AVZ Minerals Limited

2 February 2017

ACQUISITION OF 60% INTEREST IN THE MANONO LITHIUM, TIN AND TANTALUM PROJECT, DRC

- AVZ has agreed to acquire, subject to certain conditions, a 60% interest in the historic Manono Mine and surrounding area in the south of the Democratic Republic of Congo (DRC) in central Africa.
- The Manono Project is potentially one of the world's largest lithium rich LCT (Lithium Caesium Tantalum) pegmatite deposits.
- The Manono pegmatite deposit was mined for its tin content between 1919 and 1980.
- The Manono pegmatite extends for a strike length of at least 13km, with only a small shallow portion tested by historical exploration activities. The exploration activity indicates potential thickness of the pegmatite is up to 250m in places.
- Reporting of historic activities also indicates that the Manono pegmatites appear to be reasonably homogeneous mineralogically with cassiterite (up to 2000g/m^3), tantalum (up to 100g/m^3) and spodumene (up to 25% or 1.6% Li_2O) present.
- AVZ will be responsible for funding expenditure to completion of a feasibility study, and will also make certain cash payments and share issues in relation to the acquisition.
- Placement of up to 250 million shares at 2 cents (together with up to 250 million attaching options exercisable at 3 cents and expiring 3 years from the date of issue) to raise up to $5,000,000. Hartleys Limited acted as Lead Manager of the Placement.
- Mr Klaus Eckhof appointed Executive Chairman and Mr Nigel Ferguson joins the AVZ Board as Technical Director. Mr Ferguson, a geologist with 30 years of experience, will be responsible for the management of AVZ's exploration activities at Manono. He has been active in the DRC since 2004 in gold and base metals exploration and resource development.

AVZ Minerals Limited (AVZ) is pleased to announce the agreement to acquire a 60% interest in the historic Manono Mine and surrounding area (Manono Project or Project) in the south of the Democratic Republic of Congo (DRC) (the acquisition).

The acquisition is subject to completion of due diligence, shareholder approval and certain other conditions (see **Acquisition Agreement** below).

The acquisition complements AVZ's existing project interests in southern DRC prospective for lithium, tin, tantalum and rare earth elements.

Tenure, Location and Access

The Manono Project comprises PR13359, which covers approximately 188km^2. The licence was granted on 28 December 2016 for a period of five years, and may be renewed in accordance with the DRC's Mining Code.

The Manono Project is approximately 500km due north of Lubumbashi, the capital of the Katanga Province, in the south of the DRC. The project area can be accessed from Lubumbashi by 1.5 hour flight or by road. Sections of the road from Lubumbashi are in poor condition and there are plans for this road to be upgraded. See Figure 1 below.

The Project is adjacent to the Manono and Kitatolo townships. The region has a low density of population, but the greater Manono town area has a population estimated at 20,000 to 30,000 people, who are occupied mostly in subsistence agriculture and artisanal mining in the region.

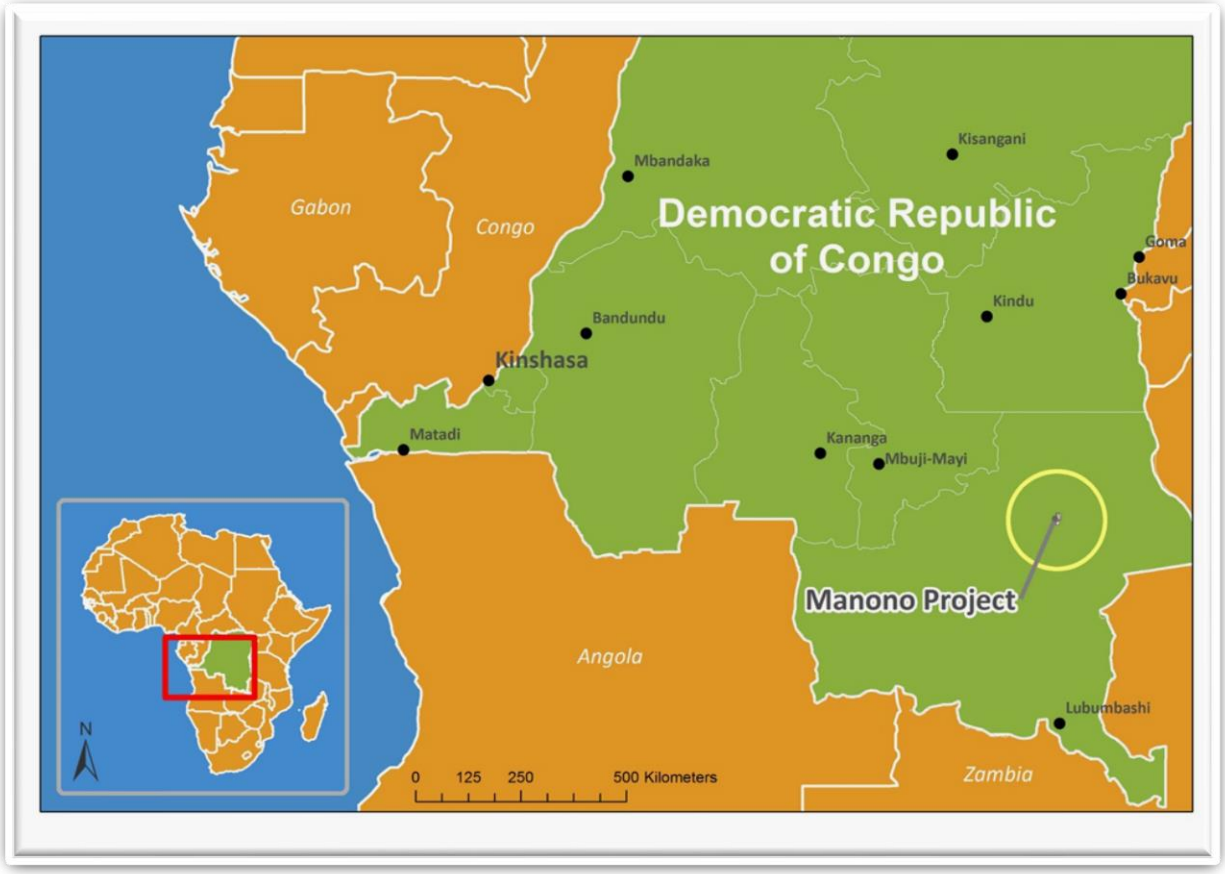


Figure 1. General Location of the Manono Project

Historical Exploration and Mining Activities

Historical Exploration

Cassiterite was first discovered in the Manono area during a regional exploration programme in 1910. Systematic prospecting programmes were conducted between 1910 and 1920. The Manono mining area was defined and Géomines, the original developer, was granted a mining licence and production commenced in 1919. The weathered pegmatite was discovered in 1925 during an exploration programme concentrating on the eluvial tin deposits.

Exploration continued for the next 10 years. Pits and drill holes were completed above the two main weathered bodies, known as Manono and Kitotolo. Prospecting continued periodically until 1960 with both the deepening of existing mining excavations and new drilling activity. The pits and drill holes were completed to bedrock, which was either a mica schist or a weathered pegmatite. Samples were crushed and washed to provide a tin concentrate which was assayed.

Between 1948 and 1949 a study of the hard-rock pegmatite was initiated. Forty two holes, totalling 2,202 m were completed on a predetermined grid in the far western part of the Kitotolo deposit. Based on these results a hard-rock open pit that operated from 1951 to 1956 was established. It was also determined that columbo-tantalite could be recovered from this hard rock.

With the exception of some exploration work carried out on the old mine dumps, aimed at determining cassiterite and spodumene grades, little prospection took place after 1960. It also appears that no exploration has taken place since 1980.

Historical Mining and Production

According to publicly available records, the Manono pegmatite deposit was mined for its tin content between 1919 and 1980, during which time a total of 100 million cubic metres (Mm3) of ore were processed to produce 185,000 tonnes of cassiterite concentrate, sourced mainly from eluvial and weathered pegmatite from which was recovered an average of 1,850gm of cassiterite concentrate per cubic metre (g/m^3) or approximately 1,330g/m^3 tin. Production from this ore was economic on account of its amenability to cheap mining and processing methods.

Production started in 1919 and remained a low cost operation until the pegmatite was discovered in 1925. Géomines recognised the significance of this discovery and invested in mechanical equipment. In 1935 Géomines purchased its first large mechanical shovel and also invested in the first phase of the Mpiana Muanga hydroelectric power station (approximately 90kms from Manono) which was reportedly able to generate between 15 to 30MW. The construction followed with a smelter, which between 1940 and 1945 processed most of the cassiterite produced in the Belgian Congo.

During this time mineral processing plants, workshops, a steel smelter and an oxygen plant, as well as technical schools, hospital and accommodation for 2,500 local workers and 200 to 250 expatriates were also built.

Until 1949 production was derived from the eluvials and weathered pegmatite. This represented the most successful period of the mine with production reaching 3,500tpa of tin, from 5,000t of cassiterite concentrate with a grade of 72% Sn. Production from the hard rock was attempted between 1951 and 1956.

Production declined during the 1950s and 60s due to the depletion of soft rock and eluvial reserves; the tin price; lack of investment and the resultant deteriorating condition of the equipment and poor supervision. All official production ceased in 1982.

Several sites within the project area are currently being worked by artisans for high-grade cassiterite within lateritic material and the lower grade tailings. There are also sporadic, but extensive alluvial workings and less extensive pitting into hard rock for recovery of "coltan" (columbite tantalum) along the entire length of the known pegmatite.

Infrastructure

As noted above, plant infrastructure was not properly maintained during the production years. In addition, in 2007 forces from Rwanda destroyed much of the remaining infrastructure in Manono and the surrounding areas, including the Mpiana Muanga hydroelectric power station and associated transmission lines. Power is currently generated at the Manono township using diesel generators and a solar power system. There are plans for the reconstruction of the hydroelectric power station.

There is an abundance of good water supply for both local consumption and any potential mining operation at Manono. Other consumables are bought locally and supplemented by goods brought in from Lubumbashi.

Climate and Topography

Manono lies in the middle of a peneplain elevated at 600masl and is vegetated with shrubby savannah. The climate is temperate with temperatures ranging from 20 to 32^{o}C. Annual rainfall is about 1,200mm falling mostly during a well-defined rainy season from October to April. The area is drained by the Lukushi River, which was dammed as a water supply for the Project. This tributary of the Luava River drains into the Lualaba River, headwaters of the Congo River.

Geology

Regional Geology

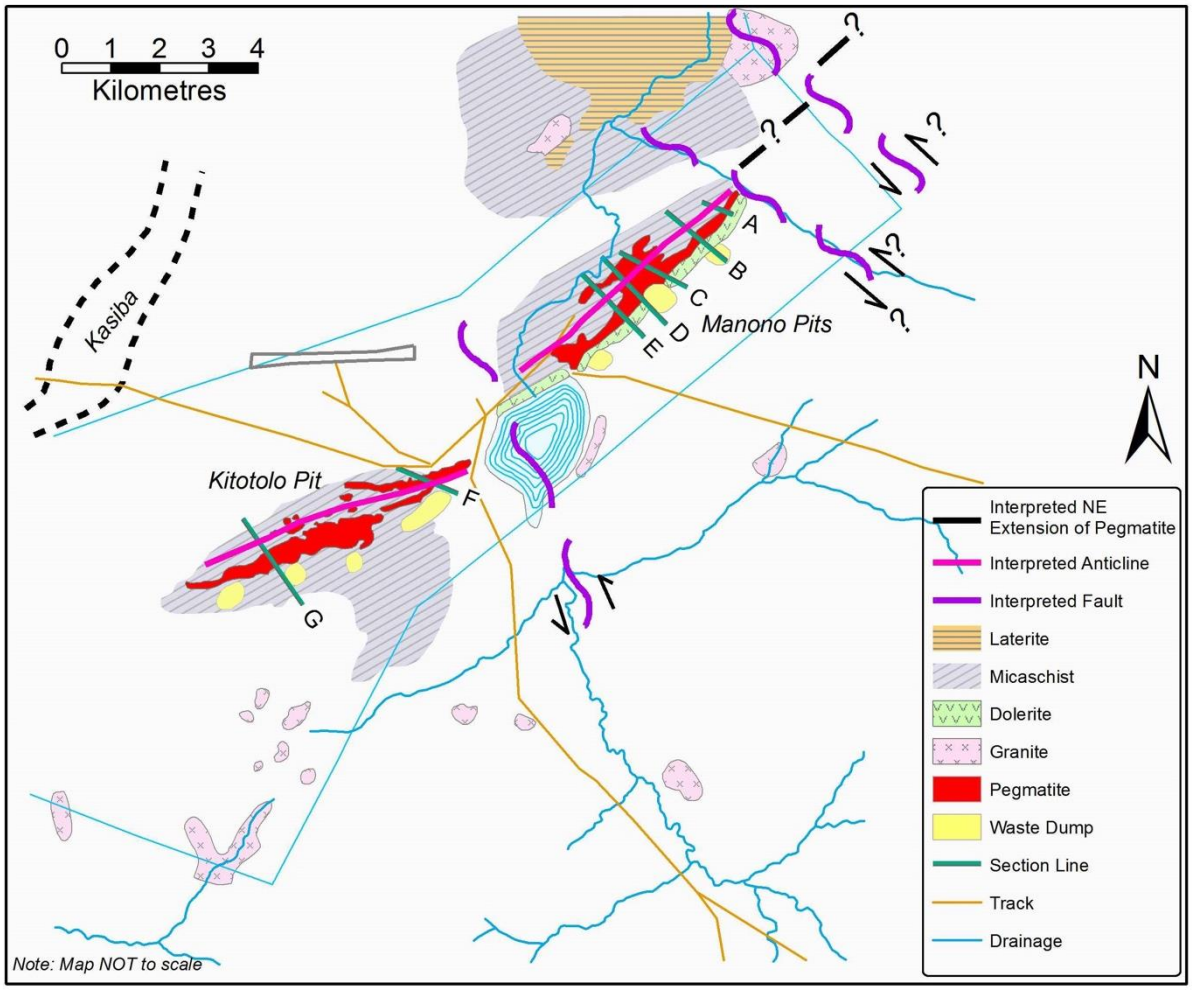
The Project lays within the mid-Proterozoic Kibaran Belt, an intracratonic domain stretching for over 1,000km through Katanga and into southwest Uganda. The belt strikes predominantly SW-NE and is truncated by the N-S to NNW-SSE trending Western Rift system. The Kibaran is underlain in the east by Archaean rocks of the Tanzanian Craton and in the west and south by Lower Proterozoic metamorphic rocks.

The Kibaran comprises 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 950Mya) is assigned to the Katangan cycle and is associated with widespread vein and pegmatite mineralization 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 500km from near Kolwezi in the southwest to Kalemie in the northeast comprising numerous occurrences and deposits of which the Manono deposit is the largest.

Local Geology

The geology of the Manono area is poorly documented and no reliable maps of local geology are available. Limited historical reporting states the Manono pegmatites are hosted by a series of quartzitic mica schists presumed to belong to the Lower Kibaran, which are associated with volcanic and intrusive rocks of mainly doleritic composition, that are also well represented at Manono. The schists observed in the vicinity of the mine are generally steeply dipping in contrast to the sub-horizontal attitude of the pegmatite intrusions.

The pegmatite intrusion is exposed in two areas, Manono in the northeast, and Kitotolo in the southwest. These are separated by a 2.5km unexposed section centred on Lake Lukushi and the surrounding alluvial plain. It is proposed that this is a faulted section due to the highly weathered nature of the pegmatite to clays derived from mica.



Geological map of the Manono Pegmatite modified after Bassot and Morios

Figure 2: Plan View of the Kitatolo and Manono Pegmatite Workings, Manono, DRC

The areal extent of the pegmatite bodies is depicted in Figure 2 above. This figure indicates that the Manono-Kitotolo pegmatite extends over a total strike length of 13km.

The pegmatite intrusion is irregular in outline and typically includes a main body as well as separate sub-parallel lenses injected into the host schists. Rafts of schist occur occasionally as enclaves within the pegmatite. The Manono body may be best described as a laccolith rather than as a simple sill.

The area between the two pegmatite exposures around Lake Lukushi and the surrounding flood plains is poorly exposed due to its highly weathered nature. On inspection during a recent site visit an outcrop of spodumene pegmatite and albite ?granite is exposed near the pump station in the middle of the Lukushi dam, suggestive that the pegmatite, albeit highly weathered, is continuous beneath Lake Lukushi.

Outlying occurrences of pegmatite are also recorded about 5km north of this locality and also several 10's of kilometres to the south, suggesting that the pegmatite may be more extensive than recorded on available maps.

The structure of the pegmatite intrusion is best reported from the area known as the RD Pit at the west end of the Kitotolo sector which was investigated by 42 shallow drill holes (maximum depth approximately 100m). Whilst assay results for these holes are not yet available to AVZ, drill sections indicate that the Kitotolo body dips around 40 degrees to the east, although steeper, faulted contacts are also recorded. The maximum thickness of the pegmatite in the RD Pit area is around 250m as interpreted from drilling. Further north, the pegmatite body is interpreted as sub-horizontal and affected by a gentle anticlinal fold structure with NE axis parallel to the elongation of the intrusion. Reverse faults parallel to the axis of the antiform suggest that the pegmatite bodies underwent NW-SE compression after emplacement. See Figure 3 below.

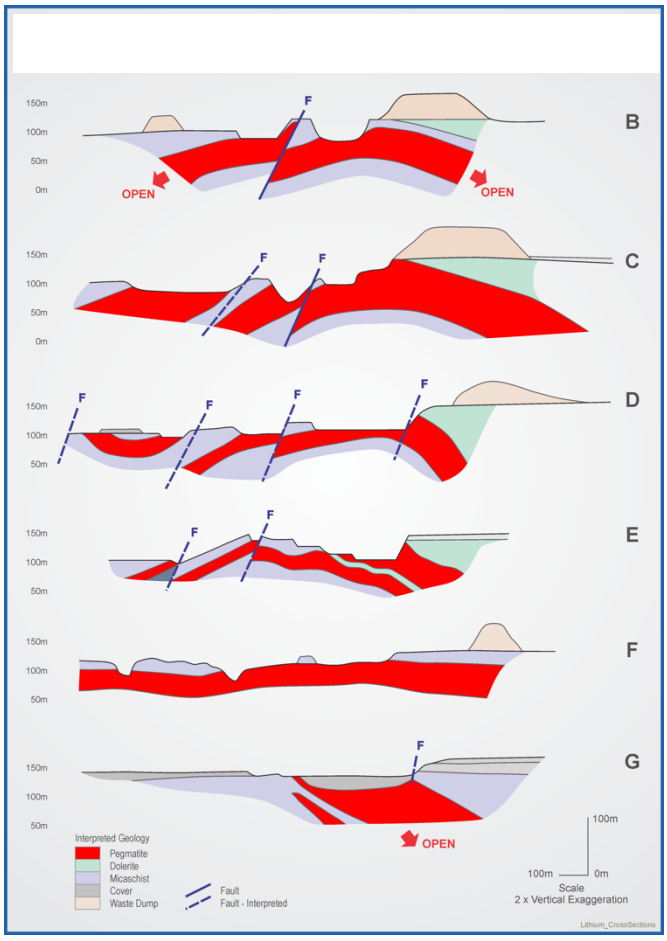


Figure 3: Cross sectional interpretation of the Manono and Kitatolo Pegmatites

It is considered the Manono intrusion may have a more widespread extent below a thin cover of schists, and may therefore be much more extensive than is indicated on maps. Such an interpretation would have important implications for exploration and possible development.

Mineralogy

There is no apparent record of any formal mineralogical study of the Manono pegmatite, however four types of pegmatite at Manono have been described in historic reports, namely:

1. Potash feldspar (orthoclase or microcline) – quartz – muscovite
2. Calcic feldspar (Albite) - quartz-muscovite
3. Calcic feldspar (Albite) - quartz-muscovite + spodumene
4. Quartz-muscovite (Greisen)

Type 1 pegmatite is considered to be the initial phase that has been pervasively altered by later albitisation and spodumene formation to result in subsequent pegmatite phases. Greisen phases are generally restricted to small occurrences predominantly close to the intrusive contact.

The main body of the Kitotolo pegmatite is characterised by development of large platy microcline feldspar crystals with a pronounced orientation perpendicular to the contact with the host rock resulting in a columnar type of structure.

The Manono pegmatite is considered to be reasonably homogeneous mineralogically, with cassiterite (up to 2000g/m3), tantalum (up to 100g/m3) and spodumene (up to 25% or 1.6%Li_2O) reported to be present. This suggests that it was emplaced in a sub-horizontal magma chamber in stable temperature and pressure conditions. This is in contrast to most pegmatites, including Greenbushes, WA, in which marked zoning occurs both towards the contacts and laterally. Further investigation may prove this incorrect as more detail of the character of the pegmatite is gained.

The main accessory mineral recorded is cassiterite, which most probably developed during albitisation. Cassiterite occurs as scattered aggregates and crystals frequently up to 10 mm in size throughout the pegmatite. It is observed previously that a large proportion (40 to 50%) of the cassiterite is finely disseminated as particles below 630 microns suggestive that previous rudimentary crush and recovery grades could be increased through modern analysis.

Spodumene is the most common mineral found in the fresh pegmatite after plagioclase and quartz. Spodumene is easily decomposed by weathering and does not therefore occur close to surface in weathered rock or laterite. The fresh pegmatite is reported to contain variable amounts of lithium, commonly around 1.6% Li_2O, equivalent to 25% spodumene within the host rock.

A purple-tinged mica has also been reported in the face at the west end of the Quarry V pit. This is tentatively identified as lepidolite (lithium mica) that appears not to have been recorded previously. If this identification is correct, whole-rock lithium analyses cannot be used as a reliable indicator of spodumene content in areas where lepidolite occurs.

Coloured accessories, such as tourmaline, apatite, beryl and biotite, that are typical of many other pegmatites, are only sparsely developed at Manono.

Project Potential

The Kitotolo-Manono pegmatite is known to extend for a strike length of at least 13km within the licence area. Only a small portion of the pegmatite has been drill tested (and most of that work is to a depth less than -100m). The historic drilling also indicated the thickness of the pegmatite was up to 250m. The Manono Project has the potential to host one of the world's largest lithium rich pegmatite deposits.

Reporting of historic activities also indicates that the Manono pegmatites appear to be reasonably homogeneous mineralogically with cassiterite (up to 2000g/m^3), tantalum (up to 100g/m^3) and spodumene (up to 25% or 1.6% Li_2O) present.

In addition, as noted above outlying occurrences of pegmatite are also recorded about 5km north of Manono and also to the south, offering further potential.

The Manono pegmatite can be classified as an "LCT" or Lithium-Caesium-Tantalum pegmatite which are well known for hosting significant amounts of lithium. For example, Greenbushes in Western Australia is considered to be "a giant pegmatite dyke of Archaean age with substantial Li-Sn-Ta mineralisation and is considered to be the largest lithium resource". Greenbushes pegmatite consists of a large main zone over 3kms long and up to 300m wide with numerous smaller pegmatite dykes and pods flanking the main body. The Greenbushes pegmatites are mineralogically zoned in a lenticular inter-fingering style along strike and down dip. The lithium zone is over 2kms long and enriched in the lithium-bearing mineral spodumene which often makes up 50% of the rock.

Based on available information, AVZ considers there is significant potential for the discovery of significant lithium, tin and tantalum, not to mention other economic minerals, at Manono within the Manono-Kitatolo "LCT" pegmatite.

Initial Work Planned

AVZ plans to complete a review of additional historic data, geological mapping and a short drilling program during the due diligence period (see Acquisition Agreement below) to confirm the presence of lithium, tin and tantalum mineralisation at Manono in significant quantities.

Following this initial program, AVZ would move quickly to undertake detailed drilling within the main target area and commence initial metallurgical test-work, with the objective of progressing to project feasibility as soon as possible thereafter.

Acquisition Agreement

The principal terms of the agreement for AVZ to acquire a 60% interest in the Manono Project from the current holders, La Congolaise D'exploitation Miniere SA (Cominiere, a State-owned enterprise) and Dathomir Mining Ressources SARL (Dathomir, a privately owned company) are:

- Agreement is subject to certain conditions precedent including:
  - AVZ completing its due diligence review to its satisfaction within 60 days (by late March 2017).
  - AVZ obtaining all necessary regulatory and shareholder approvals.

- AVZ to pay Cominiere a total of US$6 million in cash as follows:
  - US$100,000 upon execution of the agreement
  - US$1,900,000 upon satisfaction of all conditions precedent (First Instalment)

- US$1,500,000 within 12 months of the date of the First Instalment
- US$1,500,000 within 24 months of the date of the First Instalment
- US$1,000,000 within 36 months of the date of the First Instalment.

- AVZ to pay Dathomir US$750,000 in cash within 30 days of execution of the agreement, and issue to Dathomir and its nominees 260 million shares upon satisfaction of all conditions precedent.

- AVZ to issue a further 160 million shares upon satisfaction of all conditions precedent, comprising 100 million shares to Mr Klaus Eckhof (a director of AVZ), and 60 million shares to other parties (not related parties of AVZ) associated with facilitating the transaction.

- The interests of the parties in the Project at completion will be AVZ 60%, Cominiere 30% and Dathomir 10%. Cominiere will also be entitled to a 1% royalty interest. AVZ will be responsible for funding expenditure to completion of a feasibility study.

- AVZ can relinquish its interest in the Project at any time (with no further obligations).

- The Company has received warranties in respect of the Licence that are generally expected in a transaction of this nature.

- Neither Cominiere nor Dathomir are related parties of AVZ.

Separate to this agreement, Dathomir and Cominiere have agreed that Dathomir will facilitate the rehabilitation of the road from Lubumbashi to Manono and the Mpiana Mwanga hydroelectric power station.

Capital Raising

In order to fund the proposed acquisition and planned work programs, AVZ has completed a bookbuild for a placement to institutional and sophisticated investors of up to 250,000,000 shares at an issue price of 2 cents per share (together with up to 250 million attaching options exercisable at 3 cents and expiring 3 years from the date of issue (attaching options)) to raise up to $5,000,000 (Placement).

AVZ will issue up to 125,000,000 shares under its existing placement capacity in accordance with Listing Rule 7.1 and 7.1A with settlement expected to be on or around Friday 10 February 2017 (Tranche 1). The 125,000,000 attaching options for Tranche 1 will be issued subject to shareholder approval (expected in late March 2017). A further up to 125,000,000 shares and up to a further 125,000,000 attaching options (Tranche 2) will be issued subject to completion of the acquisition and shareholder approval (expected in late March 2017).

Hartleys Limited acted as Lead Manager of the Placement.

Indicative Capital Structure

The indicative effect of the Acquisition Agreement and the Capital Raising on the capital structure of AVZ is anticipated to be as follows:

Particulars	Currently on issue	Acquisition Agreement	Capital Raising	Proforma at completion
Ordinary shares	725,466,643	420,000,000	250,000,000	1,395,466,643
Options	35,000,000[1]	Nil	300,000,000[2]	335,000,000
Performance rights[3]	4,000,000	40,000,000	Nil	44,000,000

1. Exercisable at 1.2 cents, expiring 30 September 2017. On 31 January 2017 the Company received a notice for the exercise of these options. Allotment is expected to occur by the end of next week.
2. Exercisable at 3 cents, expiring 3 years from date of issue (includes 50m options to be issued to the Lead Broker subject to shareholder approval).
3. Subject to various VWAP hurdles.

Board Changes

Mr Klaus Eckhof, who is currently AVZ's Managing Director, has been appointed Executive Chairman of AVZ.

Mr Nigel Ferguson has joined the AVZ Board as Technical Director. Mr Ferguson will be responsible for the management of AVZ's exploration activities at Manono. Mr Ferguson is a geologist with 30 years of experience. He has been active in the DRC since 2004 in gold and base metals exploration and resource development. It is proposed, subject to shareholder approval, to issue 30,000,000 Performance Rights to Mr Ferguson (or his nominee) as set out below:

- 10,000,000 Performance Rights shall vest if the 10 day volume weighted average share price (VWAP) on the ASX is $0.03 or higher from the date of issue.
- 10,000,000 Performance Rights shall vest if the 10 day VWAP on the ASX is $0.05 or higher during the period commencing 12 months from the date of issue.
- 10,000,000 Performance Rights shall vest if the 10 day VWAP on the ASX is $0.075 or higher during the period commencing 12 months from the date of issue.

AVZ's current Chairman, Mr Patrick Flint, will continue to serve on the Board as a Non-Executive Director. It is proposed, subject to shareholder approval, to issue 10,000,000 Performance Rights to Mr Flint (or his nominee). These Performance Rights shall vest if the 10 day VWAP on the ASX is $0.03 or higher from the date of issue.

For more information contact:

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Executive Chairman
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Competent Person's Statement – Exploration Results

The information in this report that relates to exploration results is based on, and fairly represents information and supporting documentation prepared by Mr Nigel Ferguson, a Competent Person who is a Fellow of The Australasian Institute of Mining and Metallurgy and Member of the Australian Institute of Geoscientists. Mr Ferguson is a consultant to AVZ Minerals Limited. Mr Ferguson 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 Resource and Ore Reserves". Mr Ferguson consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data
(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code Explanation	Commentary
Sampling techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.	Diamond Core drilling was the principal form of historical sampling within the Manono project area (PR13359), with 42 vertical drill holes. Rock chip sampling of mineralized areas, soils and grab samples taken from historic waste dumps were also conducted within the project.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	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. Rock chip samples are by their nature unrepresentative of the sampled interval or horizon.
	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 1m 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.	Given the purpose of first pass exploration work, sampling practices appear to have been appropriate at the time. None of the rock chip, soils or grab samples are appropriate for, or have been used for, Mineral Resource estimates.

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.).	Previous drilling completed on the Manono Project area (PR13359) comprised 42 diamond core holes for approximately 2,202m. No details were recorded on hole diameters or bit types. Géomines carried out a program of drilling, at the RD Pit only, between 1949 and 1951, targeted on the fresh pegmatite in the Kitotolo section at the western end of the Manono intrusion. The drilling consisted of 42 vertical holes drilled to a general depth of around 50 to 60m and reaching the -80m level. Drilling was carried out on 12 sections at irregular intervals ranging from 50m to 300m, and over a strike length of some 1,100m. Drill spacing on the sections varied from 50 to 100m.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	There are no records of sample recovery for the drilling.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	There are no records of sample quality or potential contamination. All rock chip, grab and soil samples were taken in accordance with best practices.
	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.	There are no records for sample recovery for the diamond core drilling, consequently it is not possible to review grade bias in relation to sample recovery.
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.	It is not known what logging technicques were undertaken but it is presumed that all core was logged geologically and geotechnically. It is not known if this work would be sufficient to support Mineral Resource estimations.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography	Not applicable as this is not known. Drilling was undertaken some 65 years ago. Reviews in 1980 and 2010 by independent geologists. According to Behre Dolbear (2010) drill core was sampled, generally, at one-metre intervals throughout the pegmatite with a total of 1,038 tin determinations recorded in pegmatite. Rock Chip, grab and soil samples were logged for lithological detail, mineral composition, alternation and level of weathering.
	The total length and percentage of the relevant intersections logged.	Not applicable. Unknown
Sub-sampling techniques and	If core, whether cut or sawn and whether quarter, half or all core taken.	Not applicable. Unknown

	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	No record of RC drilling within the project.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	No details are recorded of sample preparation techniques. Rock chip, grab and soils were collected as approximately 3kg samples then crushed manually, mixed and a 500gm subset collected for submittal to the commercial laboratory.
	Quality control procedures adopted for all subsampling stages to maximise representivity of samples.	There are no records of QAQC procedures for sub-sampling.
	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	No duplicate sampling has been undertaken.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The sampling methods were appropriate for the material being sampled for the purposes of the sampling.
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.	Recent rock chip, grab and soil samples were analysed by SGS Laboratories in Johannesburg by ICP90A Sodium Peroxide Fusion combined ICP-AES and ICP-MS which involves the complete digestion of the sample in molten flux. Fusions are generally more aggressive than acid digestion methods and are suitable for many refractory, difficult-to-dissolve minerals such as chromite, ilmenite, spinel, cassiterite and minerals of the tantalum-tungsten solid solution series. Fusion analyses are presumed to provide a complete chemical analysis and are referred to as a “total” analysis. using a ICP. This technique is considered total. Historical sampling procedures are not known however according to Behre Dolbear (2010) drill core was sampled, generally, at one-metre intervals throughout the pegmatite body with a total of 1,038 tin determinations recorded in pegmatite. The ore was crushed and concentrated, by unknown methods, and it is understood that this concentrate averaged 72% Sn compared with 78% Sn which is the tin content of pure cassiterite. The grade distribution is rather regular throughout the pegmatite body with 90% of 10m sections averaging between 1,460 and 3,620 g/m3, and an overall average of 2,215 g/m3.

	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.	Not applicable.
	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.	As sampling undertaken was of a first pass nature, only laboratory introduced standards, blanks and a single repeat were reported during determination of the recent rock chip samples.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	No verification exploration work has so far been undertaken.
	The use of twinned holes.	No twin holes were drilled.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	The data from previous exploration are currently stored in hardcopy format and are yet to be entered into a digital database.
	Discuss any adjustment to assay data.	No assay data have been adjusted.
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.	Not applicable.
	Specification of the grid system used.	WGS_84 UTM
	Quality and adequacy of topographic control.	No survey has been undertaken. Hand held GPS coordinates have been utilized to locate sampling to date
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Sampling undertaken to date was of a reconnaissance nature and wide spread along specific structures. Historcial drilling was undertaken on the RD Pit only, between 1949 and 1951, targeted on the fresh pegmatite in the Kitotolo section at the western end of the Manono intrusion. The drilling consisted of 42 vertical holes drilled to a general depth of around 50 to 60m and reaching the -80m level. Drilling was carried out on 12 sections at irregular intervals ranging from 50m to 300m, and over a strike length of some 1,100m. Drill spacing on the sections varied from 50 to 100m.

	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.	Not applicable.
	Whether sample compositing has been applied.	Not applicable.
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	Not applicable to the current sampling.
	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.	There is no apparent bias in any sampling to date.
Sample security	The measures taken to ensure sample security.	No records exist of historic sample security procedures. The recent rock chip samples were collected and handed in person by the geologist to the commercial laboratory. Al other samples were sealed into a box and delivered by DHL to the laboratory.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No sampling techniques or data have been independently audited.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding 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 Manono licence has been recently awarded as a Research Permit PR 13359 issued on the 28th December 2016 and valid for 5 years. All indigenous title is cleared and there are no other known historical or environmentally sensitive areas.
	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.	See above, no other known impediments.

Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Previous exploration of relevance was undertaken by: Within PR13359 Geomines carried out a program of drilling, at the RD Pit only, between 1949 and 1951, targeted on the fresh pegmatite in the Kitotolo section at the western end of the Manono intrusion. The drilling consisted of 42 vertical holes drilled to a general depth of around 50 to 60m and reaching the -80m level. Drilling was carried out on 12 sections at irregular intervals ranging from 50m to 300m, and over a strike length of some 1,100m. Drill spacing on the sections varied from 50 to 100m. The licence area has been previously mined for tin and tantalum including “coltan” through a series of open pits over a total length of approximately 10km excavated by Zairetain sprl. More than 60Mt of material was mined from three major pits and several subsidiary pits. 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. Zairetain Parastatal Mineral company – limited exploration work within the Manono extension licences, Historical drilling of 42 diamond core drill holes and excavation and processing of approximately 90Mm3 of mineralised material for extraction of tin and tantalum at the nearby Manono mine.

Geology	Deposit type, geological setting and style of mineralisation.	The Project lays 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 comprises 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 My ago) is assigned to the Katangan cycle and is associated with widespread vein and pegmatite mineralization containing tin, tungsten, tantalum, niobium, lithium and beryllium. Deposits of this type occur as clusters and are widespread throughout the Kibaran terrain. In the DRC, the Katanga Tin Belt stretches over 500 km from near Kolwezi in the southwest to Kalemie in the northeast comprising numerous occurrences and deposits of which the Manono deposit is the largest. The geology of the Manono area is poorly documented and no reliable maps of local geology were observed. Bassot and Morio (1989) provide the most comprehensive account of the geology of the Manono deposits from which the following is largely derived. The Manono pegmatites are hosted by a series of quartzitic mica schists presumed to belong to the Lower Kibaran, which are associated with volcanic and intrusive rocks of mainly doleritic composition that are also well represented at Manono. The schists observed in the vicinity of the mine are generally steeply dipping in contrast to the sub-horizontal attitude of the pegmatite intrusions. The pegmatite intrusion is exposed in two areas, Manono in the northeast, and Kitotolo in the southwest. These are separated by a 2.5 km unexposed section centered on Lake Lukushi and the surrounding alluvial plain. It is proposed that this is a faulted section due to the highly weathered nature of the pegamatite to clays derived from mica.
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: • easting and northing of the drill hole collar • elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar • dip and azimuth of the hole • down hole length and interception	Historic core drilling was completed on PR13359 and was selective in nature and served only to test for the existence of mineralization within the southern most areas of the Kitotolo prospect. Maximum depth attained was 180 metres and all holes were vertical. No database of the drill holes is available. According to previous authors, the drilling consisted of 42 vertical diamond drill holes drilled to a general depth of around 50 to 60m and reaching the -80m level. Drilling was carried out on 12 sections at irregular intervals ranging from 50m to 300m, and over a strike length of some 1,100m. Drill spacing on the sections varied from 50 to 100m.

	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.	As above.
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	Not applicable.
	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.	Not applicable.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Not applicable.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported	The core holes were drilled at -90 dip to intercept mineralisation generally dipping -30 to sub-horizontal. Recorded intercept lengths will therefore be greater than true width of mineralisation. Given the widely spaced reconnaissance nature of the drilling the geometry of the mineralisation reported is not known and true width is not known.
	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').	As above.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Not applicable.
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.	Due to the nature of the drilling and lack of adequate records and survey control data available, they are to be considered indicative only and not material.
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	No further data available.

	results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	
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).	Further work will include mapping, soil sampling and bedrock sampling for geochemical anomalies to identify prospective target zones and then RC drill testing of the higher priority targets. Diamond drilling will be included in subsequent phases of 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.	The diagrams show the target areas.