ASX Announcement

Quarterly Activities Report for period ending 31st March 2018

Highlights:

Gabanintha Project

- Metallurgical test work results confirmed the Company's view that Gabanintha will be able to supply high quality V_2O_5 products to meet the needs of energy storage and steel making customers.
- Test work completed to-date has determined comminution parameters for high-grade vanadium material at Gabanintha as well as accurately testing the recovery and quality of a vanadium ore concentrate.
- Further test work is underway to optimise the process flowsheet, optimise vanadium recovery and test the recovery of other metals including titanium, cobalt, nickel and copper.
- Appointment of Wood Mining Group and commencement of Pre-Feasibility Study.
- Vanadium expert process engineering manager appointed to further strengthen AVL team and lead PFS study.

VSUN Energy

- Registration of interest submitted to Western Power for its Stand-alone Power Systems' project covering 60 sites.
- Steady interest in the supply of commercial Vanadium Redox Flow Battery systems through incoming calls to the VSUN Energy sales desk.

Corporate

- Mastermines represented AVL during a follow-up trip to China including FerroAlloyNet Conference in Wuhan.
- AVL represented at the annual Vanitec meeting in Brazil which included a site visit to Largo Resources, Maracas Mine.
- Options exercised raising $205,000 during the quarter.
- Capital Raising completed in April 2018, raising $3m before costs, introducing two resource focused institutions to the register of AVL.
- Cash position post capital raising of $5.9m. Use of funds to focus on PFS deliverables.

30.04.2018

ASX ANNOUNCEMENT

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Projects:

Gabanintha – Vanadium
Coates - Vanadium
Blesberg –Feldspar/Lithium/Tantalum
Nowthanna Hill - Uranium/Vanadium

Activities for the March 2018 quarter for Australian Vanadium Limited ("AVL" or "the Company") are as follows:

GABANINTHA VANADIUM PROJECT

The Company provided three metallurgical testwork updates during the quarter;

GABANINTHA BENEFICIATION TESTWORK

On 20th February 2018, AVL Reported on the initial results of detailed comminution and magnetic beneficiation metallurgical test work which is being undertaken on 24 large diameter diamond core samples.

On 24th April 2018 AVL reported on further results from ongoing test work. Work is focusing on geometallurgical characterisation, flowsheet development and further optimization of concentrate yield and quality.

Bench-scale magnetic separation test work on fresh and partially weathered samples of massive titaniferous magnetite material returned excellent results, with concentrate grades averaging 1.43% V_2O_5, 1.12% SiO_2 and 2.72% Al_2O_3, at an average vanadium recovery greater than 90%. Gabanintha's unique high vanadium grade, coarse grained, massive titaniferous magnetite, allows magnetic upgrading at relatively coarse grind size, supporting a low-energy beneficiation process.

Gabanintha's massive titaniferous magnetite horizons exhibit extremely well developed coarse crystalline igneous textures. Recent magnetic separation testwork has been performed on oxide, transitional and fresh rock samples at a nominal grind size of P_{80} 106µm. All beneficiation testwork is reported to this grind size unless stated otherwise.

The High-Grade Zone of massive-magnetite is located at the base of the mineralised intrusion. This High-Grade Zone is the focus of current economic studies due to its potential for high-yield, high-grade vanadium-iron concentrate suitable for traditional roast-leach vanadium recovery. This method of vanadium recovery is the most common and well understood process for high-grade vanadium-titanium-iron ores globally and is currently used by all current global producers of vanadium from magnetite sources, including Largo Resources, Bushveld Minerals and Glencore.

The metallurgical testwork was based on 24 massive-magnetite composites from Gabanintha diamond drill core. The composites were selected as discrete intervals within 10 diamond drill holes with a 173m depth range (ranging from 14m from surface to 187m) across 915m of Northing, thereby representing a significant portion of the current Measured and Indicated Resource area.

Comminution Test Work

A series of standard detailed comminutions tests have been completed. These tests allow the determination of energy requirements to prepare a consistent sized ore for later processing in any operations. This entailed crushing and grinding, density and abrasiveness testing. The results are included and summarised in Appendix 2 of the 20th February 2018 announcement.

Highlights of the first stage of detailed comminution test work completed are:

- Consistent energy consumption of 6.9 kWh/t was established to break material in a AG/SAG milling scenario with a closing screen size of 2.8mm.
- Density correlation strongly supports use of regressed density with iron grade in magnetite. Average density of 3.6 is applicable to oxide, transition and fresh high-grade materials.
- Abrasion index work indicate ore only "slightly abrasive", indicating modest wear of comminution equipment.

Magnetic Separation

- Previous bench-scale test work on ten fresh high-grade massive magnetite samples using Wet Low Intensity Magnetic Separation (WLIMS) at 1500 Gauss indicated exceptional concentrate recovery, on average capturing 92.03% of vanadium in a 1.42% V_2O_5 concentrate. The average concentrate calculated from 10 fresh rock metallurgical samples had an overall mass recovery of 72.9% with 57.3% Fe and a very low silica content of 0.55% SiO_2 (See Figure 1).
- Optimisation tests on nine transitional materials using WLIMS at 1500 Gauss and Rare Earth Magnetic Separation (REMS) at 2600 Gauss produced a weighted average concentrate product capturing 87.8% of vanadium in a 1.45% V_2O_5 concentrate. The average calculated head grade of the nine samples was 1.13% V_2O_5. The combined concentrate had an average mass yield of 67.0% with 52.3% Fe grade, 15.4% TiO_2 and 1.68% SiO_2 grade. A summary of the magnetic response for each transitional sample is provided in Figure 2.
- Concentrate grades from transitional samples of up to 1.79% V_2O_5 (Sample 17) and 1.67% V_2O_5 (Sample 16) were achieved, indicating the potential to enhance the concentrate grade further for some material types.
- Metallurgical samples classified as oxide returned lower concentrate yield using magnetic separation up to 2600 Gauss. Further work is in progress to characterise the oxide material type and evaluate vanadium upgrading potential using gravity, hydrosizing and higher magnetic intensity processes.
- Base metals (nickel and copper) and cobalt are present at low grades within the Gabanintha fresh rock mineralisation and preferentially report to the non-magnetic stream. Microscopic observations have identified coarse sulphide minerals within silicate phases of the massive titaniferous iron mineralisation.

Work is continuing to understand the mineralogy driving the metallurgical responses and optimise concentrate grade and lower silica and alumina in oxide, transition and fresh feed material. A number of opportunities have been identified to further enhance the concentrate quality and these initiatives are being investigated in the laboratory.

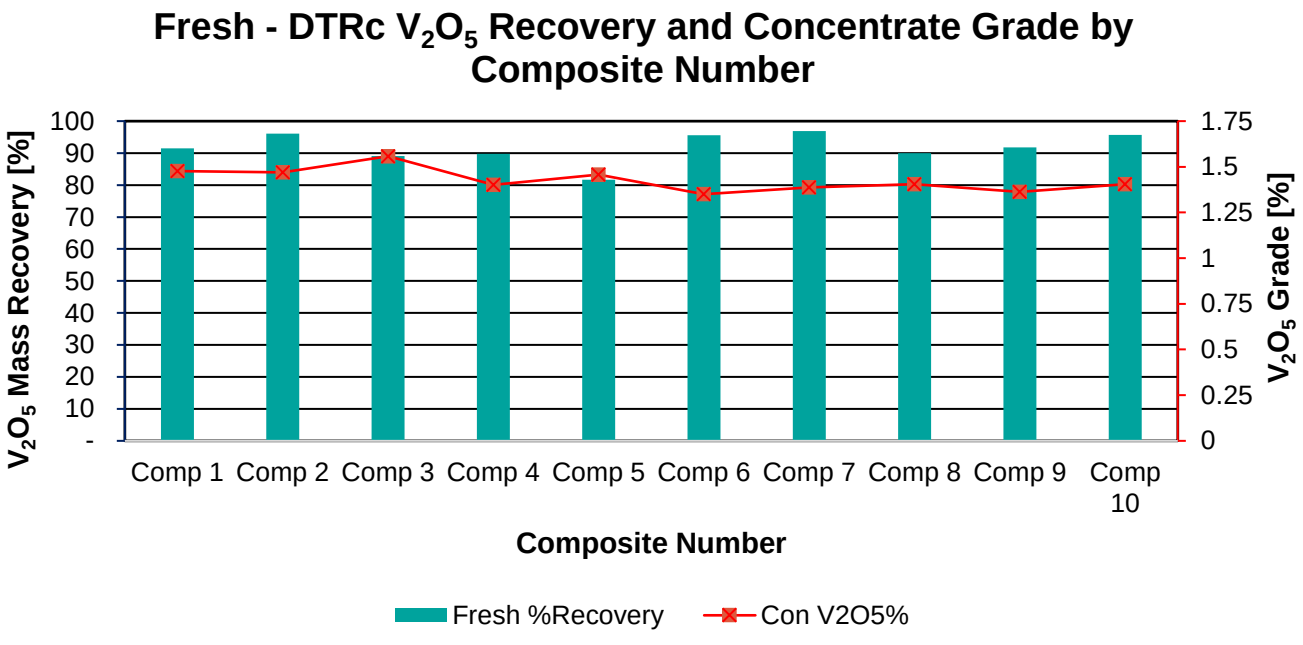

Figure 1 Fresh Composites V_2O_5 DTR recovery and concentrate grade

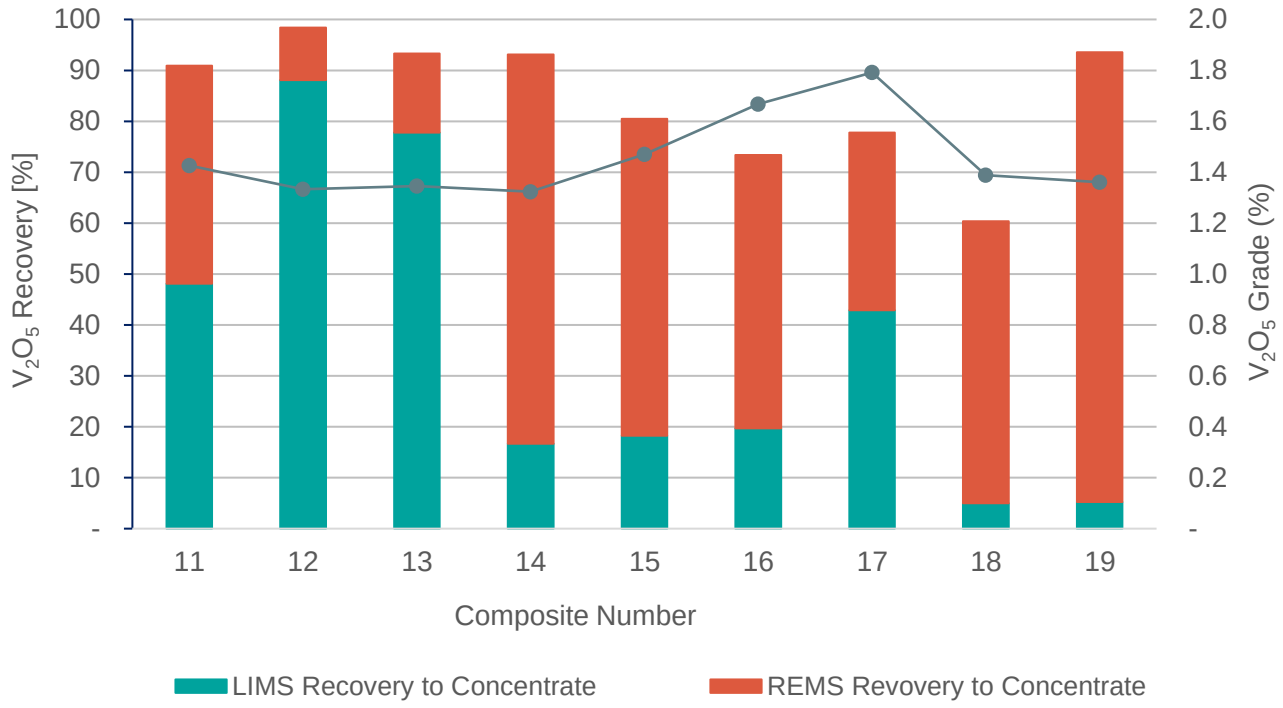

Figure 2 Magnetic V_2O_5 recovery and concentrate grade for transitional samples

Further testwork is already underway to optimise the process flowsheet for inclusion in the Pre-Feasibility Study. The optimisation of feed quality and yield has significant implications for downstream project economics by ensuring the lowest use of water, reagents and power. The objective is for Gabanintha to provide the highest quality processing feed possible from the entire high-grade orebody via the simplest circuit design.

A prefeasibility study (PFS) of the Gabanintha Vanadium Project has commenced and will focus on delivery of high specification products suitable for battery and steel markets.

Key aspects of the PFS are being completed in parallel with the remaining metallurgical test work. These include environmental studies, native title negotiations, mining licence grant, process flow sheet development and preliminary mine modelling.

Testwork plans for the production of high quality V_2O_5 products

The Company is currently planning a test program to undertake concentrate roast-leach pilot testing and subsequent high-purity vanadium pentoxide recovery. The planning and proper execution of detailed testing will follow the finalisation of the vanadium concentrate beneficiation circuit (part of the PFS study) and the collection of new sample material from planned additional drilling at Gabanintha. This detailed testing will form part of the DFS level studies commencing later in 2018.

In the short term, a simpler test program is being costed to conduct bench-scale batch roast-leach tests on available concentrate material. The objectives of these tests will be to demonstrate the vanadium leach extraction at a range of reagent addition rates and roast conditions.

Acid Leach Tests

On 9th January 2018 the Company provided an update on testwork results received from Canadian company Sedgman in conjunction with Neomet. The testwork indicated encouraging results on low and high-grade oxide materials provided for acid leach extraction testing by Sedgman in Canada.

The high-grade oxide sample (1.78% V_2O_5) showed extraction of 96% of vanadium, 87% of iron and 1% of titanium after 1 hour HCl (hydrochloric acid) leach. Titanium upgraded from 8.8% to 23.4% in the residue.

The low-grade oxide sample (0.67% V_2O_5) showed extraction of 88% of vanadium, 97% of iron and 33% of titanium after 1 hour HCl leach.

AVL sent core samples to be tested through a standard Neomet bench scale testing facility in their Montreal, Canada laboratory. These initial tests were conducted free-of-charge to AVL.

The proprietary process has previously demonstrated its ability to extract and recover over 95% of secondary metals at a commercial grade, with a metal purity of over 99.5%. The process potentially enables the extraction of V_2O_5, TiO_2 and Fe_2O_3 from TVM ores such as Gabanintha. The process seeks to generate maximum value of in-situ metal credits. A unique closed HCl leaching circuit for acid regeneration and reuse/recycle is used in the process.

AVL studies to date focused on initial magnetic concentration of its mineralised materials and processing of the concentrate using the technically mature pyrometallurgical process. Pyrometallurgical processes require ore concentrate to be roasted at ~850°C for 2 hours to release vanadium. Alternative, hydrometallurgical methods such as the Neomet process can be economically preferred substitutes in some situations, particularly when reagents such as acid can be efficiently recycled.

The positive results from the initial Neomet leach test on the oxide materials work allows AVL to better understand the potential recovery of other valuable metal credits.

The Company will consider additional testwork programmes using the Neomet process following the completion of other ongoing test work.

Vanadium Experts Appointed

Production and technical management expert, Todd Richardson, has been appointed to drive the pre-feasibility study for the Gabanintha Vanadium Project. Todd has started work in AVL's West Perth office. Non-Executive Director, Daniel Harris has been appointed as Technical Director for the project.

Wood Mining and Metals, led by Principal Engineer Brian McNab, is to be appointed as the primary contractor for the PFS.

The depth of knowledge and experience in the vanadium sector that these expert appointments bring, provides AVL with a leading edge above competitors in the vanadium exploration space.

VSUN ENERGY

AVL announced on 4th April 2018, that its energy focused subsidiary VSUN Energy had submitted a registration of interest to Western Power for its Stand-alone Power Systems (SPS) project.

SPS are hybrid systems which are not physically connected to the existing network. The systems use a combination of renewable energy, batteries and back-up diesel generators, enabling generation, storage and reliable delivery of power. They are particularly useful in areas on the fringe of the existing grid where power is not as stable, or in remote, off-grid locations.

60 locations in regional Western Australia have been identified by Western Power. This project will build upon the previous SPS trial in 2017, where 6 properties in the Great Southern were provided with SPS. Lessons learnt from this initial rollout will be integrated into the larger project.

Vanadium redox flow batteries (VRFB) have particular strengths which are useful in SPS. The ability to store large amounts of energy means that there is a reduced reliance on diesel, if sized correctly diesel can be removed

altogether. VRFB are non-flammable, meaning that they are ideally suited to the many bushfire prone areas in Western Australia. The systems can be cycled as many times as the customer wants, without degradation to performance and be charged and discharged at the same time, allowing them to form the basis of the grid with their integrated inverters. They are ideal for providing greater than 4 hours of full baseload energy when matched to a site.

The battery VSUN Energy installed at a native tree nursery in Busselton in late 2016 (see ASX Announcement dated 18th May 2016) is a 10kW power system with 100kWh of energy storage, meaning that it can deliver 10kW for 10 hours or with a smaller load, provide 5kW continuously for 20 hours. This vanadium-based battery has been performing continuously as a SPS since that installation date. The 10kW-100kWh system has required minimal maintenance and used 0kW of grid electricity since installation. It has not needed to draw energy at all from the grid in over a year and a half of operation, in spite of cloudy periods during the winter. It is still performing in the same manner as it was when it was installed.

Figure 3 Vanadium redox flow battery in Busselton, Western Australia

CORPORATE

Mastermines

Mastermines mining materials promotion and marketing consultancy is assisting AVL with an active approach towards future Chinese cooperation, as the Company seeks to develop interest in the Gabanintha vanadium project and markets for its potential products. In recent months the supply of vanadium has tightened considerably providing an excellent environment for negotiations

Mastermines returned to China on AVL's behalf during the quarter, to follow up on previous marketing and engage with new targeted prospects. This provided AVL with an active involvement in China's largest vanadium conference in Wuhan.

A follow-up trip to China is planned for the next quarter which will include AVL's management. A number of emerging vanadium enterprises have been earmarked from comprehensive research over preceding months.

Marketing

The Company presented at the investor focused conferences Paydirt Battery Metals in Perth; Lithium and Battery Metals in Perth and Mines and Money Asia in Hong Kong. Directors completed a broker roadshow in Melbourne and Sydney. The Company was also represented at the Vanitec meeting in Brazil which included a visit to Largo Resources' vanadium operation enabling valuable discussion with the vanadium producers and the ability to see their processes in action.

On 19th April 2018 AVL announced that it will be part of Benchmark Minerals' World Tour, with Vincent Algar delivering keynote presentations on the Australian leg of the tour. This will be the first time that vanadium's energy storage supply chain has been included.

Capital Raising

During the quarter the Company issued 44,154,084 new shares following receipt of $649,594.88 from the exercise of unlisted options at 1.4712 cents per share in December 2017.

During the quarter the Company received a total of $205,248.82 through the exercise of 10,262,441 December 31, 2018 listed options at 2.0 cents per share.

On 12th April 2018 the Company announced an equity placement of 75,000,000 ordinary fully paid shares, at an issue price of $0.04 each, to raise $3,000,000 before costs. The placement was completed through Fosters Stockbroking and was placed with two leading Australian Resource investment funds.

Cash Position

As at the 31st March 2018, the Company had $2.971 million in cash and cash equivalents.

For further information, please contact:

Vincent Algar, Managing Director

About Australian Vanadium Limited

AVL is a diversified resource company with an integrated strategy with respect to vanadium, seeking to offer investors a unique exposure to all aspects of the vanadium value chain – from resource through to steel and energy storage opportunities.

AVL is advancing the development of its 100%-owned, world-class Gabanintha vanadium project. The Gabanintha vanadium project is currently one of the highest-grade vanadium projects being advanced globally with existing Mineral Resource of 179.6Mt at 0.75% vanadium pentoxide (V_2O_5), made up of a Measured Mineral Resource of 10.2Mt at 1.06% V_2O_5, an Indicated Mineral Resource of 25.4Mt at 0.62% V_2O_5, and an Inferred Mineral Resource of 144Mt at 0.75% V_2O_5, reported in compliance with the JORC Code 2012 (see AVL ASX Announcement 5th September 2017).

The Mineral Resource includes a distinct massive magnetite high-grade zone of 92.8 Mt at 0.96% V_2O_5 consisting of Measured Mineral Resource of 10.2Mt at 1.06% V_2O_5, Indicated Mineral Resource of 4.8Mt at 1.04% V_2O_5, and Inferred Mineral Resource of 77.8Mt at 0.94% V_2O_5.

AVL is aiming to develop a local commercial production capacity for high-purity vanadium electrolyte, which forms a key component of vanadium redox flow batteries (VRFB). AVL, through its 100%-owned subsidiary VSUN Energy Pty Ltd, is also actively marketing VRFB in Australia.

Zone	Classification	Mt	V_2O_5 %	Fe %	TiO_2 %	SiO_2 %	Al_2O_3 %	LOI %
HG	Measured	10.2	1.06	41.6	12.0	11.6	8.6	4.2
	Indicated	4.8	1.04	41.9	11.5	12.0	8.0	3.6
	Inferred	77.8	0.94	41.2	10.7	12.7	7.9	3.3
	Sub-total	**92.8**	**0.96**	**41.3**	**10.9**	**12.6**	**8.0**	**3.4**
LG 2-5	Measured	-	-	-	-	-	-	-
	Indicated	20.5	0.52	24.3	7.1	27.9	17.6	8.4
	Inferred	61.8	0.50	26.2	7.0	26.9	16.1	7.2
	Sub-total	**82.4**	**0.51**	**25.7**	**7.0**	**27.2**	**16.5**	**7.5**
Trans 6-8	Measured	-	-	-	-	-	-	-
	Indicated	-	-	-	-	-	-	-
	Inferred	4.5	0.66	28.4	7.2	24.5	16.6	8.4
	Sub-total	**4.5**	**0.66**	**28.4**	**7.2**	**24.5**	**16.6**	**8.4**
Total	Measured	10.2	1.06	41.6	12.0	11.6	8.6	4.2
	Indicated	25.4	0.62	27.7	7.9	24.9	15.8	7.5
	Inferred	144.1	0.75	34.4	9.0	19.2	11.7	5.2
	Sub-total	**179.6**	**0.75**	**33.8**	**9.0**	**19.6**	**12.1**	**5.4**

Table 1 Gabanintha Project – Mineral Resource estimate by domain and resource classification using a nominal 0.4% V_2O_5 wireframed cut-off for low grade and nominal 0.7% V_2O_5 wireframed cut-off for high grade (total numbers may not add up due to rounding)

Tenement Schedule

Tenement Information as Required by Listing Rule 5.3.3 For the Quarter Ended 31 March 2018					
Project	**Location**	**Tenements**	**Economic Interest**	**Notes**	**Change in Quarter %**
Western Australia	**Gabanintha**	E51/843	100% Granted		Nil
		E51/1396	100% Granted		Nil
		E51/1534	100% Granted		Nil
		E51/1576	100% Granted		Nil
		E51/1685	100% Granted		Nil
		E51/1694	100% Granted		Nil
		E51/1695	100% Granted		Nil
		P51/2566	100% Granted		Nil
		P51/2567	100% Granted		Nil
		P51/2634	100% Granted		Nil
		P51/2635	100% Granted		Nil
		P51/2636	100% Granted		Nil
		MLA51/878		100% On application	Nil
Western Australia	**Nowthanna**	M51/771	100% Granted		100%
Western Australia	**Peak Hill**	E52/3349	0.75% NSR Production Royalty		Nil
Western Australia	**Coates**	E70-4924-I	100% Granted		100%
South Africa	**Blesberg**	(NC) 940 PR		Earning 50.03%	Nil

Competent Person Statements – Gabanintha Project

The information in this report that relates to Exploration Results and Exploration Targets is based on and fairly represents information and supporting documentation prepared by Mr Brian Davis (Consultant with Geologica Pty Ltd). Mr Davis is a shareholder of Australian Vanadium Limited. Mr Davis is a member of the Australian Institute of Geoscientists and has sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to the activities undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Specifically, Mr Davis consents to the inclusion in this report of the matters based on his information in the form and context in which they appear.

The information in this report that relates to Mineral Resources is based on and fairly represents information compiled by Mr Lauritz Barnes, (Consultant with Trepanier Pty Ltd) and Mr Brian Davis (Consultant with Geologica Pty Ltd). Mr Davis is a shareholder of Australian Vanadium Limited. Mr Barnes is a member of the Australasian Institute of Mining and Metallurgy and Mr Davis is a member of the Australian Institute of Geoscientists and both have sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to the activities undertaken to qualify as Competent Persons as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Specifically, Mr Barnes is the Competent Person for the estimation and Mr Davis is the Competent Person for the database, geological model and site visits. Mr Barnes and Mr Davis consent to the inclusion in this report of the matters based on their information in the form and context in which they appear.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resource or 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 person's findings are presented has not been materially modified from the original market announcement.

Competent Person Statement – Blesberg Exploration Program

The information relating to the Blesberg Feldspar-Lithium-Tantalum Project exploration program reported in this announcement is based on information compiled by Mr Vincent Algar. Mr Algar is a Member of The Australian Institute of Mining and Metallurgy (AusIMM) and a full-time employee of the Company. Mr Algar has more than 25 years' experience in the field of mineral exploration. He has sufficient experience relevant to the style of mineralisation and type of deposit under consideration 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. Algar consents to the inclusion in the report of the matters based on the information made available to him, in the form and context in which it appears.

Competent Person Statement – Metallurgical Results

The information in this statement that relates to Metallurgical Results is based on information compiled by independent consulting metallurgist Brian McNab (CP. B.Sc Extractive Metallurgy), Mr McNab is a Member of The Australasian Institute of Mining and Metallurgy. Brian McNab is employed by Wood Mining and Metals. Mr McNab has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which is 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 McNab consents to the inclusion in the report of the matters based on the information made available to him, in the form and context in which it appears.

Concept Study Parameters – Cautionary Statement

The Concept Study in this report (nominal +/- 50% accuracy) is based on low-level technical and economic assessments and is insufficient to support estimation of Ore Reserves or to provide assurance of an economic development case at this stage, or to provide certainty that the current conclusions of the Concept Study will be realised. There is a moderate level of geological confidence associated with Measured Indicated and Inferred Mineral Resources and there is no certainty that further exploration and development work will result in the estimation of Ore Reserves or that the production target itself will be realised. The Company advises the Concept Study results and production targets reflected in this announcement are highly preliminary in nature as conclusions are drawn from the average grade of Measured, Indicated and Inferred Resources. A generic mining cost per tonne of material moved and an average resource grade has been used to determine overall mining and processing costs as opposed to a detailed mining block model evaluation to produce a detailed mining schedule.

Forward Looking Statements

This announcement may contain certain "forward-looking statements" which may not have been based solely on historical facts, but rather may be based on the Company's current expectations about future events and results. Where the Company expresses or implies an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and believed to have a reasonable basis. However, forward looking statements are subject to risks, uncertainties, assumptions and other factors which could cause actual results to differ materially from future results expressed, projected or implied by such forward-looking statements. Such risks include, but are not limited to Resource risk, metal price volatility, currency fluctuations, increased production costs and variances in ore grade or recovery rates from those assumed in mining plans, as well as political and operational risks in the countries and states in which we sell our product to, and government regulation and judicial outcomes. For more detailed discussion of such risks and other factors, see the Company's Annual Reports, as well as the Company's other filings. Readers should not place undue reliance on forward looking information. The Company does not undertake any obligation to release publicly any revisions to any "forward looking statement" to reflect events or circumstances after the date of this announcement, or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws.