

ACN 116 221 740

Half Year Report

31 December 2020

Contents

Corporate Directory	3
Directors' Report	4
Auditor's Independence Declaration	17
Condensed Consolidated Statement of Profit or Loss and Other Comprehensive Income	18
Condensed Consolidated Statement of Financial Position	19
Condensed Consolidated Statement of Changes in Equity	20
Condensed Consolidated Statement of Cash Flows	21
Notes to the Financial Statements	22
Directors' Declaration	29
Independent Auditor's Review Report	30
Mineral Resource	32

Corporate Directory

Directors

Cliff Lawrenson (Non-Executive Chair) Vincent Algar (Managing Director and CEO) Leslie Ingraham (Executive Director) Daniel Harris (Non-Executive Director)

Secretary Neville Bassett

Registered and Principal Office Level 1, 85 Havelock Street West Perth WA 6005

Telephone 08 9321 5594

Facsimile 08 6268 2699

Share Registry

Automic Pty Ltd Level 2 267 St George's Terrace Perth WA 6000 Telephone 1300 288 664

Auditors

Armada Audit & Assurance Pty Ltd 18 Sangiorgio Court Osborne Park WA 6017

Telephone: 08 6165 4090

Australian Securities Exchange

Australian Vanadium Limited shares (AVL) are listed on the Australian Securities Exchange.

Directors' Report

Your directors submit the financial report of Australian Vanadium Limited ("AVL" or the "Company") and its subsidiaries (the "Consolidated Entity" or "Group") for the half-year ended 31 December 2020. This report should be read in conjunction with the 2020 Annual Report and announcements to the Australian Securities Exchange. In order to comply with the provisions of the Corporations Act 2001, the directors' report as follows:

DIRECTORS

The names of the Directors who held office during or since the end of the half-year and until the date of this report are noted below. Directors were in office for this entire period unless otherwise stated:

Cliff Lawrenson – appointed 12 October 2020 (Non-executive Director); appointed 25 November 2020 (Non-executive Chair)

Brenton Lewis (Non-executive Chair) - resigned 25 November 2020

Vincent Algar (Managing Director and CEO)

Leslie Ingraham (Executive Director)

Daniel Harris (Non-executive Director)

REVIEW OF OPERATIONS

The net loss for the half-year attributed to members of Australian Vanadium Limited was \$1,149,498 (31 December 2019 - loss of \$1,304,243).

ROUNDING OF AMOUNTS

The Company has applied the relief available to it in ASIC Corporations (Rounding in Financial/Directors' Report) Instrument 2016/191 and accordingly certain amounts in the financial report and the directors' report have been rounded off to the nearest dollar.

HIGHLIGHTS

The Company's operations during the half-year were focused on advancing its high-grade Australian Vanadium Project located in central Western Australia. Through subsidiary VSUN Energy Pty Ltd, the Company advances its downstream opportunities in vanadium electrolyte and vanadium redox flow batteries (VRFBs). A summary of the main activities included:

The Australian Vanadium Project

In December 2020 AVL released a Technical and Financial Update to its Pre-Feasibility Study (PFS) which reflects robust economics and incorporates a revised layout and location, an updated process design and a new extended Ore Reserve.

The December 2020 update incorporates work that has been undertaken to improve the Australian Vanadium Project's (the "Project") economics and minimise risk. Underpinned by an increased Ore Reserve of 32 Mt at 1.05% V_2O_5 , the Project's life has been extended to 25 years and processing layout and improvements have resulted in an operating cost estimate of US\$3.66/lb V_2O_5 , comparable to other global primary vanadium producers. Pilot scale testwork performed on samples designed to be indicative of average early years and life of mine process feed, has

verified AVL's process flowsheets and their capability to deliver high quality vanadium products and an improvement in vanadium recovery at an industry competitive low operating cost.

These key developments, coupled with AVL's strategy to de-risk the Project by locating the processing plant closer to a port, human resources and existing gas infrastructure in WA's Mid-West, drove the decision to update the Project economics of the PFS.



Figure 1 Project Location Map

Highlights from the updated PFS included:

- Project pre-tax NPV₈ of A\$909M increased from A\$320M (↑ 184%).
- Project IRR rises to 17.5% (141%).
- Project payback of 6.6 years (↓ 17.5%).

- Plant and associated infrastructure capital cost of US\$253M.
- Total Project capital cost of US\$399M (↑ 13%) includes area and regional infrastructure, indirects, EPCM, growth and owner's costs.
- Ore Reserve increased to 32.1Mt at 1.05% V₂O₅ (↑ 76%) comprised of a Proved Reserve of 9.8Mt at 1.08% V₂O₅ and a Probable Reserve of 22.4Mt at 1.04% V₂O₅ (rounding is applied).
- Increased anticipated mine life from 17 to 25 years, supporting a long-life, consistent ore feed operation on AVL's granted mining lease.
- Increased nominal vanadium production to 24.3 Mlbs V₂O₅ annually (↑ 8%).
- · Forecast vanadium ore recovery to concentrate of 74.8% life of mine, supported by pilot testing.
- New innovative flowsheet for processing plant recovers 88% V₂O₅ utilising tried-and-tested grate kiln technology.

- Separation of processing plant from minesite provides access to cheaper competitive natural gas near Geraldton, local workforce and FeTi coproduct sales opportunities for 900,000 dry tonnes per annum over the mine life.
- Positive economic results give grounds for completion of Bankable Feasibility Study (BFS) mid-2021, finalising offtake, obtaining final approvals and securing project finance.

Key outcomes from the updated PFS include:

- Improved Project metrics including an overall Project pre-tax NPV₈ of A\$909M, and a post-tax NPV₈ of A\$542M.
- A substantial increase in IRR to 17.5% from 12.4%, driven by lower overall costs, higher recoveries through the processing plant, and a longer mine life.
- Operating expenses (C1 costs) have significantly improved to US\$3.66/lb V₂O₅ equivalent (±25%), placing AVL firmly in the bottom quartile of current vanadium producers. This significantly reduces project risk, achieving AVL's goal for a low-cost operation that will be healthy throughout vanadium market price cycles.
- Fully realised cost of production (C3 costs) of US\$5.04 on a zero-debt basis.
- Forecast average vanadium recovery to concentrate of 74.8% for life of mine, as confirmed in the CMB pilot testwork. This is exceptionally high versus other current operating vanadium operations, allowing for a compact and effective crushing and milling operation.
- Operationally robust flowsheets have been developed and tested, providing assurance that the CMB and vanadium processing plant can perform treating a managed blend of feed.

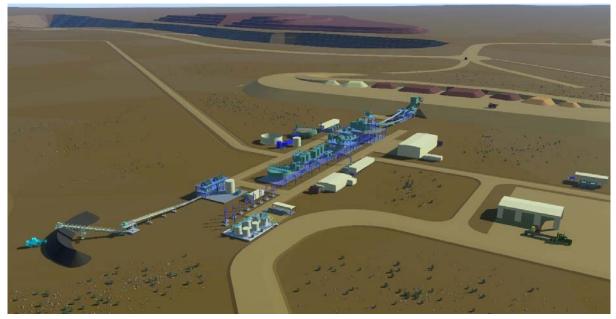


Figure 2 CMB Plant Layout (view to the North)

In August 2020, the Company announced the granting of Mining Lease M51/878 for the Project by the Western Australian Government Department of Mines, Industry Regulation and Safety. 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.

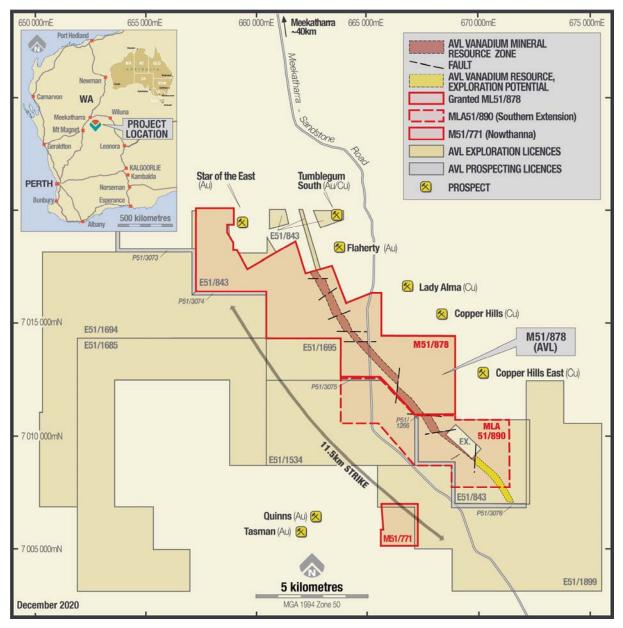


Figure 3 The Australian Vanadium Project Location and Tenure

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 circuit.

Australian Vanadium Ltd Half Year Report December 2020

The area under application is immediately south of and contiguous with AVL's M51/878 application and covers the remaining strike of the Project. The Mineral Resources within M51/878 will continue to be the primary basis for the Bankable Feasibility Study.

In November 2020, a diamond drilling program was undertaken on the Project's southern Resource blocks 50 and 60. The drilling was designed to gather data for metallurgical and geotechnical purposes which are required for the BFS.

The drill core collected for metallurgical testwork will be used in further variability work and will quantify any potential differences in the massive magnetite horizon between the northern and southern Resource blocks. Diamond holes completed in 2009 and 2015 indicate that the weathering of material in block 60 is shallower than northern blocks 20 and 30. This drilling was designed to confirm the observations and is required for the BFS.

Diamond holes were also drilled for geotechnical data to determine important pit slope information. The intention is to include the southern Indicated Resources in the BFS mining schedule on granted Mining Lease M51/878.

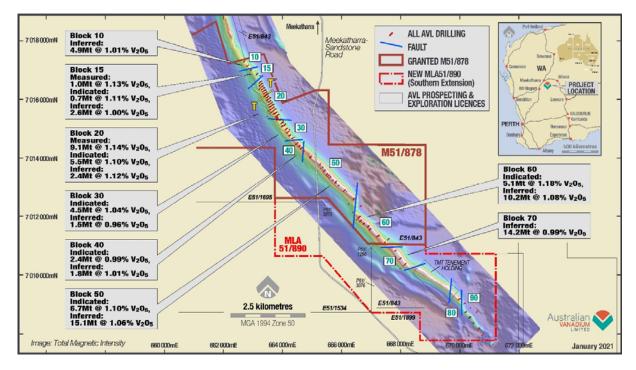


Figure 4 Mineral Resources for Shown Fault Blocks over TMI

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.

AVL has identified multiple potential markets for the sale of the Fe-Ti coproduct formed after extraction of vanadium. 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 1) 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

Australian Vanadium Ltd Half Year Report December 2020

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.

As a result of 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.

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.

As part of the detailed pilot scale testing now completed at the Metso Outotec pyrometallurgical testing facilities in the US, roast/leach test work using a pelletised concentrate 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 represents 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 production and build on results from previous AVL bench scale tests, where 587kg of concentrate was roasted in batches and similar vanadium leach extractions were observed.

The Company has also produced high purity 99.4% vanadium pentoxide (V_2O_5) from representative leach liquor. The vanadium flake product from the Project is expected to be of outstanding quality, comparable to high purity products from existing global producers. Testing has included APV and AMV production routes, allowing optionality in the BFS to simplify the refinery circuit and potentially lower both capital and operating costs. Testwork has demonstrated the ability to produce high purity V_2O_5 at scale.

Green hydrogen

AVL released a green hydrogen strategy in November 2020, with four potential uses of green hydrogen for the Project:

- Use of green hydrogen in the ore reduction process.
- Introducing green hydrogen into the natural gas pipeline.
- Transportation from minesite vehicles through to haulage trucks.
- Use of green hydrogen ammonia byproduct material in vanadium processing.

AVL has had significant engagement with Government of Western Australia departments and commercial companies working on green hydrogen projects.

In November 2020 AVL signed a Memorandum of Understanding (MOU) with ATCO Australia for the supply of green hydrogen for the processing plant. ATCO is one of seven proponents shortlisted by the Australian Renewable Energy Agency (ARENA) under the Renewable Hydrogen Deployment Round to develop a project for the commercial scale production of hydrogen gas in Australia.

The MOU provides a basis for negotiations to establish a binding offtake agreement, with the intention for ATCO to supply 10% of the total gas requirements with green hydrogen.



Figure 5 ATCO's Clean Energy Innovation Hub in Jandakot, WA

MOUs

AVL signed an MOU with U.S. Vanadium LLC (USV) in relation to offtake from the Project in December 2020. USV produces and sells a range of specialty vanadium chemicals, including the world's highest-purity vanadium pentoxide (V_2O_5) at 99.6%, which is produced at its Hot Springs, Arkansas facility. The MOU sets a framework for progression to a possible formal and binding agreement and outlines an offtake proposal for USV to acquire 2,000 tonnes of V_2O_5 per annum from AVL.

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.

An MOU was signed by AVL 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.

Separate MOUs were 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 and Singaporean VRFB manufacturer V-Flow Tech. Both MOUs relate to the supply of vanadium pentoxide from AVL's planned Project.

VSUN Energy

Battery sales

VSUN Energy has a strong, well-developed list of leads for battery projects in markets such as mining, agriculture, utility and commercial settings. During the period, a rural residential customer in Hyden, Western Australia, has ordered a 5kW/30kWh VRFB standalone power system to provide uninterrupted power to his residence and farm.

The Shire of Beverley in Western Australia has selected a 5kW/30kWh VRFB which will be paired with 26kW of solar to enable the expansion of its caravan park. Both batteries will be supplied by V-Flow Tech.

MOUs

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.

VSUN Energy also signed an MOU for vanadium electrolyte supply and battery sales agency for Australia with V-Flow Tech, a commercial VRFB manufacturer based in Singapore. V-Flow's smallest VRFB, a 5kW/30kWh is suited to larger residential properties, particularly in rural areas and small commercial businesses.



Figure 6 A 5kW/30kWh V-Flow VRFB

An MOU was also 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 covers electrolyte

production within Australia for use in CEC VRFBs and product development of CEC's residential VRFB for the Australian market.



Figure 7 Proposed design for residential VRFB

Australia's first grid-connect ready 5kW/30kWh residential VRFB from CEC is currently being tested at Western Australian design and consultancy group CADDS Group. Initial concept designs have been created (see Figure 7) and further product development is underway.

VSUN Energy will refine market-ready residential and small business VRFBs for the Australian energy storage market, with units available in 2021.

Looking at the wider Australian VRFB market, Invinity Energy Systems will supply a 2MW/8MWh VRFB for a utilityscale solar-plus-storage project to be built in South Australia. VSUN Energy is working closely with Invinity Energy Systems on a series of potential projects in Australia and the ability to supply vanadium electrolyte to projects within the country.

Coates Project

In September 2020 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 the 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.

Work on the Coates project is not the Company's main priority, but exploration planning is being progressed for geochemical and geophysical programs.

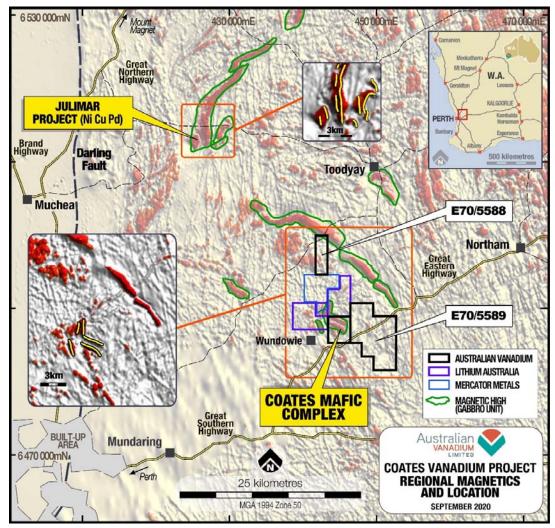


Figure 8 Coates Mafic Complex Location with Chalice Gold Mines Julimar Discovery shown on 80m GSWA Aeromagnetics Imagery

ESG

The Environmental Impact Assessment application will be lodged during the first quarter of 2021. The submission focuses on the mine site and concentration plant (CMB) only, which are to be located at the Gabanintha mine site. A separate industrial assessment will be lodged for the planned processing plant at Tenindewa.

AVL has a strong ESG focus and will be further developing this work throughout 2021. The introduction of a green hydrogen strategy and the use of renewable energy for mining operations contribute to the environmental strategies of the Company. AVL continues to support the Stephen Michael Foundation in its endeavours to provide opportunities for the children of Meekatharra. The Company is also engaged with the Meekatharra Community Resource Centre and wider Meekatharra community. In the Geraldton region our Community Relations Advisor is building relationships and establishing ways that AVL can make a difference for the community as we move towards construction and production.

Corporate

The AVL team was joined by experienced company executive Cliff Lawrenson in early October 2020. 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.

On 30 September 2020 the Company announced the issue of 357,142,857 ordinary fully paid shares under a Placement to institutional and sophisticated investors at a price of \$0.014 each, and 178,571,428 options on the basis of one free option for every two shares subscribed for and issued in the Placement. The options were issued on 18 December 2020, following approval by shareholders at the general meeting held on 25 November 2020, and are exercisable at \$0.025 each with an expiry of two years from date of issue. The total funds raised from the Placement was \$5 million before costs.

SIGNIFICANT CHANGES IN STATE OF AFFAIRS

Significant changes in the state of affairs of the consolidated entity during the half-year are detailed under the heading 'Review of Operations' of this report. In the opinion of the Directors, there were no other significant changes in the state of affairs of the consolidated entity that occurred during the half-year under review not otherwise disclosed in this report or in the financial report.

DIVIDENDS

No dividends have been declared or paid during the half-year ended 31 December 2020 or in the prior period, and the Directors do not recommend the payment of a dividend in respect of the half-year ended 31 December 2020.

EVENTS SUBSEQUENT TO REPORTING DATE

Since the end of the half-year the Company has received \$973,000 from the Australian Federal Government's Research and Development Tax Incentive Scheme for the 2019/20 tax year.

There are no further matters or circumstances that have arisen since the end of the half-year, which significantly affected or may significantly affect the operations of the consolidated entity, the results of those operations, or the state of affairs of the consolidated entity in subsequent financial periods.

AUDITOR'S DECLARATION OF INDEPENDENCE

A copy of the auditor's independence declaration as required under section 307C of the Corporations Act 2001 in relation to the review for the half-year ended 31 December 2020 is included within this financial report.

Signed on behalf of the Directors

Mawanon

Cliff Lawrenson CHAIRMAN Perth, 12 March 2021

Competent Person Statement — Mineral Resource Estimation

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 Barnes and Mr Davis are members 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.

Competent Person Statement – Metallurgical Results

The information in this report 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.

Competent Person Statement Ore Reserves

The technical information in this report that relates to the Ore Reserve estimate for the Project is based on information compiled by Mr Ross Cheyne, an independent consultant to AVL. Mr Cheyne is a Fellow of the Australasian Institute of Mining and Metallurgy. He is an employee and Director of Orelogy Mine Consulting Pty Ltd. Mr Cheyne has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a competent person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Cheyne consents to the inclusion in the report of the matters related to the Ore Reserve estimate in the form and context in which it appears.



T (08) 6165 4090 F (08) 6165 4067 A 18 Sangiorgio Court Osborne Park WA 6017 P Locked Bag 4 Osborne Park DC WA 6916 E info@armada.com.au

strength in numbers

AUDITOR'S INDEPENDENCE DECLARATION UNDER SECTION 307C OF THE CORPORATIONS ACT 2001 TO THE MEMBERS OF

AUSTRALIAN VANADIUM LIMITED

I declare that, to the best of my knowledge and belief, during the half-year ended 31 December 2020 there have been:

- i) No contraventions of the auditor independence requirements as set out in the *Corporations Act 2001* in relation to the review; and
- ii) No contraventions of any applicable code of professional conduct in relation to the review.

Armada Audit & Assurance

ARMADA AUDIT & ASSURANCE PTY LTD

NIGEL DIAS

DIRECTOR

Perth, Dated 12 March 2021

TAX & ACCOUNTING | AUDITING | BUSINESS MANAGEMENT | BUSINESS CONSULTING | FINANCIAL PLANNING | LENDING

ARMADA.COM.AU

Armada Audit & Assurance Pty Ltd - ABN 52 618 974 119. A member of the Armada Group. Whilst the Armada Group logo is utilised by all members of the Armada Group, each member of the Armada Group is a separate legal entity in its own right and is not in partnership with any other members of the Armada Group. Liability limited by a scheme approved under Professional Standards Legislation.

Condensed Consolidated Statement of Profit or Loss and

Other Comprehensive Income

For the half year ended 31 December 2020

	Consol	idated
	31 December 2020	31 December 2019
	\$	\$
Revenue		
R&D Income	-	249,643
Other Income	115,131	73,231
	115,131	322,874
Expenses		
Exploration and evaluation expenditure	(12,999)	(54,089)
Depreciation	(66,949)	(60,955)
Finance costs	(13,302)	(20,094)
Share Based Payments	(24,845)	(33,439)
Directors fees and benefits expenses	(50,000)	(37,500)
Wages and salaries (incl superannuation)	(612,372)	(652,609)
Travel costs	-	(82,894)
Consulting fees	(101,796)	(232,194)
Other corporate and administrative expenses	(382,366)	(453,343)
Loss before income tax expense from continuing operation	(1,149,498)	(1,304,243)
Income Tax Expense	-	-
Loss after income tax expense for the half year	(1,149,498)	(1,304,243)
Other Comprehensive Income/(Loss)		
Other Comprehensive Income/(Loss) that is not allowed to be reclassified to the statement of profit and loss	281,250	(157,500)
Total Comprehensive Loss for the half year	(868,248)	(1,461,743)
	Cents	Cents
Basic/ diluted earnings per share	(0.04)	(0.06)

Condensed Consolidated Statement of Financial Position

As at 31 December 2020

		Consolidated	
		31 December	30 June
		2020	2020
	Notes	\$	\$
Assets			
Current Assets			
Cash and cash equivalent		7,153,521	5,541,703
Trade and other receivables		349,504	225,196
Total Current Assets		7,503,025	5,766,899
Non-Current Assets			
Plant and equipment		249,764	238,863
Right of Use Asset		112,670	151,343
Deferred exploration expenditure	2	26,022,288	23,479,022
Investments		821,250	540,000
Total Non-Current Assets		27,205,972	24,409,228
Total Assets		34,708,997	30,176,127
Liabilities			
Current Liabilities			
Trade and Other Payables		1,226,773	461,179
Lease Liability - current		79,375	106,098
Provisions		172,952	187,580
Total Current Liabilities		1,479,100	754,857
Non-Current Liabilities			
Lease Liability – non-current		45,297	69,829
Total Non-Current Liabilities		45,297	69,829
Total Liabilities		1,524,397	824,686
Net Assets		33,184,600	29,351,441
Equity			
Issued capital	3	94,141,899	89,457,105
Reserves		(294,709)	(592,572)
Accumulated Losses		(60,662,590)	(59,513,092)
Total Equity		33,184,600	29,351,441

Condensed Consolidated Statement of Changes in Equity

For the half year ended 31 December 2020

		Co	onsolidated		
	Issued Capital	Accumulated Losses	Asset Revaluation Reserve	Option Reserve	Total
	\$	\$	\$	\$	\$
Balance as at 1 July 2019	83,411,527	(56,741,093)	(802,500)	70,491	25,938,425
Opening balance adjustment on adoption of new accounting standard AASB16 <i>Leases</i>	-	(58,369)		-	(58,369)
Balance as at 1 July 2019 restated	83,411,527	(56,799,462)	(802,500)	70,491	25,880,056
Loss for the period	-	(1,304,243)	-	-	(1,304,243)
Movement in fair value of investments recognised in equity	-	-	(157,500)	-	(157,500)
Total comprehensive loss for the period	-	(1,304,243)	(157,500)	-	(1,461,743)
Shares issued as consideration	31,516	-	-	-	31,516
Shares issued pursuant to placements	6,594,975	-	-	-	6,594,975
Shares issued on conversion of Performance Rights	27,099	-	-	-	27,099
Share based payments	-	-	-	164,288	164,288
Capital Raising Cost	(731,167)	-	-	-	(731,167)
Balance as at 31 December 2019	89,333,950	(58,103,705)	(960,000)	234,779	30,505,024
Balance as at 1 July 2020	89,457,105	(59,513,092)	(870,000)	277,428	29,351,441
Loss for the period	-	(1,149,498)	-		(1,149,498)
Movement in fair value of investments recognised in equity	-	-	281,250	-	281,250
Total comprehensive loss for the period	-	(1,149,498)	281,250	-	(868,248)
Shares issued as consideration	28,000	-	-	-	28,000
Shares issued pursuant to placements	5,000,000	-	-	-	5,000,000
Shares issued on conversion of Performance Rights	45,731	-	-	-	45,731
Share based payments	-	-	-	16,613	16,613
Capital Raising Cost	(388,937)	-	-	-	(388,937)
Balance as at 31 December 2020	94,141,899	(60,662,590)	(588,750)	294,041	33,184,600

Condensed Consolidated Statement of Cash Flows

For the half year ended 31 December 2020

	Consolidated	
	31 December	31 December
	2020	2019
Notes	\$	\$
Cash flows from operating activities		
Payments to suppliers and employees	(1,263,636)	(1,834,018)
Interest paid on leases	(24,487)	(20,094)
Interest received	13,871	18,753
Receipts from other entities	90,612	-
Net cash used in operating activities	(1,183,640)	(1,835,359)
Cash flows from investing activities		
Payments for exploration and mining interests	(1,928,295)	(2,660,796)
Receipts from Research and Development Tax Incentives and Government Grants	165,623	267,900
Payments for property plant and equipment	(39,178)	(3,625)
Net cash used in investing activities	(1,801,850)	(2,396,521)
Cash flows from financing activities		
Proceeds from issue of shares	5,000,000	6,594,975
Payment of capital raising costs	(351,437)	(506,605)
Repayment of lease liabilities	(51,255)	(57,805)
Net cash provided by financing activities	4,597,308	6,030,565
Net increase in cash held	1,611,818	1,798,685
Cash at beginning of the period	5,541,703	4,417,373
Cash at end of the period	7,153,521	6,216,058

Notes to the Financial Statements

1. STATEMENT OF SIGNIFICANT ACCOUNTING POLICIES

This consolidated interim financial report for the half-year reporting period ended 31 December 2020 has been prepared in accordance with Australian Accounting Standard AASB 134: Interim Financial Reporting and the Corporations Act 2001.

This consolidated interim financial report does not include full disclosures of the type normally included in an annual report. It is recommended that this financial report be read in conjunction with the annual financial report for the year ended 30 June 2020 and any public announcements made by Australian Vanadium Limited during the half-year reporting period in accordance with the continuous disclosure requirements of the Corporations Act 2001.

The accounting policies have been consistently applied with those of the previous financial periods and corresponding interim reporting period, except in relation to the matters disclosed below.

Financial Position

The financial report has been prepared on the going concern basis, which contemplates the continuation of normal business activity and the realisation of assets and the settlement of liabilities in the normal course of business. The Group's primary source of funding is from capital raisings and equity funding. For the half year ended 31 December 2020 the Group incurred a net loss of \$1,149,498 (2019: \$1,304,243). Further the Group incurred a cash out flows from operating and investing activities of \$2,985,490 for the half year ended 31 December 2020.

The Group had a working capital surplus of \$6,023,925 at 31 December 2020. The Group has a listed investment of \$821,250 at 31 December 2020 that can be sold to generate further funds. The Group also has the ability to cut back and reduce discretionary costs as necessary. Furthermore, on 8 January 2021, the Group received \$973,000 from the Australian Federal Government's Research and Development Tax Incentive Scheme for the 2019/20 tax year.

Based on the working capital surplus at 31 December 2020, the value of the listed investment, the ability to raise further capital, and the Group's ability to reduce discretionary costs, the directors consider the going concern basis of preparation to be appropriate.

Adoption of New and Revised Accounting Standards

In the half-year ended 31 December 2020, the Directors have reviewed all of the new and revised Standards and Interpretations issued by the AASB that are relevant to the Group and effective for the current reporting periods beginning on or after 1 July 2020. As a result of this review, the Directors have determined that there is no material impact of the Standards and Interpretations in issue not yet adopted on the Group and, therefore, no change is necessary to Group accounting policies.

Significant Accounting Estimates and Judgments

The Group makes certain estimates and assumptions concerning the future which, by definition, will seldom represent actual results. The estimates and assumption that have a significant inherent risk in respect of estimates based on

future events, which could have a material impact on the assets and liabilities in the next financial year, are discussed below:

(a) Exploration and evaluation expenditure

Exploration and evaluation costs have been capitalised in accordance with the requirements of AASB 6. The application of this policy necessarily requires management to make certain estimates and assumptions as to future events and circumstances. Any such estimates and assumptions may change as new information becomes available. If, after having capitalised expenditure under the policy, it is concluded that the expenditures are unlikely to be recovered by future exploitation or sale, then the relevant capitalised amount will be written off to the Statement of Profit or Loss and Other Comprehensive Income.

(b) Share-based payment transactions

The consolidated entity measures the cost of equity-settled transactions with employees by reference to the fair value of the equity instruments at the date at which they are granted. The fair value is determined by using either the Binomial or Black-Scholes model taking into account the terms and conditions upon which the instruments were granted. The accounting estimates and assumptions relating to equity-settled share-based payments would have no impact on the carrying amounts of assets and liabilities within the next annual reporting period but may impact profit or loss and equity. Refer to Note 4 for further information.

Australian Vanadium Ltd Half Year Report December 2020

2. DEFERRED EXPLORATION EXPENDITURE

	31 December	30 June
	2020	2020
	\$	\$
Deferred exploration expenditure		
Expenditure brought forward	23,479,022	21,750,919
Receipts for exploration and mining activities*	(165,623)	(2,658,763)
Expenditure incurred during the period	2,721,888	4,401,842
Expenditure written off during period	(12,999)	(14,976)
Expenditure carried forward	26,022,288	23,479,022

*Receipts of \$165,623 is government grants related to exploration and evaluation expenditure.

The expenditure above relates principally to the exploration and evaluation phase. The ultimate recoupment of this expenditure is dependent upon the successful development and commercial exploitation, or alternatively, sale of the respective areas of interest, at amounts at least equal to book value.

3. ISSUED CAPITAL

		31 December	30 June	
	_	2020	2020	
	Notes	\$	\$	
Issued Capital				
Issues and paid up capital				
Ordinary shares - fully paid	3(i)	96,496,217	91,422,486	
Ordinary shares - partly paid	3(ii)	8,000	8,000	
Share issue costs written off against issued capital		(2,362,318)	(1,973,381)	
		94,141,899	89,457,105	
Movement in ordinary share in issue				
(i) Ordinary share - fully paid		No.	\$	
Balance at beginning of period		2,566,322,832	91,422,486	
Movement				
- Issue of ordinary shares via placements*		357,142,857	5,000,000	
 Issue of ordinary shares on conversion of performance rights 		4,573,125	45,731	
 Issue of ordinary shares in lieu of services rendered 		2,120,000	28,000	
Balance at end of Period		2,930,158,814	96,496,217	
(ii) Ordinary share - partly paid (\$0.0389 unpaid)				
Balance at beginning of period		80,000,000	8,000	
Movement		-	-	
Balance at end of Period		80,000,000	8,000	

*The Company issued 357,142,857 shares to shareholders and 178,571,428 options to shareholders on the basis of one free option for every two shares subscribed for and issued in the Placement. The total funds raised from the placement being \$5,000,000

4. SHARE BASED PAYMENTS

Share based payments reserve		31 December	30 June	
	Notes	2020	2020	
		\$	\$	
Balance at the beginning of the period		277,428	70,491	
Fair value of options recognised in share issue costs	4(ii)	37,500	189,464	
Fair value of performance rights converted to shares	4(iv)	(45,731)	(25,175)	
Fair value of performance rights issued to employees	4(iv)	3,083	42,648	
Fair value of service rights issued to employees	4(iii)	1,061	-	
Fair value of performance rights issued to directors	4(i)	20,700	-	
Balance at the end of the period		294,041	277,428	

i. Performance Rights Issued to Directors

On 2 December 2020 the Company issued 124,000,000 performance rights to Directors under the Australian Vanadium Employee Incentive Plan adopted at the Company's Annual General Meeting held on 25 November 2020. The performance rights have been valued using a binomial model using the following inputs:

		Tranche 1	Tranche 2	Tranche 3	Tranche 4
Expected volatility	%	107.63%	107.63%	107.63%	107.63%
Risk-free interest rate	%	0.335%	0.335%	0.335%	0.335%
Expected life	Years	5.0	5.0	5.0	5.0
Expiry date		2-Dec-25	2-Dec-25	2-Dec-25	2-Dec-25
Exercise price	\$	Nil	Nil	Nil	Nil
Underlying share price	\$	0.013	0.013	0.013	0.013
Fair value of performance right	\$	0.009	0.009	0.008	0.008

The fair value of the performance rights granted is \$1,054,000, with the total amount recognised in equity over the vesting period to 31 December 2020 being \$20,700.

Australian Vanadium Ltd Half Year Report December 2020

The performance conditions of the rights are as follows:

- Service condition The service condition is met if employment with Australian Vanadium Ltd is continuous for the period commencing on the grant date until the date the rights vest; and
- Market based vesting conditions vesting conditions must be met for the applicable performance period to trigger the Board consideration of whether the performance rights should vest. For the specific tranches above the vesting conditions are:
 - Tranche 1 share price of at least \$0.025 over 20 consecutive trading days on which the Company's shares have actually traded;
 - Tranche 2 share price of at least \$0.03 over 20 consecutive trading days on which the Company's shares have actually traded;
 - Tranche 3 share price of at least \$0.04 over 20 consecutive trading days on which the Company's shares have actually traded; and
 - Tranche 4 share price of at least \$0.05 over 20 consecutive trading days on which the Company's shares have actually traded.

ii. Options Issued to Brokers

The Company issued 7,500,000 options during the half year as consideration for underwriting services provided. The options issued have been valued using a binomial model with the following parameters:

- Grant date: 25 November 2020
- Option exercise price: \$0.025
- Underlying share price at issue: \$0.014
- Volatility: 101.82%
- Effective interest rate: 0.105%
- Expiry date: 17 December 2022
- Fair value of option \$0.005

with the total fair value of the options issued to the brokers on grant date being \$37,500.

- iii. The Company issued 1,000,000 service rights in lieu of services performed (exercise price: \$nil; expiry date: 31 March 2021) during the half year which have been valued using the share price on grant date being \$0.013. The total amount recognised in equity over the vesting period to 31 December 2020 is \$1,061.
- iv. In the prior year the Company issued 4,573,125 performance rights (exercise price: \$nil; expiry date: 31 December 2020) which were valued using the share price on grant date being \$0.01. The total amount recognised in equity over the vesting period to 6 July 2020 was \$45,731 of which \$3,083 was expensed in the half-year ended 31 December 2020 and \$42,648 was expensed as at 30 June 2020. The performance rights were subsequently converted to shares.

5. SEGMENT INFORMATION

AASB 8 requires a 'management approach' under which segment information is presented on the same basis as that used for internal reporting purposes. The Board as a whole will regularly review the identified segments in order to allocate resources to the segment and to assess its performance.

The Group has identified two operating segments for 2020 being:

- 1. Exploration consisting of the Australian Vanadium Project and other exploration projects, and
- 2. Energy Storage VSUN Energy Pty Limited's vanadium redox flow battery sales activities.

Segment revenues, assets and liabilities are those that are directly attributable to a segment and the relevant portion that can be allocated to the segment on a reasonable basis. Segment assets include all assets used by a segment and primarily consist of plant and equipment and project tenements. Segment liabilities consist primarily of trade and other creditors and employee benefits.

The following tables present revenue, expenditure and asset information regarding operating segments for the half-year ended 31 December 2020 and 31 December 2019.

Dec 2020	Exploration \$	Energy Storage \$	Unallocated \$	Total \$
Sales to External Customers	-	-	-	-
Other Revenue	-	10,000	105,131	115,131
Total Segment Revenue	-	10,000	105,131	115,131
Total Segment Results	(472,750)	(57,848)	(618,900)	(1,149,498)
Total Segment Assets	26,022,288	165,887	8,520,822	34,708,997
Total Segment Liabilities	1,368,501	1,916	153,980	1,524,397
Write off on Exploration Assets	(12,999)	-	-	(12,999)
Depreciation and Amortisation	-	(11,180)	(55,769)	(66,949)
Finance Costs	-	-	(13,302)	(13,302)
Interest Income	-	-	13,871	13,871

Dec 2019	Exploration	Energy Storage	Unallocated	Total
	\$	\$	\$	\$
Sales to External Customers	-	732	-	732
Other Revenue	249,643	-	72,499	322,142
Total Segment Revenue	249,643	732	72,499	322,874
Total Segment Results	(195,578)	(132,058)	(976,607)	(1,304,243)
Total Segment Assets	24,553,935	139,663	7,198,036	31,891,634
Total Segment Liabilities	1,349,685	8,354	28,571	1,386,610
Write off on Exploration Assets	(54,089)	-	-	(54,089)
Depreciation and Amortisation	-	(7,037)	(53,918)	(60,955)
Finance Costs	-	-	(20,094)	(20,094)
Interest Income	-	-	27,054	27,054

6. CONTINGENT LIABILITIES

In October 2019 the Company signed an option agreement with Wyalong Pastoral Co Pty Ltd to purchase a site of 1,334 acres (subject to survey) inland from Geraldton, which has been identified as a possible location for its vanadium processing plant. The option was extended on 31 October 2020 for another year with one further one-year term extension permitted. The purchase price for the land will be \$2,100 per acre, to be calculated on the surveyed area.

7. EVENTS SUBSEQUENT TO REPORTING DATE

Since the end of the half-year the Company has received \$973,000 from the Australian Federal Government's Research and Development Tax Incentive Scheme for the 2019/20 tax year.

There are no further matters or circumstances that have arisen since the end of the half-year which significantly affected or may significantly affect the operations of the consolidated entity, the results of those operations, or the state of affairs of the consolidated entity in subsequent financial periods.

8. RELATED PARTY TRANSACTIONS

Aside from the directors' remuneration including the performance rights issued to Directors, there were no related party transactions in the half year ended 31 December 2020. The financial report for the year ended 30 June 2020 provides further details on the nature of previous related party transactions.

Directors' Declaration

In the opinion of the directors of Australian Vanadium Limited (the "Consolidated Entity" or "Group") :

- 3. The financial statements and notes thereto of the consolidated entity, as set out within this financial report, are in accordance with the Corporations Act 2001 including:
 - a. complying with Accounting Standard AASB 134: Interim Financial Reporting and the Corporations Regulations 2001; and
 - b. giving a true and fair view of the consolidated entity's financial position as at 31 December 2020 and of its performance for the half-year then ended.
- 2. In the directors' opinion, there are reasonable grounds to believe that the Group will be able to pay its debts as and when they become due and payable.

This declaration is signed in accordance with a resolution of the Board of Directors.

Myawanon

Cliff Lawrenson CHAIRMAN

Perth, 12 March 2021



T (08) 6165 4090 F (08) 6165 4067 A 18 Sangiorgio Court Osborne Park WA 6017 P Locked Bag 4 Osborne Park DC WA 6916 E info@armada.com.au

strength in numbers

Independent Auditor's Review Report to the Members of Australian Vanadium Limited

Report on the Half-Year Financial Report

Conclusion

We have reviewed the accompanying half-year financial report of Australian Vanadium Limited ('the Group"), which comprises the condensed consolidated statement of financial position as at 31 December 2020, the condensed consolidated statement of profit or loss and other comprehensive income, the condensed consolidated statement of cash flows and the condensed consolidated statement of changes in equity for the half-year ended on that date, notes comprising a summary of significant accounting policies, other explanatory notes and the directors' declaration of the Group comprising the Company and the entities it controlled at half-year end from time to time during the half-year.

Based on our review, which is not an audit, nothing has come to our attention that causes us to believe that the half-year financial report of Australian Vanadium Limited is not in accordance with the *Corporations Act 2001* including:

- (a) Giving a true and fair view of the Group's financial position as at 31 December 2020 and of its performance for the half-year ended on that date; and
- (b) Complying with Accounting Standard AASB 134: *Interim Financial Reporting* and the *Corporations Regulations 2001*;

Basis for Conclusion

We conducted our review in accordance with ASRE 2410 *Review of a Financial Report Performed by the Independent Auditor of the Entity.* Our responsibilities are further described in the *Auditor's Responsibility for the Review of the Half-Year Financial Report* section of our report. We are independent of the Group in accordance with the independence requirements of the *Corporations Act* 2001 and the ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants (including Independence Standards)* (the Code) that are relevant to our audit of the annual financial report in Australia. We have also fulfilled our other ethical responsibilities in accordance with the Code.

We confirm that the independence declaration required by the *Corporations Act 2001* which has been given to the directors of the Group, would be in the same terms if given to the directors as at the time of this auditor's review report.

TAX & ACCOUNTING | AUDITING | BUSINESS MANAGEMENT | BUSINESS CONSULTING | FINANCIAL PLANNING | LENDING

ARMADA.COM.AU

Armada Audit & Assurance Pty Ltd - ABN 52 618 974 119. A member of the Armada Group. Whilst the Armada Group logo is utilised by all members of the Armada Group, each member of the Armada Group is a separate legal entity in its own right and is not in partnership with any other members of the Armada Group. Liability limited by a scheme approved under Professional Standards Legislation.



T (08) 6165 4090 F (08) 6165 4067 A 18 Sangiorgio Court Osborne Park WA 6017 P Locked Bag 4 Osborne Park DC WA 6916 E info@armada.com.au

strength in numbers

Directors' Responsibility for the Half-Year Financial Report

The Directors of the Group are responsible for the preparation of the half-year financial report that gives a true and fair view in accordance with Australian Accounting Standards and the *Corporations Act 2001* and for such internal control as the directors determine is necessary to enable the preparation of the half-year financial report that gives a true and fair view is free from material misstatement, whether due to fraud or error.

Auditor's Responsibility for the Review of the Half-Year Financial Report

Our responsibility is to express a conclusion on the half-year financial report based on our review. ASRE 2410 requires us to conclude whether we have become aware of any matter that makes us believe that the half-year financial report is not in accordance with the *Corporations Act 2001* including giving a true and fair view of the Group's financial position as at 31 December 2020 and its performance for the half-year ended on that date, and complying with Accounting Standard AASB 134: *Interim Financial Reporting* and the *Corporations Regulations 2001*.

A review of a financial report consists of making enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with Australian Auditing Standards and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Armada Audit & Assurance

ARMADA AUDIT & ASSURANCE PTY LTD

NIGEL DIAS

DIRECTOR

Perth, Dated 12 March 2021

TAX & ACCOUNTING | AUDITING | BUSINESS MANAGEMENT | BUSINESS CONSULTING | FINANCIAL PLANNING | LENDING

ARMADA.COM.AU

Armada Audit & Assurance Pty Ltd - ABN 52 618 974 119. A member of the Armada Group. Whilst the Armada Group logo is utilised by all members of the Armada Group, each member of the Armada Group is a separate legal entity in its own right and is not in partnership with any other members of the Armada Group. Liability limited by a scheme approved under Professional Standards Legislation.

Australian Vanadium Ltd Half Year Report December 2020

MINERAL RESOURCE

Table 1 - The Australian Vanadium Project Mineral Resource Estimate at February 2020 by Domain and
Resource Classification ¹

Zone	Classification	МТ	V ₂ O ₅ %	Fe%	TiO ₂ %	SiO ₂ %	Al ₂ O ₃ %	LOI%
HG 10	Measured	10.1	1.14	43.9	13.0	9.2	7.5	3.7
	Indicated	25.1	1.10	45.4	12.5	8.5	6.5	2.9
	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
LG 2-5	Measured	-	-	-	-	-	-	-
	Indicated	44.5	0.51	25.0	6.8	27.4	17.0	7.9
	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
Transported 6-8	Measured	-	-	-	-	-	-	-
	Indicated	-	-	-	-	-	-	-
	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
	Total	208.2	0.74	33.6	9.0	19.8	12.1	5.6

Table 2 Ore Reserve Statement as at December 2020, at a cut-off grade of $0.7\% V_2O_5$

Ore Reserve	Mt	V ₂ O ₅ %	Fe ₂ O3%	TiO ₂ %	SiO ₂ %	LOI%	V₂O₅ production kt	Ore Reserve	Mt
Proved	9.8	1.08	59.9	12.4	8.7	3.5	63.2	Waste	244.5
Probable	22.4	1.04	61.7	11.8	8.3	2.8	158.9	Total Material	276.7
Total Ore	32.1	1.05	61.2	12.0	8.4	3.0	222.1	Strip Ratio	7.6

¹ 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).