



## ASX ANNOUNCEMENT

17 May 2019

### Operations Update

**AVZ Minerals Limited** (ASX: AVZ, “The Company”) announces that the 13 tonne bulk metallurgical sample from Roche Dure has arrived safely at the Nagrom Laboratory in Perth after quarantine clearance from AQIS in Fremantle. The test programme will commence next week at Nagrom with the initiation of a Sighting Programme designed to confirm the suite of tests to be carried out on the rock sample.

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#### Directors

Managing Director: Nigel Ferguson  
Technical Director: Graeme Johnston  
Non-Executive Director: Rhett Brans  
Non-Executive Director: Hongliang Chen  
Non-Executive Director: Peter Huljich

**Market Cap**  
\$92 M

**ASX Code:** AVZ



*Figure 1 – Metallurgical samples being unloaded at the Nagrom laboratory*

#### Spodumene Concentrate

AVZ anticipates that at the completion of the testing program a representative spodumene concentrate will be generated. This material will be available to potential off-take partners either under existing MoU or those currently in discussions with AVZ, to conduct their own due diligence. There will also be sufficient spodumene concentrate produced for future Lithium Carbonate and Lithium Hydroxide bench-scale test-work if deemed necessary at a later date by AVZ.

## Tin and Tantalum Credits

This work will also provide an estimate of the likely future recoverable tin and tantalum tonnages from Roche Dure. This material can also be made available for analysis to the several companies that have already contact AVZ Minerals and expressed an interest in potential Roche Dure tin and tantalum by-product offtake.

## DFS Update

### **Environment and Social Impact Assessment Studies**

The Definitive Feasibility Study continues to gain momentum. Scopes of work and costings have been received from several well established DRC based environmental consultancies to conduct further work on the final Environmental and Social Impact Assessment (ESIA) document. This programme has already started with a site-wide hydrological assessment completed late in 2018 to permit the dewatering of Roche Dure pit to take place. This must be augmented by a Roche Dure specific hydrogeological study, the results of which will be included in the final ESIA report. Several specialist hydrogeological consultants have been contacted to carry out this work and tenders are expected from them in the near future.

### **Geotechnical Studies**

Additionally, the Phase 1 geotechnical report of the Roche Dure has been received from the Project's geotechnical consultants, Middindi Consulting Pty Ltd of Johannesburg and the slope angles generated from this work have been used in the 5 mtpa Scoping Study and which is now being finalised. Ninety-Four drillholes were examined for the initial mining geotechnical programme and approximately 70% of this investigation was completed to a DFS level of reporting (Table 1).

<b>Geotechnical data</b>	<b>Boreholes (derived)</b>	<b>Quantity</b>	<b>Level of accuracy</b>	<b>Comments</b>
Rock quality designation	88	25,316	DFS	Well reported
Structure shape	74	5,935	DFS	Well reported
Structure roughness	74	5,395	DFS	Well reported
Weathering profile	94	4,807	DFS	Well reported
Orientation data	78	6,494	DFS	Excellent data, needs filtering
Fracture spacing	78	6,455	PFS	Adequate, needs interpretation
Field estimates of strength	-	-	Concept	Rock testing programme required
RMR <sub>89</sub> joint condition ratings	-	-	Scoping	Relogging of 5 holes required

*Table 1 - Summary of the status of geotechnical data collation*

Phase 2 work still required to complete the mining geotechnical investigation up to a Definitive Feasibility Study (“DFS”) level of reporting will include :

- The relogging of 5 existing boreholes to collect the full suite of rock quality data including field estimates of strength, joint spacing data and joint conditions
- Scanline mapping of the dewatered pit walls to augment existing data (approximately 10 scanlines required)
- The commissioning of a rock strength test programme that must include Uniaxial Compressive Strengths (UCS), Triaxial Compressive Strengths (TCS), Brazilian tensile tests (BTT) and direct shear tests of the main discontinuity sets.

Note that some of this data may also be collected from the new diamond drill core located in Perth under the supervision of Middindi.

**Nigel Ferguson, AVZ’s Managing Director** commented, *“We are happy that the PQ sized diamond drill core has finally been cleared and arrived at the Nagrom laboratory and that the metallurgical programme can commence. The study team overseeing the Definitive Feasibility Study have been impressed by the scale of the mineralisation that can be observed in the core and we are looking forward to informing the market of the results of the multiple tests as the information becomes available. This metallurgical work programme is expected to not only inform the plant design but also yield data vital to negotiations with potential offtake partners and financiers for the Manono Lithium and Tin Project.”*

### **Appointment of Project Manager**

The Company is pleased to announce the appointment of Michael Bourguignon as the Project Manager for AVZ’s Manono Lithium and Tin Project in the Democratic Republic of Congo (“DRC”).

Mr Bourguignon has over 22 years’ experience including managing both Contractors and Owners Teams to successful completion of Projects. He has experience in numerous commodities and has been working in Africa for the last decade, including in the DRC. In his more senior roles, he has been responsible for DFS review and updating; Preparation for financing; Project delivery post DFS completion; and Capital projects execution.

He joins the company from Ironbark Zinc where he was Project Director for the Citronen Zinc Project, a proposed 310ktpa zinc mine, currently in the financing stage. As Project Manager he created the roadmap for the Project’s execution.

A summary of his recent experience prior to Ironbark Zinc is provided below:

Role	Project	Location	Budget	Company
Capital Projects Manager Resources	Balama Graphite Mine	Mozambique	US\$200m	Syrah Resources Limited
General Manager Projects Resources	Kipoi Copper Mine	DRC	US\$359	Tiger Resources Limited
Project Director Mining	Sissingue Gold Mine	Ghana	US\$180m	Perseus Mining Limited

He will commence with the Company immediately and his initial focus will be on the completion of the Project's Definitive Feasibility study due for delivery in Q1 2020.

**AVZ Minerals Managing Director, Nigel Ferguson**, commented, *"Michael's appointment to lead the delivery of Roche Dure is of great significance to the company given his breadth and depth of experience. His experience in building and managing projects in Africa will particularly be beneficial and he will be a valued addition to our senior executive team."*

For further information, visit [www.avzminerals.com.au](http://www.avzminerals.com.au) or contact:

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