherently involves known and unknown risks (including risks generally associated with the mining industry), uncertainties and other factors that may cause actual results, performance and achievements to be materially greater or less than estimated.

Any forward-looking statements are also based on assumptions and contingencies which are subject to change without notice and which may ultimately prove to be materially incorrect. Investors should consider the forward-looking statements contained in this document, in light of those disclosures and not place undue reliance on such statements.

The forward-looking statements in this document are not guarantees or predictions of future performance and may involve significant elements of subjective judgment, assumptions as to future events that may not be correct, known and unknown risks, uncertainties and other factors, many of which are outside the control of the Company. The forward-looking statements are based on information available to the Company as at the date of this document. Except as required by law or regulation, the Company undertakes no obligation to provide any additional or updated information or update any forward-looking statements, whether as a result of new information, future events or results or otherwise. To the maximum extent permitted by law, each member of the Company and its respective directors, officers, employees, advisers, agents and intermediaries disclaim any obligation or undertaking to release any updates or revisions to the information to reflect any change in expectations or assumptions. No member of the Company makes any representation or warranty (express or implied) as to the fairness, accuracy, reliability, currency or completeness of any forward-looking statements contained in this document.

Appendix 1: Manono Lithium and Tin Project, Ore Reserve Report No. 240.2021., July 2021

Chapter 4 Ore Reserve Estimation Process

The format of the following description of the Ore Reserve estimation process is based on the requirements of ASX Chapter 5, Paragraph 5.9 Requirements applicable to reports of Ore Reserves for material mining projects, sub-paragraph 5.9.1 relating to the components of a market announcement.

4.1 Material Assumptions and Outcomes from the Feasibility Study and Optimisation Study (including Economic Assumptions)

Appropriate studies for the development of the Manono Project have been undertaken by AVZ and several suitably qualified independent consultants, experts and contracting firms. All study assumptions are to a minimum of a Pre-Feasibility Study (PFS) standard, with the majority of key parameters to a Feasibility Study level of confidence. A FS was completed in April 2020 and updated in July 2021 by AVZ for a 4.5 Mtpa Dense Media Separation (DMS) and lithium sulphate processing facility. The proposed process produces a 6% Li_2O concentrate as a saleable product, and from that 45 kt/a of Primary Lithium Sulphate (PLS) product. This plant size forms the basis of the Ore Reserve estimate. The outcome of the FS has been to demonstrate that the Project currently meets the investment criteria of AVZ to progress the Project to the next stage of development.

Outcomes of the FS include a mine life of 29.5 years, 21.3 million tonnes of 6% Li_2O concentrate produced, 1.7 million tonnes of 80% lithium sulphate concentrate produced, and 77 kt of 60% tin concentrate produced. The optimisation study results showed that a larger pit had potential to return a higher discounted cashflow value, however the pit was limited to a mine life of less than 30 years due to the marketing uncertainty beyond a 30-year time horizon. Further studies to a PFS level of confidence, assessing a larger processing plant may result in an increased Ore Reserve estimate.

Pit optimisations in Whittle™ software uses forecast product prices provided by the Company. The pit optimisations and FS were based on Measured and Indicated Mineral Resources only. The weathered component of the Mineral Resource assumed tin could be recovered and lithium could not be recovered.

Geotechnical analysis was completed by Middindi Consulting Pty Ltd ("Middindi Consulting") in January 2020. Middindi Consulting analysed the Roche Dure pit and provided pit wall batter and berm configurations for each wall orientation within each of the weathering domains. Table 1 shows the design sector definition and Table 2 through to Table 6 show the slope geometry for each design sector. This slope geometry was used as a basis for the pit optimisation as well as pit and stage designs within the FS.

Table 1: Design sector definition

Design Sector	Wall Dip Direction (˚)
1	133
2	230
3	315
4	335
5	10
6	50

Table 2: Design sector 1 slope geometry

Design Sector Material	Bench Height (m)	Berm Width (m)	Number of benches	Bench Face Angle	Stack Angle (˚)	Overall Slope Angle (˚)
Weathered	5.00	4.50	1.00	75	N/A	48

Pegmatite	15.00	10.00	5.00	80	50	
Schist	15.00	10.00	8.00	80	50	

Table 3: Design sector 2 slope geometry

Design Sector Material	Bench Height (m)	Berm Width (m)	Number of benches	Bench Face Angle	Stack Angle (˚)	Overall Slope Angle (˚)
Weathered	5.00	4.50	1.00	75	N/A	47
Pegmatite	15.00	11.50	2.00	80	47	
Schist	15.00	11.50	15.00	80	47	

Table 4: Design sector 3 slope geometry

Design Sector Material	Bench Height (m)	Berm Width (m)	Number of benches	Bench Face Angle	Stack Angle (˚)	Overall Slope Angle (˚)
Weathered	5.00	4.50	5.00	75	41	46
Pegmatite	15.00	10.00	6.00	80	50	
Schist	15.00	10.00	5.50	80	50	

Table 5: Design sector 4 slope geometry

Design Sector Material	Bench Height (m)	Berm Width (m)	Number of benches	Bench Face Angle	Stack Angle (˚)	Overall Slope Angle (˚)
Weathered	10.00	4.50	7.00	75	51	49
Pegmatite	15.00	10.00	4.00	80	46	
Schist	15.00	10.00	4.50	80	45	

Table 6: Design sector 5 slope geometry

Design Sector Material	Bench Height (m)	Berm Width (m)	Number of benches	Bench Face Angle	Stack Angle (˚)	Overall Slope Angle (˚)
Weathered	5.00	4.50	4.00	75	41	47
Pegmatite	15.00	10.00	9.00	80	50	
Schist	15.00	10.00	3.00	80	50	

Table 7: Design sector 6 slope geometry

Design Sector Material	Bench Height (m)	Berm Width (m)	Number of benches	Bench Face Angle	Stack Angle (˚)	Overall Slope Angle (˚)
Weathered	5.00	4.50	4.00	75	41	47
Pegmatite	15.00	10.00	9.00	80	50	
Schist	15.00	10.00	3.00	80	50	

4.2 Criteria Used for Classification, including Classification of Mineral Resources on which Ore Reserves are Based and Confidence in Modifying Factors

The Ore Reserves have been classified according to the underlying classification of the Mineral Resource and the status of the Modifying Factors. The status of the Modifying Factors is generally considered sufficient to support the classification of Proved Ore Reserves when based upon Measured Mineral Resources and Probable Ore Reserves when based upon Indicated Mineral Resources. Analysis of the financial model on the main economic assumptions indicate that the Project is robust in terms of all operating costs, recoveries, and product pricing; it is most sensitive and at greatest risk to changes impacting on revenue, being commodity prices and metallurgical recovery.

4.3 Mining Method Selected and Other Mining Assumptions, including Mine Recovery Factors and Mining Dilution Factors

Open cut mining using conventional 60 tonne trucks and 120 tonne excavators have been selected for the Manono Project as it occurs close to the surface. The equipment selection is appropriate for the proposed scale and selectivity of this operation, and this size of equipment is readily available in DRC.

Mining dilution by elevation has been applied to represent the changing quantities of waste dilution existing on each bench of the pit:

- Surface to the 565RL has 5% mining dilution applied
- 565RL to the 505RL has 2% mining dilution applied
- 505RL to the 435RL has 1% mining dilution applied
- Below the 435 RL has 0% mining dilution applied, as the whole bench is Ore.

A variable mining recovery has also been applied:

- Surface to 565RL has 98% mining recovery applied
- Below the 565RL has 99% mining recovery applied.

Detailed pit designs have been prepared with the following parameters:

- Batter face angles, berm widths, and overall slope angles applied as per section 0 of this report
- A geotechnical berm 15 m wide at the 580RL
- Dual lane ramps are 23.1 m wide
- Single lane ramps are 13.6 m wide and are utilised for the final 30 vertical metres of the pit design, with passing bays every 15 vertical metres
- Ramp gradient of 1:10 for all designed ramps
- Minimum mining width of 35 m
- Minimum cutback width of 40 m.

The pit will extract resources between the surface and the base of the open pit at the 350RL, a depth of 290 m. The final pit floor is at the 350RL. Access to the full pit depth is via a dual-lane ramp starting in the hangingwall, with two passes before becoming a single lane ramp at the 375RL. The single lane ramp is designed for the final 25 vertical metres of the pit.

4.4 Processing Method Selected and Other Processing Assumptions, including Recovery Factors Applied and Allowances made for Deleterious Elements

The processing method comprises a Dense Media Separation (DMS) process to produce a Spodumene Concentrate and a Tin Concentrate, and a secondary process on a portion of the Spodumene Concentrate to produce a Lithium Sulphate product. Figure 1 shows the DMS processing flow sheet for the Manono Project. The DMS Processing Plant for the Manono Project consists of:

- 3-stage crushing comprising Primary Jaw Crusher, Secondary Cone Crusher and Tertiary High-Pressure Grinding Rolls (HPGR)
- 0.5 mm wet screening with up-current classification for the removal of Mica
- Two stage, split sized (plus and minus 2 mm) dense media separation to maximise lithia recovery
- Rougher, cleaner and scavenger spiral circuit treating fines for the upgrade of tin and tantalum minerals to a pre-concentrate
- Wet high intensity magnetic separation.

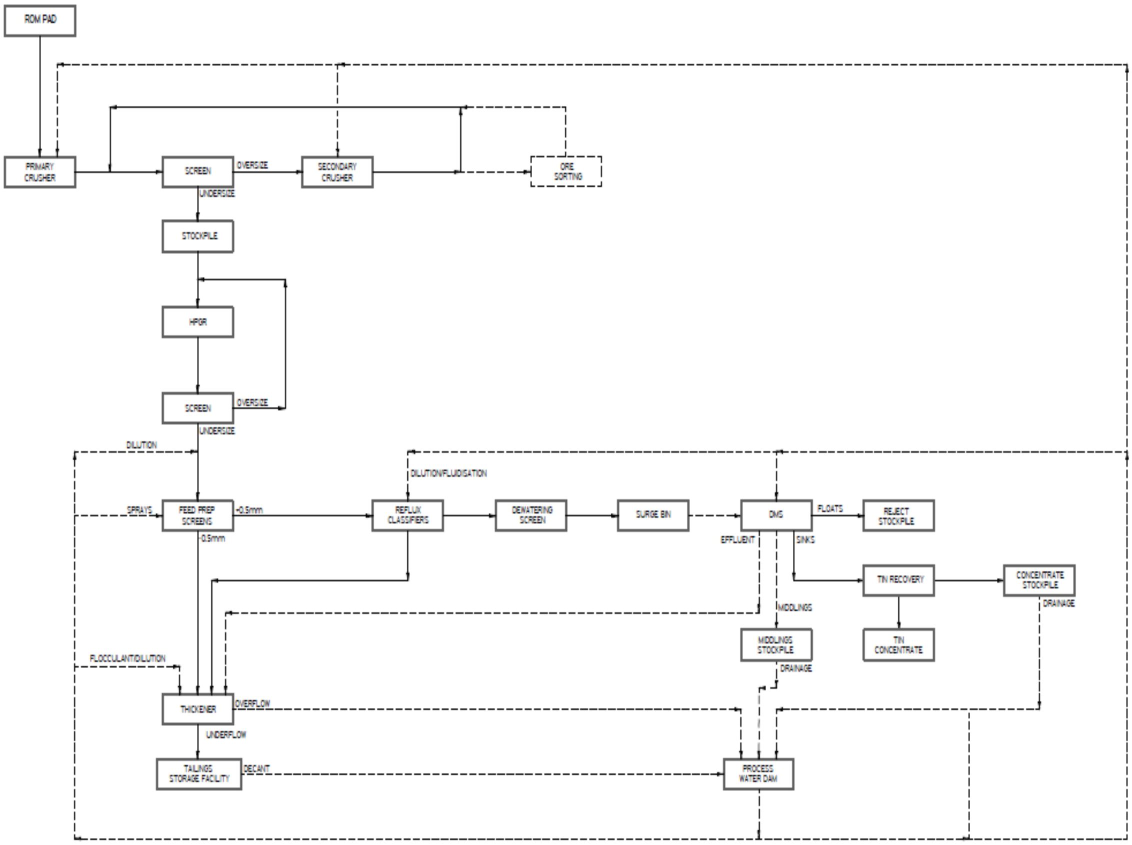

Figure 1: DMS Process flowsheet

On average and under optimised conditions for a target grade of 6% Li_2O, the test work concludes a recovery of 60% of the total lithia. Equation 1 shows the processing recovery used to represent operating a full-size distribution stream (-8+0.5 mm) for a target grade of 6% Li_2O concentrate.

*Equation 1: ((100-(0.7*30.43))*(0.91*(100-152*e^(Li2O*-1.358)))%)*

Figure 2 presents the process flowsheet for the Lithium Sulphate process.

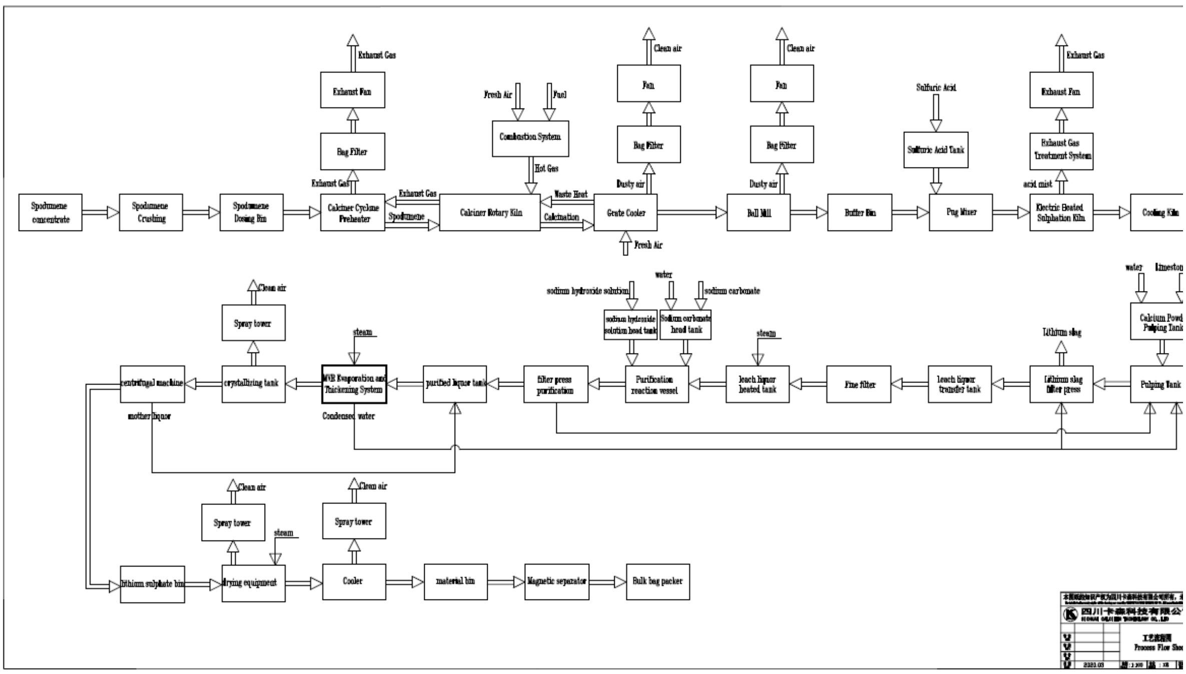

Figure 2 Lithium Sulphate Process flowsheet

Metallurgical work completed to date has identified the Roche Dure deposit as amenable to dense media separation. The following test work has been completed to date:

- Detailed mineralogy to ascertain liberation characteristics and deleterious elements
- Crush size optimisation for a DMS only processing plant
- Laboratory to pilot to industrial performance scaling for predictive beneficiation performance
- Comminution studies including typical Bond and JK design parameters and HPGR trials
- General characterisation and liberation of heavy minerals
- Bulk crushing using industrial equipment from sample representing a 5-10 year mine plan
- Bench scale test work of lithium sulphate process
- Detailed heavy mineral concentration and flowsheet derivation
- Engineering, Vendor and Performance Testing
- Exploration of various process opportunities to complement the DFS flowsheet including flotation and concentrate cleaning.

Metallurgical samples were taken from 5 PQ sized drill holes selected from within the Measured Resource category including variability from the pegmatite, host rocks, and weathering levels to maintain sample variability and ensure the test work is representative of the deposit. The material that formed the basis of the test work was 13 tonnes of full core.

Total lithia recovery returned 60.1% for an average product grade of 6.1% Li_2O. Heavy mineral product recoveries were 24-41% with concentrates of approximately 64% SnO_2.

The following tailings test work was undertaken against 3 samples sent to E-prevision Laboratories and 2 samples to Graeme Campbell and Associates:

- DMS tailings
- Minus 0.5 Mm fines.

The tailings test work was supervised by Chris Lane from L&MGSPL.

4.5 Basis of Cut-Off Grade Applied

The cut-off between ore and waste has been determined by net value per block. A total block revenue is estimated for each block within the block model, accounting for the total lithium and tin recovered to payable products, as well as the respective product prices. Total block costs are estimated for all operating costs to the point of sale including processing, product haulage, crusher feed, general and administration, ore differential, selling costs, and grade control costs. The total block revenue minus the total block costs estimates the net value per block. Any block returning a positive net value has been defined as “ore” for the purposes of pit design and production scheduling. All blocks that have a negative value are classified as waste material.

4.6 Estimating Methodology

The Modifying Factors used to estimate the Manono Project Ore Reserve estimate are informed and bound by the findings of the July 2021 FS.

Whittle™ pit optimisation software has been used to identify the preferred pit shell on which the pit designs were based for the recovery of Measured and Indicated Mineral Resources.

A detailed open pit mine design was completed and used to generate the mining schedule. The mining schedule has several operating constraints that control operations. The bench by bench schedule outputs are fed into the AVZ financial model. Capital and operating costs are estimated to an FS level of confidence and have been applied to the planned activities. The revenue assumptions for lithium concentrate are based on a December 2019, lithium market study completed by Roskill

Consulting Group Limited (Roskill). Tin prices are based on current data sourced from a third-party sales database.

The results of the financial model for the Manono FS meet the investment criteria for AVZ Minerals.

The sensitivity analysis completed in the FS indicates that the Project results remain favourable when the key parameters (revenue, exchange rate, grade, capital and operating costs) are individually flexed to plus and minus 20% of the FS values.

The Project is most sensitive to changes in revenue parameters such as the lithium sulphate price and spodumene concentrate price. The Project is also sensitive to transport cost which account for 46% of the total operating costs of the Project.

4.7 Material Modifying Factors, including Status of Environmental Approvals, Mining Tenements and Approvals, Other Government Factors and Infrastructure Requirements for Selecting Mining Method and Transport to Market

The Exploration Certificate Number for the Manono Lithium and Tin Project is CAMI/CR/7113/16 and was granted to Dathcom Mining SA on December 28, 2016 under the Exploration Lease (PR) Number 13359. The Exploration Lease covers approximately 188 km^2 and is located 500 km north of Lubumbashi in the territory of Manono, Tanganyika province, DRC.

On 5th May 2021, Dathcom submitted an application for a mining licence for the Manono Project to the Cadastre des Minieres (CAMI) of the DRC government. It is anticipated that this licence will be granted on submission as the DRC government hold a material ownership of the project and have given every indication that development of the project is encouraged.

EmiAfrica SARL completed an Environmental and Social Impact Assessment for the Project in April 2020. EmiAfrica SARL are registered and approved by the Ministry of Mines of the DRC to carry out local environmental studies and submit environmental reports.

As stipulated in Article-64 of the DRC mining code, the Mining License gives the holder exclusive rights to carry out, within the tenement on which it is established and during the period of its validity, exploration, development, construction and mining operations targeting the mineral substances for which the tenement is established and associated or non-associated substances if it has requested an extension. The Mining Lease is a real, exclusive and transferable right in accordance with the provisions of the DRC Mining Code.

Figure 3 shows a site layout of the mining, processing and tailings facilities for the Project. The Project will consist of the following major components:

- Open pit
- Waste rock dump
- Run of mine (ROM) stockpiles on ROM pad
- Explosives magazine
- Bulk explosives ANFO and emulsion facility
- Processing plant
- Primary lithium sulphate plant
- Tailings storage facility (TSF)
- Site buildings
- Warehouse and workshops
- Raw water pump house and reticulation to site
- HV substation in Manono with High Voltage (HV) powerlines to site
- HV substation in Mpiana Mwanga with HV powerlines to Manono, 87 km of 60 MW

- 120 kV line
- Mpiana Mwanga Hydroelectric Power Plant (HEPP) delivered in two stages
- Stage 1 – Upgrade MP2 to 3 x 10.3 MW turbines (start Q3 2020)
- Stage 2 – Upgrade MP1 to 3 x ~4.5 MW turbines (start ~Q1 2022)
- Accommodation village, Camp Colline, 150-person camp
- Kitotolo village married accommodation 15-20 houses
- Solid waste disposal, a single landfill site to serve camps and mine site
- Truck park up bay 2,000 m x 250 m
- Diesel Power generation, short terms until the HEPP is in place
- Staging station at Kabondo Dianda
- Rail spur into the staging yard off the National Railway of the Congo (SNCC)
- Staging station at Lobito port
- Staging station at Dar es Salaam port
- Corporate Office in Lubumbashi (already exists)
- Upgrade to the Manono Airport facility

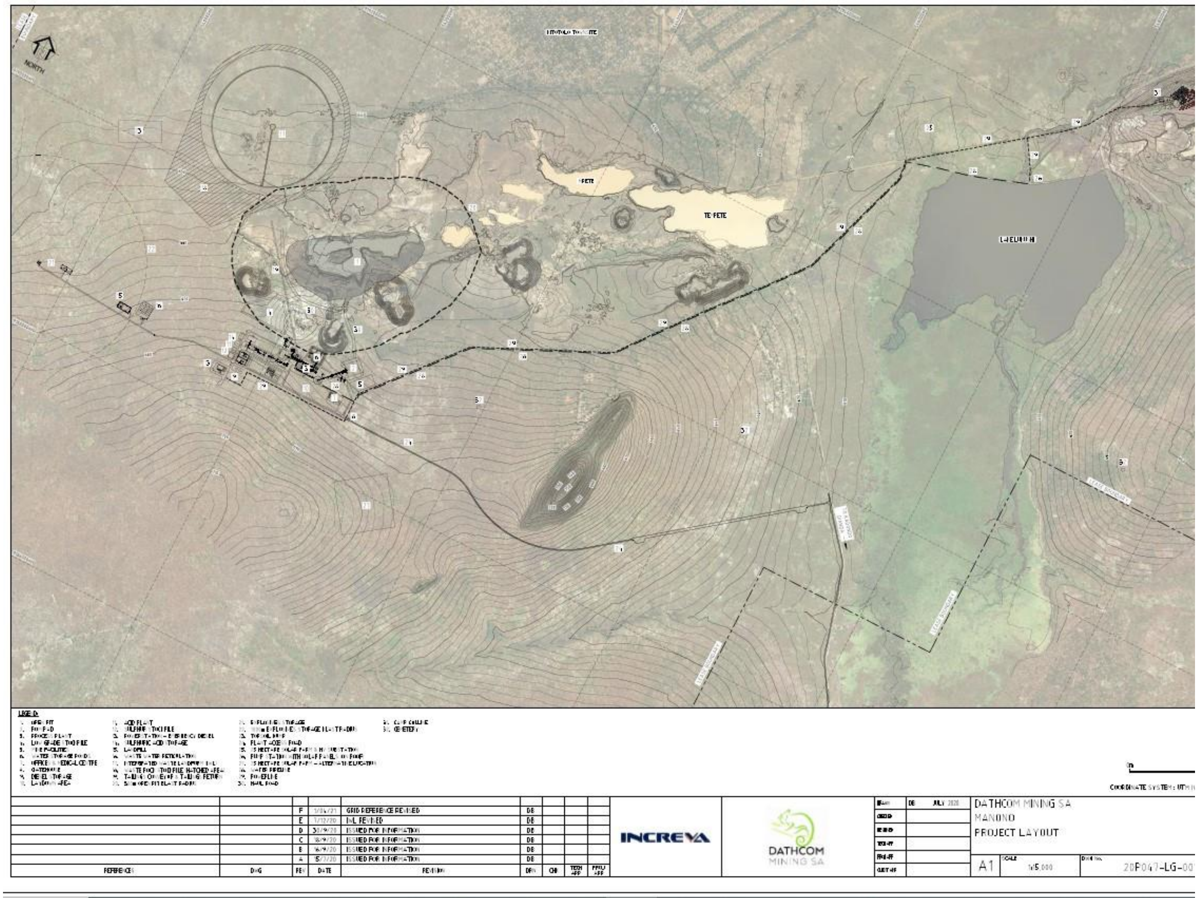

Figure 3: Project site layout

Raw water will be taken from Lake Lukushi via a single-walled HDPE raw water overland pipeline to the raw water dams located in the processing facility.

Power during operations will be supplied by a newly refurbished Hydro Power plant and 120 kV transmission line connecting the Project site to the Hydro Power Substation.

Since 1919, Manono has been a tin ore extraction centre with the exploitation of the deposit by Géomines. The mine and its related industries were the original reason for the town of Manono's existence. Géomines activity area extended over nearly 1,300 hectares. The Project location has two existing excavations and surrounding waste rock dumps and stockpiles.

Several artisanal miners and trading posts for cassiterite and coltan have been identified in Manono. The Exploration Lease grants exclusive rights to carry out exploration work on the mineral substances including Lithium and Tin. No other mining or quarry rights have been identified within the license limits. Figure 4 shows the location of land rights within the tenement.

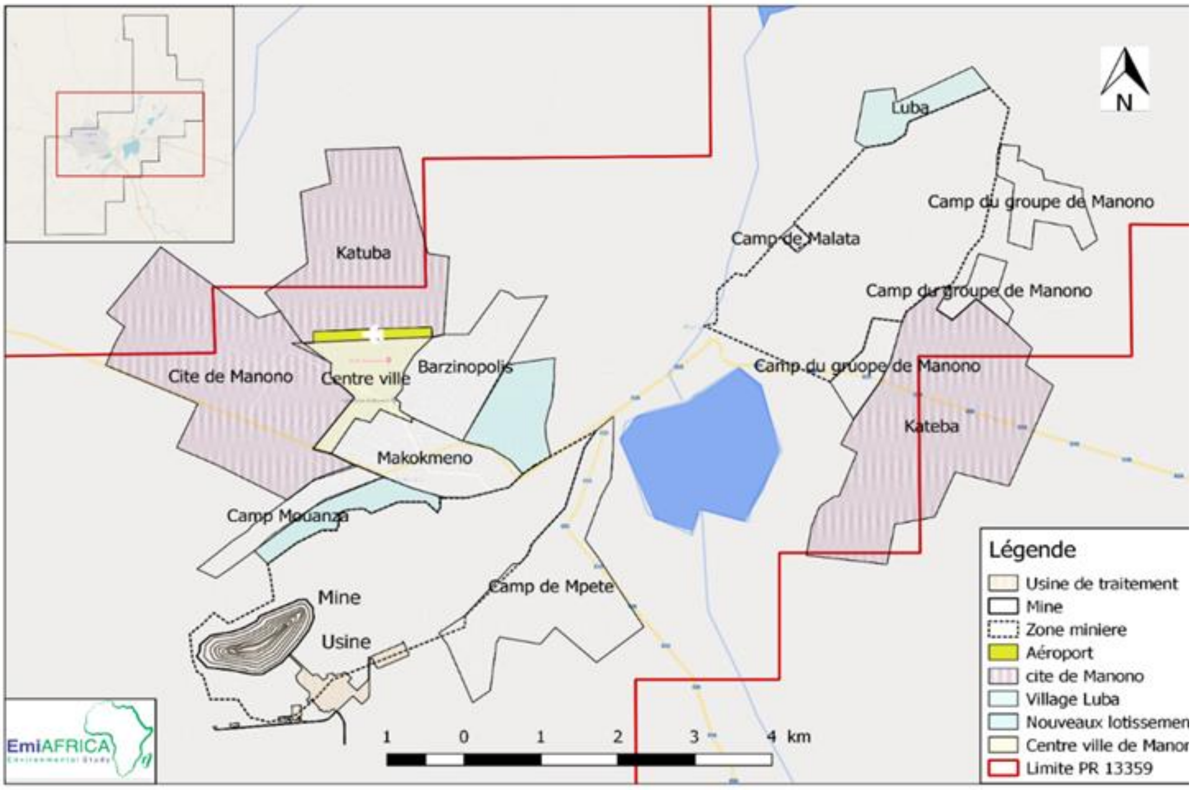

Figure 4: Location of land rights within the tenement

A due diligence study for the transport route options was conducted by the Australian based railway consultancy Infraology Pty Ltd (Infraology).

Four potential concentrate product transport routes were identified during the study. The Feasibility Study concluded to use two of these transport routes from Manono.

The first is to Dar es Salaam in Tanzania through Zambia, using the Tanzania and Zambia Railway Authority (TAZARA) rail. The TAZARA rail is equally owned by the United Republic of Tanzania and the Republic of Zambia. The TAZARA railway will require upgrade and maintenance to reduce the frequency of derailments. The route includes 340 km of unsealed road to the DRC State owned SNCC rail allocated at Kabondo Dianda. From Kabondo Dianda there is 772 km of rail to Ndola (in Zambia) and then 165 km of rail to Kapiri Mposhi on the Zambian Railways Limited (ZRL) rail which is wholly owned by the Republic of Zambia. From Kapiri Mposhi to Dar es Salaam is 1,860 km on the TAZARA rail. The route has two border crossings between the DRC, Zambia, and Tanzania. Figure 5 shows the proposed transport route in red.

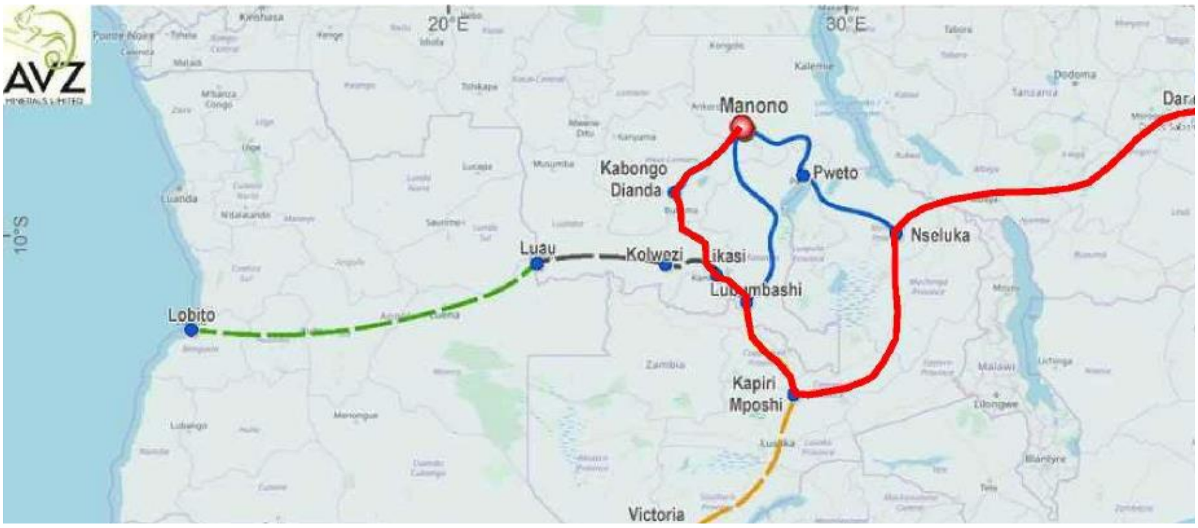

Figure 5: Manono to Dar es Salaam via Kabondo Dianda (shown by the red line)

The second route to the port of Lobito has one border crossing from DRC to Angola at Luau. The route follows 340 km of unsealed road to Kabondo Dianda from Manono. From Kabondo Dianda there is 802 km of SNCC rail to Dilolo, followed by 1,344 km of the State owned Caminho de Ferro de Benguela (CFB) rail to Lobito. Figure 6 shows the Manono to Lobito route in red. Infraology noted that the CFB was in good condition, had been recently upgraded and is well managed.

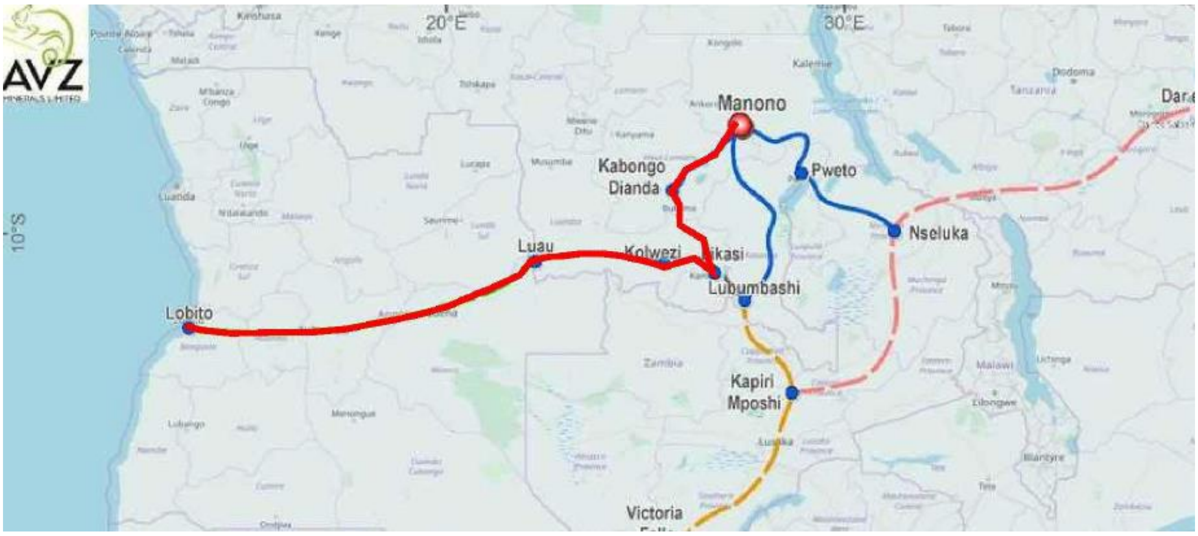

Figure 6: Manono to Lobito via Kabondo Dianda (shown by the red line)

Appendix 2: JORC Table 1, Sections 1 and 2

Section 1 Sampling Techniques and Data

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

	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 Core Drilling** • Diamond drilling which produces drill 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, utilising channel sampling from trenches and point-source sampling of scattered outcrops. • Based on available data, there is nothing to indicate that drilling and sampling practices were not to normal industry standards at the time within the Manono licence PR13359. The pegmatite has been sampled from the hanging wall contact continuously through to the footwall contact. In addition, the host-rocks extending 2 m from the contacts have also been sampled. • Diamond drilling was used to obtain core samples which have then been cut longitudinally. Intervals submitted for assay have been determined according to geological boundaries. Samples were taken at 1 m intervals. • The submitted half-core samples typically had a mass of 3-4 kg. **Reverse Circulation (RC) Drilling** • Reverse circulation percussion drilling, producing pulverised rock samples, was utilised to sample the pegmatite below ground surface. This method is recognised as providing high quality information and samples of the unexposed geology. • Based on available data, there is nothing to indicate that drilling and sampling practices were not to normal industry standards at the time within the Manono licence PR13359. • Reverse Circulation percussion drilling has been used to obtain samples which were then split to smaller representative samples using an on-site riffle splitter. Intervals submitted for assay have been determined according to geology. Samples were taken at 1 m intervals. • The submitted 1 m split samples typically had a mass of 1-2 kg.

	JORC Code explanation	Commentary
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 **diamond core drilling** was completed using diamond core rigs with PQ sized drill rods used from surface to sample through to fresh or unbroken rock and HQ sized drill rods used after the top-of-fresh-rock had been intersected. Most holes are angled between 50° and 75° and collared from surface. All collar locations were surveyed after completion. All holes were downhole surveyed using a digital multi-shot camera at approximately 30 m intervals. All core was oriented. • The **RC drilling** was completed using a reverse circulation drill rig with a 5.5 inch steel percussion hammer to drill from surface to 100 m depth. Samples were taken at 1 m intervals from the start to the end of the hole. All holes were drilled at 90° (vertical). All collar locations were surveyed after completion. Reverse circulation holes are relatively short and were therefore not surveyed down the hole.

	JORC Code explanation	Commentary
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.*	**Diamond Core Drilling** • Drill core attained >97% recovery 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. **RC Drilling** • A visual estimate of recoveries was made with a general observation that minor recovery losses were usually near the top of the hole in loose soil and cover on top of weathered rock. The samples are considered a reasonable representation of the mineralisation. • Based upon the high recovery, AVZ did not have to implement additional measures to improve sample recovery and the samples are considered representative and fit for sampling for lithium content. • There may be a bias in reported Fe_2O_3 results due to abrasion of steel from both drill rods and the face of the percussion hammer. This may give a higher iron content than expected due to contamination. Due to the small number of reverse circulation samples included in the database it is not expected that they will materially affect the total iron content reported in any future Mineral Resource estimates. • For the vast majority of drilling completed, there was negligible sample loss. It is considered that there is no sample bias due to preferential loss or gain of fine or coarse material.

	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.*	• Drill core was 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. A complete copy of the data is held by an independent consultant. • The drill core was logged for geology and geotechnical properties (RQD & planar orientations). • All core was logged, and logging was by qualitative (lithology) and quantitative (RQD and structural features) methods. All core was also photographed both in dry and wet states, with the photographs stored in the database. • The entirety of all drillholes were logged for geological, mineralogical and geotechnical data. • A library of drill chips was collected down each hole at 1 m intervals and were logged by qualitative (lithology) methods. All drill chips were photographed both in dry and wet states, with the photographs stored in the database. • The entirety of all RC drillholes were logged for geological and mineralogical 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.*	**Diamond Core Drilling** • Core is cut longitudinally, and half-core samples of a nominal 1 m length are submitted for assay. • The sample preparation for drill core samples incorporates standard industry practice. The half-core samples have been prepared at the onsite sample preparation facility 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 out. This 500 g sub-sample is then pulverised to produce a pulp with 85% passing -75µm size fraction. A 120 g sub-sample is then split from this, the certified reference material, blanks and duplicates are inserted at appropriate intervals and then the complete sample batch is couriered to ALS Perth for assay. • 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 Manono preparatory facility, an AVZ geologist took a split of the pulverised sample which is utilised as a field duplicate. The geologist placed the split into a pre-numbered bag which was then inserted into the sample stream. It is 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. **RC Drilling** • The drilling produced bags of pulverised rock material at 1 m intervals weighing approximately 30 kg. The 1 m bulk percussion samples were riffle split on a 75% : 25% splitter down to 1-2 kg sub-samples and sent to the onsite sample preparatory facility for sample preparation. • These samples were recovered from a standalone reverse circulation programme consisting of 9 holes which were then cased as piezometer water table monitoring holes.

	JORC Code explanation	Commentary
		• The sample preparation for reverse circulation samples incorporates standard industry practice. The split samples were dried and prepared at the onsite facility at Manono prior to being couriered to ALS Perth for assay. • At AVZ's onsite sample preparation facility the 1 m riffle split samples of approximately 1-2 kg are oven dried, crushed to -2 mm with a 500 g sub-sample being split out. This 500 g sub-sample is then pulverised to produce a pulp with 85% passing -75µm size fraction. A 120 g sub-sample is then split from this, the certified reference material, blanks and duplicates are inserted at appropriate intervals and then the complete sample batch is couriered to ALS Perth for assay. • Standard sub-sampling procedures are utilised by the Manono sample preparation facility 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 riffle split samples were crushed at the Manono preparatory facility, an AVZ geologist took a split of the crushed sample which is utilised as a field duplicate. The geologist placed the split into a pre-numbered bag which was then inserted into the sample stream. It is then processed further, along with all the other samples.

	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.*	• Sample pulps were couriered to Australia and analysed by ALS Laboratories in Perth, Western Australia using a sodium peroxide fusion of a 5 g 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. • Geophysical instruments were not used in assessing the mineralisation. • Interlab check samples are routinely conducted by Nagrom in Perth as part of the QAQC programme. • 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.

	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.*	• Company geologists and consultants observed the mineralisation in the majority of chip samples and drill core on site, although no check assaying was completed by CSA Global. • Interlab check samples are routinely conducted by Nagrom in Perth. • Jusdox Surveying 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 estimate the Mineral Resource. • Drilling data is stored on site as both hard and soft copy. Drilling data are validated onsite before being sent to data management consultants in Perth where the data are 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 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, unless otherwise noted. • All angled holes were downhole surveyed using a digital multi-shot camera at approximately 30 m intervals. • Vertical holes were not surveyed downhole. • For the purposes of geological modelling and estimation, the drillhole collars were projected onto the topographic surface. In most cases adjustments were within 1 m (in elevation). • Coordinates are relative to WGS84 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.*	• Resource drillhole spacing was completed on sections 100 m apart, and collars were less than 100 m apart on section where possible. • The reverse circulation drillholes were located at roughly regular intervals around the life of mine open pit to be used for water table monitoring over the period of the operating mine.

	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 is 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 Perth, chain of custody is maintained by AVZ personnel onsite to Lubumbashi. Samples are stored onsite until they are delivered by AVZ personnel in sealed bags to the laboratory at ALS Perth. The ALS laboratory checked received samples against the sample dispatch form and issues a reconciliation report. • At Lubumbashi, the prepared samples (pulps) are sealed in a box and delivered by DHL to ALS Perth. • ALS issue a reconciliation of each sample batch, actual received vs documented dispatch. • The ALS Manono site preparation facility is managed by in house ALS trained personnel who supervise the sample preparation. Prepared samples are sealed in boxes and transported by air to the Malabar clearing agency in Lubumbashi and are accompanied by an AVZ employee, where export documentation and formalities are concluded. DHL couriers 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 multiple site visits. • 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 25% and Dathomir 15%. • AVZ manages the project and meets all funding requirements. • 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 Geomines whom 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 been previously 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 available. 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:* 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.*	• See table in announcement for collar and survey data for newly acquired drill holes used in this Mineral Resource update. • Previously used assay and intersection details have been the subject of previous ASX announcements by AVZ.
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 have previously been reported to the ASX. • 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 figures are included in this document.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• All exploration results are routinely reported.

Criteria	JORC Code explanation	Commentary
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• All supporting exploration data including bulk sampling work, metallurgical test programmes, geotechnical studies etc have all been reported on as data is generated by these various studies and both independently and internally reviewed and verified prior to reporting.
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 of the identified priority targets beyond Roche Dure is planned immediately along strike to the north-east of the current extent of drilling. • Infill and strike extension drilling is planned at Roche Dure including the north-east where access problems previously prevented down dip extension drilling. • Further mining studies are planned on the basis of this MRE.

Appendix 2: JORC Table 1, Section 3

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.*	• The Competent Person for the Mineral Resource, Mr Anton Geldenhuys (Principal Resource Consultant employed by CSA Global), 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. • The Competent Person for the data and geology, Mr Michael Cronwright (Principal Geologist employed by CSA Global), has visited the Manono Project site in April 2018 and December 2019. The visits comprised of inspecting the cores, reviewing the exploration processes and the Roche Dure Mineralisation as well as existing and planned Roche Dure pit, existing and future site infrastructure locations, proposed plant site location, operating drill rigs, and diamond drill core.

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 reasonable level of confidence. • Geological logging and assay data were used to define estimation domains within the pegmatite. • Geological logging was used to define the host rock domains i.e. overburden, hangingwall and footwall. • 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.
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 (eg 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*	• Leapfrog Geo 5.0.4 was used to model the geology and weathering surfaces. • Datamine Studio RM 1.6.75.0 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 0.1 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 Sn, Ta and Fe_2O_3. • Li_2O, Sn, Ta, Fe_2O_3 and P_2O_5 were estimated into the block model using ordinary kriging. • Density was assigned based on mean values per domain. • Search ellipses were aligned with the range of the modelled semi-variograms, which in turn was aligned with the plane of the pegmatite.

Criteria	JORC Code explanation	Commentary
	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.*	• A minimum of 5 and maximum of 16 composites were used to estimate a block, with the maximum number per hole used to estimate being 4. Should sufficient samples not be located in the first search, then the search was expanded two times, and finally 5 times to ensure all model blocks were estimated. Most 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, comparing global mean values and swath analysis of input composites versus output estimates.
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.
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 was applied for the reporting of the Mineral Resource. This is based on other hard rock lithium projects but will be investigated in future through robust 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 by open pit mining. • 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.
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*	• 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.

Criteria	JORC Code explanation	Commentary
	of the metallurgical assumptions made.	• Mineral characterisation work covered selected samples chosen to verify mineral species in, for example, varying grades of mineralisation, hydrothermally altered spodumene and greisen. • Test work has confirmed that the cassiterite in the tin Mineral Resource is 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.*	• A Definitive Feasibility Study level Environmental and Social Impact Assessment report for the entire concession (PR13359) has been completed by company consultants in the DRC and subsequently lodged with DRC government department Cadastre Minier in the capital, Kinshasa in May 2021.
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 3,295 bulk density determinations have been carried out on Roche Dure drill core. • Most of these determinations were done on fresh pegmatite material by the Archimedes principal of weighing the assay sample 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 assigned to the various domains based on mean values.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *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).* • *Whether the result appropriately reflects the Competent Person's view*	• 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.

Criteria	JORC Code explanation	Commentary
	of the deposit.	• 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 the CPs during a site visit in April 2018 and in December 2019: - A site-based review of the drillhole data processes and data collection protocols, - Inspection of the drill core used in the Mineral Resource estimate, - A complete inspection of all drilling data available at the time. - Core photos of the "wedge" drill holes were also inspected.
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, however parameters were output from the estimation of Li_2O that provide an indication of the reliability of the estimate. These were checked relative to the Mineral Resource classification and support the classification. • Due to the near normal distribution of Li_2O grade values in the fresh pegmatite, it is reasonable to assume that the estimate of Li_2O grades have a high degree of confidence. • 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 and can be considered global in nature. • Apart from historical mining of the weathered pegmatite for tin, no modern mining has taken place at Roche Dure, and therefore no production data are available for comparison to the Mineral Resource.

Appendix 3: JORC Table 1, Section 4

Section 4: Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	*Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	The Ore Reserve estimate (ORE) is based on the Mineral Resource estimate (MRE) released on 24 May 2021 by AVZ Minerals and prepared by Mr Anton Geldenhuys of CSA Global as the Competent Person. The MRE was reported using a 0.5% Li_2O cut-off. The fresh pegmatite MRE at a cut-off of 0.5% Li_2O was reported as: • Total of 401 Mt at 1.65% Li_2O, 715 ppm Sn, and 34 ppm Ta • Measured and Indicated Resource of 274 Mt at 1.66% Li_2O, 830 ppm Sn, and 35 ppm Ta. The weathered pegmatite MRE at a cut-off of 500 ppm Sn was reported as: • Total of 11.3 Mt at 1,092 ppm Sn, 0.39% Li_2O, and 45 ppm Ta • Indicated Resource of 8.3 Mt at 1,071 ppm Sn, 0.37% Li_2O, and 45 ppm Ta. The Mineral Resource is reported inclusive of the Ore Reserve estimate.
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.*	The Competent Person, Daniel Grosso (Principal Consultant with CSA Global) has not visited the site. Michael Cronwright and Anton Geldenhuys (Principal Geologists employed by CSA Global) have visited the Manono Project site in December 2019 and the Competent Person is confident that the requirements of a site visit have been sufficiently fulfilled. There has been no mining or construction activity on the site since these site visits. The visits comprised of inspecting the existing and planned Roche Dure pit, existing and future site infrastructure locations, proposed plant site location, operating drill rigs, and recovered diamond drill core.
Study status	*The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	AVZ Minerals completed the Manono Project to a Feasibility Study (FS) level. The work undertaken in this FS has addressed all the material Modifying Factors required for the conversion of the Mineral Resources to Ore Reserves and has shown that the mine plan is technically achievable and economically viable. This ORE applies all material Modifying Factors such as mining dilution, mining recovery, processing recoveries, infrastructure, costs, legal, environmental, social and regulatory, in line with the FS.
Cut-off parameters	*The basis of the cut-off grade(s) or quality parameters applied.*	A variable economic cut-off grade has been used for this Ore Reserve estimation. The cut-off value has been based on a block by block analysis whereby if the revenue obtained from the three products exceeds operating costs in processing, G&A, transporting and

Criteria	JORC Code explanation	Commentary
		selling costs, then that block becomes a part of the Ore Reserve if it is classified as either a Measured or Indicated Mineral Resource. All other blocks within the pit design that do not satisfy these criteria are treated as waste material. The revenues were based on a spodumene price of US$790/t of 6% Li_2O concentrate, an 80% primary lithium sulphate (PLS) concentrate price of US$12,400, and a 60% tin concentrate price of US$5,500/t.
Mining factors or assumptions	*The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).* *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* *The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc), grade control and pre-production drilling.* *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).* *The mining dilution factors used.* *The mining recovery factors used.* *Any minimum mining widths used.* *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* *The infrastructure requirements of the selected mining methods.*	In order to develop the mine plan for the Roche Dure deposit, optimised pit shells and pit designs were prepared using the Dassault System Whittle software and Surpac software. Input parameters for the pit optimisation were based on provided data from AVZ Minerals and supporting contractors and consultants. The input parameters were reviewed by CSA Global. Product prices are considered appropriate for the lithium and tin markets into the future. The operating costs have been based on a mixture of contractor quotations and first principle estimates, all to a minimum of a Preliminary Feasibility Study (PFS) standard. The mining method is based on a three-staged Roche Dure pit using conventional open cut, drill and blast, and load and haul methods. Pit slope parameters were made in accordance with the calculations made by geotechnical engineers Middindi Consulting Limited. Middindi Consulting defined 6 geotechnical sectors as shown in the below table: Design Sector / Wall Dip Direction (˚): 1 – 133; 2 – 230; 3 – 315; 4 – 335; 5 – 10; 6 – 50 In weathered material batter angles of 75° are proposed for all designed sectors, and a berm width of 4.5 m is proposed for all design sectors except design sector 2 which has a planned berm width of 4.5 m. Batter heights of 5 m are proposed for all design sectors except design sectors 4 and 5, which have batter heights of 10 m.

Design Sector	Wall Dip Direction (˚)
1	133
2	230
3	315
4	335
5	10
6	50

Criteria	JORC Code explanation	Commentary
		In fresh material bench face angles of 80° are proposed for all design sectors, and a berm width of 10 m is proposed for all design sectors except design sector 2 which has a berm width of 11.5 m. All design sectors have a proposed batter height of 15 m. There is a designed 15 m wide geotechnical berm at the 580 RL within the final stage pit design. 10 m high benches are planned with the removal of four 2.5 m-high mining flitches. A minimum mining width of 35 m is applied to all pit stage designs. A minimum cutback width of 40 m is applied between all pit stage designs. Mining dilution by elevation has been applied to represent the changing quantities of waste dilution existing on each bench of the pit: • Surface to the 565RL has 5% mining dilution applied • 565RL to the 505RL has 2% mining dilution applied • 505RL to the 435RL has 1% mining dilution applied • Below the 435 RL has 0% mining dilution applied, as the whole bench is ore. The grade of the diluting material added to the ore stream is 0% Li_2O and 0% Sn. The following variable mining recovery has been applied: • Surface to 565RL has 98% mining recovery applied • Below the 565RL has 99% mining recovery applied. These values are considered suitable for the deposit geometry, mining method and the size of the proposed mining equipment. Inferred Mineral Resources have not been considered in the pit optimisations and any Inferred Mineral Resources within the final pit design have been treated as waste material in the Feasibility Study. Mining infrastructure includes run of mine pad, tailings facility, overburden and waste rock dump, haul roads, workshops and offices. The establishment of this infrastructure is included in the capital cost estimate for the project.
Metallurgical factors or assumptions	*The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* *Whether the metallurgical process is well-tested technology or novel in nature.* *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* *Any assumptions or allowances made for deleterious elements.*	Metallurgical work completed to date as identified the Roche Dure deposit as amenable to dense media separation. The following test work has been completed to date: • Detailed mineralogy to ascertain liberation characteristics and deleterious elements • Crush size optimisation for a DMS only processing plant • Laboratory to pilot to industrial performance scaling for predictive beneficiation performance • Comminution studies including typical Bond and JK design parameters and HPGR trials • General characterisation and liberation of heavy minerals

Criteria	JORC Code explanation	Commentary
	The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole. *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	• Bulk crushing using industrial equipment from sample representing a 5-10 year mine plan • Bench scale test work of proposed lithium sulphate process • Detailed heavy mineral concentration and flowsheet derivation • Engineering, Vendor and Performance Testing • Exploration of various process opportunities to compliment the DFS flowsheet including flotation and concentrate cleaning. Metallurgical samples were taken from 5 PQ sized drill holes selected from within the Measured Resource category including variability from the pegmatite, host rocks, and weathering levels to maintain sample variability and ensure the test work is representative of the deposit. The material that formed the basis of the test work was 13 tonnes of full core. Total lithia recovery returned 60.1% for an average product grade of 6.1% Li_2O. Heavy mineral product recoveries were 24-41% with concentrates of approximately 64% SnO_2. The FS assumed no lithia was recovered from weathered pegmatite.
Environmental	*The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	An Environmental and Social Impact Assessment (ESIA) Environmental Management Plan of the Project (EMPP) was undertaken by EmiAfrica SARL, an approved independent consultant. On the 17th May 2021, an application for a mining license for the Manono Project was submitted to the DRC government. It is anticipated that this license will be granted on submission of a compliant application as the DRC government hold a material ownership of the project and have given every indication that development of the project is encouraged. Geochemistry conducted by Graeme Campbell and Associates indicates there is no potential for acid rock drainage (ARD) from tailings materials. Feasibility Study level work has been finalised by the company regarding waste disposal options. The work has identified suitable areas for waste landforms and contains appropriate volumes for waste disposal in tailings storage and waste rock dumps. Waste disposal will not present a barrier to exploitation of the deposit, and that any disposal and potential environmental impacts will be correctly managed as required regulatory permitting conditions.
Infrastructure	*The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.*	Raw water will be extracted from the Lake Lukushi to the raw water dams located in the processing facility. Power during operations will be supplied by a newly refurbished Hydro Power plant and 120 kV transmission line connecting the Project to the Hydro Substation. A due diligence study for the transport route options was conducted by the Australian based railway consultancy Infraology Pty Ltd (Infraology)

Criteria	JORC Code explanation	Commentary
		Infraology found that the proposed railways were all intact and operational but required funding for upgrading and maintenance programs. The study proposed two concentrate transport routes. The first to the port of Dar es Salaam in Tanzania. The second to Lobito in Angola. Both routes rely on the DRC State owned Société Nationale des Chemins de Fer du Congo (SNCC) rail. The SNCC rail required improved quality of the railway ballasting and sleepers, as identified by Infraology. The route to Dar es Salaam relies on the Tanzania and Zambia Railway Authority (TAZARA) rail that requires upgrading of the railway ballasting and sleepers. This route also requires an intermodal staging station on the TAZARA property at Yambo. The Caminho de Ferro de Benguela (CFB) rail to Lobito has been recently upgraded. This route also requires an intermodal staging station on the SNCC property at Kabondo Dianda. Other transport infrastructure required is: • Unsealed all weather road reconstruction between the N33 from Manono to Kabondo Dianda, including 18 bridges that are in need of attention • Ferry crossing at Lualaba river and departure aprons refurbishment • Staging area in Dar es Salaam. The Project requires the following infrastructure: • Explosives magazine • Bulk explosives ANFO and emulsion facility • Lithium concentrate processing facility • Lithium sulphate processing facility • Tailings storage facility • Site administration buildings • Warehouse and workshops • Raw water pump house • High voltage (HV) substation in Manono with HV powerlines to site • HV substation in Mpiana Mwanga with HV powerlines to Manono • Mpiana Mwanga Hydro Electricity Power Plant • 150 person accommodation village • Diesel power plant • Rail spur into the staging yard off the National Railway of the Congo • Staging station at Lobito port

Criteria	JORC Code explanation	Commentary
		• Staging station at Dar es Salaam port • Upgrade to the Manono Airport facility.
Costs	*The derivation of, or assumptions made, regarding projected capital costs in the study.* *The methodology used to estimate operating costs.* *Allowances made for the content of deleterious elements.* *The source of exchange rates used in the study.* *Derivation of transportation charges.* *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* *The allowances made for royalties payable, both Government and private.*	The capital cost estimate for the Manono Project Feasibility Study is an estimate based on quotations, budget prices, engineering experience, and a small percentage priced on industry norms and typical estimating factors. The capital cost estimate can be considered to have an accuracy of ±15%, based on normal Feasibility Study standards. The operating cost estimate for the Manono Project Feasibility Study is derived from quotations, tenders, and a small percentage priced on industry norms and typical estimating factors. Metallurgical test work has indicated that there are no deleterious elements that would impact the sale of products. All costs used in the study have been based on US dollars. The Feasibility Study assessed four transport routes with cost estimates for each route. The Feasibility Study chose two viable routes to Lobito as well as Dar es Salaam. The cost estimate includes 50% of product being sent to Lobito and 50% of product being sent to Dar es Salaam. Transport costs also include all necessary customs duties and taxes. A DRC state royalty rate of 3.5% is applied to all revenues. Treatment and refining charges do not apply to the products as all sales are based on Free on Board (FOB) prices.
Revenue factors	*The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	The grade of process feed and metal content is supported by the information in the Mineral Resource estimate and driven by the mining and production schedule. Processing recoveries are based on the metallurgical test work and are applied within the financial model. For Li_2O, recoveries are applied as per the below variable recovery equation below for fresh pegmatite, and result in an overall recovery of approximately 60% Li_2O. Li_2O Process Recovery = ((100-(0.7*30.43))*(0.91*(100-152*e^(Li2O*-1.358)))%) For Sn a 35% processing recovery is applied. Lithium concentrate prices have been based on independent pricing obtained a December 2020, lithium market study completed by Roskill Consulting Group Limited (Roskill). Tin prices are based on current data sourced from a third-party global sales database.
Market assessment	*The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* *A customer and competitor analysis along with the identification of likely market windows for the product.*	The 2019 lithium market study by Roskill noted the rechargeable battery sector as the largest lithium consumer and that the electrification of global transport is now the largest demand sector forecast to sustain continued market growth for the coming decades.

Criteria	JORC Code explanation	Commentary
	Price and volume forecasts and the basis for these forecasts. *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	With global demand increasing, a supply shortfall is expected to be met by increased global production from new lithium projects. The study is limited to 30 years due to the marketing uncertainty beyond a 30-year time horizon.
Economic	*The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	The economic analysis is based on capital cost estimates described in the FS and cash flows driven by the production schedule. The cash flow projections include: initial and sustaining capital estimates; mining, processing and concentrate logistics costs to the customer; revenue estimates based on concentrate pricing; and an 10% discount factor. Sensitivity analysis completed in the FS indicates that the project results remain favourable when the key project parameters (revenue, exchange rate, grade, metallurgical recovery, capital and operating costs) are individually flexed to plus and minus 20% of the FS average values.
Social	*The status of agreements with key stakeholders and matters leading to social licence to operate.*	Key project stakeholders were consulted during the ESIA. The stakeholder consultation process was conducted by EmiAfrica with the assistance of Dathcom representatives.
Other	*To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* • *Any identified material naturally occurring risks.* • *The status of material legal agreements and marketing arrangements.* • *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	No material naturally occurring risks have been identified. There are no apparent impediments to obtaining all government approvals required for the Manon Project. The Manono Lithium and Tin Project ("the Project") is owned 100% by Dathcom Mining SA ("Dathcom") which in turn is 60% owned by AVZ Minerals limited ("AVZ"), 25% by La Congolaise d'Exploitation Miniére SA (a state-owned enterprise) and 15% by Dathomir Mining Resources SARL (a private Congolese company). An application for a mining license for the Manono Project has been submitted to the DRC government. It is anticipated that this license will be granted as the DRC government hold a material ownership of the project and have given every indication that development of the project is encouraged.
Classification	*The basis for the classification of the Ore Reserves into varying confidence categories.* *Whether the result appropriately reflects the Competent Person's view of the deposit.* *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	Proved Ore Reserves were estimated from Measured Resources and Probable Ore Reserves were estimated from Indicated Resources as per the JORC (2012) guidelines. Forty-nine (49) % of Ore Reserves have been based on Measured Mineral Resource. Mr Daniel Grosso, the Competent Person for this Ore Reserve estimation has reviewed the work undertaken to date and considers that it is sufficiently detailed and relevant to the deposit to allow those Ore Reserves derived from Indicated Mineral Resources to be classified as Probable, and Ore Reserves derived from Measured to be classified as Proved.

Criteria	JORC Code explanation	Commentary
Audits or reviews	*The results of any audits or reviews of Ore Reserve estimates.*	The FS has been internally reviewed by AVZ Minerals. The Mineral Resource estimate, mine design, scheduling, and mining cost model has been subject to internal peer review processes by CSA Global. No material flaws have been identified and the Ore Reserve basis of estimate is considered appropriate for a FS level of study. The Feasibility Study and financial model were reviewed by Mr Alan Dickson of Alan Dickson and Associates Pty Ltd. Mr Dickson is a Chartered Professional and Fellow of the Australasian Institute of Mining and Metallurgy SRK Consulting completed a March 2018 technical review of the Manono Project which included an independent review of the potential of the Manono Project, AVZ Mineral's geological dataset, and a site visit to verify mapping, trenching and drill core samples.
Discussion of relative accuracy/ confidence	*Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve 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 reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which 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.* *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	This Ore Reserve estimate is supported by the Manono Project July 2021 FS parameters. The Manono Project has an IRR and NPV which makes it robust in terms of cost variations. The Manono Project is most sensitive to lithium price. The project is also sensitive to changes in transport costs, which account for 46% of the total project operating costs. All estimates are based on local costs in United States Dollars. Standard industry practices have been used in the cost estimation process. Capital and operating expenditure estimates are considered within ±10% accuracy. There has been no lithium production at the project to date, so no comprehensive comparison or reconciliation of data has been made.