8 January 2018

AVZ Minerals Limited

Quarterly Report for the period ending 31 December 2017

ASX: AVZ

HIGHLIGHTS

Exploration at the Manono Lithium Project, DRC

- Additional strike length confirmed through rock chip sampling of the Carriere De L'est pegmatite. Assay results for the rock-chip samples range between 1.43% and 4.46% Li_2O, with an average of 3.11% Li_2O.

- 20,000m drilling program expected to commence in mid-January, aiming to define initial JORC compliant mineral resources.

- Initial mineral classification and characterization test work of Manono drill core confirms main lithia host mineral as spodumene, with low levels of iron, fluorine and phosphorous.

Infrastructure at the Manono Lithium Project

- Agreement entered between a Chinese affiliated investor group and the DRC Ministry of Infrastructure, Public Works and Reconstruction for completion of rehabilitation and sealing of the road from Lubumbashi to Manono.

- Construction of AVZ's field camp at Manono nearing completion.

Corporate

- Completed the second tranche ($1.98 million) of share placement following receipt of shareholder approval in October 2017.

- Raised an additional $1.4m pursuant to the exercise of options.

AVZ Minerals Limited (AVZ) is pleased to provide the following report on activities for the quarter ending 31 December 2017.

MANONO LITHIUM PROJECT, DRC

AVZ's interests in the Manono Lithium Project in the south of the Democratic Republic of Congo (DRC) (Figure 1) comprise:

- a 60% interest in PR13359, which covers approximately 188km^2 and includes the historic Manono and Kitotolo Mines; and

AVZ Minerals Limited ABN 81 125 176 703
Level 2, Suite 9, 389 Oxford Street, Mt Hawthorn, WA, 6016 T + 61 8 9380 6789 F + 61 8 9380 6761
E: admin@avzminerals.com.au W: **www.avzminerals.com.au**

- a 100% interest in licences PR4029 and PR4030 that surround PR13359 and provide an additional 242.25km^2 of prospective area.

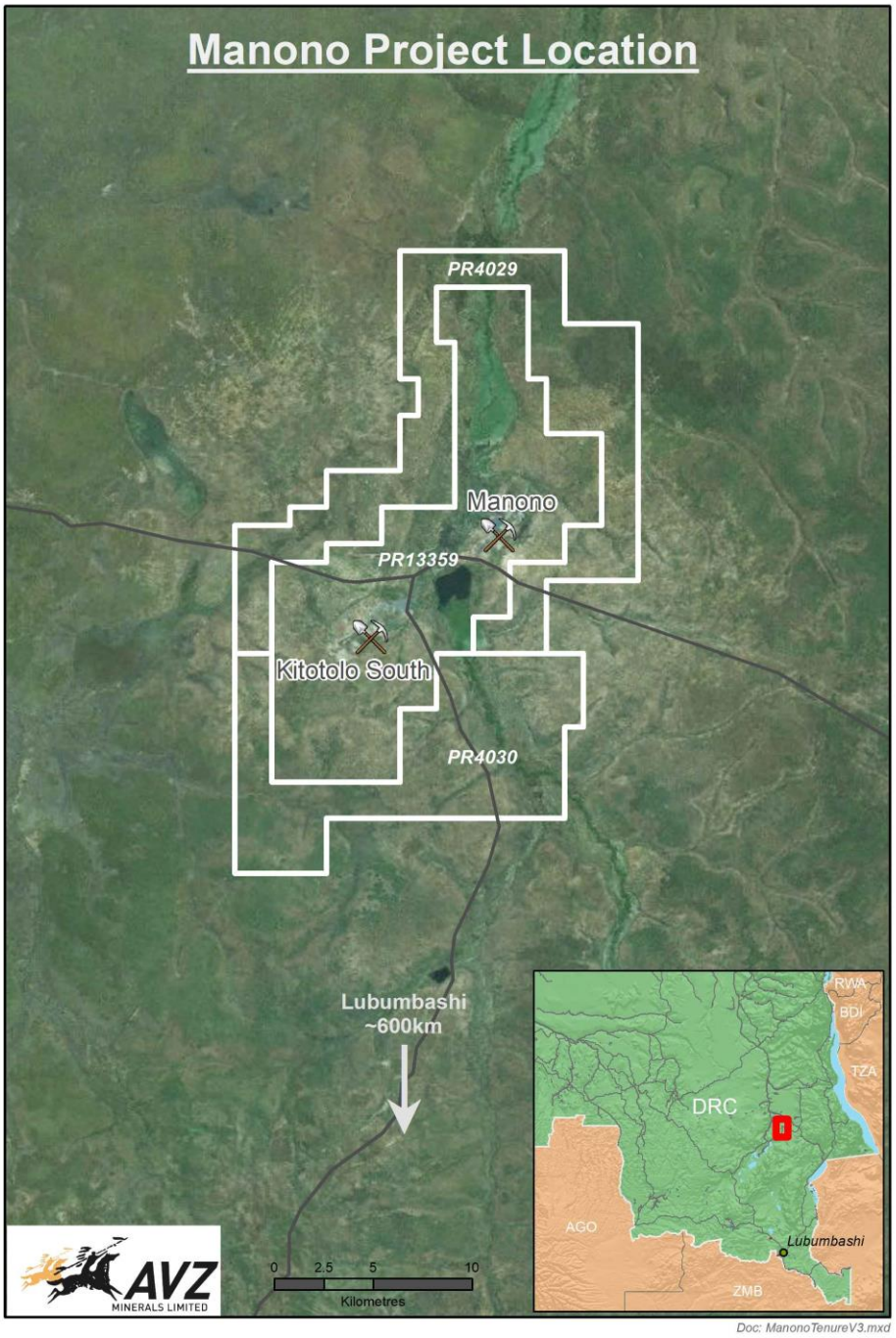

Figure 1. Location of the Manono Lithium Project licences in the Democratic Republic of Congo.

Exploration Activities

AVZ completed additional rock-chip sampling south west of hole MO17DD007 at the Carriere De L'est pegmatite and continued more detailed mapping of the entire project area. In addition, support works including construction of a base field camp for future exploration work has advanced considerably.

Mapping and Rock Chip Sampling

AVZ collected 12 rock-chip samples south-west of MO17DD007 in the spillway of the Likushi dam site. Extensive alluvium obscures any further potential rock chip sampling of the possible extension to the pegmatite, without substantial earth moving (Figure 2 and Figure 3).

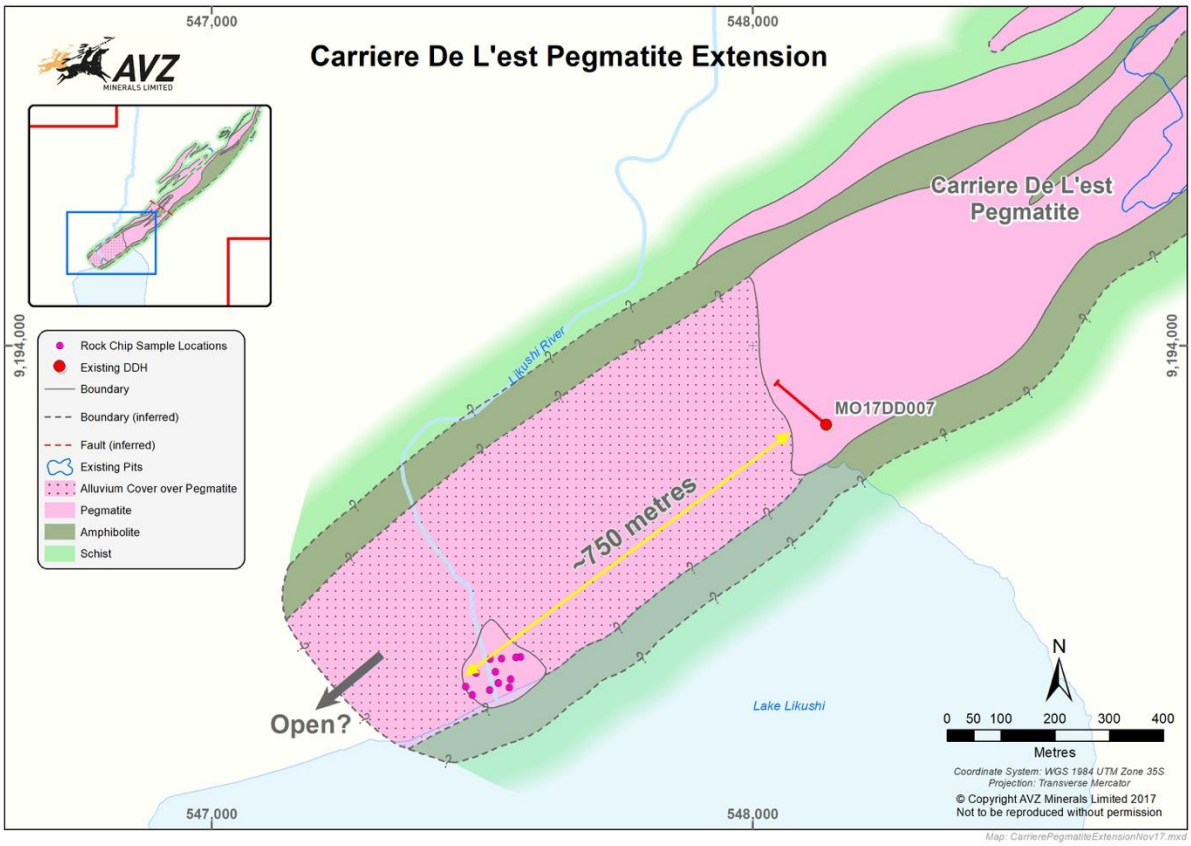

Figure 2. Extension to the Carriere De L'est Pegmatite from drill hole MO17DD007.

AVZ completed drill hole MO17DD007 to test the Carriere De L'est Pegmatite, the largest pegmatite in the Manono sector. Assay results from this hole confirmed the mineralisation distribution and tenor evident from the spodumene present in the drill-core, returning an intercept of 250.93m @ 1.48% Li_2O and 913ppm Sn. Sampling commenced at 1.9m from which depth the pegmatite is unweathered. The thickness of intersected pegmatite and the geometric relationship between the location of the drill hole and mapped pegmatite boundaries suggests the thickness of the pegmatite may be 280m.

The Carriere De L'est pegmatite is exposed for almost 1,000m to the north-east from MO17DD007 with a total potential strike length of about 5,500m. Further additional potential strike of approximately 750m has now been established within the "extension corridor" area to the south west within an exposed outcrop of approximately 100m^2 areal expression (Figure 2).

Assay results for the rock-chip samples ranged between 1.43% and 4.46% Li_2O, with an average of 3.11% Li_2O. These represent very encouraging results for potential additional tonnages of high-grade lithium mineralisation within the extensions areas. Additional work is required to fully understand the nature and extent of such mineralisation.

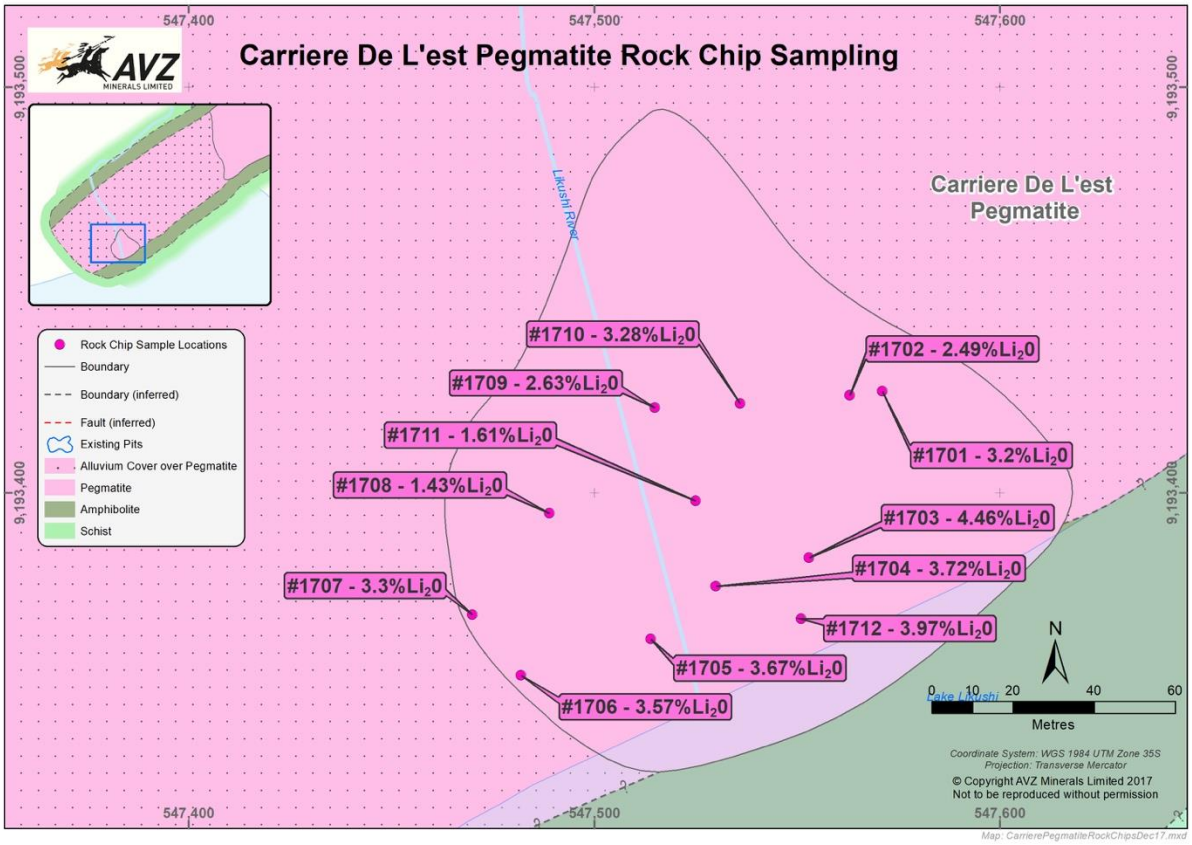

Figure 3. Rock-chip sample locations and their associated Li_2O assay results.

The results from AVZ's exploration continue to confirm the immense size of the Manono Lithium deposit. AVZ is planning further work for the extension areas including additional pitting and grab sampling followed by RC drilling to test the full extent and nature of this extension to the Carriere De L'est pegmatite.

Initial Mineral Characterisation Test Work

As part of the technical interrogation of the Manono Lithium Project's immense pegmatites and its suitability for economic mining and treatment of lithium-based minerals, AVZ is progressing drilling of the pegmatites to define a 2012 JORC-complaint Mineral Resource for the Roche Dure and Carriere De L'est pegmatites. Following this, additional Mineral Resources will be targeted for the other large pegmatites at the project (i.e. the Kyoni, Mpete, Tempete and Malata pegmatites).

A pre-requisite to defining a Mineral Resource for lithium in a pegmatite is a precise knowledge of the mineral species within the pegmatite, as grade alone is not sufficient. In addition, it is important to understand the concentrations of deleterious elements within the pegmatite, particularly the concentrations of iron, phosphorus and fluorine.

The need to confirm the mineral species present in the pegmatite, along with a need to understand the proportion of deleterious elements has led to the completion of the Initial Mineral Characterisation study for the Roche Dure pegmatite.

Sample Selection Methodology for the Mineral Characterisation

Drill-holes MO17DD001 (235.03m @ 1.66% Li_2O & 1001ppm Sn from 24.5m) and MO17DD002 (202.8m @ 1.57% Li_2O & 1078ppm Sn from 65.5m) passed through the full thickness of Roche Dure Pegmatite and mostly intersected fresh rock.

The drilling results have been discussed in previous ASX releases (see ASX Announcements 28 July 2017 and 12 September 2017). A total of 444 samples of pegmatite were assayed for a broad suite of elements but not fluorine, which requires specialised assay methods and is expensive.

Of the 444 samples of pegmatite, 426 samples were fresh (i.e. unweathered) pegmatite and their assay results were interrogated to determine the mean concentration of iron (expressed as iron (iii) oxide, Fe_2O_3) and phosphorus (expressed as phosphorus (v) oxide, P_2O_5).

From the pulps of the 426 samples of fresh pegmatite, every fifth pulp sample was selected for analysis of fluorine (F) content, resulting in a total of 85 assays of pegmatite for F content. A single sample of greisen peripheral to the Roche Dure Pegmatite was also assayed for F content.

In addition, 11 of the pulps of fresh pegmatite samples, as well as the one sample of greisen peripheral to the Roche Dure Pegmatite, were selected for determination of mineralogy by Quantitative XRD analysis. The 11 pegmatite samples were selected to represent subtly different components of the Roche Dure Pegmatite and thus attain a more comprehensive assessment of the mineralogy of the entire pegmatite.

Discussion of Results

For the 426 samples of fresh Roche Dure Pegmatite, the concentrations of the lithia or lithium oxide (Li_2O), tin (Sn), iron (iii) oxide (Fe_2O_3) and phosphorus (v) oxide (P_2O_5) were analysed to establish the typical concentrations (Table 1).

Table 1: Concentrations of valuable vs deleterious components

Component	mean concentration	range of concentration	majority composition
lithia (Li_2O)	1.66%	0.05% - 4.63%	70% of samples from 0.86% - 2.45%
tin (Sn)	992ppm	63ppm - 9110ppm	70% of samples from 383ppm - 1490ppm
iron (iii) oxide (Fe_2O3)	1.00%	0.54% - 1.77%	70% of samples from 0.75% - 1.2%
phosphorus (v) oxide (P_2O_5)	0.30%	0.02% - 1.47%	74% of samples from 0.17% - 0.40%

Lithium (expressed as lithia, Li_2O) grade distribution

The distribution of lithia concentrations corresponds to a Normal Distribution, which strongly supports the observed overall homogeneity of the Roche Dure Pegmatite. It is important to note that this homogeneity applies to the whole pegmatite, i.e. as a large-scale feature. At smaller scale, there are variations in mineral proportions (and thus lithia grades) and there are subtle differences in texture, but these differences have a random distribution rather than occurring in distinct zones.

An important consequence of mineralisation being homogenous is that the characteristics of the mineralisation, such as grade, can be assumed to be more-or-less consistent, which enables a Mineral Resource to be defined more rapidly.

Iron content (expressed as Fe_2O_3)

In nearly all cases, spodumene naturally contains some iron and in addition, there are other minerals within pegmatites that contain iron. High concentrations of iron are deleterious.

The mean concentration in the Roche Dure Pegmatite is 1.00% Fe_2O_3 and this includes iron that is present in minerals other than spodumene. This iron content is within the industry accepted range for low iron content.

Phosphorus content (expressed as P_2O_5)

Although phosphorus is a deleterious element in spodumene deposits, information on the concentration of P_2O_5 in lithium deposits is not commonly stated. The mean concentration of P_2O_5 in the Roche Dure Pegmatite of 0.30%, which is considered low.

It is important to note that the concentration of P_2O_5 in a spodumene concentrate prepared from the Roche Dure Pegmatite is likely to be less than 0.30% P_2O_5. This is because spodumene contains very little, if any phosphorus; the phosphorus is present in minerals such as apatite that occur with spodumene in the pegmatite. During the preparation of a spodumene concentrate, the phosphorus-bearing minerals will be separated from the spodumene and excluded from the spodumene concentrate. Further test-work will be required to confirm this.

Fluorine content

Fluorine is a deleterious element in spodumene ores because of the possibility of toxic fumes of fluorine or hydrogen fluoride being released during processing of spodumene concentrates to extract lithium.

Fluorine assays were completed for 85 samples of pegmatite and one sample of greisen from a greisen vein external to the Roche Dure Pegmatite.

The Fluorine concentration in the pegmatite samples ranged from 320ppm F to 2400ppm F, with a mean of 998ppm F (i.e. about 0.10% F). This is considered low and compares favourably with mined lithium pegmatites for which the F content is accessible to the public.

The results from these 85 samples are representative of the entire pegmatite because the mean concentrations of P_2O_5 and Fe_2O_3 for the 85 samples match the mean concentrations of P_2O_5 and Fe_2O_3 for the entire pegmatite. This is further evidence of the homogeneity of the Roche Dure Pegmatite.

Mineral composition

The Quantitative XRD determinations confirmed the impression gained through inspection of the drill-core that lithium mineralisation is comprised entirely of spodumene.

Most of the pegmatite sampled in this initial characterisation work (from drill holes MO17DD001 and MO17DD002 in the Roche Dure pegmatite) consists of a mixture having the following approximate composition:

- 32% quartz,
- 30% albite feldspar,
- 5% microcline feldspar,
- 8% muscovite mica,
- 20% spodumene and
- 5% “amorphous material” (non-diffracting and thus unidentifiable material).

The low proportion of mica in the Roche Dure Pegmatite is favourable because it reduces the degree of mica-contamination during the production of spodumene concentrates.

Conclusion

Based on this initial characterisation work (from drill holes MO17DD001 and MO17DD002) at the Roche Dure Pegmatite, the following characteristics are evident:

- The lithium within the pegmatite is entirely (or almost entirely) contained within spodumene
- The general composition of the pegmatite is restricted to a small number of minerals, i.e. a relatively simple composition
- The pegmatite is a homogenous LCT Albite-spodumene pegmatite having a low mica content
- The mean concentration of Li_2O is high and accompanied by significant Sn
- The mean concentrations of "penalty" elements are low.

These characteristics enhance the potential to define a world-class lithium resource within the Roche Dure Pegmatite.

Exploration Target

Based on detailed prospect scale mapping, trenching and drill results and given the size and mineralised nature of the pegmatites at Manono, AVZ generated an exploration target of between 1Bt to 1.2Bt of 1.25% to 1.5% Li_2O for the entire Manono Project, including between 300Mt and 400Mt of 1.25% to 1.5% Li_2O for the Roche Dure Pegmatite alone. It has now also generated an exploration target for a 1,200m strike portion of the Carriere De L'est pegmatite of between 200Mt and 300Mt of 1.25% to 1.5% Li_2O.

The potential quantity and grade of the exploration target as stated, is conceptual in nature as there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

The Company will now concentrate on drill assessment of the two main pegmatite sectors with a primary focus on the Roche Dure and Carriere De L'est pegmatites.

Work Planned Q1 - 2018

AVZ will commence an initial 20,000m drilling program from mid-January 2018. The program has been delayed due to additional official documentation requirements for the import of Equity Drilling's drilling equipment, as well as an embargo of heavy haulage vehicles over the Christmas and New Year period.

To complete the initial 20,000m program and initial resource estimation by the end of Q1/early Q2 2018, AVZ has engaged an additional drilling contractor (Equator Drilling).

AVZ is expecting Equator Drilling to commence drilling on or around mid-January. Shortly after this, Equity Drilling will have established itself onsite and will bring an additional four drill rigs to the program. The Company will have five rigs in operation in total.

AVZ will initially target the Roche Dure pegmatite, given the expected approximate thickness of up to 220m and a potential strike length of 2,100m. Drill-holes MO17DD001 and MO17DD002 are approximately 400m apart through the thickest section of the pegmatite, and this zone will receive initial drill testing on sectional lines 100m apart and drill holes 100m apart. Drilling will progress to the north and south along strike.

Additionally, drilling will be undertaken at the northern Manono sector, especially around Carriere De L'est where MO17DD007 intersected significant mineralisation from surface. Drilling will be programmed on lines spaced 200m apart and with holes 100m along lines over a strike length of 1600 metres of strike.

The establishment of a fully self-sufficient camp is well advanced and will be finalised prior to arrival of the drilling rigs and personnel.

Infrastructure Update

The Manono Lithium Project is approximately 600km due north of Lubumbashi, the capital of the Katanga Province, in the south of the DRC. Lubumbashi is the mining capital of the DRC, acting as a hub for many of the country's biggest mining companies. Manono can be accessed from Lubumbashi by 1.5-hour flight or by road.

As previously advised, Dathomir Mining Resources sarl, one of AVZ's joint venture partners at the Manono Lithium Project, agreed to facilitate the rehabilitation of the road from Lubumbashi to Manono.

AVZ has been advised that an agreement has been entered between a Chinese affiliated investor group (CIG) and the DRC Ministry of Infrastructure, Public Works and Reconstruction, pursuant to which the CIG will fund rehabilitation and sealing of the road from Luambo to Manono, covering 466km of road. This infrastructure project forms part of the "One Belt and One Road" initiative as proposed by China's president Xi Jinping.

The road from Lubumbashi to Luambo has previously been sealed. The estimated cost to complete the works is US$285 million.

CORPORATE

Capital Raising

During the quarter, AVZ completed the second tranche ($1.98 million) of its August 2017 placement, following receipt of shareholder approval in October 2017. A total of 28,285,714 shares at an issue price of 7 cents per share, together with 28,285,714 attaching options exercisable at 10 cents and expiring 15 April 2019, were issued to institutional and sophisticated investors.

In addition, AVZ issued a total of 24,697,411 ordinary shares following the exercise of listed options (at 3 cents each) and 6,857,141 ordinary shares following the exercise of unlisted options (at 10 cents each).

At 31 December 2017, AVZ's cash balance totalled approximately $12.9 million.

JNS Capital Corp Agreement

The Company entered into an agreement with JNS Capital Corp for the provision of marketing and promotional services in North America. Part of the consideration for the services was the issue of 3 million Performance Rights. The Performance Rights shall vest if the 10-day volume weighted average share price for the Shares on the ASX is A$0.30 or higher from the date of issue. The Performance Rights shall lapse (if not vested) on 31 March 2018.

Legal

As previously advised, in July 2017 MMCS Strategic 1 (MMCS) filed an amended claim (Claim) seeking an order pursuant to the ASIC Act and the Corporations Act requiring AVZ to make announcements to the market to correct what MMCS claims were misleading or deceptive announcements (or announcements which were likely to mislead or deceive) made by AVZ concerning the Manono licence.

AVZ firmly denies that any of its past announcements concerning the Manono licence were misleading or deceptive or likely to mislead or deceive, and AVZ will strenuously defend the claims made by MMCS under the Claim.

For more information contact:

Klaus Eckhof
Executive Chairman
AVZ Minerals Ltd
Phone: +377 680 866 300
Email: klauseckhof@monaco.mc

Competent Person's Statement – Exploration Results

The information in this report that relates to Exploration Results and Exploration Targets is based on information compiled by Mr. Peter Spitalny, a Competent Person whom is a Member of the Australasian Institute of Mining and Metallurgy. Mr. Spitalny is a full-time employee of Hanree Holdings Pty Ltd. Mr Spitalny has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Spitalny consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Information required under ASX Listing Rule 5.3.3

List of current mining and exploration tenements (as at 31 December 2017):

Country / Project	Tenement	Interest	Status
DRC – Manono Project	PR 13359	60%	Granted
DRC – Manono Extension Project	PR 4029, PR 4030	100%	Granted
DRC - Katanga Regional	PR 12206, PR 12436, PR 12449, PR 12450, PR 12454, PR 12459, PR 12461	60%	Granted