



ASX ANNOUNCEMENT

31 January 2024

Manono Project Mineral Resource increases 47% to 842Mt as Roche Dure tonnages expanded

Highlights

- Mineral Resource delineation drilling at Roche Dure adds a further 268 million tonnes (Mt) to the Manono Lithium and Tin Project (**Manono Project**).
- Mineral Resource update reinforces AVZ's 75% owned Manono Project, one of the world's largest hard rock lithium projects.
- Completion of Mineral Resource estimates following on the Early Works 2022 – 2023 53-hole diamond drilling programme for some 15,684.7m, generates the following:
 - A 47% increase in the Manono Project's (Roche Dure and Carriere de l'Este) Measured, Indicated and Inferred Mineral Resource tonnage to 842Mt grading 1.61% Li₂O, 709ppm Sn and 37ppm Ta containing 13.52Mt of lithium oxide.
 - A 67% increase in the Roche Dure Measured, Indicated and Inferred Mineral Resource tonnage to 669Mt grading 1.61% Li₂O, 690ppm Sn and 33ppm Ta containing 10.79Mt of lithium oxide.
 - An 82% increase in the Roche Dure Measured & Indicated Resource to 500Mt at 1.63% Li₂O, 755ppm Sn and 34ppm Ta containing 8.14Mt of lithium oxide and 377kt of tin.
 - An increased confidence level, with 75% of the Roche Dure Mineral Resource now classified as Measured & Indicated.
- In addition to Sn, Ta and Li₂O, CSA Global estimated Fe₂O₃, a potentially deleterious element, at an average of 1.01% Fe₂O₃ for the Project.
- The Manono Project Mineral Resource includes all results from the FY23, 53-hole Early Works drilling programme added to the recently reported Carrier de l'Este Mineral Resource estimate¹.
- The higher confidence tonnages are expected to increase the potential life of mine as will expected decreasing waste to ore stripping ratios resulting from the significant flattening of the deposit in the northern 500 metres of the newly completed geological model.

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ASX Code: AVZ

OTC Code: AZZVF

¹ Refer ASX announcement dated 18 December 2023 "Carriere de l'Este Maiden Mineral Resource Estimate"

Important information regarding ownership of the Roche Dure deposit

On the 28th December 2016, PR 13359 which authorises exploration and feasibility studies to be undertaken, was granted for a period of 5 years. On the 29th December 2016, PR13359 was transferred from La Congolaise d'Exploitation Minière SA (Cominière) to Dathcom Mining SA (Dathcom). On 4th May 2021, Dathcom applied to convert PR13359 into an exploitation permit (PE) which authorises mining. Upon lodging the PE application, PR13359's term was extended indefinitely to allow determination of the PE application.

Dathcom undertook the drilling of the Carrière de l'Esté deposit pursuant to PR 13359 between 2017 and 2021. It also carried out further drilling of the Roche Dure deposit as part of its Early Works Programme in 2022 and 2023. Subsequently, disputes have emerged relating to the ownership of PR 13359. These disputes are the subject of various arbitration proceedings which are summarised in AVZ's ASX announcements dated October 30th, November 2nd, 15th and 17th, December 19th 2023, and the 18th January 2024.

The allegation that Manono Lithium SA holds PR 15775 over the northern portion of the Manono Project is without any legal foundation. This northern area includes the Carrière de l'Esté, Malata and Kahungwe deposits, the rebuilt Colline Manono construction camp and administrative centre as well as the Dathcom core yard and core farm that hosts the sample library.

AVZ maintains that Dathcom is the holder of PR 13359 in respect of the entire Manono Project (including both the southern and northern areas) and remains the applicant for a PE in respect of that land. AVZ has grounds to believe it has strong prospects of success and is confident of its position. The purpose of the ICSID proceedings which were commenced by AVZ on 8 May 2023 and registered on 8 June 2023 is to authoritatively establish this.

On 18 January 2024, the Company announced the ICSID tribunal issued interim orders to the effect that the DRC take all necessary steps to reflect that Dathcom is the holder of PR 13359 (but excluding the northern area) and to protect AVZ, GLH and Dathcom's rights during the pendency of the proceedings. The Company considers the unlawfulness of the transfer of PR 13359 from Dathcom to Cominière, which has been reversed under the Interim Orders, renders Cominière's relinquishment of the northern portion of PR 13359 and the subsequent grant of PR 15775 to Manono Lithium SA to be equally unlawful. Accordingly, the Company will continue with its efforts to confirm its and Dathcom's ownership of the northern area of the Manono Project either through its continued negotiations with the DRC government's senior public officials or the prosecution of the ICSID and ICC proceedings to their conclusion. However, the Company's board of directors considers the ICSID tribunal's interim decision provides significant further impetus for a negotiated outcome.

In light of the above, there is a reasonable prospect that a party, including the Company, will be granted a PE in respect of both the Roche Dure and Carrière de l'Esté Mineral Resources. If Dathcom is granted a PE in respect of both the Roche Dure and Carrière de l'Esté Mineral Resources, further negotiations will then be undertaken with the shareholders of Dathcom in relation to the terms of the mining joint venture.

AVZ Minerals Limited ASX: AVZ, OTC:AZZVF, (Company) or (AVZ) is pleased to announce it has updated the Mineral Resource of the Manono Lithium and Tin Project (**Manono Project**) after generating new results from the 2022 – 2023 drilling programme at the Roche Dure pegmatite (**the Roche Dure Extension Drilling Project**).

AVZ's Managing Director, Mr Nigel Ferguson, said: "The Roche Dure drilling was carried out to the north-east of the previous geological model as part of the Early Works Programme². This 'bridging' programme was established to maintain the project construction timetable that was committed to in the project's Definitive Feasibility Study lodged with the DRC authorities. Subsequently, we received the required technical approval, leading to the Ministerial Decree to award the mining licence³, which was later revoked⁴."

² Refer to ASX announcement dated 10 February 2022 "AVZ commits A\$25 M to early works & exploration drilling program for Manono Lithium and Tin Project"

³ Refer to ASX announcement dated 4 May 2022 "Ministerial Decree to Award the Mining Licence Manono Lithium and Tin Project"

⁴ Refer to ASX announcement dated 6 February 2023 "Issue of two new Ministerial Decrees Manono Lithium and Tin Project"

“The completion of the Roche Dure drilling programme brings this study to a conclusion and has added a further 268 million tonnes to the Company’s overall Mineral Resource. Significantly, of this extra defined tonnage, an extra 216 million tonnes were added to the Measured and Indicated categories which may underpin future increases in mineable Ore Reserve re-estimates due to the relatively high level of confidence in the estimates of these new tonnages going forward.”

Early Works Drilling Programme

The objective of drilling along strike from the area of known mineralisation at Roche Dure was to expand the future economic opportunities associated with an increase of the Mineral Resource from its previous 401Mt @1.65% Li₂O (AVZ ASX Announcement 24th May 2021 – Updated Mineral Resource Estimate Includes Pit Floor “Wedge” Drill Results).

Figure 1 and Table 1 shows the extent of the Early Works Roche Dure extension drilling programme^{5,6,7,8,9}.

The primary aim of the new drilling was to infill some gaps in the existing geological model towards the northeastern end where previous drilling remained incomplete due to access problems. The secondary objective of the drilling was to extend the drilling pattern along strike to increase the size of the Mineral Resource at a close enough pattern to generate mostly Measured and Indicated Mineral Resources.

The addition of the 53 closely spaced diamond holes (Figures 1 and 2) generated a high level of confidence in the deposit model and resulted in a robust 82% increase in combined Measured and Indicated Resource tonnages at Roche Dure (Table 2).

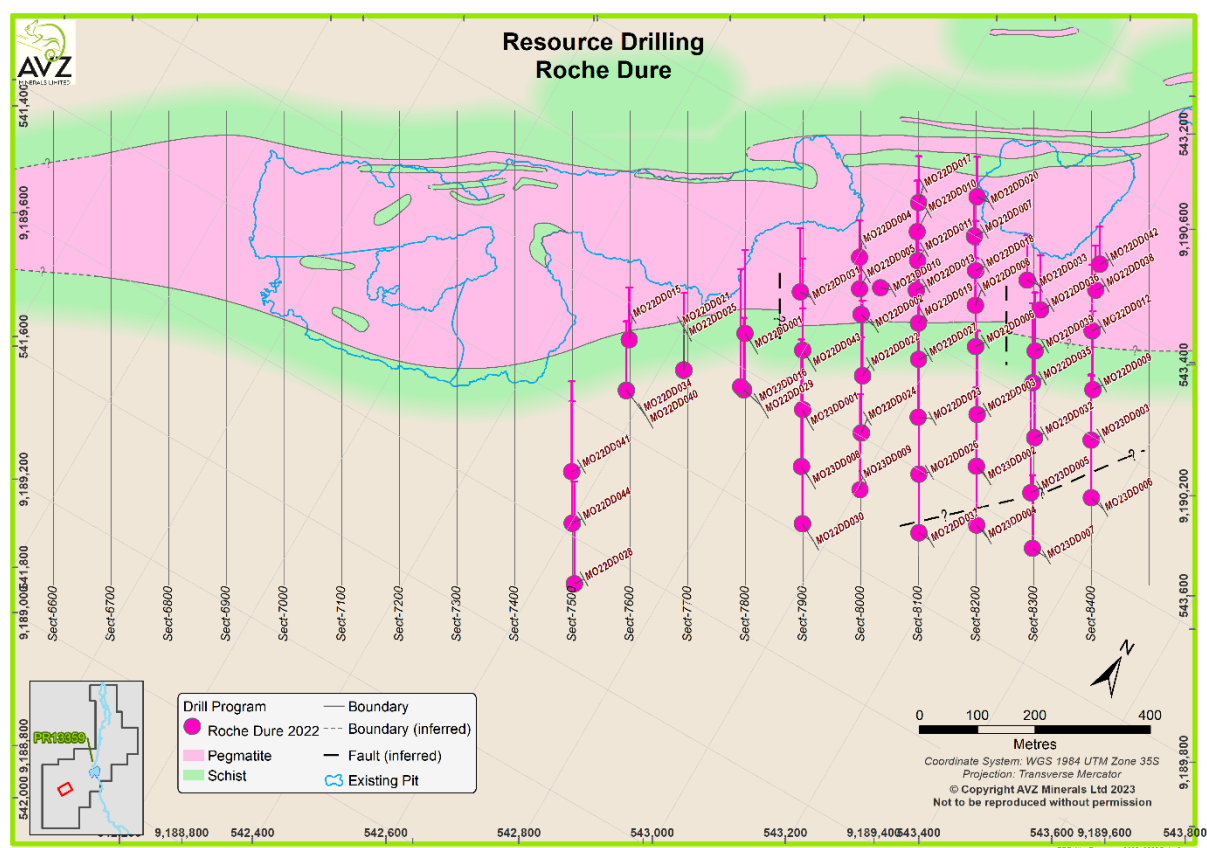


Figure 1: Plan view showing the 2022 – 2023 Early Works Programme drill hole locations comprising 53 drill holes

⁵ Refer to ASX announcement dated 31 October 2022 “Positive results from initial Roche Dure extension drilling program.”

⁶ Refer to ASX announcement dated 1 December 2022 “Further positive results confirmed at Roche Dure extension drilling program.”

⁷ Refer to ASX announcement dated 28 February 2023 “Further positive results from Roche Dure extension drilling program.”

⁸ Refer to ASX announcement dated 22 March 2023 “Further positive results from Roche Dure extension drilling program.”

⁹ Refer to ASX announcement dated 30 June 2023 “Excellent results from Roche Dure extension drilling program.”

Table 1: Additional diamond drill holes used for the Mineral Resource estimate.

Hole ID	Easting (mE)	Northing (mN)	Elevation (m)	Dip (degrees)	Azimuth (degrees)	Depth (m)
MO22DD001	542,697.4	9,190,053.9	644.2	-60.0	330.0	289.90
MO22DD002	542,854.9	9,190,183.0	642.3	-60.0	330.0	179.55
MO22DD003	543,115.9	9,190,133.6	657.2	-60.0	330.0	290.20
MO22DD004	542,803.4	9,190,267.2	643.0	-60.0	330.0	127.70
MO22DD005	542,830.8	9,190,220.2	642.0	-60.0	330.0	136.40
MO22DD006	543,055.0	9,190,234.2	657.0	-60.0	330.0	306.50
MO22DD007	542,957.1	9,190,399.3	641.1	-60.0	330.0	152.20
MO22DD008	543,018.7	9,190,295.9	643.9	-60.0	330.0	211.60
MO22DD009	543,268.1	9,190,271.4	661.2	-60.0	330.0	272.00
MO22DD010	542,867.5	9,190,356.3	641.3	-55.0	330.0	154.50
MO22DD011	542,893.5	9,190,313.1	641.8	-55.0	330.0	160.60
MO22DD012	543,216.0	9,190,358.7	660.6	-60.0	330.0	230.10
MO22DD013	542,916.9	9,190,267.3	642.5	-55.0	330.0	196.50
MO22DD015	542,528.7	9,189,944.7	645.1	-75.0	330.0	347.00
MO22DD016	542,744.2	9,189,968.3	648.9	-75.0	330.0	482.10
MO22DD017	542,844.4	9,190,400.9	640.9	-55.0	330.0	140.10
MO22DD018	542,989.1	9,190,348.3	642.3	-60.0	330.0	172.80
MO22DD019	542,948.8	9,190,220.0	643.6	-55.0	330.0	220.70
MO22DD020	542,927.1	9,190,460.6	638.9	-60.0	330.0	137.70
MO22DD021	542,637.2	9,189,945.5	650.5	-90.0	NA	434.50
MO22DD022	542,910.2	9,190,092.4	647.9	-60.0	330.0	260.00
MO22DD023	543,030.0	9,190,078.4	656.1	-55.0	330.0	302.20
MO22DD024	542,957.9	9,190,005.7	655.4	-60.0	330.0	332.20
MO22DD025	542,636.9	9,189,946.2	650.2	-73.0	330.0	458.60
MO22DD026	543,080.2	9,189,993.5	656.1	-55.0	330.0	364.90
MO22DD027	542,980.2	9,190,165.6	656.0	-55.0	330.0	259.90
MO22DD028	542,657.8	9,189,530.3	661.5	-70.0	330.0	517.90
MO22DD029	542,736.8	9,189,970.3	649.0	-60.0	330.0	407.30
MO22DD030	542,948.4	9,189,818.3	655.3	-70.0	330.0	572.30
MO22DD031	542,744.2	9,190,164.2	643.9	-60.0	330.0	220.65
MO22DD032	543,222.4	9,190,148.4	658.9	-60.0	330.0	293.00
MO22DD033	543,074.5	9,190,378.5	644.3	-60.0	330.0	154.50
MO22DD034	542,568.2	9,189,866.1	656.6	-75.0	330.0	461.30
MO22DD035	543,171.9	9,190,229.4	658.8	-60.0	330.0	274.80
MO22DD036	543,120.2	9,190,345.8	648.3	-60.0	330.0	187.80
MO22DD037	543,131.0	9,189,905.8	655.7	-70.0	330.0	278.20
MO22DD038	543,185.9	9,190,423.4	649.0	-60.0	330.0	152.60
MO22DD039	543,148.0	9,190,279.1	658.6	-60.0	330.0	202.80
MO22DD040	542,568.8	9,189,864.8	656.7	-90.0	NA	578.40
MO22DD041	542,556.9	9,189,696.1	662.0	-70.0	330.0	458.30
MO22DD042	543,169.5	9,190,465.6	642.3	-55.0	330.0	112.70
MO22DD043	542,798.5	9,190,078.6	646.7	-60.0	330.0	318.80

MO22DD044	542,602.2	9,189,619.3	663.7	-70.0	330.0	617.60
MO23DD001	542,850.0	9,189,989.6	649.1	-60.0	330.0	352.00
MO23DD002	543,159.6	9,190,055.1	656.8	-65.0	330.0	323.30
MO23DD003	543,309.4	9,190,193.8	661.2	-65.0	330.0	269.30
MO23DD004	543,211.3	9,189,966.8	656.2	-65.0	330.0	259.90
MO23DD005	543,264.3	9,190,062.8	657.7	-65.0	330.0	477.00
MO23DD006	543,359.8	9,190,107.5	659.5	-65.0	330.0	500.30
MO23DD007	543,315.2	9,189,980.7	657.2	-65.0	330.0	300.00
MO23DD008	542,897.2	9,189,903.1	650.9	-60.0	330.0	440.10
MO23DD009	543,005.5	9,189,919.1	655.7	-60.0	330.0	332.20
MO23DD010	542,860.9	9,190,239.9	648.0	-90.0	NA	100.00

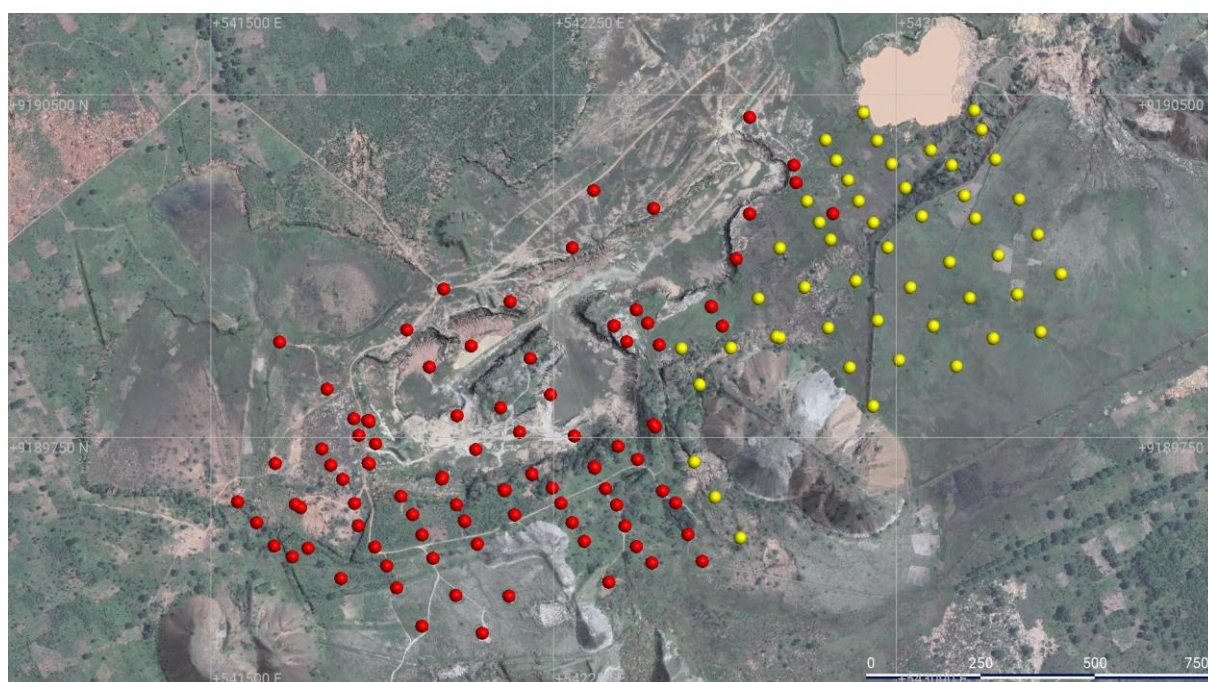


Figure 2: Plan view showing the combined Pre-2022 (red) and 2022 – 2023 (yellow) drill hole locations

The Manono Project overall Mineral Resource grows from 574 to 842 million tonnes, an increase of 47%, confirming its place as one of the world's largest hard rock lithium projects.

Mineral Resource Statement (Roche Dure) according to JORC 2012 Guidelines

The 4th updated Roche Dure Mineral Resource was estimated by independent geological consultants CSA Global South Africa Pty Ltd (CSA Global), an ERM Group Company [Mining & Metals \(erm.com\)](https://www.erm.com).

The Mineral Resource at Roche Dure includes an updated geological model of the expanded mineral deposit, based not only on the additional drilling results, but also from a reinterpretation of the previous data.

To satisfy the requirement of reasonable prospects for eventual economic extraction (RPEEE) by open pit mining, a reporting pit shell was determined based on conceptual parameters and costs (Table 2). Recovery would likely be achieved using a conventional dense media separation (DMS) and flotation circuit. A long-term spodumene concentrate (6% Li₂O) price of US\$1,500/t was selected for the determination of RPEEE. Other than described in this press release, there are no other known environmental, permitting, legal, title, taxation, socio-economic, marketing political or other factors which would materially affect the Mineral Resource.

Table 2: Conceptual parameters applied for the determination of RPEEE pit shell

RPEEE Parameter	Value	Unit
Spodumene concentrate price (6% Li ₂ O)	1,500	US\$/t
Tin concentrate price	25,000	US\$/t
Royalties	3.5	%
Transport cost	249.10	US\$/t
Fixed mining cost	2.40	US\$/t
Processing cost	22.80	US\$/t
Li ₂ O recovery	59	%
Sn recovery	35	%
Pit Slope angle (weathered)	54	degrees
Pit Slope angle (fresh)	61	degrees

The Mineral Resource is reported in accordance with the guidelines of the Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 Edition. The Mineral Resource is classified into the Measured, Indicated and Inferred categories.

The Roche Dure Mineral Resource is reported above a cut-off grade of 0.5% Li₂O in the fresh pegmatite (Table 3 and 6). This cut-off grade is consistent with that of similar lithium projects and the previous resource estimates have shown that the overall tonnages are not unduly affected by applying this figure as the cut-off grade. 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. The weathered pegmatite is not reported as part of the lithium Mineral Resource as it is generally below the cut-off grade.

Table 3: Roche Dure Mineral Resource at a cut-off of 0.5% Li₂O as at 22nd January 2024

Fresh Pegmatite Category	Tonnes (Millions)	Li ₂ O %	Sn ppm	Ta ppm	Fe ₂ O ₃ %	Li ₂ O Million tonnes	Sn Thousand tonnes	Ta Thousand tonnes
Measured	132	1.65	898	36	0.95	2.17	118.7	4.7
Indicated	367	1.62	703	34	1.03	5.96	258.5	12.3
Measured + Indicated	500	1.63	755	34	1.01	8.14	377.1	17.0
Inferred	169	1.57	498	32	1.00	2.65	84.2	5.3
Total	669	1.61	690	33	1.00	10.79	461.4	22.4

Tabulated data have been rounded and as a result minor computational errors may occur.

Fe₂O₃ is a potentially deleterious element.

In determining reasonable prospects for eventual economic extraction, it was considered that the weathered pegmatite would be mined to extract the lithium Mineral Resource in the fresh pegmatite below (Figure 3). Given the marginal costs involved in mining the weathered material, the generally low cost of creating a high-value tin concentrate from weathered cassiterite-bearing rock, as well as the additional value that could be derived from a tantalum by-product, the weathered pegmatite is considered to have reasonable prospects for eventual economic extraction for tin oxides presenting as cassiterite.

The lithium in the weathered pegmatite is however associated with spodumene alteration minerals such as clay and is therefore unlikely that any remnant lithium could be recovered as the grades are below the cut-off value.

The tin Mineral Resource in the weathered pegmatite is classified as, Measured, Indicated and Inferred based on drill spacing, such that Measured and Indicated weathered material is supported by drilling at a 100 m by 50 m spacing and 100 m by 100 m spacing respectively.

Table 4 summarises the tin Mineral Resource from the upper weathered pegmatite at Roche Dure that has to be mined to access the fresh pegmatite. As this material lies within the RPEEE pit shell it is likely to be extracted. The tin Mineral Resource in the weathered pegmatite is reported above a cut-off grade of 500 ppm as this average tin grade is comparable to other economic projects of this nature.

A final economic cutoff grade for the tine will be determined in future reserve determinations.

Table 4: Roche Dure tin Mineral Resource from weathered pegmatite at a cut-off of 500 ppm Sn as at 22nd January 2024

Weathered Pegmatite Category (tin)	Tonnes	Sn	Li ₂ O	Ta	Fe ₂ O ₃	Sn	Ta
	(Millions)	ppm	%	ppm	%	Thousand tonnes	Thousand tonnes
Measured	5.5	1,007	0.27	43	0.82	5.5	0.2
Indicated	11.5	1,137	0.30	44	0.85	13.1	0.5
Measured + Indicated	17.0	1,095	0.29	44	0.84	18.6	0.7
Inferred	5.8	1,187	0.31	43	0.82	6.9	0.2
Total	22.8	1,119	0.29	44	0.83	25.5	1.0

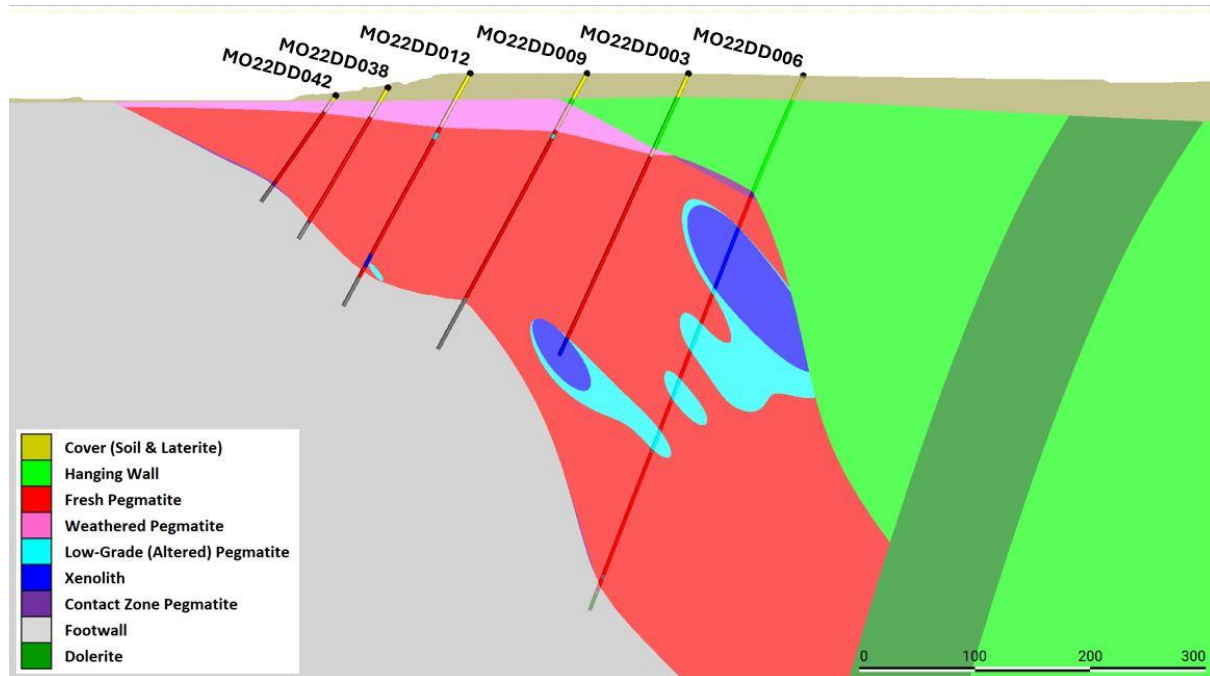


Figure 3: Roche Dure cross section 8,400mN showing the weathered pegmatite relative to the fresh pegmatite

Table 3 notes that 377.1kt of tin metal are reported at a higher level of confidence (Measured and Indicated). This represents 82% of the total tin Mineral Resource at Roche Dure. A significant portion of this will be recovered from the processing plant¹⁰ as a byproduct from the lithium concentrator.

¹⁰ Refer to ASX announcement dated 24 March 2020 "Positive heavy mineral tin and Ta recovery test work results."

Project Mineral Resource Statement by Deposit and Mineral Type

79% of the lithium Mineral Resource at the Manono Project is located at Roche Dure and the balance is hosted by the Carrière de l'Esté mineral deposit (AVZ ASX Announcement 18th December 2023 – Carrière de l'Esté Maiden Mineral Resource Estimate). This is summarised below and outlined in detail in Tables 5 and 6.

Table 5: Manono Project Mineral Resource at a cut-off of 0.5% Li₂O as at 22nd January 2024

Fresh Pegmatite Category	Tonnes	Li ₂ O	Sn	Ta	Fe ₂ O ₃	Li ₂ O	Sn	Ta
	(Millions)	%	ppm	ppm	%	Million tonnes	Thousand tonnes	Thousand tonnes
Measured	132	1.65	898	36	0.95	2.17	118.7	4.7
Indicated	367	1.62	703	34	1.03	5.96	258.5	12.3
Measured + Indicated	500	1.63	755	34	1.01	8.14	377.1	17.0
Inferred	342	1.57	643	42	1.02	5.38	220.2	14.3
Total	842	1.61	709	37	1.01	13.52	597.4	31.4

*Tabulated data have been rounded and as a result minor computational errors may occur.
Fe₂O₃ is a potentially deleterious element.*

- Roche Dure Deposit (669 million tonnes)
- Carrière de l'Esté Deposit (173 million tonnes)
- Manono Project total (842 million tonnes)

Table 6: Manono Project CY24 Mineral Resources (100% basis inclusive of Cominiere's 25% interest)

								Difference 18th Dec 2023 and 22nd Jan 2024			
		18th Dec 2023*			22 nd Jan 2024			Arithmetic		Relative %	
Deposit	JORC Class	Tonnes (Mt)	Li ₂ O		Tonnes (Mt)	Li ₂ O		Tonnes (Mt)	Li ₂ O (Mt)	Tonnes (Mt)	Li ₂ O (Mt)
Roche Dure	Measured	100	1.67	1.66	132	1.65	2.18	32	0.52	32.0%	31.2%
	Indicated	174	1.65	2.87	367	1.62	5.96	193	3.08	110.9%	107.2%
	Measured + Indicated	274	1.66	4.53	500	1.63	8.14	226	3.59	82.5%	79.3%
	Inferred	128	1.65	2.11	169	1.57	2.65	41	0.54	32.0%	25.7%
	Total	401	1.65	6.64	669	1.61	10.8	268	4.14	66.8%	62.3%
Carriere de l'Este	Measured	-	-	-	-	-	-				
	Indicated	-	-	-	-	-	-				
	Measured + Indicated	-	-	-	-	-	-				
	Inferred	173	1.58	2.7	173	1.58	2.7	0	0	0.0%	0
	Total	173	1.58	2.7	173	1.58	2.7	0	0	0.0%	0
PROJECT TOTAL	Measured	100	1.67	1.66	132	1.65	2.18	32	0.52	32.0%	31.2%
	Indicated	174	1.65	2.87	367	1.62	5.96	193	3.08	110.9%	107.2%
	Measured + Indicated	274	1.66	4.53	500	1.63	8.14	226	3.59	82.5%	79.3%
	Inferred	301	1.61	4.81	342	1.57	5.38	41	0.54	13.6%	11.3%
	Total	574	1.63	9.34	842	1.61	13.52	268	4.14	46.7%	44.3%

Notes:

- These MREs are reported using a 0.5% Li₂O cut-off.
- Li₂O masses are in situ estimates and, as such, do not account for expected mining and metallurgical recovery losses.
- Zero values are reported as '-' symbol and where necessary more decimals are used to avoid reporting values that round to zero.
- Totals and averages are affected by rounding and as a result minor computational errors may occur

* MRE reported in ASX Announcement dated 18 December 2023 "Carriere de l'Este Maiden Mineral Resource Estimate."

Mineral Resource Classification

The Roche Dure Mineral Resource occurs over approximately 2,000 m of strike length that has been drilled and sampled (Section 6,600mN to 8,400mN and extended by 100m beyond each section). The pegmatite dips at approximately 45° to the southeast. Li₂O, Sn, Ta and Fe₂O₃ have been estimated by ordinary kriging, with density assigned based on mean values in each domain.

The portion of the block model that satisfied RPEEE criteria i.e. material within the conceptual pit shell, was classified according to Mineral Resource confidence categories defined in the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code, 2012 Edition).

The classification of the block model was based on confidence in the data, confidence in the geological model, grade continuity and the drill hole spacing. The main criteria in the classification are as follows:

- There is acceptable confidence in the accuracy and precision of the assay data.
- Average drill hole sample recoveries exceed 95%.
- Recently surveyed high quality topographic data were used in the estimate. This topographic data validated well against the collar positions that were surveyed using a DGPS.
- The overall variability of the grades is low. The drill hole spacing is sufficient to provide representative global and local estimates.

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

The maximum depth of the Mineral Resource is approximately 615m below surface (Figure 4), beneath which there is insufficient information with which to model the mineralisation and therefore the Mineral Resource can be considered open at depth.

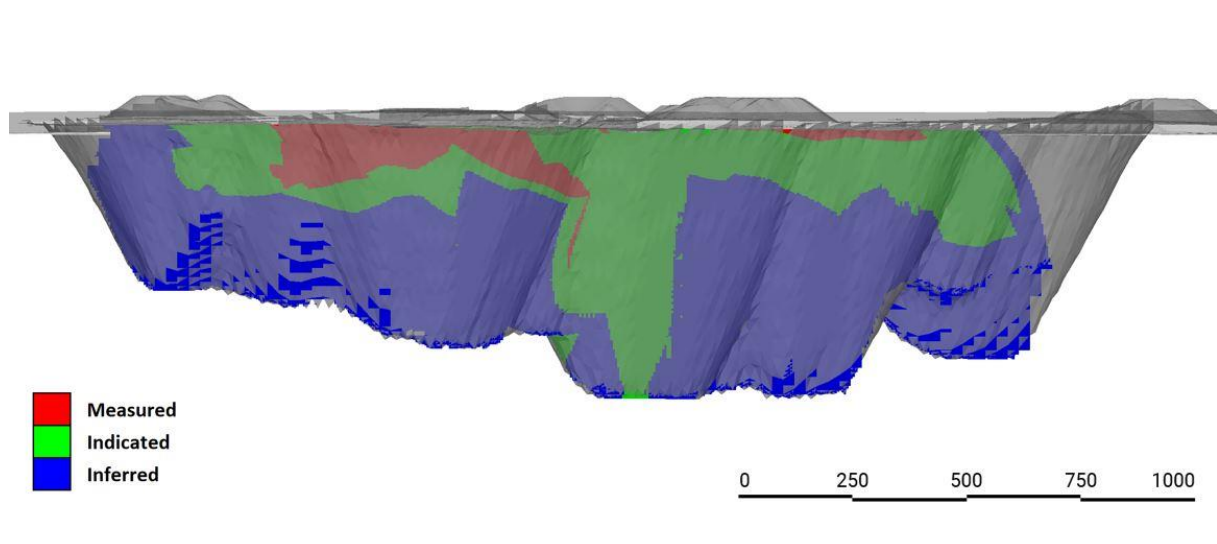


Figure 4: Long section looking north showing the Mineral Resource classification by category

It is reasonable to expect that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

This document may include references to information that relates to Mineral Resources and Ore Reserves prepared and first disclosed under the JORC Code 2012. The information references the Company's four previous ASX announcements noting the following:

North-Northwest

Drilling 2022/2023 Section 8000

South-Southeast

800

600

400

200

800

600

400

200

125.86m@0.96%Li₂O
1,111ppm Sn

75.79m@1.25%Li₂O
1377ppm Sn

EOH:100M
21.0m@1.38Li₂O
524ppm Sn

EOH:185.53m

EOH:127.7m

EOH:179.55m

EOH:260.0m

EOH:332.2m

EOH:332.2m

140.92m@1.49%Li₂O
997ppm Sn

98.0m@1.79%Li₂O
1174ppm Sn

MO17DD004

MO20RCP02

MO22DD002

MO22DD022

MO22DD024

MO23DD009

91.9m@1.72%Li₂O
979ppm Sn

197.5m@1.56%Li₂O
991ppm Sn

225.7m@1.46%Li₂O
667ppm Sn

199.3m@1.45%Li₂O
333ppm Sn

114.98m@1.52%Li₂O
1,196ppm Sn

30.02m@0.73%Li₂O

>2% Li₂O Zone

Interpreted Geology

- Pegmatite
- Pegmatite (Weathered)
- Schist
- Schist (Weathered)
- Greisen
- Soil Cover

0 50 100 200

Metres

Open at Depth

200

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AVZ Section 8000

The drilling was completed using diamond drill rigs, with PQ diameter rods used from surface through the weathered zone, and HQ-sized drill rods used below the intersection fresh rock. Most holes were angled between 50° and 75° to the northeast and collared from surface into weathered bedrock. Core is cut longitudinally, and half-core samples of a nominal 2 m length are submitted for assay. The half core samples have been prepared at the ALS sample preparation facility on site at Manono. At the onsite sample preparation facility, the half-core samples of approximately 3-6 kg were oven dried, crushed to -2 mm with a 500 g sub-sample being split out. This 500 g sub-sample was then pulverised to produce a pulp with 85% passing -75µm size fraction. A 120 g subsample was then split from this; the certified reference material, blanks and duplicates were inserted at appropriate intervals into the sample stream, and then the complete sample batch was couriered to Australia for assay analysis.

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A geological model of the Roche Dure Pegmatite, along with host rock lithologies, was constructed by CSA in Leapfrog Geo (v 2022.1.0). An automatic coding process, based on geological logging, was initially used to identify the primary domains i.e. hanging-wall, pegmatite and footwall (Figure 3), following which manual coding was conducted to refine primary, and identify secondary domains, by making use of geological and assay data. The resulting domains of overburden, hanging-wall, weathered pegmatite, fresh pegmatite, low-grade (altered) internal pegmatite, low-grade footwall contact pegmatite and footwall were modelled in Leapfrog Geo (Figure 3) and imported into Datamine Studio 3 (v RM 1.11.300.0) for block model construction and estimation.

Grades were estimated into the four pegmatite domains by means of ordinary kriging (depending on the availability of data and semi-variogram stability) or inverse distance weighting.

To date, 4,353 specific gravity (SG) determinations have been carried out on Roche Dure drill core. The majority of these were completed on fresh pegmatite material by the Archimedes principal of weighing the remaining half core corresponding to the full assay sample (one metre) in air and then submerged in water. A caliper was used to measure and calculate the volume of drill core that was too weathered to submerge in water. This material was then weighed in air and the density calculated from its volume and mass. An average SG was calculated for each of the modelled domains and assigned in the block model for tonnage calculations. The Mineral Resource is reported in accordance with the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code).

These announcements are available to view on the Company's website www.avzminerals.com.au. The Company confirms it is not aware of any new information or data that materially affects the information included in the relevant market announcements and, in the case of estimates of Mineral Resources and Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Persons' findings are presented have not been materially modified from the relevant original market announcements.

Summary and Management Comment

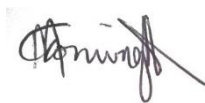
AVZ's Managing Director, Nigel Ferguson said: "We are happy to report on the updated mineral resource estimate at Roche Dure which has been completed notwithstanding the ongoing challenges to the evolution of the Manono Project. Whilst we have tended to focus on the lithium alone, it is also important to consider the significant size of the contained tin resource which will contribute to the revenue stream of the project over many years."

Competent Persons Statement

The technical information in the document that relates to the geology of the Roche Dure pegmatite is based upon information compiled by Mr. Michael Cronwright, who is a geologist with 24 years' experience in exploration, is a fellow of The Geological Society of South Africa (GSSA) and Pr. Sci. Nat. (Geological Sciences) registered with the South African Council for Natural Professions (SACNASP). Mr. Cronwright is a Principal Consultant with CSA Global Pty Ltd (an independent consulting company). Mr. Cronwright has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the JORC Code. Mr. Cronwright consents to the inclusion in this report of matters based on his information in the form and context in which they appear.

The Mineral Resource estimate has been completed by Mr. Anton Geldenhuys (BSc Hons, MEng) who is a geologist with 23 years' experience in exploration and mining as well as Mineral Resource evaluation and reporting. He is a Principal Resource Consultant for CSA Global Pty Ltd (an independent consulting company), is a member in good standing with the South African Council for Natural Scientific Professions

(SACNASP) and is a Fellow of the Geological Society of South Africa (GSSA). Mr. Geldenhuys has the appropriate relevant qualifications and experience to be considered a Competent Person for the activity being undertaken as defined in the 2012 edition of the JORC Code. Mr. Geldenhuys consents to the inclusion in this report of matters based on his information in the form and context in which they appear.



Michael Cronwright Pr. Sci. Nat.

Principal Consultant – CSA Global (Pty) Ltd



Anton Geldenhuys Pr. Sci. Nat.

Principal Resource Consultant – CSA Global (Pty) Ltd

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

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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 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 or 2 m intervals. - The submitted half-core samples typically had a mass of 3-6 kg.
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	The 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 at 55° to 75° and collared from surface as well as a few vertical holes. All collar locations were surveyed after completion. All holes were downhole surveyed using a digital multi-shot camera at approximately 30 m intervals. All cores were oriented by the drilling contractor using an ACT II core orientation tool.

	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.	• 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 for lithium due to preferential loss or gain of fine or coarse material. For the estimate of coarse tin however, core sampling may underestimate the total contained metal. Higher core losses occurred in the upper weathered portions of the pegmatite, but this is not considered material to the results reported, since the majority of this material falls outside the mineralized pegmatite.
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. • All core trays were photographed both in dry and wet states, with the photographs stored in the database.

	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> • <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> • <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> • <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> • <i>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.</i> • <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	• 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 accepted 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 3-6 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 at ALS trained Manono and ALS Perth 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 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. 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 3-6 kg.

	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 and Intertek Genalysis in Perth, Western Australia using a sodium peroxide fusion of a 5g charge followed by digestion of the prill using dilute hydrochloric acid thence determination by AES or MS, i.e. methods ME-ICP89 and ME-MS91 and FP6/OE and FP6/MS. 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 Li₂O, Al as Al₂O₃, Si as SiO₂, K as K₂O, Mg as MgO, Fe as Fe₂O₃ and P as P₂O₅. • 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 Bureau Veritas 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 and Intertek 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 the drill core on site, although no check assaying was completed by CSA Global. - Interlab check samples are routinely conducted by Bureau Veritas 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.

	JORC Code explanation	Commentary
<i>Orientation of data in relation to geological structure</i>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> <i>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.</i>	- 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.
<i>Sample security</i>	<i>The measures taken to ensure sample security.</i>	- When utilizing ALS or Intertek Genalysis (Intertek) in Perth, the 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 laboratories in Perth. Both laboratories checked received samples against the sample dispatch form and issued a reconciliation report. - At Lubumbashi, the prepared samples (pulp) are sealed in a box and delivered by DHL to Perth. - ALS and Intertek 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.
<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	- 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.	On the 28th December 2016, PR13359, which authorises exploration and feasibility studies to be undertaken, was granted for a period of 5 years. On the 29th December 2016, PR13359 was transferred from La Congolaise d'Exploitation Minière SA (Cominière) to Dathcom Mining SA (Dathcom), AVZ's 75% owned and operated DRC subsidiary. On 4th May 2021, Dathcom applied to convert PR13359 into an exploitation permit (PE) which authorises mining. Upon lodging the PE application, PR13359's term was extended indefinitely to allow determination of the PE application. Dathcom undertook the drilling of the Carrière de l'Esté resource pursuant to PR 13359 between 2017 and 2021. It also carried out further drilling of the Roche Dure mineral deposit as part of its Early Works Programme in 2022 and 2023 (being the subject of this announcement). - the current interests held by each shareholder in Dathcom; - whether Dathcom still holds PR13359 (see page 2 of this announcement for further details); - whether the DRC has acted lawfully in failing to procure the expeditious grant to Dathcom of an exploitation permit in respect of the Manono Project; - whether the northern portion of PR13359 (including the Carrière de l'Esté Mineral Resource) was validly relinquished; - whether PR15775 was validly granted to Manono Lithium SA in respect of the northern portion including the Carrière de l'Esté Mineral Resource; and - whether a PE in respect of the southern portion will be granted to Dathcom, or Cominière SA. These disputes are the subject of various arbitration proceedings which are summarised in AVZ's ASX announcements dated October 30th, November 2nd, 15th and 17th, 19th December 2023 and the 18th January 2024. Other than as stated elsewhere in this announcement, no opinion is expressed in relation to the outcome of these arbitration proceedings including which party will ultimately be granted ownership of PR13359 in respect of the Roche Dure resource. If Dathcom is granted a PE in respect of the Roche Dure resource, further negotiations will then be undertaken with the shareholders of Dathcom in relation to the terms of the mining joint venture. The land the subject of the Roche Dure resource is not subject to any land interests, historical sites, wilderness or national park and environmental settings which may impair the ability for the resources to be extracted.

Criteria	JORC Code explanation	Commentary
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 historical exploration work within the Manono region prior to the exploration programmes of the project area carried out by Dathcom Mining SA, AVZ's 75% owned and operated DRC subsidiary.

Criteria	JORC Code explanation	Commentary
Geology	<i>Deposit type, geological setting and style of mineralisation.</i>	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
<i>Drill hole Information</i>	- A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: - easting and northing of the drill hole collar - elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar - dip and azimuth of the hole - down hole length and interception depth - hole length. - If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	See references to previous announcements for tabulations of 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 multiple previous ASX announcements by AVZ. (ASX announcement dated 31 October 2022 “Positive results from initial Roche Dure extension drilling program.” ASX announcement dated 1 December 2022 “Further positive results confirmed at Roche Dure extension drilling program.” ASX announcement dated 28 February 2023 “Further positive results from Roche Dure extension drilling program.” ASX announcement dated 22 March 2023 “Further positive results from Roche Dure extension drilling program.” ASX announcement dated 30 June 2023 “Excellent results from Roche Dure extension drilling program.”).
<i>Data aggregation methods</i>	- 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 here; therefore no data was aggregated for reporting purposes. - No equivalent values are used or reported.
<i>Relationship between mineralisation widths and intercept lengths</i>	- 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.
<i>Diagrams</i>	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.

Criteria	JORC Code explanation	Commentary
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	Exploration Results are not reported as they have already been reported.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	- Preliminary metallurgical test work has been completed by AVZ and demonstrated that both the primary spodumene mineralisation, and also the tin mineralisation, at Roche Dure is amenable to the production of potentially saleable concentrates through standard industry processes. See AVZ ASX Announcement (3rd and 24th February 2020 re lithium and tin heavy mineral concentration). - No other exploration data is available.
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.	- Reconnaissance drill testing of the identified priority targets beyond Roche Dure is planned along strike to the north-east of the current extent of drilling. - Further mining studies are planned on the basis of this MRE on the extended geological and grade cell block model.

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.

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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 2,000 m along strike by approximately 750 m on dip and is limited by data extents to a maximum depth of approximately 620 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 the resource estimates.	- Leapfrog Geo 2022.1.0 was used to model the geology and weathering surfaces. - Datamine Studio RM 1.11.300.0 was used to estimate grades. - Samples were composited to 2 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 Li₂O, Sn, Ta and Fe₂O₃. - Li₂O, Sn, Ta and Fe₂O₃ were estimated into the block model using ordinary kriging. - Density was assigned based on mean values per domain.

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	• 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.	• Search ellipses were aligned with the range of the modelled semi-variograms, which in turn was aligned with the plane of the pegmatite. • 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% Li₂O 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 and is demonstrated using an RPEEE pit shell for reporting the Mineral Resource. • The Mineral Resource is reported to a depth of 615 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	• 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

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	<i>rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</i>	the complete Main Pegmatite intersections of drillholes, and tests can therefore be considered representative. - Mineral characterisation work covered selected samples chosen to verify mineral species in, for example, varying grades of mineralisation, hydrothermally altered spodumene and greisen. - 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 4,353 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	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

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	<i>confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</i> • <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i>	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 down dip from assay data. • Indicated Mineral Resources are defined in areas where the drillhole spacing is 100 m by 100 m and are not extrapolated more than 75 m away from assay data. • Inferred Mineral Resources are extrapolated to approximately 125 m from the drilling grid. • The classification reflects the Competent Persons view of the deposit.
Audits or reviews	• <i>The results of any audits or reviews of Mineral Resource estimates.</i>	• 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 diamond cored drill holes were also inspected.
Discussion of relative accuracy/confidence	• <i>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.</i> • <i>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.</i> • <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i>	• Quantification of relative accuracy was not carried out, however parameters were output from the estimation of Li₂O 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 Li₂O grade values in the fresh pegmatite, it is reasonable to assume that the estimate of Li₂O 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.