



ASX ANNOUNCEMENT

30TH OCTOBER 2020

QUARTERLY ACTIVITIES REPORT

Period ending 30th September 2020

HIGHLIGHTS

- 21-year Mining Lease granted for the Australian Vanadium Project.
- A new Mining Licence application has extended AVL's footprint at Gabanintha, covering the southern Mineral Resource fault blocks.
- Option to acquire Geraldton region processing plant land extended.
- Iron-Titanium coproduct opportunity identified. China based consultant appointed to manage Fe-Ti concentrate coproduct offtake agreements.
- Vanadium pellet roast leaching delivered uplift in vanadium extraction, achieving a 93.3% average extraction, an 8% relative improvement on the PFS¹ basis.
- MOU for collaboration with UK company GSA Environmental on vanadium products.
- Company set to complete externally reviewed Bankable Feasibility Study by mid-2021, focusing on dedicated vanadium pentoxide production for steel and battery industries.

VSUN Energy

- MOU for vanadium offtake, electrolyte and battery sales agency for Australia signed with Enerox GmbH, producer of CellCube commercial vanadium redox flow battery (VRFB) systems.
- MOU for Australian residential VRFB development and vanadium offtake signed with CEC, a Chinese VRFB manufacturer and developer.

Coates Project

- Geochemistry substantiated nickel and PGE targets at Wundowie, Western Australia.
- Historical drilling, exploration and core data supports ongoing Nickel-PGE exploration.
- Ground position enlarged at Coates base metal and PGE project.

Corporate

- \$5M placement completed.
- Board renewal with Cliff Lawrenson appointed to the Board, Chairman Brenton Lewis to step down at the AGM.
- Cash at bank on 30th September 2020 was \$8.96 million.

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¹ See ASX announcement dated 19th December 2018 'Gabanintha Pre-Feasibility Study and Maiden Ore Reserve'



Management Comment

During the September quarter, the Company was able to return to normal operations after the disruption of lockdowns in light of the initial COVID-19 global responses. The team made significant breakthroughs in the technical study, such as improvements to vanadium recovery from the pelletised roast circuit, which indicated an increased vanadium recovery of up to 8% compared to earlier work. With only three operating primary vanadium mines outside China, technical excellence and robustness of process pilot work will be crucial for project funding. AVL maintained this focus during the period, setting in place the building blocks for positive, bankable due diligence outcomes in 2021.

Funding of the Project will be contingent on offtake agreements with credible partners. During the quarter, AVL was able to secure two unique MOUs from the new vanadium battery market. VRFB manufacturers are increasingly aware of the need to secure rare future V_2O_5 production to enable product delivery. AVL's technical knowledge and experience in high purity vanadium production, electrolyte production and battery sales development via VSUN Energy, offer an ideal partner to VRFB companies such as Enerox and CEC.

Strong support for a capital raising was received at the end of the quarter. AVL raised \$5m at 1.4c per share with online sophisticated investor broker 180 Markets. The strongly supported raising places AVL in an excellent cash position moving into the end of 2020, able to actively pursue its objectives at its flagship Project, as well as opportunities at Coates Ni-PGE-V and VSUN Energy battery/renewable energy projects.

The AVL team was joined by experienced company executive Cliff Lawrenson in early October. Cliff's extensive fund raising, corporate and deal experience is an excellent addition to the Company's Board of Directors as AVL enters its next critical phase of BFS delivery, funding and development.

Activities for the quarter ended 30th September 2020 for Australian Vanadium Limited ("AVL" or "the Company") are as follows:

THE AUSTRALIAN VANADIUM PROJECT

Mining Lease granted for the Australian Vanadium Project – Key milestone reached to support vanadium project development

See ASX announcement dated 31st August 2020 'Mining Lease Granted for the Australian Vanadium Project'



On 31st August 2020, the Company announced the granting of Mining Lease M51/878 by the Western Australian Government Department of Mines, Industry Regulation and Safety for the Australian Vanadium Project ("Project"). The initial term of the Mining Lease is 21 years from 28th August 2020.

The granting of the Mining Lease is a major milestone in the Company's pathway to development of the Project.

The Project consists of 11 tenements covering 760 sq km and is held 100% by Australian Vanadium Limited, with the granted Mining Lease M51/878 covering approximately 70% of the declared Mineral Resources over a single continuous area, with the balance of the Inferred Mineral Resource located on the adjoining Mining Lease application MLA51/890, owned 100% by AVL, (see Figure 1 and Appendix 1).

The grant of the Mining Lease, combined with the strength of the Company's technical studies, creates a solid foundation for completion of the Project's approvals to commence mining operations. The licence provides greater certainty to investors and potential Project financiers in Australia and globally.

Mining Licence Application over Southern Fault Blocks

See ASX announcement dated 17th July 2020 'New Mining Licence Application Extends the Australian Vanadium Project'

In July, AVL extended its footprint and the future of the Project with a Mining Licence application (MLA51/890) covering the southern Mineral Resource fault blocks. MLA51/890 contains Inferred Resources with a total Mineral Resource of 27.5Mt at $0.76\%~V_2O_5$, including a high-grade massive magnetite zone of 14.8Mt at $0.99\%~V_2O_5$.

The southern areas of the Project were not initially a priority, due to early focus on the northern part of the deposit. Subsequent work has revealed the importance of the magnetic response of ore during beneficiation. 3D magnetic inversion modelling during 2019 highlights the quality of the deposit in the southern fault blocks where the response is found to be stronger and shallower, indicating potential for increased recovery through the magnetic separation circuit².

² See ASX announcement dated 4th March 2020 'Total Vanadium Resource at the Australian Vanadium Project Rises to 208 Million Tonnes'



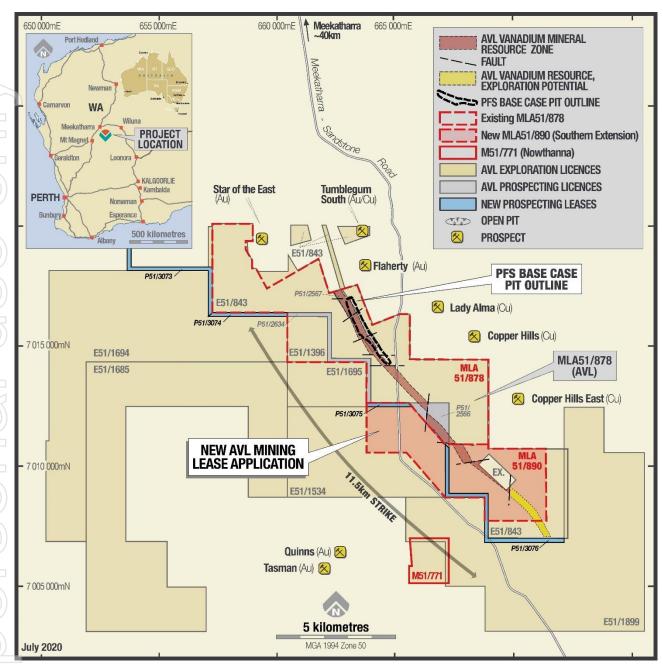


Figure 1 The Australian Vanadium Project Location and Tenure with Mining Lease Application MLA 51/890 Southern Extension

The area under application is immediately south of and contiguous with AVL's MLA51/878 application and covers the remaining strike of the Project. The Mineral Resources within MLA51/878 will continue to be the primary basis for the Bankable Feasibility Study.

Infrastructure in the new MLA, covering E51/843, E51/1534, P51/3075 and P51/3076, is planned to support two open pits as well as containing waste dumps, topsoil stockpiles, haulage roads and a mining service area. This area will be optimised, developed and mined as part of the overall schedule of operations by AVL.



Geraldton Region Vanadium Processing Plant Land Option Extended

See ASX announcement dated 21st October 2020 'AVL Extends Geraldton Region Vanadium 'Processing Plant Land Option'

In October, AVL signed a one-year extension to the land option agreement with the landowner of the proposed location for its vanadium processing plant near Geraldton in Western Australia.

In October 2019³, AVL announced that it had signed an option agreement for land to locate the value-adding processing plant for the Project near to the port city of Geraldton in Western Australia. To ensure a low-cost operation, AVL will undertake crushing, milling and beneficiation of vanadium bearing magnetite ore at the minesite location and transport the resulting concentrate to the proposed processing plant outside Geraldton, where final refinement to high-quality, high-value vanadium products will take place.

A unique value proposition resulting from this arrangement is that the Company is able to consider the sale of an Fe-Ti coproduct which will be generated after extraction of high purity vanadium products. The potential for sale of this product is one of the globally unique opportunities provided by the coastal location of the plant.

In 2019, AVL identified the value of locating the vanadium processing plant components near to Geraldton. The Company secured a suitable plant location west of Mullewa, near Geraldton. Evaluation over the past year has confirmed that this location is ideal for the Company. The extension of the option over the relevant land is another step forward towards production.

The physical and infrastructure benefits of the processing plant's location include:

- Access to cheaper and more competitive natural gas and the associated capital cost reduction of not needing to build a gas pipeline to the minesite.
- The opportunity for power at the minesite to have a large component of renewable energy, including a VRFB.
- Significantly reduced minesite water requirements by approximately one third of total water used.
- A reduced minesite camp, due to reduced numbers of personnel required onsite and workers at the Geraldton location living locally, preferably at their homes.

³ See ASX announcement dated 29th October 2019 'Option Agreement to Locate Vanadium Processing Plant near Geraldton, WA'



- Reduced construction costs for the processing plant and cheaper transportation costs of reagents.
- Location enables production and sale of Fe-Ti coproduct which would not be feasible from minesite based production.
- Enables consideration of downstream processing opportunities of vanadium or Fe-Ti products onshore near Geraldton.

The extension agreement provides a one-year extension of the original option agreement signed on 21st October 2019. The option payment for the second term is 1% of the Purchase Price, with half payable in cash and half in AVL shares. The number of shares issued will be based on the volume weighted average share price over the previous five trading days prior to the payment of the option fee. The land size is calculated at 1,334 acres, with the purchase price of \$2,100 per acre. All terms in the original option agreement remain valid.



Figure 2 AVL Project locations diagram

Iron-Titanium Coproduct sales Opportunities to Differentiate AVL

See ASX announcement dates 20th August 2020 'Iron-Titanium Coproduct sales Opportunities to Differentiate AVL'

Following an option study completed as part of the November 2018 PFS¹, AVL investigated the opportunity presented by the potential sale of the Fe-Ti coproduct formed after extraction of vanadium. The investigation identified multiple potential markets for the coproduct, which could



support AVL's objective of achieving the world's lowest-cost vanadium production. Funded by a CRC-P research grant, AVL is pursuing further value addition to the Fe-Ti coproduct by:

- Pelletising
- Upgrading Fe-Ti coproducts by further removal of gangue and other techniques
- Developing a processing solution for separating titanium from the calcine.

AVL's plans to locate its vanadium processing plant at a location 18 kilometres west of Mullewa (see Figure 2) offers multiple opportunities to improve the financial metrics of the Project which is the focus of the current BFS work. The ability to sell the Fe-Ti coproduct via the port of Geraldton arises from this plan, making AVL's Project globally unique in this respect. All other current and potential primary vanadium operations are constrained by distance and cost to ports. Iron-rich calcine is generally considered as a waste product in other projects and is stored in specially designed tailings facilities.

Piloting testwork on the vanadium recovery flowsheet has enabled the production of representative samples of calcine to be used for marketing and further characterisation and metallurgical testwork. The average chemical composition forecast for the first five years of iron-titanium material is shown in Table 1. Over the life of mine the average iron grade of the calcine is forecast to improve.

Table 1 Average First Five Years Composition of Iron-titanium coproducta

Element	Solid Analysis %												
Y 0-5	Fe	Ti	TiO ₂	Al	Si	Na	Cr	S	Mg	Mn	V	Ca	Ва
	54.5	8.95	14.9	1.53	0.96	0.78	0.52	0.049	0.35	0.13	0.09	0.08	0.01

a. Referenced from analysis of the Y0-5 pilot blend – Run 11 leach residue (ALS Test Number HY9003, 26/03/2020)

A PFS trade-off study, supported by more recent investigations, has determined that sale of the iron-titanium "as is", could improve the Project economics. Sales evidence from similar material with reference to the prior 8 years of 62% Fe iron ore benchmark pricing⁴ indicates that calcine sales above US\$50/t (CFR China) are likely to be achievable under the majority of market conditions.

AVL has compiled preliminary market research on various product options for the Fe-Ti coproduct or its derivatives. The outcomes will be used as part of AVL's critical metals research program, aimed at improving the efficiency of vanadium processing. AVL's A\$4.9 M research initiative is partially funded by a Cooperative Research Centres Projects (CRC-P) grant from the Australian Federal Government.

⁴ https://au.investing.com/commodities/iron-ore-62-cfr-futures-historical-data



Upgrading the Fe-Ti coproduct

Another potential pathway to unlock value from the Fe-Ti coproduct material is to upgrade it to a higher quality or independent higher value iron and titanium concentrates. This approach involves more capital investment, but has the obvious advantage of generating significant additional revenues.

Preliminary testwork has been undertaken by the Company to upgrade the material from a lower grade (<55% Fe) iron concentrate, to a higher grade (>62% Fe) iron product which could be sold at higher market value into the global iron ore market.

Samples of material generated from pilot and benchscale tests have been used for the testwork. The initial work undertaken has been very successful, improving iron grades from 54% up to an average of 66%, with a maximum of 71.1% Fe. Table 2 shows the assay results of upgraded calcine from three effective sighter tests.

Table 2 Results of Calcine Upgrade - Benchscale Testing

	Fe			Гі	Si		Al	
	Grade	Recovery	Grade	Recovery	Grade	Recovery	Grade	Recovery
	%	%	%	%	%	%	%	%
Test 1	67.30	97.86	9.18	91.53	0.70	60.24	1.44	77.44
Test 2	64.60	97.86	9.32	98.53	1.70	62.29	2.16	76.64
Test 3	66.20	99.49	9.10	97.38	1.00	76.30	1.52	88.63



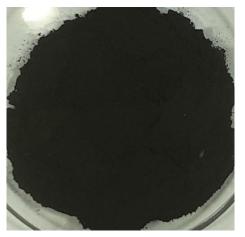


Figure 3 Calcine Test Program - Fine product of 67.3% Fe



As a result of this encouraging testing, work is now underway to explore the potential to physically separate a portion of the contained titanium, which could further upgrade the material and improve its value.

AVL is actively negotiating offtake agreements for vanadium produced from the Project and is working towards being in a similar position with an optimal Fe-Ti coproduct. Coproduct sales could have a positive impact on overall operating costs and therefore deliver the Company's goal to be the lowest cost new producer of vanadium in the world.

Experienced Marketing Support Enlisted in Asia

In October 2020, AVL appointed an expert steel metallurgist to advance its Asian market development strategy. Chinese-based consultant Yongqing Yu has been engaged to advance offtake arrangements for AVL's vanadium and planned Fe-Ti coproduct to be produced from the Project.

Beijing based Mr Yu has over 20 years of experience in the metallurgical industry in China. He has worked in various companies within the iron and steel markets, such as country manager of Shougang (one of China's top five steel mills) and being in charge of market development for iron making projects in India. He has also worked in various foreign metallurgical companies based in China, including:

- Danieli, a metallurgical company based in Italy, where he served as department manager to look after sales of important iron and steel making equipment for Chinese steel mills;
- Rio Tio where he worked as country head of Hlmelt for China market proliferation; and
- US Cliffs Natural Resources where he was heavily involved in technical marketing and sales
 of the company's fine ore product from Australia and iron concentrate from Canada.

Mr Yu has also assisted various Australian mining companies in respect of product promotion and market penetration.

Managing Director, Vincent Algar comments, "AVL has made some great inroads with relationships in China and across Asia and sees the need for an intensely targeted approach for our Fe-Ti coproduct which has several potential markets in the region. Yongqing joins the team at AVL at an exciting time and the Company will benefit from his impressive contacts and metallurgical knowledge. We can now build on our existing relationships and engage with new potential customers with a strong and local presence, as the Project's development accelerates towards technical and financial completion."



MOU signed with UK company GSA Environmental for collaboration on vanadium products

See ASX announcement dated 22nd October 2020 'AVL to Collaborate with UK Company GSA Environmental on Vanadium Products'

AVL signed an MOU for commercial and technical collaboration with a leading-edge UK based engineering and metals recovery/extraction consultancy for the purposes of evaluating value-adding feedstocks to the Australian Vanadium Project.

UK based GSA Environmental Limited (GSAe), is an engineering consultancy with front end engineering design, project management and process safety consultancy capabilities. GSAe has multi-disciplined and extensive expertise across a range of industry sectors including oil and gas processing and refining, petrochemicals and renewables. GSAe has specific intellectual property relating to the extraction of vanadium from traditionally hard-to-process by-product material such as petrochemical wastes and slags.

GSAe and AVL will collaborate principally to evaluate feedstocks that have the capability to further improve the economics of the Project and its planned processing facility near the port city of Geraldton in Western Australia.

AVL has made significant progress through its PFS and highly detailed pilot studies, enabling the Company to reliably target lowest quartile cost production of primary vanadium⁵.

With a number of petrochemical industry by-products containing vanadium, such as fly ash, slags and petcoke slags, AVL's world class vanadium team in conjunction with staff from GSAe will collaborate and partner to investigate the commercial opportunities and possible economies offered by incorporating vanadium units into the processing plant. Vanadium and other metals, such as nickel, are contained in a variety of wastes including fly ash which is generated from crude oil. This material is currently disposed of in landfill sites around the world. Extracting the saleable material from this waste will therefore have a positive economic and environmental impact.

The MOU is for a two-year initial term with an option to extend by mutual agreement. The MOU can be terminated by either party if an offtake agreement with a supplier is not concluded by the end of the term. The agreement provides the basis for the two companies to enter into a commercial agreement for use of GSAe's proprietary technology and technologies developed between AVL and GSAe.

⁵ See AVL's 2020 Annual Report



Exceptional Vanadium Leach Extraction of up to 94.7%

See ASX announcement dated 1st July 2020 'Pellet Roast Pilot Testing Delivers Uplift in Vanadium Extraction'

As part of the ongoing and detailed pilot scale testing underway at the Metso Outotec pyrometallurgical testing facilities in the US, roast/leach test work using a pelletised concentrate has achieved an average of 93.3% leach extraction. After allowing for scaling up, this is estimated to deliver an 8% relative improvement on the basis applied in the PFS and represent a significant unique advantage for the Company. These test outcomes relate to the processing of concentrate, designed to represent the average of the first five years of forecast production⁶ and build on results from previous AVL bench scale tests, where 587kg of concentrate was roasted in batches and similar vanadium leach extractions were observed⁷.

Testing has demonstrated that the Project's roasting requirements are well within standard grate kiln operating parameters. With the optimised roast conditions now well understood, the final bulk production phase of the pyrometallurgical testwork program is being executed. This work will also confirm the grate kiln performance in treating the average life of mine (LOM) concentrate generated in AVL's previously reported crushing, milling and beneficiation (CMB) pilot testwork.

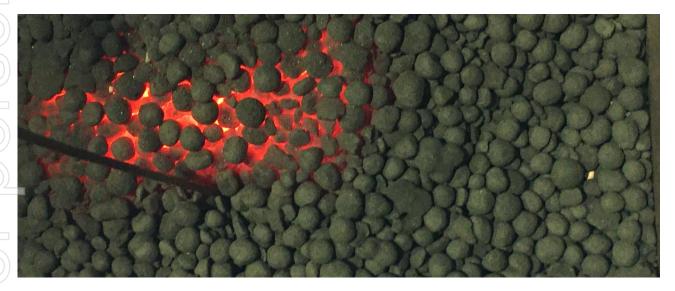


Figure 4 AVL pellets cooling after thermal treatment

The CMB pilot concentrates were exceptionally low in silica for a vanadium titanium magnetite (VTM) project. The Y0-5 concentrate having 1.83% SiO₂ (0.86% Si) and the LOM concentrate 1.68% SiO₂

⁶ See ASX announcement dated 16th March 2020 'Pilot Study Programme Confirms High Vanadium Recoveries and Concentrate Quality'

⁷ See ASX announcement dated 5th February 2020 'High Vanadium Extraction Confirmed as Pyrometallurgical Pilot Begins'



(0.79% Si). Roast leach results on the Y0-5 concentrate also confirm a low extraction of silicon (an impurity) into the leach solution, presenting the opportunity to further simplify downstream hydrometallurgical processing. Silicon leach extraction averaged 4.2%, while almost no aluminium was leached.

VANADIUM IN ENERGY STORAGE

Value Added Reseller Agreement signed with CellCube vanadium redox flow battery manufacturer Enerox GmbH

See ASX announcement dated 9th September 2020 'MOU for Vanadium Offtake, Electrolyte Supply and Battery Sales Agency'

AVL signed an MOU with Enerox GmbH ("Enerox"). Enerox is a global market leader of VRFB energy storage systems. Enerox designs, develops, manufactures, sells, installs, operates and maintains battery storage projects on a global level in the megawatt range, for grid-connected energy storage and offgrid/microgrid applications, under the brand name CellCube.

The MOU establishes a cooperative environment to establish binding agreements for offtake of vanadium products from AVL's planned Project to support global sales and services of Enerox's well known VRFB product CellCube. Australian based sales of VRFBs will be supported by the development of a vanadium electrolyte blending facility by AVL. AVL will also assist Enerox with the arrangement of electrolyte leasing on project specific demand.

In addition to the MOU, AVL's 100% owned VRFB-focused subsidiary VSUN Energy has signed a Value Added Reseller (VAR) agreement with Enerox for the supply and installation of CellCube products and services in Australia.





Figure 5 Solar and CellCube VRFB installation at a commercial and industrial site © Enerox

Residential vanadium redox flow battery product development collaboration agreement

See ASX announcement dated 16th September 2020 'Residential Vanadium Redox Flow Battery

Development and Vanadium Offtake MOU'

An MOU was signed with Chinese VRFB manufacturer Gui Zhou Collect Energy Century Science and Technology Co Ltd, trading as CEC VRFB Co. Ltd (CEC), based in Guizhou province. The MOU provides a framework for one or more binding agreements:

- The supply of vanadium pentoxide from AVL's planned Project for CEC's VRFB installations in Australia and internationally, with an initial sum of 2,000 tonnes of V₂O₅ per annum as the basis for finalising a binding offtake agreement;
- Electrolyte production within Australia for use in CEC VRFBs;
- Product development of CEC's residential VRFB for the Australian market;

VSUN Energy will have a 12-month exclusivity over sales of CEC's residential VRFBs in Australia. Australia's first grid-connect ready 5kW/30kWh residential VRFB, ordered from CEC, is due to be delivered to the Port of Fremantle in early November 2020.

VRFB Market

The VRFB market continues to grow, with Japanese VRFB manufacturer Sumitomo Electric announcing a 17MW/51MWh battery to be installed in Hokkaido for a utility customer with an existing 15MW/60MWh operating VRFB. Meanwhile, California sought alternatives to lithium-ion batteries



and awarded UK-listed Invinity Energy Systems four projects with a combined energy storage of 7.8 MWh.

In the UK, Invinity Energy Systems is installing a VRFB in conjunction with a lithium-ion battery for the Energy Superhub project in Oxford. Installations from Danish VisBlue and Spanish E22 were also finalised during this quarter.

China continues to lead the global VRFB market, with multiple manufacturing facilities being announced and multi-megawatt batteries further developed.

VSUN Energy's active social media platforms provide a good source of information for the VRFB market.

COATES NI-PGE-VANADIUM PROJECT

Historical data at Coates supports PGE exploration

See ASX announcement dated 17th September 2020 'Historical Data at Coates Project Supports PGE Exploration'

During the quarter, AVL released compiled historical drilling geochemistry for the Coates Mafic Intrusive Complex near Wundowie, Western Australia confirming the exploration strategy for nickel, base metals, gold and platinum group minerals.

AVL holds ground over the Coates Mafic Intrusive Complex (Coates). Coates is located approximately 29km southeast of the recent nickel-copper-platinum group elements (Ni-Cu-PGE) discovery at the Julimar Project by Chalice Gold Mines (ASX: CHN). Detailed historical drilling data from 1970s has been captured by the Company. The drilling defined a magnetite gabbro with vanadium-titanium mineralisation within a larger layered gabbro intrusion now considered prospective for PGE-Ni-Cu mineralisation.

Core from two historical Coates' diamond drillholes was acquired for analysis. Using new micro XRF techniques, scans of historical core hole CRD019 indicated presence of disseminated pyrrhotite and chalcopyrite within discrete pyroxenite phase of magnetite gabbro.

Mafic intrusions, including Coates, within the Jimperding Metamorphic Belt were recognised as prospective for PGE-Ni-Cu in an early 1980s geological journal article. Exploration planning is underway for extensive geochemical and geophysical programs.



AVL is collaborating with Lithium Australia NL (ASX:LIT) and Mercator Metals Pty Ltd which hold adjacent tenements. On 23rd September, AVL announced an enlarged ground position at Coates Nickel-Copper-PGE project⁸. Two new tenement applications were made to the north and east of the known extents of the Coates Mafic Intrusive Project, increasing the overall size of the Coates Project tenure (AVL, LIT and Mercator), to 111.6km².

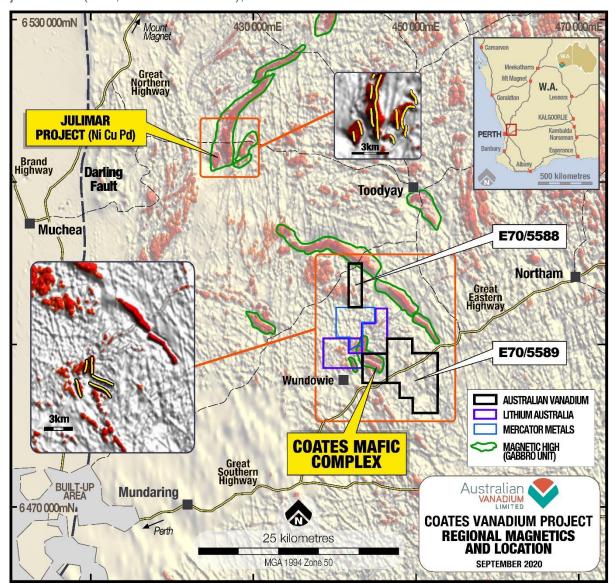


Figure 6 Coates Mafic Complex Location with Chalice Gold Mines Julimar Discovery shown on 80m GSWA Aeromagnetics Imagery

AVL has digitally captured nearly 18,000 metres of drilling by Garrick Agnew Pty Ltd and Mt Dempster Mining Pty Ltd which was undertaken in the early and mid-1970s, respectively, at the

⁸ See ASX announcement dated 23rd September 2020 'AVL Enlarges Ground Position at Coates Nickel-Copper-PGE Project'.



Coates Siding vanadium-titanium-magnetite deposit. The geological logs and assay data have been used to create a 3D model of the geology within AVL's tenure.

LIT has previously validated the Ni-PGE exploration model for Coates when releasing results from drilling by Bauxite Resources Ltd during 2013 in the north west portion of the tenement group⁹. Whilst targeting bauxite, end of hole samples were analysed for a range of precious and base metals, and some are adjacent to the Coates Mafic Intrusion magnetic footprint. The results show a coincident anomalous nickel (Ni), copper (Cu), chromium (Cr) platinum (Pt max 37 ppb) and palladium (Pd max 53 ppb) (together "PGE") and gold² (Au max 108 ppb)¹⁰ signature along the western edge of the Coates intrusion.

A portion of two historical diamond drill holes (BX size half core) have been acquired from a private owner. The core is from holes CRD019 and CRD013 that were drilled by Mt Dempster Mining Pty Ltd in 1974.

The drill core is in excellent condition and checks have validated that it is from the Coates deposit. During review of the core from hole CRD019, discordant mela-gabbro phases with disseminated sulphide were noted above a small chlorite-pyrite shear zone. While there are small amounts of disseminated sulphide throughout the magnetite gabbro unit, the sulphide abundance increases in the mela-gabbro unit.

The Company has an approved Programme of Works to undertake sampling and drilling within the Vacant Crown Land portion of its holding at Coates (km²) and will be commencing exploration in the summer.

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

Field work over the remaining areas 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 programmes.

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 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.

⁹ See LIT ASX announcement dated 30th July 2020 "Geochemistry substantiates Nickel and PGE targets at Wundowie, Western Australia"

¹⁰ Ni, Cu, Cr analysed by portable XRF; Pt, Pd, Au analysed by fire assay at a commercial laboratory



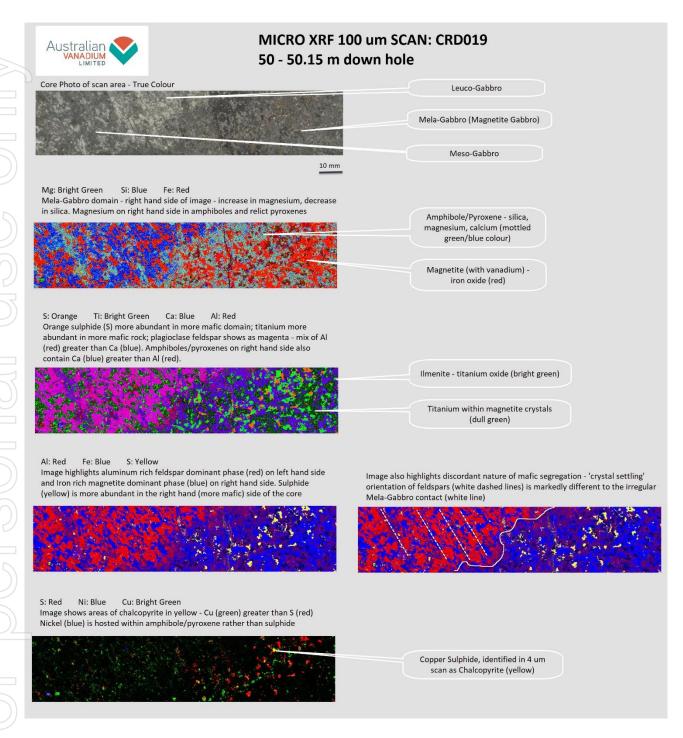


Figure 7 Element maps from 100 um Micro XRF scan of core from 50 - 50.15 m down hole in CRD019

BLESBERG

During the quarter, the Company was able to secure an additional 5% equity stake in the Blesberg Project, taking AVL's stake to 10%, after negotiations with the project vendors for exploration work previously completed by AVL. The project is currently under a sale process by the South African vendor. The Blesberg Project was fully impaired in the financial year ending 30 June 2020.



CORPORATE

Cliff Lawrenson appointed to the Board

See ASX announcement dated 12th October 2020 'AVL Renews Board Structure'

AVL announced the appointment of a new Non-Executive Director Cliff Lawrenson on 12th October. The current Non-Executive Chairman Brenton Lewis also announced his intention to retire at the Company's AGM in November 2020.

Mr Lawrenson's appointment forms part of the Company's ongoing board renewal process. Cliff is a highly regarded and experienced industry professional and has been appointed as a Non-Executive Director and Non-Executive Chairman-elect. He is currently Non-Executive Chairman of Paladin Energy Ltd (ASX:PDN) and Caspin Resources Limited (ASX:CPN) which is expected to list shortly. Mr Lawrenson is also Non-Executive Chairman of privately owned Pacific Energy Limited and Onsite Rental Group.

Mr Lawrenson was Managing Director of Atlas Iron Ltd from 2017 and led the company to its acquisition by Hancock Prospecting Pty Ltd. Prior to Atlas Iron, Mr Lawrenson was Managing Director of a number of ASX listed companies in the mining and mining services sectors. Mr Lawrenson was a senior executive of CMS Energy Corporation in the United States of America and Singapore and this was preceded by an investment banking career.

AVL Completes \$5M Placement

See ASX announcement dated 25th September 2020 'AVL Completes \$5M Placement'
On 25th September, AVL announced that it had received firm commitments for the placement of 357,142,857 ordinary fully paid shares (Shares) in the Company at a price of \$0.014 each, to raise \$5 million before costs (Placement). Subject to shareholder approval, for every two (2) Shares issued under the Placement, one (1) free attaching option will be issued (Option). The Options will have an exercise price of \$0.025 and expire two years from the date of issue.

The Shares were placed to institutional and sophisticated investors that qualify under section 708 of the Corporations Act. The capital raising was managed by 180 Markets, Australia's newest Capital Raising platform with a difference.

The Placement attracted strong interest from both existing shareholders and new investors, with the ~357 million share placement representing approximately 14% of the Company's existing Shares on issue. 180 Markets were paid a 6% Fee on all funds introduced and will receive 7.5m options.



The offer price of \$0.014 represented a 10.02% discount to the 15-day VWAP of \$0.0156 and a 17.65% discount to the last closing price of \$0.017. The issue of Shares is not subject to shareholder approval as the issuance will comprise 254,142,857 Shares under the Company's ASX Listing Rule 7.1 issue capacity and 103,000,000 Shares under the Company's ASX Listing Rule 7.1A issue capacity. The Options will be issued subject to shareholder approval at the Company's upcoming annual general meeting. Subject to meeting ASX requirements, it is the intention of the Company to seek quotation of the options.

Appendix 5B – Quarterly Cash Flow Report

The cash position of AVL as at 30th September 2020 was \$8.96 million.

The aggregate amount of payments to related parties and their associates included in the current quarter cash flows from operating activities were \$186k, comprising Directors' fees, salaries and superannuation.

During the quarter \$38,000 was expensed for exploration and evaluation which related to native title management, and tenement rents and rates. The \$727,000 amount of exploration and evaluation expenditure capitalised was comprised of pilot testwork (\$133,000), metallurgical testwork (\$60,000), environmental/hydrology work (\$85,000), mining analysis (\$63,000) and research/investigation costs (\$32,000), with the balance being other consultants and labour, and tenement costs.

No production and development activities were undertaken during the quarter.

ESG

AVL's Stakeholder Engagement Manager, Samantha McGahan, has been appointed Chair of the Meekatharra Community Resource Centre committee.

The Environmental Impact Assessment application is progressing towards lodgement. Currently the submission will focus on the mine site and concentration plant (CMB) only, which are to be located on the Gabanintha deposit site. A separate industrial assessment will be lodged for the planned processing plant location.

Texas A&M University, in partnership with global vanadium organisation Vanitec, released a technical white paper on the positive impact of vanadium in the reduction of carbon emissions in the steel sector. The paper can be found on AVL's website under Investor and Media\Reports.



Marketing

The Company attended a number of online conferences and conducted interviews to promote the company during the quarter;

International Flow Battery Forum (IFBF)

The online nature of this year's IFBF meant that more staff from AVL and VSUN Energy were able to attend various sessions than in previous years. Opportunities for industry networking were reduced, but the community hopes to be able to meet in person again in 2021. At the conference, Sumitomo announced the order of their latest multi-megawatt VRFB. The lifecycle benefits of VRFBs was a popular topic, with the reuse of vanadium electrolyte a key driver for its green credentials.

Australian British Chamber of Commerce (ABCC)

As AVL seeks to develop partnerships from diverse geographical regions, membership of the ABCC has been added to the Company's membership of the American Chamber of Commerce (AmCham). Both organisations offer opportunities for networking and introductions and this quarter, Vincent Algar and Samantha McGahan made presentations about AVL at both online and in person events.

Mines and Money

In September Vincent Algar took part in a series of online meetings for the Mines and Money conference. Meetings were booked on a one-to-one basis and were targeted at financiers for the Project.

The Company also maintains a strong presence on social media platforms, summarising company and vanadium related news and development. The company is promoted under Australian Vanadium, AVL and VSUN Energy brand names.

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.



MINERAL RESOURCE

Table 3 - The Australian Vanadium Project Mineral Resource Estimate at February 2020 by Domain and Resource Classification¹¹

Zone	Classification	MT	V ₂ O ₅ %	Fe%	TiO ₂ %	SiO ₂ %	Al ₂ O ₃ %	LOI%
	Measured	10.1	1.14	43.9	13.0	9.2	7.5	3.7
HG 10	Indicated	25.1	1.10	45.4	12.5	8.5	6.5	2.9
ПG 10	Inferred	52.7	1.04	44.6	11.9	9.4	6.9	3.3
	Subtotal	87.9	1.06	44.7	12.2	9.2	6.8	3.2
	Measured	-	-	-	-	-	-	-
LG 2-5	Indicated	44.5	0.51	25.0	6.8	27.4	17.0	7.9
LG 2-5	Inferred	60.3	0.48	25.2	6.5	28.5	15.3	6.7
	Subtotal	104.8	0.49	25.1	6.6	28.0	16.1	7.2
	Measured	-	-	-	-	-	-	-
Transported	Indicated	-	-	-	-	-	-	-
6-8	Inferred	15.6	0.65	28.4	7.7	24.9	15.4	7.9
	Subtotal	15.6	0.65	28.4	7.7	24.9	15.4	7.9
Total	Measured	10.1	1.14	43.9	13.0	9.2	7.5	3.7
	Indicated	69.6	0.72	32.4	8.9	20.6	13.2	6.1
	Inferred	128.5	0.73	33.5	8.8	20.2	11.9	5.4
	Subtotal	208.2	0.74	33.6	9.0	19.8	12.1	5.6

 $^{^{11}}$ 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).



Table 4 - Tenement Schedule

Tenement information as required by Listing Rule 5.3.3 for the quarter ended 30 September 2020.

Project	Location	Tenements	Economic Interest	Notes	Change in Quarter %
Western Australia	The Australian	E51/843	100% Granted ¹		Nil
Australia	Vanadium Project	E51/1534	100% Granted1		Nil
		E51/1685	100% Granted ¹		Nil
		E51/1694	100% Granted ¹		Nil
		E51/1695	100% Granted ¹		Nil
		E51/1899	100% Granted ¹		Nil
		E51/1943	100% Granted ¹		100%
		E51/1944	100% Granted ¹		100%
		P51/3073	100% Granted		Nil
		P51/3074	100% Granted		Nil
		P51/3075	100% Granted		Nil
		P51/3076	100% Granted		Nil
		M51/878	100% Granted		100%
		MLA51/888		100% ¹ on Application	Nil
		MLA51/890		100% ¹ on Application	100%
Western Australia	Nowthanna	M51/771	100% Granted		Nil
Western Australia	Peak Hill	E52/3349	0.75% NSR Production Royalty		Nil
Western Australia	Coates	E70-4924-I	100% Granted		Nil
Australia		ELA70/5588		100% ¹ on Application	100%
		ELA70/5589		100% ¹ on Application	100%
South Africa	Blesberg	(NC) 940 PR	10%		5%

Note 1: Australian Vanadium Limited retains 100% rights in V/U/Co/Cr/Ti/Li/Ta/Mn & iron ore on The Australian Vanadium Project. Bryah Resources Limited holds the Mineral Rights for all minerals except V/U/Co/Cr/Ti/Li/Ta/Mn & iron ore only



FORWARD LOOKING STATEMENTS

Some of the statements contained in this report are forward looking statements. Forward looking statements include, but are not limited to, statements concerning estimates of tonnages, expected costs, statements relating to the continued advancement of Australian Vanadium Limited's projects and other statements that are not historical facts. When used in this report, and on other published information of Australian Vanadium Limited, the words such as 'aim', 'could', 'estimate', 'expect', 'intend', 'may', 'potential', 'should' and similar expressions are forward looking statements.

Although Australian Vanadium Limited believes that the expectations reflected in the forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that the actual results will be consistent with these forward-looking statements. Various factors could cause actual results to differ from these forward-looking statements including the potential that Australian Vanadium Limited's project may experience technical, geological, metallurgical and mechanical problems, changes in vanadium price and other risks not anticipated by Australian Vanadium Limited.

Australian Vanadium Limited is pleased to report this information in a fair and balanced way and believes that it has a reasonable basis for making the forward-looking statements in this report, including with respect to any mining of mineralised material, modifying factors, production targets and operating cost estimates.

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.

COMPETENT PERSON STATEMENT – EXPLORATION RESULTS AND TARGETS

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 member of the Australasian Institute of Mining and Metallurgy 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 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 Davis



consents to the inclusion in this report of the matters based on his information in the form and context in which they appear.

COMPETENT PERSON STATEMENT — MINERAL RESOURCE ESTIMATION

The information in this announcement 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 Barnes and Mr Davis are members of the Australasian Institute of Mining and Metallurgy (AusIMM) and Mr Davis is a member of the Australian Institute of Geoscientists, 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 announcement of the matters based on their information in the form and context in which they appear.

COMPETENT PERSON STATEMENT - METALLURGICAL RESULTS

The information in this announcement 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 AusIMM. 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 JORC 2012 Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr McNab consents to the inclusion in the announcement of the matters based on the information made available to him, in the form and context in which it appears.