ASX ANNOUNCEMENT **14TH OCTOBER 2021**

ELECTROMAGNETIC CONDUCTORS AT COATES NICKEL-COPPER-PGE PROJECT

Significant 1,900 metre long electromagnetic conductor at Coates highlights exploration potential

KEY POINTS

- **Three conductors identified by SkyTEM Airborne Electromagnetics (AEM) survey at Coates, with the largest having a strike length of 1,900 metres**
- **Coherent 1,900m long bedrock conductor (T2) present to the northeast and parallel to the Coates magnetite gabbro**
- **No drilling has been completed in the T2 area, along a magnetic high and topographic low interpreted by AVL to be a serpentinised ultramafic unit, an ideal host for Ni-PGE mineralisation**
- **Two additional lower tenor bedrock conductors (T4 and T6) also identified in the south of the tenement area**
- **AVL is exploring for nickel, base metals, gold and platinum group elements (PGEs) at its Coates Project near Wundowie 80km NE of Perth in WA**
- **The Project covers a southern extension of similar mafic-ultramafic rocks to the sequence that is host to the Chalice Gold Mines' nickel-copper-PGE Julimar Project (ASX:CHN) 29 km NNW of Coates**
- **Priority follow up work planned with EIS funded drilling program in Q4 of 2021 – location of 1,900m long conductor supports drill program design**

Australian Vanadium Limited (ASX: AVL, "the Company" or "AVL") is pleased to announce results from a SkyTEM Airborne Electromagnetic (AEM) survey over the AVL tenure at the Coates Mafic Intrusive Complex near Wundowie, 80km NE of Perth in Western Australia. The survey was completed by Charger Metals NL (ASX:CHR), with AVL participation, to collect electromagnetics data over the extent of the Coates Mafic Complex.

The Coates Project hosts a vanadium-titanium magnetite deposit (VTM) and was previously explored only for vanadium-titanium mineralisation, with no other economic metal assays recorded.

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Historical exploration has exclusively focused on vanadium mineralisation, which is the reason AVL pegged the project in 2017. Subsequent and significant recent Ni-Cu-PGE discoveries in the region have supported AVL's expansion of exploration for nickel, base metals, gold and PGEs at the Coates Project (location and tenure shown in Figure 1).

Managing Director, Vincent Algar comments, *"The EM results are highly encouraging considering the success of the method in other discoveries in the area. The new data supports the matching geological setting for Ni-PGE bearing host rocks. The 1,900m long coincident, magnetic high, EM high and topographic low further validate our past work at Coates and provide impetus for our planned drilling program using EIS funding late in 2021. Whilst the Company's main focus is on the development of the Australian Vanadium Project at Gabanintha, it is great to share in the discovery excitement being generated in this region. The suite of potential minerals at Coates are currently in high demand. We look forward to seeing what the planned drilling uncovers."*

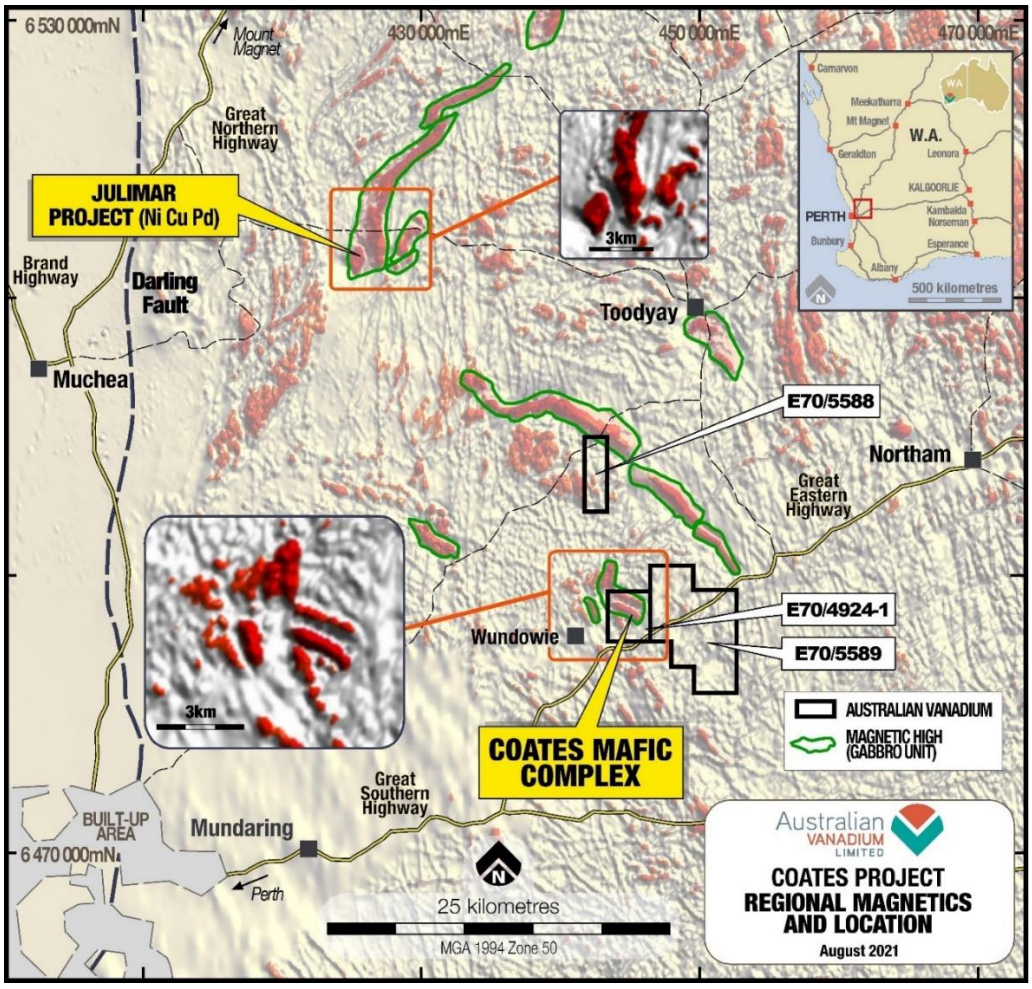

Figure 1 Coates Mafic Complex Location and Tenure showing proximity and magnetic similarity to Chalice Gold Mines Julimar Discovery on 80m GSWA Aeromagnetics Imagery[1]

[1] Brett JW, 2020, 80 m Magnetic Merged Grid of Western Australia 2020 version 1: Geological Survey of Western Australia, www.dmp.wa.gov.au/geophysics

The AVL tenement E70/4924-I at the Coates Project covers 11.68 km^2 over a southern extension of similar mafic-ultramafic rocks to the sequence that is host to the nickel-copper-PGE Julimar Project discovery by Chalice Gold Mines Limited (ASX:CHN).

Among the rarest metals on earth, PGEs comprise ruthenium, rhodium, palladium, osmium, iridium, and platinum, which are elements with high melting points, corrosion resistance and catalytic qualities.

ELECTROMAGNETICS SKYTEM SURVEY

During August, AVL participated in an Airborne Electro Magnetic (AEM) survey of the greater Coates Mafic Complex, which was organised by Charger Metals. The AEM survey was completed with SkyTEM technology, flown at 150m spaced lines. The survey has identified a coherent 1,900m long conductor (T2), coinciding with the topographic low, magnetic high that AVL has interpreted as a potential serpentinised ultramafic rock, akin to the rocks hosting CHN's Julimar Project PGE-Ni-Cu deposit. This latest phase of data collection adds to AVL's interpretation of a continuation of mafic – ultramafic rocks north of the main magnetite gabbro ridge that may be prospective for Ni-Cu-PGE mineralisation.

The gabbro magnetite ridge is the target of almost all previous exploration drilling to date, being the location of V-Ti Magnetite mineralisation, with no drilling having been completed on this prospective north-eastern magnetic, and now electromagnetic conductor feature. See Figure 2 for the location of the T2 conductor identified during the SkyTEM survey. The image also shows the presence of two low order conductors (T4 and T6), plus the location of the historical drilling on the magnetite gabbro ridge. The electromagnetics image from the recent survey is shown, with the background of reprocessed GSWA 40m aeromagnetics data. Importantly, the known magnetite gabbro ridge does not elicit a conductive response, indicating the conductivity of the T2 zone is unlikely to be caused by magnetite content of the rocks. Drilling is required to determine whether the conductive zone is due to the presence of sulphides in the bedrock.

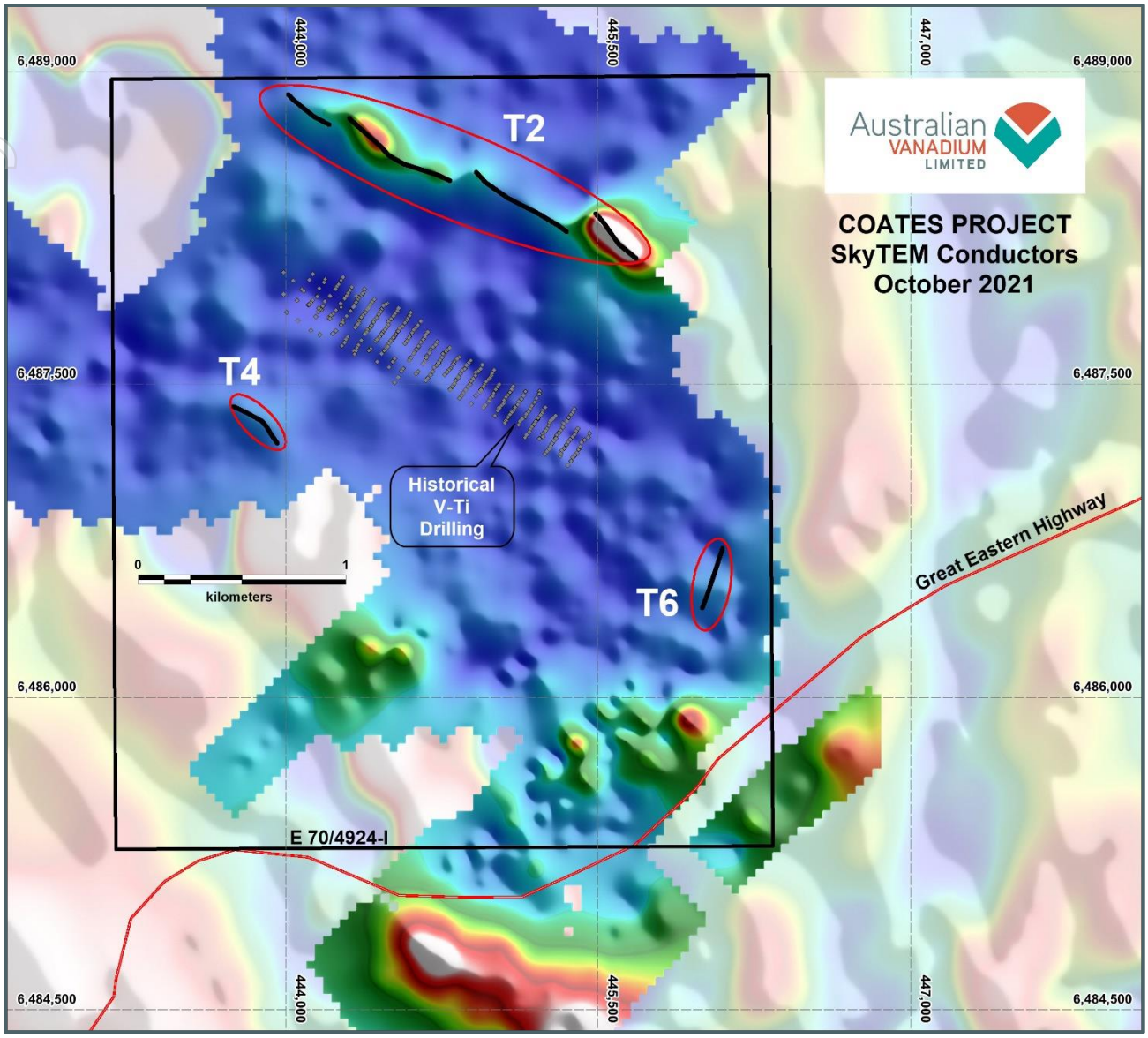

Figure 2 SkyTEM results (Channel 30) with bedrock conductors T2, T4 and T6 in AVL tenement E 70/4924-I

FORTHCOMING WORK

AVL has further phases of field and desktop work planned at the Coates Project during the last quarter of 2021.

EIS co-funded Reverse Circulation (RC) pre-collar and diamond tail drilling is planned for Q4 2021[2]. The grant is for up to $112,500, half of the cost of an 11 hole drill program. The drilling will provide a stratigraphic section through the Coates Mafic Intrusion within AVL tenure, allowing for lithological and geochemical studies, focussing on nickel-copper-PGE prospectivity. The results from the

[2] See AVL ASX announcement dated 23rd April 2021 *"Grant Funding for Nickel-Copper-PGE-Gold Drilling at Coates Project"*

SkyTEM survey strongly support the validity of the existing drill program design to test mafic – ultramafic stratigraphy.

An application for approval to conduct non-ground disturbing works (soil sampling and ground geophysics) will be submitted to the Department of Biodiversity, Conservation and Attractions (DBCA) during Q4 2021 as part of the approvals process to work on a wider area of E70/4924-I and within Woondowing Reserve.

Further soil surveys will be completed to cover the main intrusive area. Focus will be on extending sampling out from the areas showing anomalous Cu, Pt, Ni, Cr soil geochemistry identified in the 2021 survey, pending approval by DBCA.

For further information, please contact:
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This announcement has been approved in accordance with the Company's published continuous disclosure policy and has been approved by the Board.

ABOUT AUSTRALIAN VANADIUM

AVL is an Australian owned resource company focused on production of high value vanadium products in Australia. AVL is 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 world-class Australian Vanadium Project and intends to produce a value-added vanadium product in Australia prior to sale to steel, battery and specialty chemical customers.

The Australian Vanadium Project is currently one of the highest-grade vanadium projects being advanced globally, with 208.2Mt at 0.74% vanadium pentoxide (V_2O_5) and containing a high-grade zone of 87.9Mt at 1.06% V_2O_5 reported in compliance with the JORC Code 2012 (see ASX announcement dated 4th March 2020 '*Total Vanadium Resource at The Australian Vanadium Project Rises to 208 Million Tonnes*').

The Australian Federal Government awarded the Australian Vanadium Project 'Major Project Status' in September 2019. The Western Australian State Government awarded the Australian Vanadium Project 'Lead Agency Status' in April 2020.

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 Resources 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 have not been materially modified from the original market announcement.

AVL has developed a local production capability 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 actively marketing VRFB in Australia.

The Coates Project is a secondary project for AVL, initially demonstrating interest for its vanadium potential, but now being examined for nickel, base metals, gold and platinum group elements.

COMPETENT PERSON STATEMENT – EXPLORATION RESULTS

The information in this statement that relates to Exploration Results is based on information compiled by independent consulting geologist Brian Davis BSc DipEd who is a Member of The Australian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists and is employed by Geologica Pty Ltd. Brian Davis 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 Davis 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.

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.

APPENDIX 1

JORC Code, 2012 Edition, Table 1 Exploration Results

Section 1 – Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
Sampling Techniques	*Nature and quality of sampling (e.g. cut channels, random chips, or specific specialized 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.*	This release contains no sampling results.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	This release contains no sampling results.
	Aspects of the determination of mineralization that are Material to the Public Report.	This release contains no sampling results.
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.).*	No drilling results included in release.
Drill Sample Recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	No drilling results included in release.
	Measures taken to maximize sample recovery and ensure representative nature of the samples.	No drilling results included in release.
	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.	No drilling results included in release.
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support*	This release contains no sampling results.

Criteria	JORC Code Explanation	Commentary
	appropriate Mineral Resource estimation, mining studies and metallurgical studies.	
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	This release contains no sampling results.
	The total length and percentage of the relevant intersections logged.	This release contains no sampling results.
Sub-Sampling Techniques and Sample Preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	This release contains no sampling results.
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	This release contains no sampling results.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	This release contains no sampling results.
	Quality control procedures adopted for all sub-sampling stages to maximize representivity of samples.	This release contains no sampling results.
	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.	This release contains no sampling results.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	This release contains no sampling results.
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.*	This release contains no sampling results.
	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.	Data in this release was captured with SkyTEM312 AEM system configuration with interleaved Low Moment (LM) and High Moment (HM) transmitters. LM: ~3,000Am^2 peak moment. 0.80 ms on-time, 1.018 ms off time. First window 9.2 µs from end of current ramp. Last window 0.870 ms. SHM: ~475,000Am^2 peak moment. 5 ms on-time, 15 ms off time. First window 138.7 µs from end of current ramp. Last window 13,357 ms. Investigation depth of 300+ metres in areas of minimal weathering where extensive conductive targets are present at depth. Depth of investigation reduced in area of conductive overburden (eg. Weathered layer, salt lakes etc). Final processed data typical sounding interval density is 13 – 15m at 100 kph. 150m spaced lines at 045 degrees (NE-SW orientation).

Criteria	JORC Code Explanation	Commentary
	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.	This release contains no sampling results.
Verification of Sampling and Assaying	*The verification of significant intersections by either independent or alternative company personnel.*	This release contains no sampling results.
	The use of twinned holes.	This release contains no sampling results.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Data captured into automated digital systems prior to processing.
	Discuss any adjustment to assay data.	This release contains no sampling results.
Location of Data Points	*Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	Data is spatially located to sub-metre accuracy with a differential GPS (DGPS) during capture.
	Specification of the grid system used.	The grid projection used for Coates is MGA_GDA94, Zone 50. All maps included in this report are referenced to this grid.
	Quality and adequacy of topographic control.	Topographic control captured by DGPS system during capture.
Data Spacing and Distribution	*Data spacing for reporting of Exploration Results.*	The SkyTEM survey was flown at 150 metre spaced lines, with lines oriented perpendicular to the stratigraphy (045 degrees).
	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.	No Mineral Resource or Ore Reserve estimations have been applied.
	Whether sample compositing has been applied.	No Mineral Resource or Ore Reserve estimations have been applied.
	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	No drilling results included in release.
	If the relationship between the drilling orientation and the orientation of key mineralized structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	No drilling results included in release.
Sample Security	*The measures taken to ensure sample security.*	This release contains no sampling results.
Audits or Reviews	*The results of any audits or reviews of sampling techniques and data.*	This release contains no sampling results.

Section 2 – Reporting of Exploration Results

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.*	Exploration is located within Lease E70/4924-I. The tenement is 100% owned by AVL. The area comes under the ILUA legislation and the claimants are the Whadjuk people (Indigenous Land Use Agreement claim no. WC2011/009 in File Notation Area 11507). The Mines Department Native Title statutory regulations and processes apply. There are no outstanding Native Title issues. The following restricted access areas occur on the tenement, requiring Minister for Mines approval prior to works: Woondowing Nature Reserve Category 1A ((R14275 Freehold lot 29702) Extension of Nature Reserve (R14275 Freehold lot 29046) Area reserved for Railway Purposes (R23746 freehold lot 27520) Recreation Area (R11619 Freehold lot 28581)
	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.	At the time of reporting, there are no known impediments to obtaining a licence to operate in the area and the tenement is in good standing.

Criteria	JORC Code Explanation	Commentary
Exploration Done by Other Parties	*Acknowledgment and appraisal of exploration by other parties.*	The Coates deposit was identified in the 1960's by Mangore P/L and investigated with shallow drilling, surface sampling and mapping. Mangore WAMEX Report A1884 identified low grade vanadium bedrock mineralization (0.5 – 0.6% V_2O_5) below 30 – 50m of laterite cover. Regional exploration for gold was undertaken by Swan Gold P/L in the 1980's and extensive low-grade gold mineralization was identified in laterites in an area a few kilometres east of the current tenement. Vanadium exploration saw a resurgence in 2008 by Mercator Metals Pty Ltd and Orientation surveys, laterite morphology studies, surface geochemical surveys along roads, tracks and public land with a field portable XRF. Mining started in 1980, but the high silica content limited the production of vanadium pentoxide to approximately 500 pounds, and a year later production stopped. Historical Measured and Indicated Resources in 1968 were recorded as 39 Mt at 0.51% V_2O_5. Indicated Resources from the laterite deposit are reported as 1.5 Mt at 0.6% V_2O_5. ***NOTE: These resources do not comply with the JORC 2012 Mineral Resource Guidelines and are only included here for reference.***
Geology	*Deposit type, geological setting and style of mineralization.*	The bedrock geology at Coates Project consists of gabbros and anorthosites contained within Archaean mafic volcanics and meta-sediments, surrounded by gneisses and granitic rocks. Vanadium occurs within a titaniferous magnetite hosted by the gabbro-anorthosite unit. The Coates vanadium deposit occurs in magnetite lenses at the core of the layered Coates Gabbro within a Magnetite Gabbro that is about 2 km long and up to 500 m thick. The gabbro is poorly exposed in an area of extensive lateritisation and was originally thought to be between granites, however, recent re-interpretation indicates surrounding rocks are mafic volcanics and meta-sediments. It has a general strike of 120° dipping southwest at 70°. The hangingwall unit to the southwest is a meso-gabbro and the immediate footwall unit to the northeast is a leuco-gabbro/anorthosite. Granite intrudes the southeast corner of the magnetite gabbro, and all other rocks are intruded by late (Proterozoic?) dolerites that are relatively thin and striking about north – northwest. The oxidized pisolitic ferricrete caprock extends 10m to 20m below surface and contains vanadium associated with magnetite and other iron minerals. There is a parallel, weaker magnetic feature to the north of the magnetite

Criteria	JORC Code Explanation	Commentary
		gabbro, that AVL currently interpret as a possible serpentinised ultramafic unit, though this requires drill testing for verification.
Drillhole Information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:* *easting and northing of the drillhole collar* *elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar* *dip and azimuth of the hole* *down hole length and interception depth hole length.*	No drilling results included in release.
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.*	No sampling results are included in release.
	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.	No data aggregation methods have been applied.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalents have been used.
Relationship Between Mineralisation Widths and Intercept Lengths	*If the geometry of the mineralization with respect to the drillhole angle is known, its nature should be reported.*	No drilling results included in release
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 drillhole collar locations and appropriate sectional views.*	A map of the conductors identified in the AEM survey have been included in the body of this release.
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.*	Imagery for all graphical AEM results within AVL tenure has been shown in the included map
Other Substantive Exploration Data	*Other exploration data, if meaningful and material, should be reported including (but not limited to): geological*	Historical exploration only is available in WAMEX reports: A1884 Exploration Progress Report. Mangore Australia Pty Ltd. HE Abendroth. 1962.

Criteria	JORC Code Explanation	Commentary
	observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	A1885 Economic Evaluation of Vanadiferous Magnetite deposits of WA. AW Heuck.1962 A1886 Quarterly Progress Report on Metallurgical Tests. Mangore Pty Ltd. June 1962 A1694 Progress Report on Temporary Reserve 2755H South West Mineral Field for the year 26/3/1970 – 25/3/1971. Garrick Agnew Pty Ltd. 1971. A3142 Final Report on Temporary Reserve 2755^{H} South West Mineral Field, Western Australia, Vol. III. Coates Drill Logs. XRF Assay Data. A5698 Coates Siding Polysius Metallurgy Test Report. 1974 A6071 Coates Vanadium Project. Diamond Drill Logs. Mt Dempster Mining Pty Ltd.1974 A6977 Vanadiferous Magnetite material from Coates. AMDEL Metallurgy test report. Prepared for Agnew Clough Ltd. June 1975. A6978 Sodium Removal from Vanadium Leach Residue Pellets. Government Chemical Laboratories for Agnew Clough Ltd. March 1977 A81303 Annual Report 2008 for E70/2230. Mercator Metals Pty Ltd. January 2009 A85887 Annual Report Wundowie Project 2008-2009. Mercator Metals Pty Ltd. Jan 2009 A102789 Partial Surrender Report E70/2230 Wundowie Project. Bauxite Resources Ltd /Mercator Metals Pty Ltd. July 2014 A102790 Partial Surrender Report for E70/2230. Mercator Metals Pty Ltd. July 2014 A102864 Final Surrender Report Wundowie Project. Aurum West Pty Ltd. July 2014 Work by CRC LEME: Cornelius M, Morris PA, Cornelius AJ; 2006; "Laterite Geochemical Database for the Southwest Yilgarn Craton, Western Australia"; CRC LEME Open File Report 201 / CSIRO Report P2006/75; Perth, Western Australia
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).*	Additional soil sampling is planned for later 2021, including an orientation survey to determine the optimal size fraction prior to further geochemical surveying. An EIS grant has been obtained to drill a line of stratigraphic holes, investigating geochemical zonation and nickel-copper-PGE prospectivity of the Coates Mafic Intrusion within AVL tenure. This drill program is planned for November – December 2021, pending drill rig availability.
	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 AEM image shows the location of the target horizon, with pending work programs outlined in the body of the report.