

ASX ANNOUNCEMENT

23<sup>RD</sup> SEPTEMBER 2020

# AVL ENLARGES GROUND POSITION AT COATES NICKEL-COPPER-PGE PROJECT

Tenure significantly expanded around highly prospective Coates base metal and PGE Project.

## **KEY POINTS**

- Australian Vanadium Ltd (ASX: AVL) expands licence holdings with tenement applications north and east of the Coates Mafic Intrusive Complex (Coates Project).
- Coates East application covers possible extensions of the Coates Project to the east.
- Coates North application lies north of Mercator Metals Pty Ltd retention licence (R70/59) which identified Platinum (Pt) and Palladium (Pd) anomalism in bottom of hole samples reported by Lithium Australia NL (ASX: LIT)<sup>1</sup>.
- New tenement applications significantly strengthen land holding at the Coates Project to cover 111.6km<sup>2</sup>.
- The Coates Project is located 29km SSE of the Ni-PGE discoveries by Chalice Gold Mines (ASX: CHN).
- After granting, field work will include soil geochemistry and airborne electromagnetic (EM) surveys which have proved successful in the region for exploration target generation.

Australian Vanadium Limited (ASX: AVL, "the Company" or "AVL") announces applications for two new exploration licences at the Coates Project near Wundowie. AVL is collaborating with Lithium Australia NL (ASX: LIT) and Mercator Metals Pty Ltd (Mercator) for exploration<sup>2</sup>.

The combined tenements and applications of the Coates Project now cover 111.6km<sup>2</sup> of a southern extension of similar mafic-ultramafic rocks to the sequence that is host to the recent nickel-copper-PGE Julimar Project discovery by Chalice Gold Mines Limited. The new tenement applications add 52.6km<sup>2</sup> of area, to the east and north of the existing tenement group, covering chrome anomalism

<sup>&</sup>lt;sup>1</sup> See LIT announcement dated 30 July 2020, "Geochemistry substantiates nickel and PGE targets at Wundowie, Western Australia". 2 See ASX announcement dated 27 May 2020, "Strategic Alliance Formed to Explore the Coates Mafic Intrusion for Nickel Sulphides"



in pisolite geochemistry to the east and extending land holding north of a Pt and Pd anomaly identified from bottom of hole geochemistry drill holes reported by LIT<sup>1</sup>.

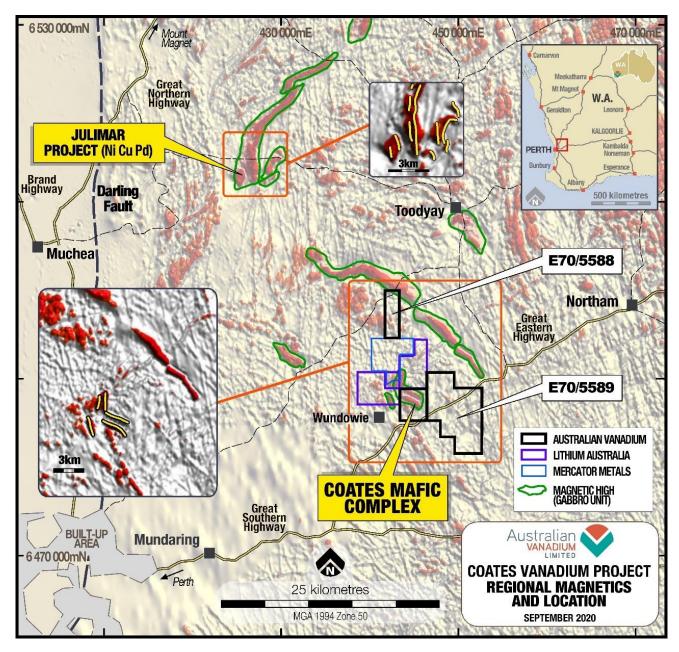


Figure 1 Coates Mafic Complex Location and new tenure with Chalice Gold Mines Julimar Discovery shown on 80m GSWA Aeromagnetics Imagery<sup>3</sup>

The Coates Project hosts a vanadium-titanium magnetite deposit (VTM) previously explored exclusively for vanadium mineralisation. An extensive digitalisation and interpretation of historical data<sup>4</sup> strongly supports the analogous geological nature to nearby base metal PGE discoveries. The

<sup>&</sup>lt;sup>3</sup> Brett JW, 2020, 80 m Magnetic Merged Grid of Western Australia 2020 version 1: Geological Survey of Western Australia, <u>www.dmp.wa.gov.au/geophysics</u>

<sup>4</sup> See ASX announcement dated 17th September 2020 'Historical Data at Coates Project Supports PGE Exploration'



companies are collaborating to explore for nickel, base metals, gold and platinum group elements (PGEs) at the Coates Project<sup>5</sup> (location and tenure shown in Figure 1).

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.

Details of the new tenement applications are shown in Figure 1 and as follows:

- Tenement application E70/5589 covers possible extensions of the mafic complex to the east of E70/4924 (AVL granted tenement).
- Tenement application E70/5588 to the north of Mercator Metals Pty Ltd retention licence (R70/59) extends land holding north of Pt and Pd anomalism in bottom of hole samples from drilling reported by LIT<sup>1</sup>.
- AVL's new tenement applications strengthen the collaborative landholdings of AVL, LIT and Mercator at the Coates Project from 59km<sup>2</sup> to 111.6km<sup>2</sup>.

Managing Director Vincent Algar comments, 'The results from AVL's geological compilation of the historical Coates Project data, in addition to recently released co-incident Ni-Cu-Co-PGE soil anomalism on adjacent LIT ground, strongly supports the value of this ground in the search for additional Ni-Cu-PGE discoveries such as those at Julimar and Yarahwindah. Ground in the area is now extremely sought after and AVL is pleased to be able to add to the existing portfolio with these new applications.

Exploration including soil geochemistry and airborne electromagnetic surveys are being planned now in this exciting area".

### **NEW LICENCES – PROSPECTIVITY**

The new tenement application E70/5588 extends the collaborative land holding by AVL, LIT and Mercator northwards of where Pt and Pd anomalism has been identified in bottom of hole samples reported by LIT<sup>1</sup> in short vacuum holes drilled for bauxite exploration. This anomaly could be significantly larger than currently defined, as the elevated Pt and Pd values extend to the edge of the current sampling. The state-wide GSWA aeromagnetics show elevated magnetism in the new tenement application that is most likely caused by mafic-ultramafic rocks, extending through to a

<sup>&</sup>lt;sup>5</sup> See ASX announcement dated 27th May 2020 'Strategic Alliance Formed to Explore the Coates Mafic Intrusion for Nickel Sulphides'



significant magnetic high in ground held by Chalice Gold Mines, as part of their regional tenement package that encompasses land considered prospective for Julimar Project style rocks.

The Coates Project is largely covered by laterite and recent sediments and for this reason the extent of the prospective mafic rocks is poorly understood. New tenement application E70/5589 covers possible extensions of the Coates Mafic Complex to the east of E70/4924. Methods for the best way to determine bedrock geology beneath recent cover (laterite, slope and drainage sediments) is under evaluation by AVL.

#### FORTHCOMING FIELDWORK

Within the AVL granted tenement E70/4924 the Company has an approved Program of Works to undertake sampling and drilling within the Vacant Crown Land portion of its holding at the Coates Project and will be commencing exploration in the summer.

AVL, LIT and Mercator are working together to gain statutory approvals for the remaining areas within granted tenements prior to commencing field work, including development of a conservation management plan and land-owner access agreements.

Field work over the remaining areas of the granted tenure will then commence. LIT has completed early magnetic inversion modelling of available state aeromagnetic data to determine the extent of proposed soil geochemistry and geological mapping programs.

Rapid turn-around Ni, Cu and Cr analyses of soil samples by a portable XRF will be followed by precious metals (Au, Pd and Pt) analysis by a commercial laboratory.

Resulting nickel geochemical targets will be surveyed using airborne electromagnetic surveys, possibly followed by moving loop electromagnetic equipment (MLEM), to detect conductive rock-types, which may include nickel sulphides.

Conductive targets will then be ranked for priority to be drilled once statutory approvals are acquired.

Concurrently, surface sampling programs and geophysics surveys will be evaluated and designed for the two new AVL tenement applications, while bringing the tenements to grant is pursued.

For further information, please contact: Vincent Algar, Managing Director +61 8 9321 5594

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 4<sup>th</sup> 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 STRATEGY**

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

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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.