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ASX ANNOUNCEMENT **4TH APRIL 2023**

HIGH GRADE RESULTS FROM INFILL DRILLING AT THE AUSTRALIAN VANADIUM PROJECT

Drilling results received to support Mineral Resource Update

KEY POINTS

- **Results received for 7,283 metres of Reverse Circulation infill drilling at the Australian Vanadium Project.**
- **The infill drilling program confirms higher vanadium and iron grades and more shallow weathering profiles.**
- **Best down-hole high-grade zone Reverse Circulation intercepts include:**
  - 22ARC025 – 14m @ **1.35% V_2O_5** from 64m
    *Including 9m at **1.52% V_2O_5** from 65m*
  - 22ARC024 – 19m @ **1.28% V_2O_5** from 29m
    *Including 12m at **1.44% V_2O_5** from 36m*
  - 22ARC041 – 21m at **1.21% V_2O_5** from 29m
    *Including 11m at **1.47% V_2O_5** from 36m*
  - 22ARC051 – 15m at **1.35% V_2O_5** from 25m
    *Including 13m at **1.41% V_2O_5** from 26m*
  - 22ARC015 – 23m at **1.25% V_2O_5** from 18m
    *Including 16m at **1.36% V_2O_5** from 21m*
  - 22ARC017 – 15m at **1.31% V_2O_5** from 33m
    *Including 8m at **1.40% V_2O_5** from 37m*
  - 22ARC019 – 24m at **1.02% V_2O_5** from 73m
    *Including 9m at **1.26% V_2O_5** from 85m*
- **Assay results will inform updated Mineral Resource Estimate and economic updates in 2023.**

Australian Vanadium Limited (ASX: AVL, "the Company" or "AVL") is pleased to announce new assay results from infill Reverse Circulation (RC) drilling at the Australian Vanadium Project ("the Project") near Meekatharra in Western Australia. The new assay results, coupled with magnetic susceptibility data, provide further confirmation of the presence of higher grades of vanadium and iron, with a shallower weathering profile in the high-grade Zone 10 primary economic horizon in the southern resource blocks 50, 60 and 70 at the Project (Figure 1).

CEO Graham Arvidson comments on the program's significance, *"These drill results improve our geotechnical and geometallurgical understanding of the Mineral Resource inventory, which will play*

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a key role in maximising the value of the Project as we move closer to financial investment decision and development. The initial results from this infill drilling program confirm higher vanadium and iron grades and shallower weathering profiles. These positive results will enable our geometallurgical team to further optimise concentrate grade, yield and recovery outcomes, while maximising the Project economics and further de-risking the ramp-up period of the Project."

An extensive program of resource development infill drilling was completed from August to October 2022. The drilling consisted of nine diamond core drill holes for 813.5 metres and 86 RC drill holes for 7,283 metres. This program has provided additional core for quality assurance of RC drill results and ongoing characterisation of the geometallurgy of the deposit along strike. The RC drilling infills southern resource blocks 50, 60 and 70 to support higher Mineral Resource classification.[1] Infill RC and diamond core programs during 2022 targeted the pit optimisation shells and planned early mine life of the mining schedule developed during the Bankable Feasibility Study (BFS)[2] which was completed in 2022. Variability testwork will be performed to confirm expected vanadium recoveries and other plant performance metrics based on previous pilot testwork.

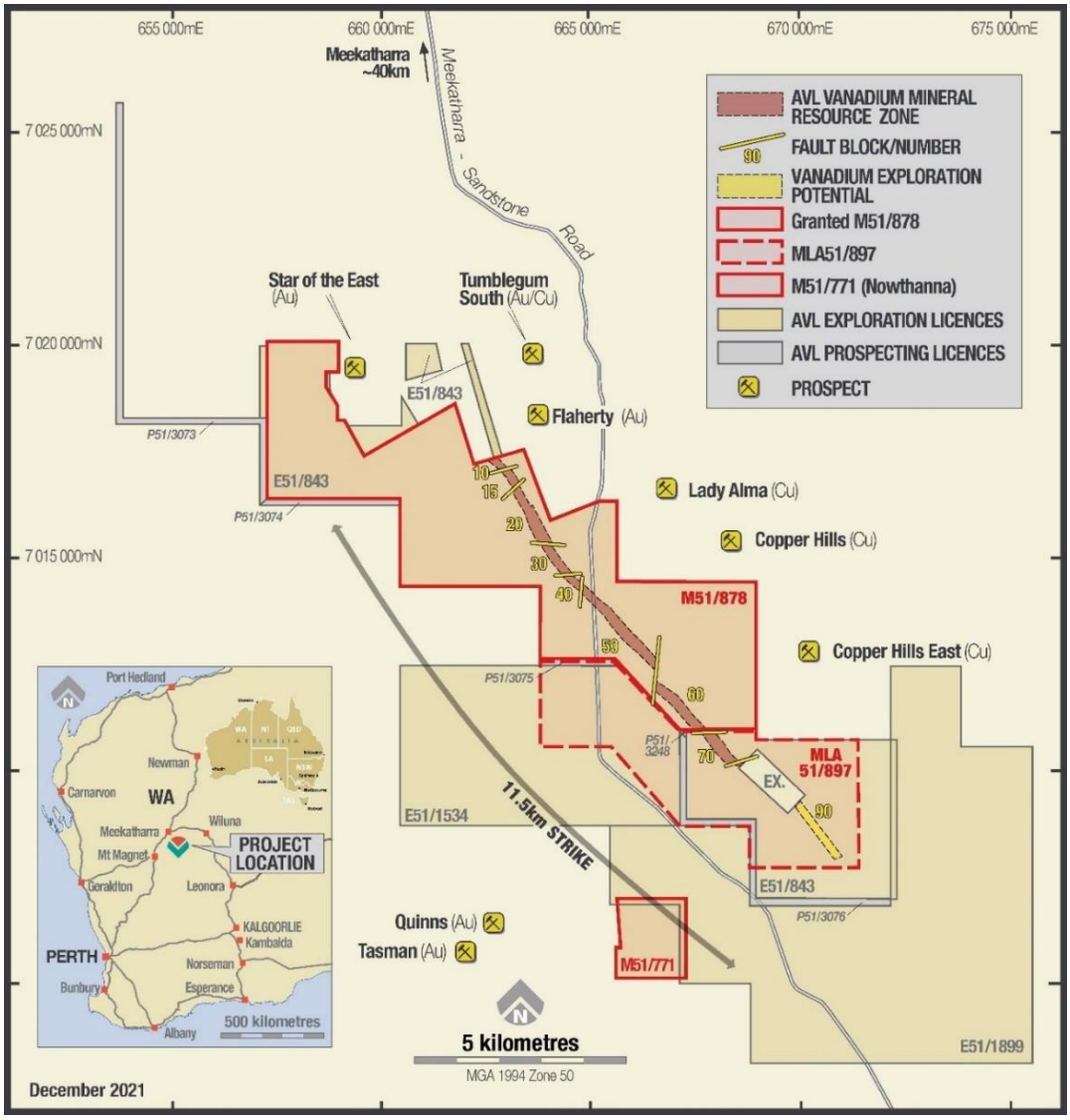

***Figure 1* - The Australian Vanadium Project Site Location and Block Numbers for reference**

[1] See ASX Announcement dated 25th October 2022 *'Vanadium Resource Development Drill Program Completed'*
[2] See ASX Announcement dated 6th April 2022 *'Bankable Feasibility Study for the Australian Vanadium Project'*

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2022 REVERSE CIRCULATION DRILLING

During September and October 2022, 86 RC holes were drilled through southern blocks 50, 60 and 70 at the Project, for a total of 7,283 metres of percussion drilling. Results have been received and interpreted for all of the metres drilled. Southern blocks at the Project have shallow weathering compared to the northern blocks and will provide high quality early mine-life feed to the Crushing, Milling and Beneficiation (CMB) plant.

The RC program infills drill lines to a spacing of 70m by 30m in the top 100m vertically of early mine-life BFS pit optimisations in block 60 and 50. This is the same drill density which currently supports the Measured Mineral Resource category in northern blocks 15 and 20.

Infill drilling to 140m by 30m spacing elsewhere through blocks 50, 60 and 70 can support an increase in the Mineral Resource to Indicated category in areas of current Inferred Mineral Resource. The initial mining at the Project is currently scheduled to commence in block 60, then block 50. Drilling has also greatly improved the resolution of data in block 70, the southernmost block of the current Mineral Resource, which is presently excluded from the BFS. The Mineral Resource inventory of block 70 that is high grade zone 10 Inferred Mineral Resource, is reported as 15.4 Million Tonnes at 1.00% V_2O_5, which represents an attractive future resource extension for the Project. Drill collars for all 2022 drilling are shown in Figure 2.

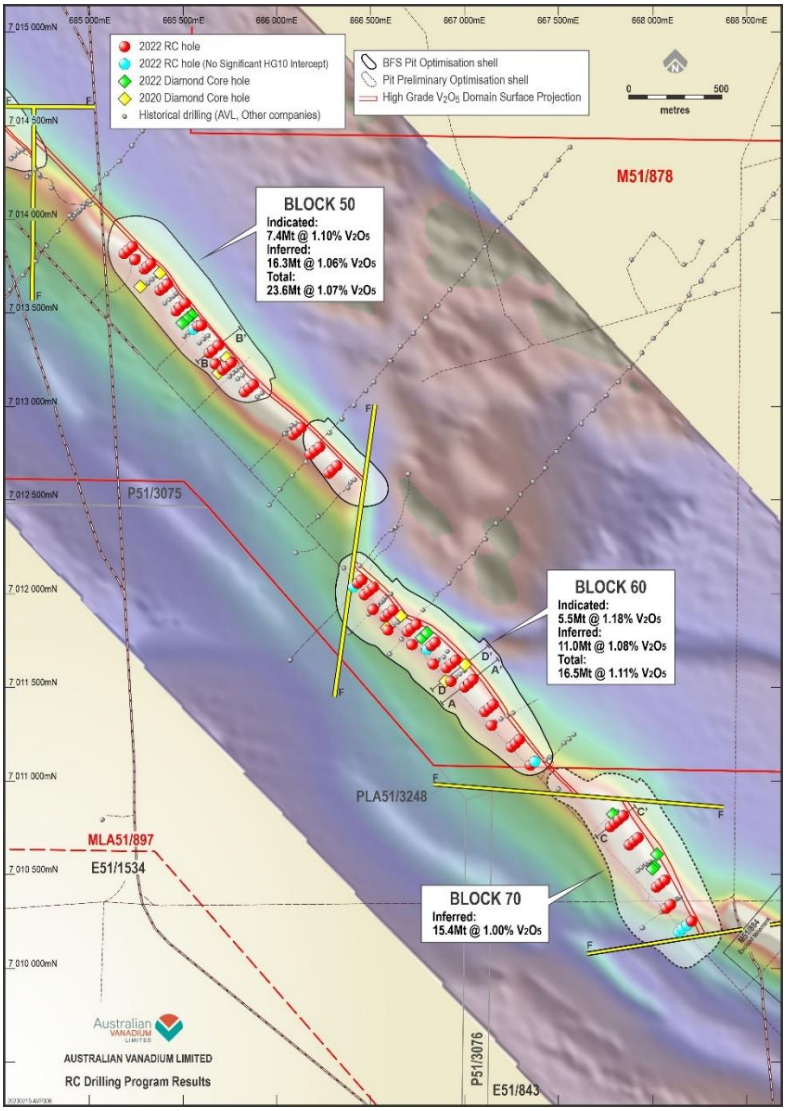

Figure 2 – **Southern Block Drilling and Mineral Resource**

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Block 60 RC Drilling

During the 2022 resource development program, 35 RC holes for 3,150m were drilled in block 60, infilling the stage 1 and 2 pit designs to 70m drill sections, and the stage 3 pit design to 140m spaced sections.

The tenor of results received in block 60 are comparable to the grade and thickness of the high grade domain throughout the resource, though there are some double thickness intercepts of the high grade domain in several holes. This is likely due to high angle faults onlapping the high grade domain over strike distances of up to 50 metres. Importantly, the high magnetic susceptibility of the shallowest RC holes in block 60 confirm minimal weathering of the high grade domain. This high magnetic susceptibility has previously been correlated with improved concentrate grades and yields in the BFS.[2]

One hole at the southern end of block 60 drilled over the top of the high grade domain due to the presence of a deep channel adjacent to the regional fault (22ARC009). Another hole intersected a dolerite dyke cross cutting the deposit (22ARC026) and a further hole at the north end of block 60 drilled through one of the major faults that dislocate the deposit into km scale blocks (22ARC040). All other holes defined modest to excellent intercepts of the high grade domain.

The intercepts of the recent RC holes in block 60 are shown below in Figure 3. A trace of the high grade domain is shown projected to the surface.

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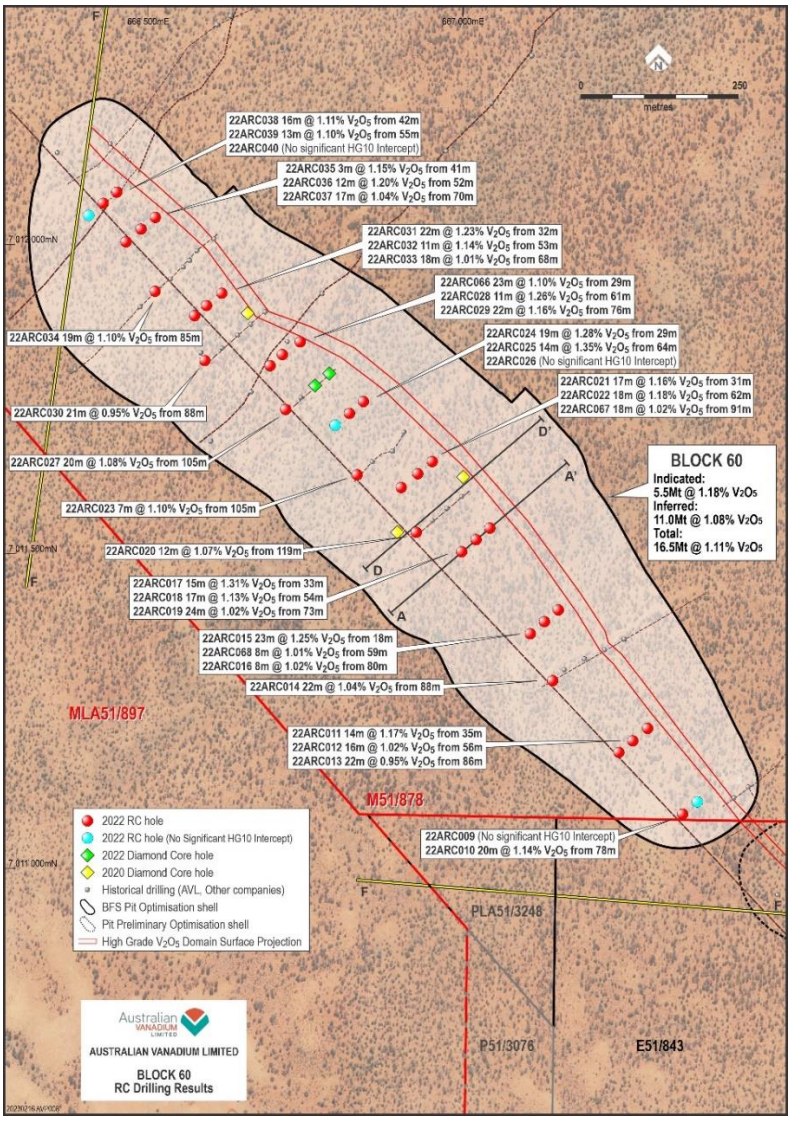

***Figure 3* – Block 60 Drill Plan with High Grade Intercepts**

Best intercepts returned in block 60 include:

- 22ARC025 – 14m @ 1.35% V_2O_5 from 64m
  Including 9m at 1.52% V_2O_5 from 65m
- 22ARC024 – 19m @ 1.28% V_2O_5 from 29m
  Including 12m at 1.44% V_2O_5 from 36m
- 22ARC015 – 23m at 1.25% V_2O_5 from 18m
  Including 16m at 1.36% V_2O_5 from 21m
- 22ARC019 – 24m at 1.02% V_2O_5 from 73m
  Including 9m at 1.26% V_2O_5 from 85m
- 22ARC017 – 15m at 1.31% V_2O_5 from 33m
  Including 8m at 1.40% V_2O_5 from 37m
- 22ARC066 – 23m at 1.10% V_2O_5 from 29m
  Including 9m at 1.31% V_2O_5 from 39m

Figure 4 is a cross section within block 60 and demonstrates the consistency of the vanadium deposit defined by the 2022 RC drilling. The location of this section is denoted by A – A' on the overview total magnetic intensity (TMI) plan in Figure 2 and the block 60 collar plan in Figure 3.

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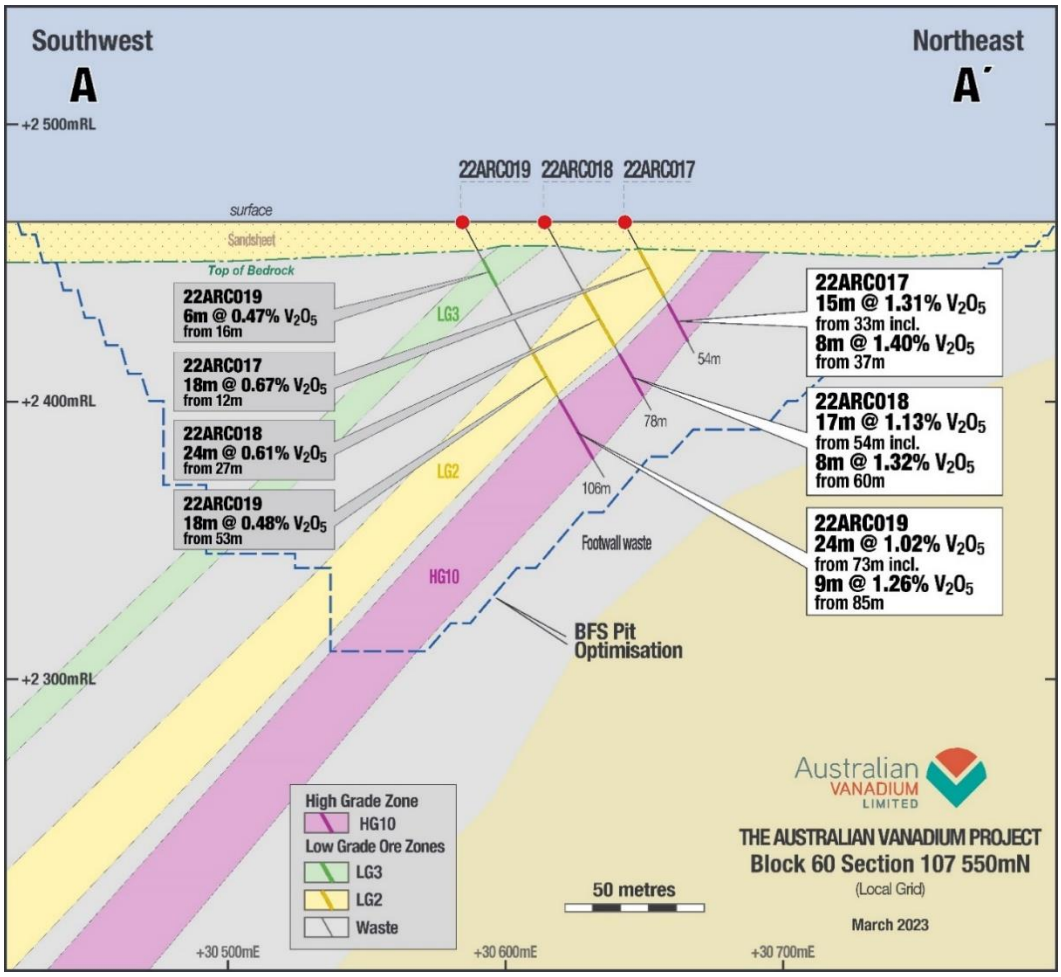

***Figure 4* – Block 60 Drill Section 107,550mN (Local Grid)**

Block 50 Drilling

In year three of the BFS mine schedule, mining of stage one in block 50 commences. This occurs in the northern portion of the block 50 pit optimisation. During the 2022 resource development program, 35 holes for 2,626m of RC drilling were completed. All except nine holes were drilled in the main BFS pit optimisation area, infilling stages one, two and three of the block 50 main pit. This was completed at 70m spaced sections with 30m spaced drill centres, to a depth of 100m below surface. The remaining nine holes infill the southern-most portion of block 50 to 140m spaced sections with 30m spaced centres, supporting an increase in the Mineral Resource category for that portion of the deposit. In the BFS, the southern area of block 50 was an Inferred Mineral Resource pit shell, scheduled to be mined towards the end of the Project mine life.

In received results, the high grade domain is as thick, or thicker, than previously modelled, with grade at the same tenor as previous drilling. There was one drill hole in block 50 that returned a 'no significant intercept' result, being hole 22ARC056 that was abandoned due to a collar blow out on a historical hole in front of the drill location on the same section.

The intercepts of all 2022 RC holes in block 50 is shown below and in Figure 5, with the trace of the high grade domain projected to surface, and the outline of the BFS design pit. Best intercepts returned in block 50 include:

- 22ARC053 – 24m at 1.04% V_2O_5 from 16m
  Including 11m at 1.30% V_2O_5 from 26m
- 22ARC041 – 21m at 1.21% V_2O_5 from 29m

Including 11m at 1.47% V_2O_5 from 36m

- 22ARC047 – 20m at 1.15% V_2O_5 from 32m
  Including 7m at 1.35% V_2O_5 from 39m
- 22ARC051 – 15m at 1.35% V_2O_5 from 25m
  Including 13m at 1.41% V_2O_5 from 26m
- 22ARC063 – 15m at 1.18% V_2O_5 from 49m
  Including 6m at 1.38% V_2O_5 from 56m

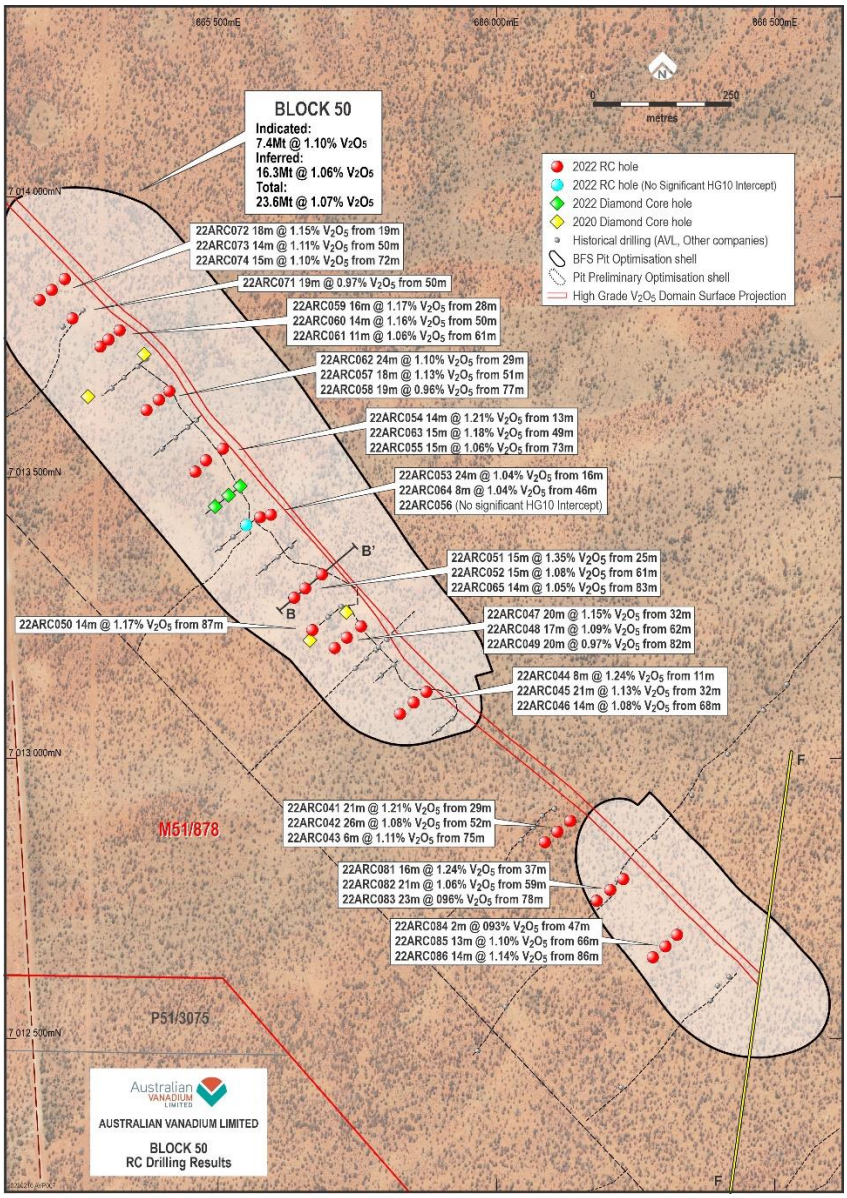

***Figure 5* – Block 50 Drill Plan with High Grade Intercepts**

Figure 6 below shows a section from block 50 with intercepts for holes 22ARC051, 22ARC052 and 22ARC065. Results received confirm the high grade domain has thick internal zones of grade above 1.20% V_2O_5, and that the existing geological model defines predictable layering within the gabbro, validating previous models. The section is denoted by B – B' on the overview TMI plan in Figure 2 and the block 50 plan in Figure 5 and is located at 109,790mN in the local grid co-ordinate system.

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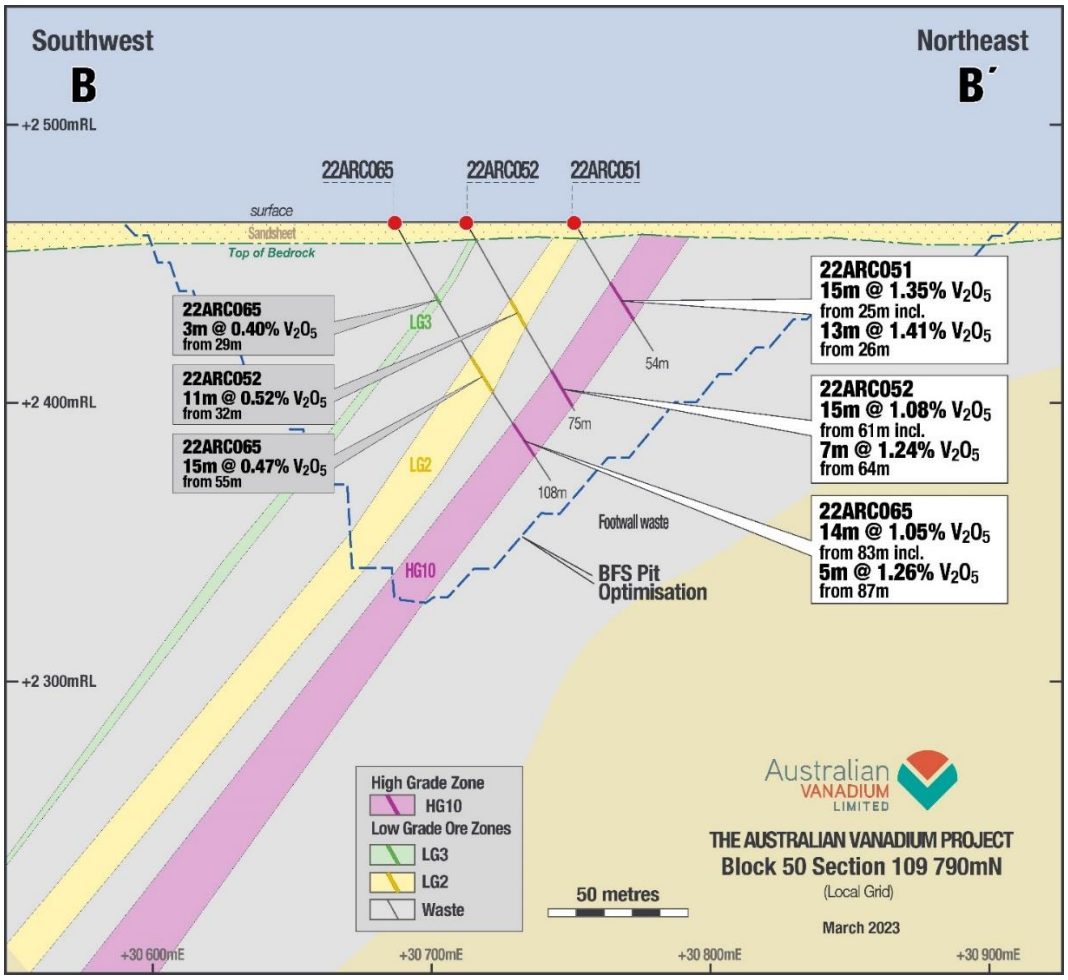

***Figure 6* – Block 50 Drill Section 109,790mN (Local Grid)**

Block 70 Drilling

Block 70 is not included in the BFS mine schedule as it is south of the granted mining lease M51/878. Mining lease application M51/897 covers the block 70 Mineral Resource which can be included in the mine schedule when the mining lease is granted. Drilling during 2022 improved the drill density by infill drilling to 140m spaced sections, with 30m drill centres on each section, to a depth of about 100m below surface. Results are now returned for all 16 drill holes in block 70, for 1,507m of drilling.

Results for block 70 define continuous thicknesses of the high grade domain with internal zones of grade greater than 1.25% V_2O_5. Magnetic susceptibility of the shallowest drill holes demonstrates very shallow weathering of the high grade unit. Block 70 has potential to provide high quality vanadium, iron material very close to surface, immediately beneath the pervasive sand sheet and more sporadic high grade domain detrital units covering the area.

Three holes on the southernmost line in block 70 were not drilled to full depth and appear to still be in the hangingwall sequence to the high grade domain. The holes were ended early due to the high grade domain being further east than previously interpreted, which was not anticipated during drilling leading to early ending of the holes. If further diamond core is required at the Project, these holes represent an opportunity for use as a pre-collar, being holes 22ARC075, 22ARC076 and 22ARC077.

The intercepts of RC holes in block 70 with returned assays is shown in Figure 7. The trace of the high grade domain is shown projected to the surface, and the preliminary pit optimisation outline. Best intercepts returned in block 70 include:

- 22ARC004 – 17m at 1.10% V_2O_5 from 95m
  Including 7m at 1.26% V_2O_5 from 101m
- 22ARC005 – 24m at 1.20% V_2O_5 from 48m
  Including 9m at 1.26% V_2O_5 from 56m
- 22ARC006 – 25m at 0.96% V_2O_5 from 77m
  Including 4m at 1.26% V_2O_5 from 92m

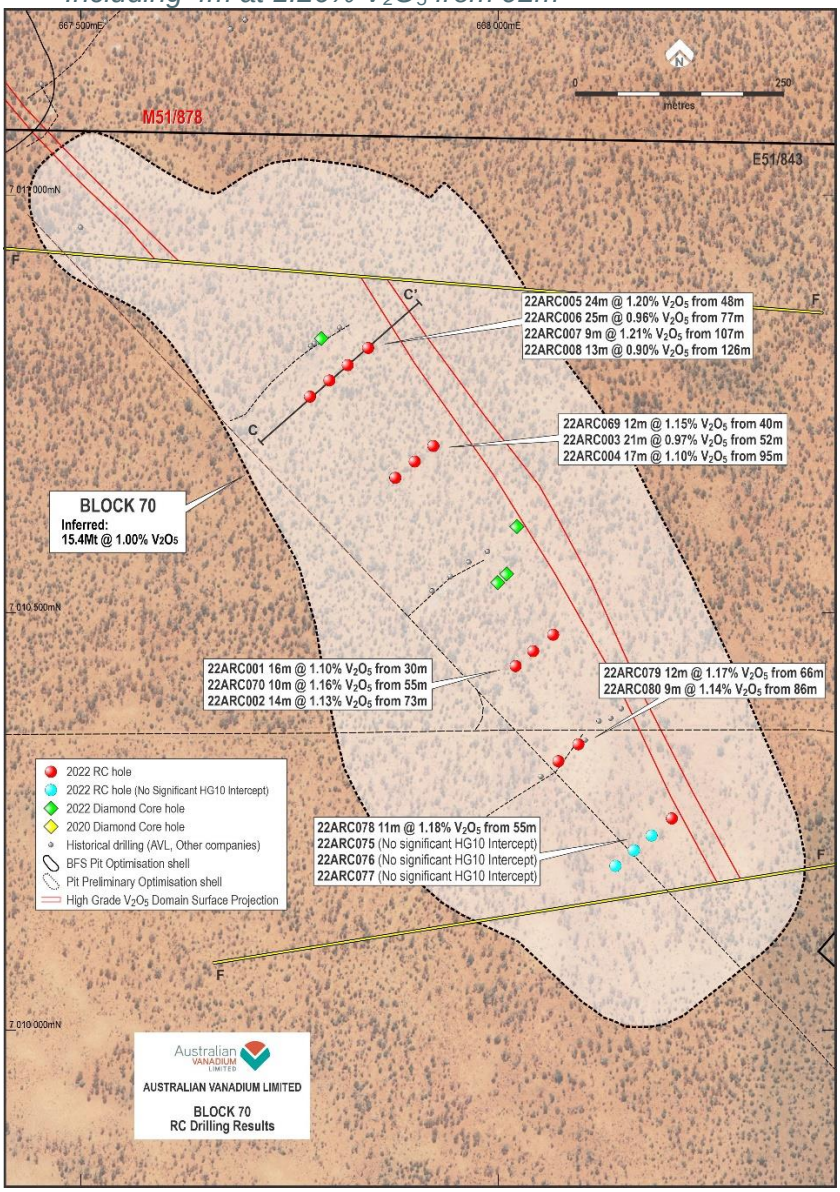

***Figure 7* – Block 70 Drill Plan with High Grade Intercepts**

A cross section of block 70 is shown in Figure 8 and includes the intercepts for holes 22ARC005, 22ARC006, 22ARC007 and 22ARC008. Intercepts confirm the high grade domain has good continuity, with relatively fresh material close to surface. The section is denoted by C – C' on the overview TMI plan in Figure 2 and the block 70 plan in Figure 7 and is located at 106,480mN in the local grid co-ordinate system.

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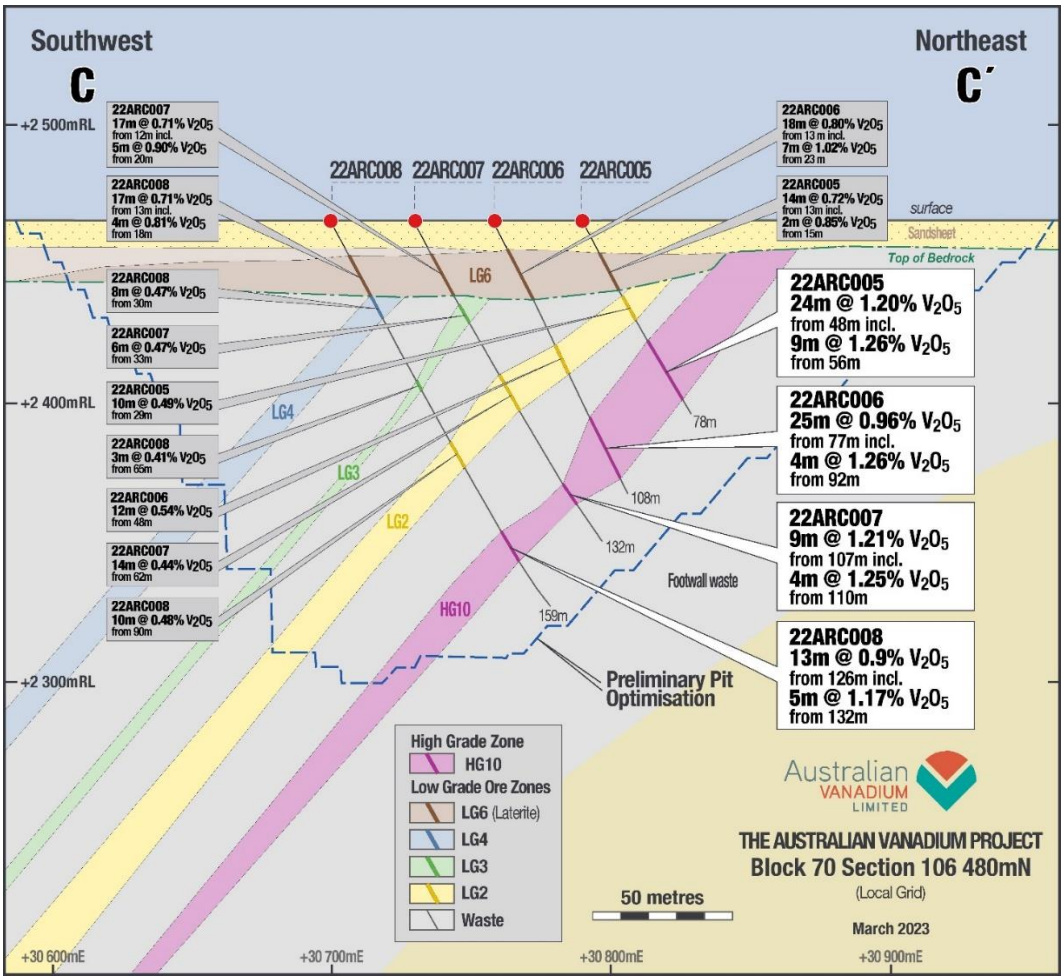

***Figure 8* – Block 70 Drill Section 106,480mN (Local Grid)**

2020 GEOTECHNICAL DIAMOND CORE RESULTS

Geotechnical diamond drilling of eight holes targeting two pit designs (block 50 and block 60) was completed in late 2020 to gain information to improve southern block pit wall designs to underpin a BFS level optimisation and mine schedule. Four of the eight holes intersected the high-grade domain, providing additional material for geometallurgical studies and further assay confirmation of the Mineral Resource RC drilling results.

The core was retained at the Company shed to ensure all geotechnical information that was needed could be gained from the core. The core was cut during 2022, then submitted for assay, ready for incorporation into the geology model and Mineral Resource update planned for 2023.

Results from the core assays demonstrate the increasing tenor of the vanadium, iron and titanium endowment of the high-grade domain moving from the north towards the south through the greater deposit strike. Figure 9 shows the location of the 2020 geotechnical diamond core holes, relative to the recently completed October 2022 campaigns of diamond core and RC drilling.

Assays plus visual observations of these four geotechnical diamond core holes substantiate the existing geological interpretation and tenor of mineralisation/ore in the southern blocks.

Down hole intersections of the vanadium high-grade domain, by drill hole were:

- 20GDH008 – 14.6m at 1.44% V_2O_5, 43.6% Fe and 18.7% TiO_2 from 10m
- 20GDH006 – 10.05m at 1.32% V_2O_5, 48.9% Fe and 12.5% TiO_2 from 16.45m

- 20GDH003 – 16.95m at 1.16% V_2O_5, 48.4% Fe and 13.0% TiO_2 from 34.35m
  Including 11.7m at 1.25% V_2O_5, 51.6% Fe and 14.0% TiO_2 from 38m
- 20GDH002 – 14.52m at 1.12% V_2O_5, 46.5% Fe and 12.8% TiO_2 from 46.4m
  Including 8m at 1.28% V_2O_5, 51.2% Fe and 14.5% TiO_2 from 50m

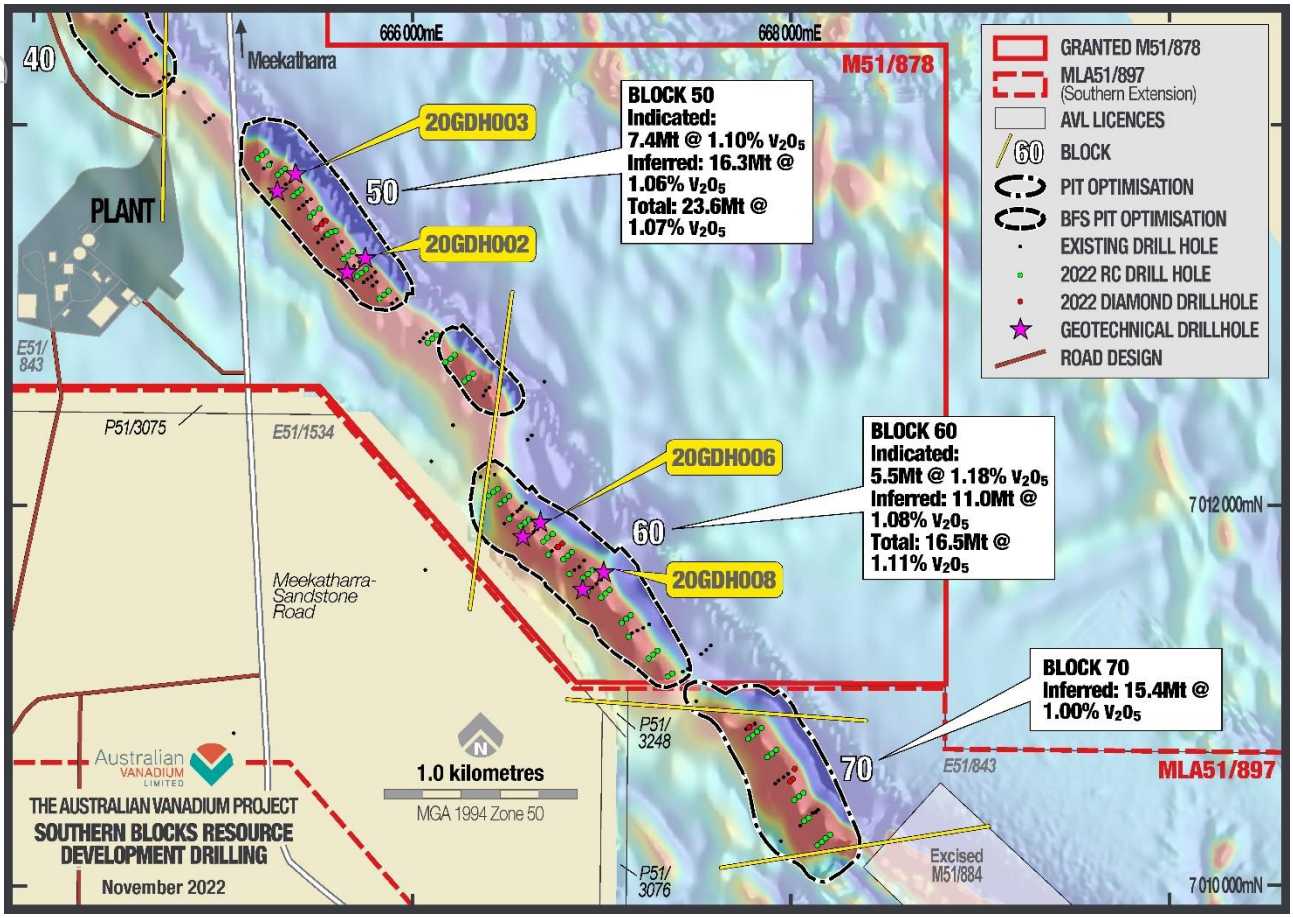

***Figure 9* – Geotechnical Diamond Holes in the Southern Blocks 50 and 60 over TMI**

Figure 10 is a cross section showing drill hole 20GDH008 in block 60. This section illustrates the consistency of the continuity and grade of the high-grade domain.

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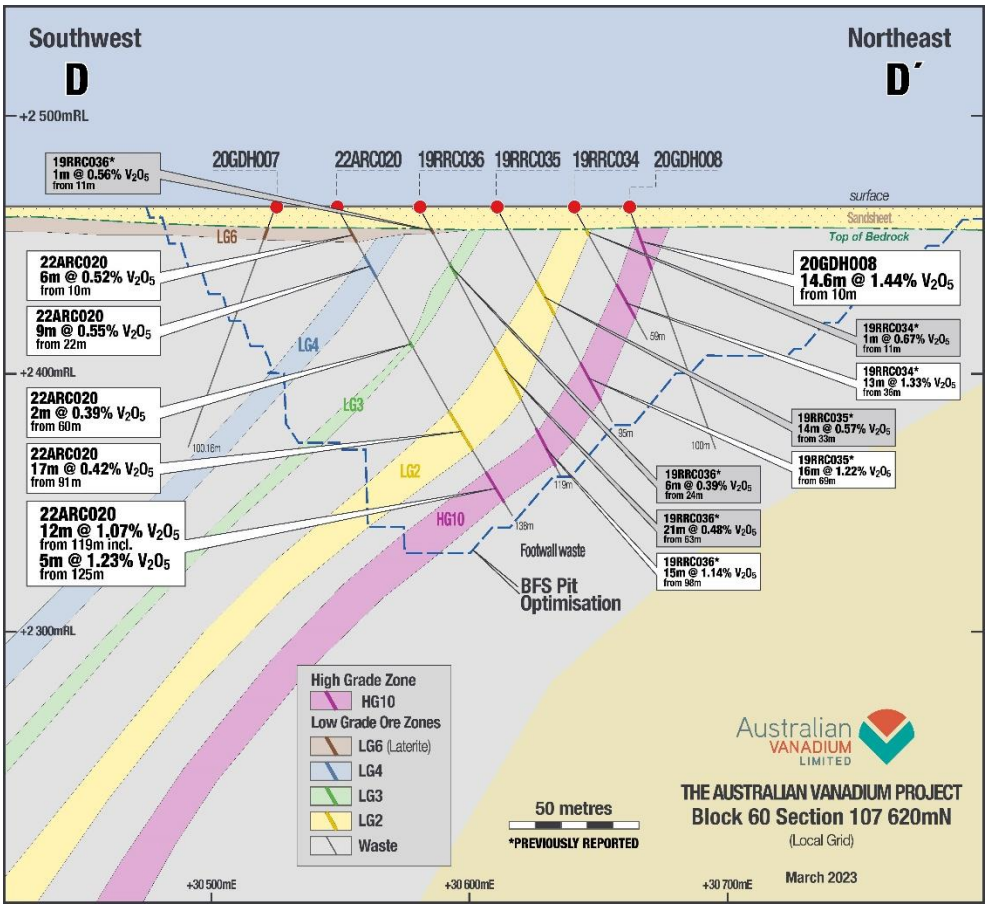

Figure 10 – **Local Grid Cross Section 107 620mN in Southern Block 60**

NEXT STEPS

With all results now returned for the RC portion of the resource development program, update of the geological model is underway. Diamond core drilled during 2022 will be used for variability and geometallurgy studies, as well as Mineral Resource QAQC purposes. Samples have been submitted to the laboratory and results are pending. Sampling of the remainder of the 2020 and 2022 diamond core is planned in the coming weeks for geometallurgy programs which are aimed at further de-risking the Project.

During the remainder of the first half of 2023 the geological model update will be completed, followed by an update of the Mineral Resource for the Project.

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This announcement has been approved in accordance with the Company's published continuous disclosure policy and has been approved by the Board.

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COMPETENT PERSON STATEMENT – EXPLORATION RESULTS AND TARGETS

The information in this report that relates to Exploration Results is based on and fairly represents information and supporting documentation prepared by Mr Brian Davis (Consultant with Geologica Pty Ltd) and Ms Gemma Lee who is employed by Australian Vanadium Ltd as Principal Geologist. Mr Davis is a member of the Australasian Institute of Mining and Metallurgy and Ms Lee is a member of the Australian Institute of Geoscientists. Both Mr Davis and Ms Lee 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 Davis and Ms Lee 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 — 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 both members of the Australasian Institute of Mining and Metallurgy (AusIMM) and the Australian Institute of Geoscientists (AIG). 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.

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APPENDIX 1

Collars and Intercepts – 2022 Reverse Circulation Drilling

Collar Table: MGA95, Zone 50

Hole ID	Depth (m)	East	North	RL	Dip	Azimuth	Comments
22ARC001	55	668,065	7,010,473	464	-50	050	
22ARC002	96	668,020	7,010,436	464	-50	050	
22ARC003	81	667,900	7,010,681	464	-50	050	
22ARC004	120	667,876	7,010,661	464	-50	050	
22ARC005	78	667,844	7,010,817	464	-50	050	
22ARC006	108	667,819	7,010,796	464	-50	050	
22ARC007	132	667,797	7,010,778	464	-50	050	
22ARC008	159	667,774	7,010,758	464	-50	050	
22ARC009	102	667,372	7,011,106	465	-50	050	NSI - Fault Zone
22ARC010	108	667,349	7,011,086	464	-50	050	
22ARC011	60	667,293	7,011,223	465	-50	050	
22ARC012	84	667,270	7,011,203	465	-50	050	
22ARC013	114	667,248	7,011,185	465	-50	050	
22ARC014	120	667,142	7,011,298	465	-50	050	
22ARC015	48	667,151	7,011,411	465	-50	050	
22ARC016	96	667,107	7,011,373	465	-50	050	
22ARC017	54	667,043	7,011,541	465	-50	050	
22ARC018	78	667,021	7,011,523	465	-50	050	
22ARC019	106	666,998	7,011,503	465	-50	050	
22ARC020	138	666,926	7,011,534	465	-50	050	
22ARC021	54	666,951	7,011,647	465	-50	050	
22ARC022	91	666,928	7,011,628	465	-50	050	
22ARC023	138	666,832	7,011,626	465	-50	050	
22ARC024	54	666,842	7,011,742	465	-50	050	
22ARC025	85	666,820	7,011,723	465	-50	050	
22ARC026	102	666,797	7,011,705	465	-50	050	NSI – Dolerite Intrusion
22ARC027	135	666,718	7,011,729	465	-50	050	
22ARC028	78	666,713	7,011,817	465	-50	050	
22ARC029	106	666,694	7,011,799	465	-50	050	
22ARC030	118	666,590	7,011,807	465	-50	050	
22ARC031	63	666,617	7,011,914	465	-50	050	
22ARC032	72	666,593	7,011,895	465	-50	050	
22ARC033	100	666,573	7,011,878	465	-50	050	
22ARC034	114	666,511	7,011,917	465	-50	050	
22ARC035	54	666,511	7,012,035	465	-50	050	
22ARC036	72	666,488	7,012,016	465	-50	050	
22ARC037	96	666,465	7,011,996	465	-50	050	
22ARC038	66	666,450	7,012,075	465	-50	050	
22ARC039	78	666,429	7,012,057	465	-50	050	
22ARC040	102	666,406	7,012,038	465	-50	050	NSI - Fault Zone
22ARC041	60	666,129	7,012,888	465	-50	050	
22ARC042	84	666,106	7,012,869	465	-50	050	
22ARC043	96	666,084	7,012,850	465	-50	050	
22ARC044	45	665,873	7,013,118	465	-50	050	
22ARC045	60	665,850	7,013,099	465	-50	050	
22ARC046	90	665,826	7,013,079	465	-50	050	
22ARC047	60	665,756	7,013,235	465	-50	050	
22ARC048	84	665,731	7,013,215	465	-50	050	

Hole ID	Depth (m)	East	North	RL	Dip	Azimuth	Comments
22ARC049	110	665,709	7,013,196	465	-50	050	
22ARC050	108	665,670	7,013,228	465	-50	050	
22ARC051	54	665,686	7,013,327	465	-50	050	
22ARC052	78	665,657	7,013,302	465	-50	050	
22ARC053	48	665,596	7,013,434	465	-50	050	
22ARC054	36	665,510	7,013,552	465	-50	050	
22ARC055	95	665,461	7,013,511	465	-50	050	
22ARC056	18	665,552	7,013,415	465	-50	050	NSI – collar blow out
22ARC057	80	665,396	7,013,639	465	-50	050	
22ARC058	104	665,374	7,013,621	465	-50	050	
22ARC059	52	665,326	7,013,763	464	-50	050	
22ARC060	70	665,306	7,013,746	464	-50	050	
22ARC061	84	665,292	7,013,734	464	-50	050	
22ARC062	54	665,415	7,013,654	465	-50	050	
22ARC063	66	665,480	7,013,531	465	-50	050	
22ARC064	72	665,577	7,013,430	465	-50	050	
22ARC065	108	665,637	7,013,286	465	-50	050	
22ARC066	60	666,741	7,011,837	465	-50	050	
22ARC067	120	666,902	7,011,606	465	-50	050	
22ARC068	84	667,129	7,011,392	465	-50	050	
22ARC069	60	667,922	7,010,699	464	-50	050	
22ARC070	72	668,041	7,010,454	464	-50	050	
22ARC071	78	665,242	7,013,784	464	-50	050	
22ARC072	48	665,229	7,013,854	464	-50	050	
22ARC073	72	665,206	7,013,835	464	-50	050	
22ARC074	90	665,184	7,013,817	464	-50	050	
22ARC075	66	668,183	7,010,233	463	-50	050	NSI – hole finished early
22ARC076	108	668,162	7,010,215	463	-50	050	NSI – hole finished early
22ARC077	114	668,140	7,010,197	463	-50	050	NSI – hole finished early
22ARC078	72	668,207	7,010,253	463	-50	050	
22ARC079	84	668,095	7,010,342	463	-50	050	
22ARC080	102	668,071	7,010,322	463	-50	050	
22ARC081	60	666,223	7,012,784	465	-50	050	
22ARC082	87	666,200	7,012,765	465	-50	050	
22ARC083	102	666,176	7,012,746	465	-50	050	
22ARC084	78	666,319	7,012,685	466	-50	050	
22ARC085	87	666,299	7,012,664	465	-50	050	
22ARC086	108	666,276	7,012,645	465	-50	050	

NSI: No Significant Intercept (high grade domain)

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2022 RC Drilling Intercepts Table

Hole ID	From (m)	To (m)	Interval (m)	V_2O_5 %	Fe %	TiO_2 %	SiO_2 %	Al_2O_3 %	LOI %	Zone	Block
22ARC001	30	46	16	1.10	47.8	12.0	7.2	5.4	2.25	HG10	70
including	*36*	*42*	*6*	*1.22*	*52.5*	*12.8*	*2.6*	*4.0*	*1.36*	*HG10*	*70*
22ARC002	73	87	14	1.13	49.0	12.3	6.1	5.3	0.23	HG10	70
including	*76*	*82*	*6*	*1.23*	*53.1*	*13.5*	*2.5*	*4.1*	*- 1.82*	*HG10*	*70*
22ARC003	52	73	21	0.97	42.8	11.0	10.1	8.2	2.30	HG10	70
including	*65*	*72*	*7*	*1.25*	*52.3*	*13.7*	*2.4*	*4.0*	*0.53*	*HG10*	*70*
22ARC004	95	112	17	1.10	47.1	11.9	8.0	6.0	- 0.02	HG10	70
including	*101*	*108*	*7*	*1.26*	*53.1*	*13.3*	*2.8*	*4.2*	*- 1.56*	*HG10*	*70*
22ARC005	48	72	24	1.20	48.5	13.1	5.8	5.1	2.18	HG10	70
including	*56*	*65*	*9*	*1.26*	*50.9*	*13.8*	*3.2*	*4.4*	*1.51*	*HG10*	*70*
22ARC006	77	102	25	0.96	43.7	10.7	10.5	6.9	2.22	HG10	70
including	*92*	*96*	*4*	*1.26*	*54.3*	*13.5*	*1.8*	*3.6*	*- 1.06*	*HG10*	*70*
22ARC007	107	116	9	1.21	52.8	13.1	3.1	4.2	- 1.50	HG10	70
including	*110*	*114*	*4*	*1.25*	*54.3*	*13.4*	*1.8*	*3.8*	*- 1.94*	*HG10*	*70*
22ARC008	126	139	13	0.90	41.0	10.4	13.3	7.0	1.86	HG10	70
including	*132*	*137*	*5*	*1.17*	*51.5*	*13.3*	*3.1*	*4.3*	*- 0.57*	*HG10*	*70*
22ARC010	78	98	20	1.14	47.4	12.9	6.8	5.6	2.62	HG10	60
including	*91*	*96*	*5*	*1.20*	*51.1*	*13.3*	*3.1*	*4.6*	*1.44*	*HG10*	*60*
22ARC011	35	49	14	1.17	45.0	12.8	8.4	7.2	3.23	HG10	60
including	*39*	*46*	*7*	*1.27*	*49.4*	*14.0*	*4.8*	*4.9*	*1.57*	*HG10*	*60*
22ARC012	56	72	16	1.02	41.0	11.3	12.7	8.8	4.17	HG10	60
including	*64*	*72*	*8*	*1.27*	*50.5*	*13.8*	*3.2*	*4.6*	*1.62*	*HG10*	*60*
22ARC013	86	108	22	0.95	41.2	10.3	12.3	8.2	4.20	HG10	60
including	*99*	*103*	*4*	*1.26*	*51.5*	*13.3*	*2.1*	*4.1*	*1.58*	*HG10*	*60*
22ARC014	88	110	22	1.04	46.9	11.5	7.7	6.3	1.17	HG10	60
including	*100*	*105*	*5*	*1.25*	*54.5*	*13.5*	*1.6*	*4.1*	*- 1.80*	*HG10*	*60*
22ARC015	18	41	23	1.25	42.8	14.5	8.6	7.7	3.78	HG10	60
including	*21*	*37*	*16*	*1.36*	*46.1*	*15.7*	*5.6*	*6.0*	*2.59*	*HG10*	*60*
22ARC016	80	88	8	1.02	44.2	11.5	9.6	6.6	3.16	HG10	60
including	*85*	*87*	*2*	*1.24*	*53.0*	*13.8*	*1.7*	*3.9*	*- 0.01*	*HG10*	*60*
22ARC017	33	48	15	1.31	45.6	14.4	6.2	6.4	2.78	HG10	60
including	*37*	*45*	*8*	*1.40*	*49.8*	*15.4*	*2.8*	*4.6*	*1.72*	*HG10*	*60*
22ARC018	54	71	17	1.13	44.9	12.5	8.1	6.4	3.12	HG10	60
including	*60*	*68*	*8*	*1.32*	*51.3*	*14.5*	*2.2*	*3.9*	*1.51*	*HG10*	*60*
22ARC019	73	97	24	1.02	45.9	11.4	8.5	6.8	1.94	HG10	60
including	*85*	*94*	*9*	*1.26*	*53.4*	*13.9*	*1.8*	*3.9*	*- 0.78*	*HG10*	*60*
22ARC020	119	131	12	1.07	47.9	12.1	7.6	5.7	- 0.26	HG10	60
including	*125*	*130*	*5*	*1.23*	*53.3*	*13.5*	*2.7*	*4.3*	*- 1.64*	*HG10*	*60*
22ARC021	31	48	17	1.16	40.6	12.9	11.2	9.4	4.35	HG10	60
including	*39*	*46*	*7*	*1.35*	*50.0*	*14.9*	*3.1*	*4.3*	*2.09*	*HG10*	*60*
22ARC022	62	80	18	1.18	48.6	13.0	5.6	4.8	1.60	HG10	60
including	*67*	*75*	*8*	*1.30*	*51.9*	*14.2*	*1.9*	*3.7*	*1.29*	*HG10*	*60*
22ARC023	105	112	7	1.10	47.5	12.5	7.7	5.6	0.09	HG10	60
including	*111*	*112*	*1*	*1.27*	*54.6*	*14.2*	*1.6*	*3.6*	*- 2.23*	*HG10*	*60*
22ARC024	29	48	19	1.28	38.7	14.3	10.8	10.2	4.64	HG10	60
including	*36*	*48*	*12*	*1.44*	*45.6*	*15.9*	*5.0*	*5.9*	*2.93*	*HG10*	*60*
22ARC025	64	78	14	1.35	45.3	14.5	5.7	6.5	2.95	HG10	60
including	*65*	*74*	*9*	*1.52*	*47.8*	*16.3*	*2.8*	*4.9*	*2.63*	*HG10*	*60*
22ARC027	105	125	20	1.08	48.0	12.0	7.2	5.7	- 0.11	HG10	60
including	*114*	*120*	*6*	*1.26*	*55.5*	*13.7*	*1.0*	*3.7*	*- 2.39*	*HG10*	*60*
22ARC028	61	72	11	1.26	49.9	14.1	3.5	4.5	2.04	HG10	60
including	*64*	*72*	*8*	*1.31*	*51.9*	*14.5*	*1.9*	*3.9*	*1.46*	*HG10*	*60*
22ARC029	76	98	22	1.16	47.8	12.9	5.7	5.8	2.09	HG10	60
including	*83*	*90*	*7*	*1.28*	*52.3*	*14.2*	*1.9*	*4.0*	*0.80*	*HG10*	*60*

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Hole ID	From (m)	To (m)	Interval (m)	V_2O_5 %	Fe %	TiO_2 %	SiO_2 %	Al_2O_3 %	LOI %	Zone	Block
22ARC030	88	109	21	0.95	42.4	10.7	12.4	7.6	2.00	HG10	60
including	*99*	*108*	*9*	*1.18*	*50.8*	*13.0*	*4.5*	*5.1*	*- 0.49*	*HG10*	*60*
22ARC031	32	54	22	1.23	44.2	13.7	7.9	7.6	3.06	HG10	60
including	*36*	*48*	*12*	*1.36*	*49.5*	*15.2*	*3.3*	*4.8*	*1.63*	*HG10*	*60*
22ARC032	53	64	11	1.14	45.4	12.8	9.1	5.0	2.47	HG10	60
including	*58*	*63*	*5*	*1.26*	*49.3*	*14.0*	*4.1*	*4.4*	*1.92*	*HG10*	*60*
22ARC033	68	86	18	1.01	43.3	11.3	10.4	7.3	3.08	HG10	60
including	*78*	*84*	*6*	*1.28*	*51.7*	*14.2*	*2.3*	*4.0*	*1.01*	*HG10*	*60*
22ARC034	85	104	19	1.10	47.1	12.3	7.7	5.7	1.52	HG10	60
including	*89*	*96*	*7*	*1.28*	*53.7*	*14.1*	*1.5*	*3.7*	*- 0.33*	*HG10*	*60*
22ARC035	*41*	*44*	*3*	*1.15*	*45.9*	*12.4*	*8.9*	*5.9*	*2.30*	*HG10*	*60*
22ARC036	52	64	12	1.20	51.5	13.2	3.2	4.2	1.52	HG10	60
including	*58*	*60*	*2*	*1.25*	*53.8*	*13.7*	*1.6*	*3.6*	*0.54*	*HG10*	*60*
22ARC037	70	87	17	1.04	46.8	11.9	8.2	6.0	1.43	HG10	60
including	*79*	*84*	*5*	*1.25*	*54.8*	*13.9*	*1.4*	*3.7*	*- 1.47*	*HG10*	*60*
22ARC038	42	58	16	1.11	48.5	12.3	6.5	4.6	2.13	HG10	60
including	*46*	*51*	*5*	*1.28*	*52.9*	*14.1*	*1.6*	*3.7*	*1.24*	*HG10*	*60*
22ARC039	55	68	13	1.10	49.2	12.4	5.7	4.7	2.26	HG10	60
including	*62*	*66*	*4*	*1.23*	*52.8*	*13.5*	*2.1*	*3.5*	*1.52*	*HG10*	*60*
22ARC041	29	50	21	1.21	37.4	14.6	12.2	9.7	4.77	HG10	50
including	*36*	*47*	*11*	*1.47*	*44.1*	*17.8*	*5.3*	*5.7*	*3.32*	*HG10*	*50*
22ARC042	52	78	26	1.08	45.2	12.2	8.3	6.0	1.60	HG10	50
including	*61*	*69*	*8*	*1.22*	*52.2*	*13.6*	*3.0*	*4.7*	*- 1.08*	*HG10*	*50*
22ARC043	75	81	6	1.11	47.4	12.7	6.5	5.8	0.02	HG10	50
including	*78*	*79*	*1*	*1.25*	*52.1*	*13.9*	*2.8*	*4.5*	*- 1.33*	*HG10*	*50*
22ARC044	11	19	8	1.24	41.6	13.7	11.8	6.8	3.37	HG10	50
including	*12*	*17*	*5*	*1.35*	*43.7*	*14.8*	*9.1*	*6.5*	*2.82*	*HG10*	*50*
22ARC045	32	53	21	1.13	47.2	12.5	6.8	5.6	2.51	HG10	50
including	*40*	*53*	*13*	*1.25*	*51.1*	*13.5*	*3.1*	*4.2*	*1.83*	*HG10*	*50*
22ARC046	68	82	14	1.08	47.4	12.0	7.5	5.8	0.95	HG10	50
including	*72*	*78*	*6*	*1.25*	*53.6*	*13.8*	*1.7*	*3.9*	*- 0.65*	*HG10*	*50*
22ARC047	32	52	20	1.15	44.1	13.3	7.9	6.4	3.28	HG10	50
including	*39*	*46*	*7*	*1.35*	*48.8*	*15.3*	*3.5*	*4.7*	*1.98*	*HG10*	*50*
22ARC048	62	79	17	1.09	44.9	12.1	8.1	5.7	3.34	HG10	50
including	*67*	*73*	*6*	*1.28*	*50.6*	*14.3*	*2.5*	*3.9*	*2.47*	*HG10*	*50*
22ARC049	82	102	20	0.97	42.9	11.1	11.4	7.4	2.03	HG10	50
including	*91*	*97*	*6*	*1.27*	*52.8*	*14.2*	*2.5*	*4.2*	*- 1.32*	*HG10*	*50*
22ARC050	87	101	14	1.17	51.1	13.3	3.8	4.8	- 0.68	HG10	50
including	*91*	*96*	*5*	*1.24*	*54.4*	*14.1*	*1.3*	*3.8*	*- 1.93*	*HG10*	*50*
22ARC051	25	40	15	1.35	46.0	15.1	5.9	5.8	2.74	HG10	50
including	*26*	*39*	*13*	*1.41*	*47.0*	*15.7*	*4.7*	*5.3*	*2.49*	*HG10*	*50*
22ARC052	61	76	15	1.08	45.9	12.1	7.4	5.7	2.63	HG10	50
including	*64*	*71*	*7*	*1.24*	*51.5*	*13.9*	*2.1*	*3.9*	*1.00*	*HG10*	*50*
22ARC053	16	39	23	1.05	36.0	13.7	14.2	12.1	5.38	HG10	50
including	*26*	*37*	*11*	*1.30*	*45.0*	*16.5*	*6.2*	*6.1*	*3.25*	*HG10*	*50*
22ARC054	13	27	14	1.21	43.8	14.1	7.2	7.0	4.68	HG10	50
including	*19*	*25*	*6*	*1.38*	*50.6*	*15.6*	*2.7*	*4.5*	*1.94*	*HG10*	*50*
22ARC055	73	89	15	1.06	41.3	11.9	11.3	7.4	2.90	HG10	50
including	*78*	*84*	*6*	*1.33*	*49.5*	*14.9*	*2.9*	*4.2*	*1.10*	*HG10*	*50*
22ARC057	51	69	18	1.13	47.0	12.9	6.5	5.0	2.39	HG10	50
including	*61*	*66*	*5*	*1.28*	*52.1*	*14.5*	*1.6*	*3.9*	*0.75*	*HG10*	*50*
22ARC058	77	96	19	0.96	42.7	11.2	12.5	7.0	1.20	HG10	50
including	*86*	*94*	*8*	*1.24*	*52.7*	*14.1*	*2.5*	*4.2*	*- 1.50*	*HG10*	*50*
22ARC059	28	44	16	1.17	47.5	13.3	6.4	5.3	1.98	HG10	50
including	*33*	*39*	*6*	*1.29*	*52.0*	*14.5*	*1.7*	*4.0*	*0.69*	*HG10*	*50*
22ARC060	50	64	14	1.16	49.9	13.0	4.4	5.1	1.10	HG10	50
including	*52*	*59*	*7*	*1.26*	*53.3*	*14.0*	*1.4*	*3.8*	*- 0.13*	*HG10*	*50*

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Hole ID	From (m)	To (m)	Interval (m)	V_2O_5 %	Fe %	TiO_2 %	SiO_2 %	Al_2O_3 %	LOI %	Zone	Block
22ARC061	61	72	11	1.06	46.9	12.0	7.3	5.7	1.41	HG10	50
including	*66*	*71*	*5*	*1.25*	*53.4*	*13.9*	*1.8*	*3.9*	*- 0.95*	*HG10*	*50*
22ARC062	29	53	24	1.10	40.1	12.5	10.0	8.6	4.63	HG10	50
including	*40*	*48*	*8*	*1.32*	*49.0*	*14.7*	*3.1*	*5.0*	*2.16*	*HG10*	*50*
22ARC063	49	64	15	1.18	42.2	13.4	8.9	7.1	3.71	HG10	50
including	*56*	*62*	*6*	*1.38*	*47.3*	*15.2*	*4.0*	*5.4*	*3.02*	*HG10*	*50*
22ARC064	46	54	8	1.04	41.2	12.1	11.2	8.0	3.84	HG10	50
including	*50*	*53*	*3*	*1.30*	*50.0*	*14.8*	*2.8*	*4.2*	*1.97*	*HG10*	*50*
22ARC065	83	97	14	1.05	46.5	11.7	8.8	5.9	0.71	HG10	50
including	*87*	*92*	*5*	*1.26*	*53.6*	*14.0*	*1.9*	*3.9*	*- 1.22*	*HG10*	*50*
22ARC066	29	52	23	1.10	33.9	12.9	16.1	12.0	5.70	HG10	60
including	*39*	*48*	*9*	*1.31*	*41.0*	*15.2*	*8.7*	*7.7*	*3.87*	*HG10*	*60*
22ARC067	91	109	18	1.02	44.9	11.5	9.1	6.5	1.42	HG10	60
including	*98*	*103*	*5*	*1.28*	*54.2*	*14.0*	*1.8*	*3.6*	*- 1.67*	*HG10*	*60*
22ARC068	59	67	8	1.01	43.4	11.0	10.3	8.2	3.90	HG10	60
including	*62*	*63*	*1*	*1.26*	*52.8*	*13.6*	*1.6*	*3.8*	*1.62*	*HG10*	*60*
22ARC069	40	52	12	1.15	50.4	12.7	4.4	4.6	1.58	HG10	70
including	*47*	*50*	*3*	*1.26*	*52.6*	*13.8*	*2.1*	*3.7*	*1.25*	*HG10*	*70*
22ARC070	55	65	10	1.16	50.1	12.9	4.6	4.7	0.75	HG10	70
including	*59*	*62*	*3*	*1.25*	*53.5*	*13.6*	*2.0*	*3.7*	*- 0.49*	*HG10*	*70*
22ARC071	50	69	19	0.97	40.9	11.4	12.5	8.0	3.02	HG10	50
including	*60*	*68*	*8*	*1.24*	*51.6*	*14.1*	*2.2*	*4.1*	*0.77*	*HG10*	*50*
22ARC072	19	37	18	1.15	42.9	13.7	7.8	7.4	3.56	HG10	50
including	*24*	*32*	*8*	*1.31*	*50.3*	*15.3*	*2.4*	*4.7*	*0.96*	*HG10*	*50*
22ARC073	50	64	14	1.11	47.2	12.5	6.5	5.3	2.46	HG10	50
including	*56*	*59*	*3*	*1.25*	*50.9*	*14.0*	*2.5*	*4.1*	*1.91*	*HG10*	*50*
22ARC074	72	87	15	1.10	49.7	12.3	5.8	4.8	0.12	HG10	50
including	*74*	*79*	*5*	*1.22*	*54.7*	*13.8*	*1.3*	*3.7*	*- 1.90*	*HG10*	*50*
22ARC078	55	66	11	1.18	50.9	12.9	4.9	4.6	- 0.84	HG10	70
including	*58*	*63*	*5*	*1.24*	*53.5*	*13.6*	*2.6*	*4.0*	*- 1.48*	*HG10*	*70*
22ARC079	66	78	12	1.17	51.1	12.9	4.7	4.3	- 0.73	HG10	70
including	*70*	*75*	*5*	*1.25*	*54.4*	*13.8*	*1.6*	*3.8*	*- 1.39*	*HG10*	*70*
22ARC080	86	95	9	1.14	50.4	12.6	5.3	4.8	- 1.09	HG10	70
including	*91*	*92*	*1*	*1.24*	*53.7*	*13.3*	*2.4*	*3.6*	*- 1.16*	*HG10*	*70*
22ARC081	37	53	16	1.24	48.5	14.0	5.1	4.9	1.93	HG10	50
including	*37*	*48*	*11*	*1.30*	*49.9*	*14.9*	*3.5*	*4.3*	*1.40*	*HG10*	*50*
22ARC082	59	80	21	1.06	47.1	12.2	6.9	5.5	1.35	HG10	50
including	*68*	*74*	*6*	*1.22*	*54.0*	*13.7*	*1.4*	*3.8*	*- 0.81*	*HG10*	*50*
22ARC083	78	101	23	0.96	43.7	10.9	12.3	6.2	0.43	HG10	50
including	*87*	*93*	*6*	*1.24*	*54.4*	*13.9*	*1.7*	*3.9*	*- 2.05*	*HG10*	*50*
22ARC084	47	49	2	0.93	34.9	11.1	18.4	9.4	4.58	HG10	50
22ARC085	66	79	13	1.10	47.0	12.5	6.1	5.8	1.10	HG10	50
including	*71*	*75*	*4*	*1.24*	*53.2*	*13.8*	*1.6*	*3.8*	*- 0.91*	*HG10*	*50*
22ARC086	86	100	14	1.14	50.6	12.8	5.0	4.9	- 0.98	HG10	50
including	*90*	*95*	*5*	*1.26*	*54.9*	*14.1*	*1.2*	*3.9*	*- 2.55*	*HG10*	*50*
22ARC001	5	21	16	0.53	25.7	6.8	26.5	18.2	8.0	LG2	70
22ARC002	66	69	3	0.75	33.2	8.9	20.4	9.1	4.7	LG2	70
22ARC003	35	50	15	0.50	24.8	6.5	28.6	18.0	6.3	LG2	70
22ARC004	77	88	11	0.47	22.3	5.9	30.5	17.1	2.9	LG2	70
22ARC005	29	39	10	0.49	24.5	5.7	30.2	18.4	8.4	LG2	70
22ARC006	48	60	12	0.54	28.1	7.0	23.7	16.8	7.3	LG2	70
22ARC007	62	76	14	0.44	22.6	5.8	29.8	16.3	6.3	LG2	70
22ARC008	90	100	10	0.48	23.8	6.1	28.8	16.8	2.7	LG2	70
22ARC010	52	68	16	0.65	28.8	8.4	21.3	17.7	8.3	LG2	60
22ARC011	25	28	3	0.72	28.1	7.4	29.8	10.9	7.4	LG2	60
22ARC012	36	52	16	0.53	21.9	6.5	28.7	20.4	9.6	LG2	60
22ARC013	63	80	17	0.55	28.2	7.0	23.2	17.3	8.6	LG2	60

Hole ID	From (m)	To (m)	Interval (m)	V_2O_5 %	Fe %	TiO_2 %	SiO_2 %	Al_2O_3 %	LOI %	Zone	Block
22ARC014	72	85	13	0.50	24.9	6.5	27.8	16.8	5.7	LG2	60
22ARC015	15	17	2	0.77	25.2	12.7	22.3	17.3	8.5	LG2	60
22ARC016	52	62	10	0.47	26.3	6.2	26.0	17.4	8.0	LG2	60
22ARC017	12	30	18	0.67	22.6	7.9	26.7	21.1	9.2	LG2	60
22ARC018	27	51	24	0.61	25.6	7.6	25.3	19.8	8.2	LG2	60
22ARC019	53	71	18	0.48	25.2	6.2	26.0	19.0	8.9	LG2	60
22ARC020	91	108	17	0.42	24.0	5.5	28.9	15.7	6.4	LG2	60
22ARC021	13	26	13	0.65	21.6	9.0	27.1	21.1	9.1	LG2	60
22ARC041	14	25	11	0.57	25.6	7.5	25.7	19.5	7.9	LG2	50
22ARC042	36	51	15	0.61	26.0	7.9	25.3	18.9	7.3	LG2	50
22ARC043	55	73	18	0.49	24.4	6.3	26.9	17.2	6.6	LG2	50
22ARC045	11	22	11	0.55	25.4	7.4	29.0	17.9	7.3	LG2	50
22ARC046	55	66	11	0.55	27.2	7.0	26.4	14.5	4.4	LG2	50
22ARC047	9	19	10	0.54	22.2	7.0	29.3	20.2	8.8	LG2	50
22ARC048	39	54	15	0.52	26.9	6.8	25.5	17.8	7.3	LG2	50
22ARC049	63	73	10	0.52	25.4	6.5	26.9	16.4	4.6	LG2	50
22ARC050	72	82	10	0.48	24.2	6.5	27.2	17.8	6.1	LG2	50
22ARC052	32	43	11	0.52	28.9	6.7	24.1	16.9	7.5	LG2	50
22ARC053	6	16	10	0.46	16.2	6.1	27.3	20.5	14.2	LG2	50
22ARC058	58	75	17	0.52	27.1	6.8	25.3	17.3	6.5	LG2	50
22ARC059	12	24	12	0.65	27.1	8.3	20.9	15.7	9.8	LG2	50
22ARC060	34	48	14	0.61	31.9	7.6	22.4	13.4	5.9	LG2	50
22ARC061	40	57	17	0.53	27.8	6.8	25.0	16.6	6.8	LG2	50
22ARC062	5	27	22	0.56	23.5	7.3	29.2	20.0	7.8	LG2	50
22ARC063	21	34	13	0.52	24.6	6.7	27.4	19.5	7.8	LG2	50
22ARC064	19	31	12	0.58	24.1	7.7	26.6	20.8	8.2	LG2	50
22ARC065	55	70	15	0.47	24.1	6.1	28.2	18.1	5.3	LG2	50
22ARC066	13	27	14	0.55	18.5	7.3	30.8	24.4	9.4	LG2	60
22ARC067	71	82	11	0.48	22.7	6.5	31.1	17.2	6.1	LG2	60
22ARC004	6	12	6	0.84	40.5	7.6	16.6	11.1	4.7	LG6	70
22ARC005	13	27	14	0.72	33.5	6.5	25.2	12.3	5.6	LG6	70
22ARC006	13	31	18	0.80	37.9	7.8	21.2	10.3	4.3	LG6	70
22ARC007	12	29	17	0.71	37.3	7.2	21.0	11.9	4.5	LG6	70
22ARC008	13	30	17	0.71	39.7	7.8	17.8	11.6	4.3	LG6	70
22ARC009	51	61	10	0.70	31.2	7.9	19.0	17.6	8.3	LG6	60
22ARC020	10	16	6	0.52	25.0	5.7	33.0	14.9	8.6	LG6	60

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APPENDIX 2

Collars and Intercepts – 2020 Geotechnical Diamond Drilling

Hole ID	MGA94 East	MGA94 North	RL	Hole Depth	Dip	Azimuth
20GDH001	665665	7013210	465	125.05	-80	230
20GDH002	665730	7013260	465	120.25	-80	50
20GDH003	665370	7013720	465	120.03	-80	50
20GDH004	665270	7013640	465	135.03	-80	230
20GDH005	666583	7011820	465	100.08	-80	230
20GDH006	666658	7011882	465	95	-80	50
20GDH007	666895	7011534	465	100.16	-80	230
20GDH008	667000	7011622	465	100	-80	50

Hole ID	From (m)	To (m)	Interval	V_2O_5 %	Fe %	SiO_2 %	Al_2O_3 %	TiO2 %	Zone
20GDH002	17	41.3	24.3	0.58	25.4	24.0	17.6	7.3	LG2
Including	*39.1*	*41.3*	*2.2*	*1.09*	*42.4*	*10.0*	*6.5*	*12.9*	
20GDH002	46.38	60.9	14.52	1.12	46.5	6.9	5.9	12.8	HG10
Including	*50*	*58*	*8*	*1.28*	*51.3*	*1.7*	*4.0*	*14.5*	
20GDH003	34.35	51.3	16.95	1.16	48.4	5.6	5.2	13.0	HG10
Including	*38*	*49.7*	*11.7*	*1.25*	*51.6*	*2.6*	*4.5*	*14.0*	
20GDH006	10.55	15	4.45	1.06	39.4	16.0	7.9	12.5	LG_T
20GDH006	16.45	26.5	10.05	1.32	48.9	5.0	4.7	14.7	HG10
20GDH008	10	24.6	14.6	1.44	43.5	4.4	6.5	18.7	HG10

Note: Drill holes 20GDH001, 20GDH004, 20GDH005 and 20GDH007 not assayed as drilling away from mineralisation

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APPENDIX 3

The Australian Vanadium Project – Mineral Resource estimate by domain and resource classification using a nominal 0.4% V_2O_5 wireframed cut-off for LG and nominal 0.7% V_2O_5 wireframed cut-off for HG (total numbers may not add up due to rounding).[2]

Domains	Category	Mt	V_2O_5 %	Fe %	TiO_2 %	SiO_2 %	Al_2O_3 %	LOI %
HG 10	Measured	11.3	1.14	43.8	13.0	9.2	7.5	3.7
	Indicated	27.5	1.10	45.4	12.5	8.5	6.5	2.9
	Inferred	56.8	1.04	44.6	11.9	9.4	6.9	3.3
	Subtotal	**95.6**	**1.07**	**44.7**	**12.2**	**9.1**	**6.8**	**3.2**
LG 2-5	Measured	-	-	-	-	-	-	-
	Indicated	54.9	0.50	24.9	6.8	27.6	17.1	7.9
	Inferred	73.6	0.48	25.0	6.4	28.7	15.4	6.6
	Subtotal	**128.5**	**0.49**	**24.9**	**6.6**	**28.2**	**16.1**	**7.2**
Trans 6-8	Measured	-	-	-	-	-	-	-
	Indicated	-	-	-	-	-	-	-
	Inferred	14.9	0.66	29.0	7.8	24.5	15.1	7.8
	Subtotal	**14.9**	**0.66**	**29.0**	**7.8**	**24.5**	**15.1**	**7.8**
Total	Measured	11.3	1.14	43.8	13.0	9.2	7.5	3.7
	Indicated	82.4	0.70	31.7	8.7	21.2	13.5	6.2
	Inferred	145.3	0.71	33.0	8.7	20.7	12.0	5.4
	Subtotal	**239.0**	**0.73**	**33.1**	**8.9**	**20.4**	**12.3**	**5.6**

The Australian Vanadium Project - Ore Reserve Statement as at April 2022, at a cut-off grade of 0.7% V_2O_5.

Ore Reserve	Mt	V_2O_5%	Fe%	TiO_2%	SiO_2%	LOI%	V_2O_5 production kt	Ore Reserve	Mt
Proved	10.5	1.11	61.6	12.8	9.5	3.7	70.9	Waste	238.5
Probable	20.4	1.07	63.4	12.2	9.2	3.0	152.9	Total Material	269.4
Total Ore	**30.9**	**1.09**	**62.8**	**12.4**	**9.3**	**3.2**	**223.8**	**Strip Ratio**	**7.7**

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APPENDIX 4

ASX CHAPTER 5 COMPLIANCE AND CAUTIONARY AND FORWARD-LOOKING STATEMENTS

ASX Listing Rules 5.19 and 5.23

ASX Listing Rule 5.19

The information in this announcement relating to production targets, or forecast financial information derived from a production target, is extracted from the announcement entitled 'Bankable Feasibility Study for the Australian Vanadium Project' released to the ASX on 6th April 2022 which is available on the Company's website www.australianvanadium.com.au.

The Company confirms that all material assumptions underpinning the production target, or the forecast financial information derived from a production target, in the original market announcement continue to apply and have not materially changed.

ASX Listing Rule 5.23

The information in this announcement relating to exploration results and mineral resource and ore reserve estimates for the Australian Vanadium Project is extracted from the announcement entitled 'Bankable Feasibility Study for the Australian Vanadium Project' released to the ASX on 6th April 2022 which is available on the Company's website www.australianvanadium.com.au.

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 that all material assumptions and technical parameters underpinning the estimates in the original 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.

Forward-Looking Statements

This release may contain certain forward-looking statements with respect to matters including but not limited to the financial condition, results of operations and business of AVL and certain of the plans and objectives of AVL with respect to these items.

These forward-looking statements are not historical facts but rather are based on AVL's current expectations, estimates and projections about the industry in which AVL operates and its beliefs and assumptions.

Words such as "anticipates," "considers," "expects," "intends," "plans," "believes," "seeks," "estimates", "guidance" and similar expressions are intended to identify forward looking statements and should be considered an at-risk statement. Such statements are subject to certain risks and uncertainties, particularly those risks or uncertainties inherent in the industry in which AVL operates.

These statements are not guarantees of future performance and are subject to known and unknown risks, uncertainties, and other factors, some of which are beyond the control of AVL, are difficult to predict and could cause actual results to differ materially from those expressed or forecasted in the forward-looking statements. Such risks include, but are not limited to resource risk, metal price volatility, currency fluctuations, increased production costs and variances in ore grade or recovery rates from those assumed in mining plans, as well as political and operational risks in the countries and states in which we sell our product to, and government regulation and judicial outcomes. For more detailed discussion of such risks and other factors, see the Company's Annual Reports, as well as the Company's other filings.

AVL cautions shareholders and prospective shareholders not to place undue reliance on these forward-looking statements, which reflect the view of AVL only as of the date of this release.

The forward-looking statements made in this announcement relate only to events as of the date on which the statements are made.

AVL will not undertake any obligation to release publicly any revisions or updates to these forward-looking statements to reflect events, circumstances or unanticipated events occurring after the date of this announcement except as required by law or by any appropriate regulatory authority.

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APPENDIX 5

2012 JORC Code – Table 1

Section 1 - Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
Sampling Techniques	Nature and quality of sampling (eg. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	The Australian Vanadium Project deposit was sampled using diamond core and reverse circulation (RC) percussion drilling from surface. During 2022, eight HQ3 diamond core holes were drilled for 813.5m during August; assays are pending. 86 RC holes were drilled for 7,283m and sampled at 1 metre intervals during September - October. The holes infilled southern blocks 50, 60 and 70. This release contains results from all of the drilled metres from the program (7,283 metres). Eight diamond holes in PQ and HQ size were drilled in blocks 50 and 60 for geotechnical studies during 2020 for 895.6 metres. These holes are pending sampling and assay. Four of the eight holes were drilled towards the northeast and intersected the HG10 domain; four were drilled towards the southwest and intersected hangingwall units only. Logging and magnetic susceptibility measurements demonstrate the HG10 domain was intersected at the expected depths and thicknesses. During 2019 43 RC holes were drilled; 30 RC holes were drilled for 2,236m in the December 2019 drilling on blocks 50 and 60, and 13 RC holes for 1,224m drilled in blocks 20, 25 and 30 during October 2019. A further 30 PQ diamond drill holes were completed by March 2019, to collect metallurgy sample for a plant pilot study. 12 were drilled down-dip into the high-grade zone. These were complimented by an additional 18 PQ diamond drill tails on RC pre-collars, drilling vertically. The down dip holes were measured by hand-held XRF at 50 cm intervals to inform metallurgy characterisation but will not form part of any resource estimation update as there is no certified laboratory analysis completed on the drill core, with material being used for metallurgical testwork. 14 of the 18 diamond tails were cut and a ¼ of the PQ sized core was sent for analysis. At the time of the latest Mineral Resource estimation (March 2020), a total of 280 RC holes and 50 diamond holes (24 of which are diamond tails) were drilled into the AVL portion of the deposit. 20 of the 330 holes were either too far north or east of the main mineralisation trend. One section in the southern part of the deposit (holes GRC0156, GRC0074, GRC0037 and GRC0038) was blocked out and excluded from the resource due to what appeared to be an intrusion which affected the mineralised zones in this area. Of the remaining 310 drill holes, one had geological logging, but no assays and one was excluded due to poor sample return causing poor representation of the mineralised zones. Two diamond holes drilled during 2018 were not part of the resource estimate, as they were drilled into the western wall for geotechnical purposes. The total metres of drilling available for use in the interpretation and grade estimation was 26 660.89m of drilling with 23,650.32 metres being RC and 3,010.57 metres of DDH over 305 holes at the date of the most recent resource estimate. 18 down-dip metallurgical drillholes and 4 metallurgical diamond tails contribute magnetic susceptibility and geological logging to the Mineral Resource estimation, but not assay data, being drilled to provide metallurgical sample. The initial 17 RC drill holes were drilled by Intermin Resources NL (IRC) in 1998. These holes were not used in the 2015, 2017, 2018 and 2020 estimates due to very long unequal sample lengths and a different grade profile from subsequent drilling. 31 RC drill holes were drilled by Greater Pacific NL in 2000 and the remaining holes for the project were drilled by Australian Vanadium Ltd (Previously Yellow Rock Resources Ltd) between 2007 and 2019. This drilling includes 50 diamond holes (24 of which are diamond tails) and 170 RC holes, for a total of 27,655.75m drilled.

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Criteria	JORC Code Explanation	Commentary
		All of the drilling sampled both high and low-grade material and were sampled for assaying of a typical iron ore suite, including vanadium and titanium plus base metals and sulphur. Loss on Ignition was also assayed.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	2022 RC drilling has been split from a cyclone directly at the rig. Select holes had green bag weights recorded to evaluate sample recovery. No signs of concatenation were observed, and the sample bags weights represented good overall recovery for the drilled metres. 2020 geotechnical diamond core holes were ¼ cored where PQ and ½ cored where HQ3 for samples sent for assay. Core loss was recorded in geology logs, and sample intervals. PQ core from 2019 diamond tails was ¼ cored and sent for assay. The remaining core went to make up the pilot plant metallurgical sample. The down dip 2019 PQ core has not been sampled, though handheld XRF datapoints were captured, as well as magnetic susceptibility data. Handheld XRF machines being used to take ½ metre measurements on the core have been calibrated using pulps from previous drilling by the Company, for which there are known head assays. 2018 HQ diamond core was half-core sampled at regular intervals (usually one metre) with smaller sample intervals at geological boundaries. 2015 diamond core was quarter-core sampled at regular intervals (usually one metre) and constrained to geological boundaries where appropriate. 2009 HQ diamond core was half-core sampled at regular intervals (one metre) or to geological boundaries. Most of the RC drilling was sampled at one metre intervals, apart from the very earliest programme in 1998. RC samples have been split from the rig for all programmes with a cone splitter to obtain 2.5 – 3.5 kg of sample from each metre. Field duplicates were collected for every 40th drill metre to check sample grade representation from the drill rig splitter. During the October 2019 RC programme, field duplicates were collected from the rig splitter for every 30th drill metre. During the December 2019 RC programme, field duplicates were collected from the rig splitter for every 20th drill metre.
	Aspects of the determination of mineralisation that are Material to the Public Report.	RC drilling samples were collected at one metre intervals and passed through a cone splitter to obtain a nominal 2 – 5 kg sample at an approximate 10% split ratio. These split samples were collected in pre-numbered calico sample bags. The sample was dried, crushed and pulverised to produce a sub sample (~200g) for laboratory analysis using XRF and total LOI by thermo-gravimetric analysis. Diamond core was drilled predominantly at HQ size for the earlier drilling (2009) and entirely HQ for the 2018 programme with the 2015 and 2019 drilling at PQ3 size. 2020 diamond core was drilled at HQ and PQ size for geotechnical studies. 2022 diamond core is HQ3. Field duplicates, standards and blanks have been inserted into the sampling stream at a rate of nominally 1:20 for blanks, 1:20 for standards (including internal laboratory), 1:40 for field duplicates, 1:20 for laboratory checks and 1:74 for umpire assays. For the RC programme completed in December 2019, the field duplicates were incorporated at a rate of 1:20, while standards 1:50 and blanks also at least 1:50.
Drilling Techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	Diamond drill holes account for 16% of the drill metres used in the Resource Estimate and comprises HQ and PQ3 sized core. RC drilling (generally 135 mm to 140 mm face-sampling hammer) accounts for the remaining 84% of the drilled metres. 24 of the diamond holes have RC pre-collars (GDH911, GDH913 & GDH916, 18GEDH001, 002 and 003, 19MTDT001 – 018), otherwise all holes are drilled from surface. No core orientation data has been recorded in the database. 17 RC holes were drilled during the 2018 programme and three HQ diamond tails were drilled on RC pre-collars for resource and geotechnical purposes. The core was not orientated but all diamond holes were logged by OTV and ATV televiewer. Six RC holes from

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Criteria	JORC Code Explanation	Commentary
		the 2018 campaign are not used in the resource estimate due to results pending at the time of the latest update, and two diamond holes drilled during 2018 were not used as they are for geotechnical purposes and do not intersect the mineralised zones. During 2019 a further 12 PQ diamond holes have been drilled down-dip on the high-grade zone for metallurgical sample but have not been sampled for assay analysis as they have been sampled for a metallurgy pilot study programme. As such they do not form part of any resource estimation. An addition 18 PQ diamond tails on RC pre-collars have been drilled vertically, of which 14 contribute to the resource. Two were used for the metallurgy pilot study programme, one was not sampled due to core loss and a further core hole cut but not submitted for assay. A further 43 RC holes using a 140 mm face hammer on a Schramm drill rig have been completed during October and December 2019. Eight HQ and PQ diameter diamond core holes were drilled from surface during 2020, in fault blocks 50 and 60. The holes were drilled for geotechnical information. Four of the holes were drilled towards the northeast and intercept the high grade domain. The high grade domain was intersected at the depth and thicknesses expected in the four holes drilled towards the northeast, with assays confirming visual observations. Eight HQ diameter diamond core holes were drilled in 2022, with assays pending. 86 RC holes were drilled during 2022 with this release reporting just over half of the results from the program. The remainder of results are pending return and/or interpretation.
Drill Sample Recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Diamond core recovery is measured when the core is recovered from the drill string. The length of core in the tray is compared with the expected drilled length and is recorded in the database. For the 2019, 2018 and 2015 drilling, RC chip sample recovery was judged by how much of the sample was returned from the cone splitter. This was recorded as good, fair, poor or no sample. The older drilling programmes used a different splitter, but still compared and recorded how much sample was returned for the drilled intervals. All of the RC sample bags (non-split portion) from the 2018 programme were weighed as an additional check on recovery. An experienced AVL geologist was present during drilling and any issues noticed were immediately rectified. No significant sample recovery issues were encountered in the RC or PQ drilling in 2015. No significant sample recovery issues were encountered in the RC or PQ drilling in 2019 except where core loss occurred in three holes intersecting high grade ore. This involved holes 19MTDT012 between 142.9m and 143.3m; 19MTDT013 from 149m to 149.6m, 151m to 151.4m and 159.5m to 160m; as well as 19MTDT016 between 29.5m and 30.7m down hole. In each case the interval lost was included as zero grade for all elements for the estimation of the total mineralised intercept. During 2022 RC drilling, about 10 percent of the holes had green (reject) bags weighed to determine sample recovery. No obvious concatenation issues were observed, and most drill metres showed good sample recovery.

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Criteria	JORC Code Explanation	Commentary
	Measures taken to maximize sample recovery and ensure representative nature of the samples.	Core depths are checked against the depth given on the core blocks and rod counts are routinely carried out by the drillers. Recovered core was measured and compared against driller's blocks. 2019 diamond core samples had a coarse split created at the laboratory that was also analysed to evaluate laboratory splitting of the sample. RC chip samples were actively monitored by the geologist whilst drilling. Field duplicates have been taken at a frequency between every 20th and every 50th metre in every RC drill campaign. All drill holes are collared with PVC pipe for the first metres, to ensure the hole stays open and clean from debris. 2022 RC samples were held in the cyclone until the entire metre was collected, then dropped through the splitter in one batch, to optimise the splitting effectiveness. Duplicates perform well, indicating good sample representivity.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	No relationship between sample recovery and grade has been demonstrated. Two shallow diamond drill holes drilled to twin RC holes have been completed to assess sample bias due to preferential loss/gain of fine/coarse material. AVL is satisfied that the RC holes have taken a sufficiently representative sample of the mineralisation and minimal loss of fines has occurred in the RC drilling resulting in minimal sample bias.

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Criteria	JORC Code Explanation	Commentary
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	All diamond core and RC chips from holes included in the latest resource estimate and this release were geologically logged. Diamond core was geologically logged using predefined lithological, mineralogical and physical characteristics (such as colour, weathering, fabric, texture) logging codes and the logged intervals were based on lithological intervals. RQD and recoveries were also recorded. Structural measurements were recorded (bedding to core angle measurements) and have been saved to the database. The logging was completed on site by the responsible geologist. All of the drilling was logged onto paper then transferred to a SQL Server drill hole database using DataShed™ database management software. The database is managed by Mitchell River Group (MRG). The data was checked for accuracy when transferred to ensure that correct information was recorded. Any discrepancies were referred back to field personnel for checking and editing. All core trays were photographed wet and dry. RC chips were logged generally on metre intervals, with the abundance/proportions of specific minerals, material types, lithologies, weathering and colour recorded. Physical hardness for RC holes is estimated by chip recovery and properties (friability, angularity) and in diamond holes by scratch testing. From 2015, drilling also had magnetic susceptibility recorded, with the first nine diamond holes (GDH901-GDH909) having readings taken on the core every 30 cm or so downhole. Holes GDH910 to GDH917 had readings every 50 cm and RC holes GRC0159 to GRC0221 had readings for each one metre green sample bag. 2018 RC drill holes also have magnetic susceptibility data for each one metre of drilling. Pulps from historic drill holes have been measured for magnetic susceptibility, with calibration on results applied from control sample measurement of pulps from drill programmes from 2015 onwards where measurements of the RC bags already exist. All resource (vs geotechnical) diamond core and RC samples have been logged to a level of detail to support Mineral Resource estimation to and classification to Measured Mineral Resource at best. Geotechnical logging and Optical Televiewer (OTV) / Acoustic Televiewer (ATV) data was collected on three diamond drill holes from the 2018 campaign, by consultant company Dempers and Seymour, adding to an existing dataset of geotechnical logging on 8 of the 2015 diamond drill holes and televiewer data for four of the same drill holes. In addition, during 2018 televiewer data was collected on a further 15 RC drill holes from various drill campaigns at the project. PQ diamond drill holes completed during 2019 were geologically and geotechnically logged in detail by the site geologists. PQ and HQ diamond drill holes completed during 2020 and 2022 were geologically logged in detail by the site geologists, and geotechnically logged by consultants PSM. Five of the eight geotechnical holes drilled during 2020 were down hole ATV surveyed.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	Logging was both qualitative and quantitative in nature, with general lithology information recorded as qualitative and most mineralisation records and geotechnical records being quantitative. Core photos were collected for all diamond drilling.

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	The total length and percentage of the relevant intersections logged.	All recovered intervals were geologically logged.
Sub-Sampling Techniques and Sample Preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	The 2018 and 2009 HQ diamond core were cut in half and the half core samples were sent to the laboratories for assaying. Sample intervals were marked on the core by the responsible geologist considering lithological and structural features. No core was selected for duplicate analysis. The 2015 PQ diamond core was cut in half and then the right-hand side of the core (facing downhole) was halved again using a powered core saw. Quarter core samples were sent to the laboratories for assaying. Sample intervals were marked on the core by the responsible geologist considering lithological and structural features. No core was selected for duplicate analysis. 14 of the 18 total vertical diamond PQ diamond drill holes from 2019 have been quarter core sampled and assayed. Sample intervals were marked on the core by the responsible geologist considering lithological and structural features. 2020 diamond core was cut using an automated Almonte core saw, into half core for HQ diameter, and into quarter core for PQ diameter.
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	RC drilling was sampled by use of an automatic cone splitter for the 2022, 2019, 2018 and 2015 drilling programmes; drilling was generally dry with a few damp samples and occasional wet samples. Older drilling programmes employed riffle splitters to produce the required sample splits for assaying. One in 40 to 50 RC samples was resampled as field duplicates for QAQC assaying, with this frequency increasing to one in 30 for the October 2019 RC drilling, and one in 20 for the December 2019 and 2022 RC drilling.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	The sample preparation techniques employed for the diamond core samples follow standard industry best practice. All samples were crushed by jaw and Boyd crushers and split if required to produce a standardised ~3kg sample for pulverising. The 2015 programme RC chips were split to produce the same sized sample. All samples were pulverised to a nominal 90% passing 75 micron sizing and sub sampled for assaying and LOI determination tests. The remaining pulps are stored at an AVL facility. The sample preparation techniques are of industry standard and are appropriate for the sample types and proposed assaying methods.
	Quality control procedures adopted for all sub-sampling stages to maximize representivity of samples.	Field duplicates, standards and blanks have been inserted into the sampling stream at a rate of nominally 1:20 for blanks, 1:20 for standards (including internal laboratory), 1:20 for field duplicates, 1:20 for laboratory checks and 1:74 for umpire assays. Also, for the recent sampling at BV, 1 in 20 samples were tested to check for pulp grind size. For 2019 and 2020 diamond core samples, duplicates were created from the coarse crush at a frequency of 1 in 20 samples at the laboratory and assayed.
	Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance	140mm diameter RC hammer was used to collect one metre samples and either HQ or PQ3 sized core was taken from the diamond holes. Given that the mineralisation at the Australian Vanadium Project is either massive or disseminated magnetite/martite hosted

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	results for field duplicate/second-half sampling.	vanadium, which shows good consistency in interpretation between sections and occurs as percentage values in the samples, the sample sizes are representative. Core is not split for duplicates, however coarse crush secondary splits are collected every 20th metre at the laboratory and analysed. RC samples are split at the collection stage to get representative (2.5-3kg) duplicate samples every 20th sample. 2022 RC drilling has good repeatability in the duplicate results. The entire core sample and all the RC chips are crushed and /or mixed before splitting to smaller sub-samples for assaying.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	As all of the variables being tested occur as moderate to high percentage values and generally have very low variances (apart from Cr_2O_3), the chosen sample sizes are deemed appropriate.
	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	All samples for the Australian Vanadium Project were assayed for the full iron ore suite by XRF (24 elements) and for total LOI by thermo-gravimetric technique. The method used is designed to measure the total amount of each element in the sample. Some 2015 and 2018 RC samples in the oxide profile were also selected for SATMAGAN analysis that is a measure of the amount of total iron that is present as magnetite (or other magnetic iron spinel phases, such as maghemite or kenomagnetite). SATMAGAN analysis was conducted at Bureau Veritas (BV) Laboratory during 2018. Although the laboratories changed over time for different drilling programmes, the laboratory procedures all appear to be in line with industry standards and appropriate for iron ore deposits, and the commercial laboratories have been industry recognized and certified. Samples are dried at 105˚C in gas fired ovens for 18-24 hours before RC samples being split 50:50. One portion is retained for future testing, while the other is then crushed and pulverised. Sub-samples are collected to produce a 66g sample that is used to produce a fused bead for XRF based analysing and reporting. Certified and non-certified Reference Material standards, field duplicates and umpire laboratory analysis are used for quality control. The standards inserted by AVL during the 2015 drill campaign were designed to test the V_2O_5 grades around 1.94%, 0.95% and 0.47%. The internal laboratory standards used have varied grade ranges but do cover these three grades as well. During 2018 and 2019, three Certified Reference Materials (CRMs) were used by AVL as field standards. These covered the V_2O_5 grade ranges around 0.327%, 0.790% and 1.233%. These CRMs are also certified for other relevant major element and oxide values, including Fe, TiO_2, Al_2O_3, SiO_2, Co, Ni and Cu (amongst others). Most of the laboratory standards used show an apparent underestimation of V_2O_5, with the results plotting below the expected value lines, however the results generally fall within ± 5-10% ranges of the expected values. The other elements show no obvious material bias. Standards used by AVL during 2015 generally showed good precision, falling within 3-5% of the mean value in any batch. The standards were not certified but compared with the internal laboratory standards (certified) they appear to show good accuracy as well. Field duplicate results from the 2015 drilling generally are within 10% of their original values, with only six percent of duplicate samples being more than 10 percent different.

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		The BV laboratory XRF machine calibrations are checked once per shift using calibration beads made using exact weights and they performed repeat analyses of sample pulps at a rate of 1:20 (5% of all samples). The lab repeats compare very closely with the original analysis for all elements. 2019 PQ and 2020 PQ and HQ diamond core has been assayed. No duplicate split samples were taken from the core, however, a coarse crush split at a frequency of 1:20 samples was created by the laboratory and assayed. The nature, quality and appropriateness of the assaying and laboratory procedures is at acceptable industry standards.
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	The geophysical readings taken for the Australian Vanadium Project core and RC samples and recorded in the database were magnetic susceptibility. For the 2009 diamond and 2015 RC and diamond drill campaigns this was undertaken using an RT1 hand magnetic susceptibility meter (CorMaGeo/Fugro) with a sensitivity of 1 x 10^{-5} (dimensionless units). The first nine diamond holes (GDH901 – GDH909) were sampled at approximately 0.3m intervals, the last eight (GDH910 – GDH917) at 0.5m intervals and the RC chip bags for every green bagged sample (one metre). During 2018 and 2019 RC and diamond core has been measured using a KT-10 magnetic susceptibility metre, at 1 x 10^{-3} ssi unit. During 2019, where archive material was available, historical drilling was re-measured with a KT-10 magnetic susceptibility metre, and comparison studies were completed with most of the Fugro and RT1 data replaced by KT-10 data, in addition to infilling gaps in the dataset. In addition to the handheld magnetic susceptibility described above the 2019 diamond drilling included downhole magnetic susceptibility. This was taken using a Century Geophysical 9622 Magnetic Susceptibility tool. The 9622 downhole tool sensitivity is 20 x 10^{-5} with a resolution of 10cm. 2019 diamond core was analysed using an Olympus Vanta pXRF with a 20 second read time. The unit is calibrated using pulp samples with known head assays from previous drill campaigns by the Company. Standard deviations for each element analysed are being recorded and retained. Elements being analysed are: Mg, Al, Si, P, S, K, Ca, Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, As, Se, Rb, Sr, Y, Zr, Nb, Mo, Ag, Cd, Sn, Sb, W, Hg, Pb, Bi, Th, and U. Four completed diamond drill holes were down hole surveyed by acoustic televiewer (GDH911, 912, 914 and 915) as a prequel to geotechnical logging during the 2015 drill campaign. A further six holes from the 2018 campaign have been down hole surveyed using acoustic televiewer and optical televiewer (18GEDH001, 002 and 003 and partial surveys of 18GERC005, 008 and 011) for 627 metres of data. Televiewer data was also collected during 2018 on some of the holes drilled in 2015 and prior. The holes surveyed were GRC0019, 0024, 0168, 0169, 0173, 0178, 0180, 0183, 0200 and Na253, Na258 and Na376 for a further 286.75 m of data. All 12 of the 2019 down dip PQ holes have been televiewer surveyed. Five of the eight PQ and HQ geotechnical drill holes completed in 2020 have been ATV surveyed.
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	QAQC results including CRMs, duplicate samples, repeat analysis and blanks for both AVL submission and internal lab checks show no material issues for the recent assaying programmes.

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Verification of Sampling and Assaying	The verification of significant intersections by either independent or alternative company personnel.	Diamond drill core photographs have been reviewed for the recorded sample intervals. Geologica Pty Ltd Consultant, Brian Davis, visited the Australian Vanadium Project site on multiple occasions and the BV core shed and assay laboratories in 2015 and 2018. Whilst on site, the drill hole collars and remaining RC chip samples were inspected. All of the core was inspected in the BV facilities in Perth and selected sections of drill holes were examined in detail in conjunction with the geological logging and assaying. Gemma Lee, Principal Geologist for AVL, has reviewed many of the diamond core drill holes from the project, worked on site regularly during drilling programs, and arranged check assaying for drill pulps, verifying the validity of the sample analysis. Resource consultants from Trepanier have visited site during 2019 and the company core storage facility in Bayswater and reviewed the core trays for select diamond holes during 2018.
	The use of twinned holes.	Two diamond drill holes (GDH915 and GDH917) were drilled to twin the RC drill holes GRC0105 and GRC0162 respectively. The results show excellent reproducibility in both geology and assayed grade for each pair. Five of the eight diamond core holes drilled during 2022 twin existing RC holes. Geological observations show very high correlation to the RC results. Assays will be interpreted for reproducibility when they are returned.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All primary geological data has been collected using paper logs and transferred into Excel spreadsheets and ultimately a SQL Server Database. The data were checked on import. Assay results were returned from the laboratories as electronic data which were imported directly into the SQL Server database. Survey and collar location data were received as electronic data and imported directly to the SQL database. All of the primary data have been collated and imported into a Microsoft SQL Server relational database, keyed on borehole identifiers and assay sample numbers. The database is managed using DataShed™ database management software. The data was verified as it was entered and checked by the database administrator (MRG) and AVL personnel
	Discuss any adjustment to assay data.	No adjustments or calibrations were made to any assay data, apart from resetting below detection limit values to half positive detection values.
Location of Data Points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	For the 2022, 2020, 2019 and 2018 drilling, all collars were set out using a handheld GPS or DGPS. After drilling they were surveyed using a Trimble RTK GPS system. The base station accuracy on site was improved during the 2015 survey campaign and a global accuracy improvement was applied to all drill holes in the Company database. For the 2015 drilling, all of the collars were set out using a Trimble RTK GPS system. After completion of drilling all new collars were re-surveyed using the same tool. Historical drill holes were surveyed with RTK GPS and DGPS from 2008 to 2015, using the remaining visible collar location positions. Only five of the early drill holes, drilled prior to 2000 by Intermin, had no obvious collar position when surveyed and a best estimate of their position was used based on planned position data. Downhole surveys were completed for all diamond holes, using gyro surveying equipment, as well as the RC holes drilled in 2022, 2019 and 2015 (from GRC0159). Some RC drill holes from the 2018 campaign do not have gyro survey as the hole closed before the survey could be done. These holes have single shot camera surveys, from which the dip readings were used with an interpreted azimuth (nominal hole setup azimuth). The holes with interpreted azimuth are all less than 120m depth. All other RC holes were given a nominal -60° dip measurement. These older RC holes were almost all 120m or less in depth.

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	Specification of the grid system used.	The grid projection used for the Australian Vanadium Project is MGA_GDA94, Zone 50. A local grid has also been developed for the project and used for the latest Mineral Resource update (March 2020). The grid is a 40 degree rotation in the clockwise direction from MGA north.
	Quality and adequacy of topographic control.	High resolution Digital Elevation Data was captured by Arvista for the Company in June 2018 over the M51/878 tenement area using fixed wing aircraft, with survey captured at 12 cm GSD using an UltraCam camera system operated by Aerometrex. The data has been used to create a high-resolution Digital Elevation Model on a grid spacing of 5m x 5m, which is within 20 cm of all surveyed drill collar heights, once the database collar positions were corrected for the improved ground control survey, that was also used in this topography survey. The vertical accuracy that could be achieved with the 12 cm GSD is +/- 0.10 m and the horizontal accuracy is +/- 0.24m. 0.5m contour data has also been generated over the mining lease application. High quality orthophotography was also acquired during the survey at 12cm per pixel for the full lease area, and the imagery shows excellent alignment with the drill collar positions. Outside M51/878, high resolution Digital Elevation Data was supplied by Landgate. The northern two thirds of the elevation data is derived from ADS80 imagery flown September 2014. The data has a spacing of 5M and is the most accurate available. The southern third is film camera derived 2005 10M grid, resampled to match it with the 2014 DEM. Filtering was applied and height changes are generally within 0.5M. Some height errors in the 2005 data may be +/- 1.5M when measured against AHD but within the whole area of interest any relative errors will mostly be no more than +/- 1M. In 2015 a DGPS survey of hole collars and additional points was taken at conclusion of the drill programme. Trepanier compared the elevations the drill holes with the supplied DEM surface and found them to be within 1m accuracy. An improved ground control point has been established at the Australian Vanadium Project by professional surveyors. This accurate ground control point was used during the acquisition of high quality elevation data. As such, a correction to align previous surveys with the improved ground control was applied to all drill collars from pre-2018 in the Company drill database. Collars that were picked up during 2018 and subsequently are already calibrated against the new ground control.
Data Spacing and Distribution	Data spacing for reporting of Exploration Results.	2022 RC drilling in blocks 50, 60 and 70 have infilled the existing drilling to 70m sections with 30m drill centres within BFS pit optimisations. Outside of the BFS optimisations, the drilling infilled to 140m sections with 30m drill centres. 2019 RC drilling in Fault Block 50 and 60 has drilled out portions of the fault block to 140 m spaced lines with 30 m drill centres on lines. Some sections are closer together where new drilling bracketed existing drill lines to maintain a minimum 140 m spacing between lines. 2019 diamond tail drilling has intersected the high grade domain at about 60 m downdip from the last existing drill hole on select sections that are at 80 m spacing. The 2018 RC drilling in Fault Block 30 and 40 has infilled areas of 260 m spaced drill lines to about 130m spaced drill lines, with holes on 30 m centres on each line. The closer spaced drilled areas of the deposit now have approximately 80m to 100m spacing by northing and 25m to 30m spacing by easting. Occasionally these spacings are closer for some pairs of drill holes. Outside of the main area of relatively close spaced drilling (approximately 7015400mN to 7016600mN), the drill hole spacing increases to between 140m and 400m in the northing direction but maintains roughly the same easting separation as the closer spaced drilled area.

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	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	The degree of geological and grade continuity demonstrated by the data density is sufficient to support the definition of Mineral Resources and the associated classifications applied to the Mineral Resource estimate as defined under the 2012 JORC Code. Variography studies have shown very little variance in the data for most of the estimated variables and primary ranges in the order of several hundred metres.
	Whether sample compositing has been applied.	All assay results have been composited to one metre lengths before being used in the Mineral Resource estimate. This was by far the most common sample interval for the diamond drill hole and RC drill hole data.
Orientation of Data in Relation to Geological Structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	The grid rotation is approximately 45º to 50º magnetic to the west, with the holes dipping approximately 60º to the east. The drill fences are arranged along the average strike of the high-grade mineralised horizon, which strikes approximately 310º to 315º magnetic south of a line at 7015000mN and approximately 330º magnetic north of that line. The mineralisation is interpreted to be moderate to steeply dipping, approximately tabular, with stratiform bedding striking approximately north-south and dipping to the west. The drilling is nearly all conducted perpendicular to the strike of the main mineralisation trend and dipping 60° to the east, producing approximate true thickness sample intervals through the mineralisation. The exception is 18 RC pre-collar, diamond tail holes drilled vertically to intersect the deposit at depth, and 12 down-dip diamond holes drilled from surface down-dip in the high grade domain to gain metallurgical sample. These holes do not contribute assay data to the estimation.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	The orientation of drilling with respect to mineralisation is not expected to introduce any sampling bias. Drill holes intersect the mineralisation at an angle of approximately 90 degrees. The 2019 PQ diamond holes are deliberately drilled down dip to maximise the amount of metallurgy sample collected for the pilot study, with all material used for metallurgy purposes (hence not being available for assay). They are not intended to add material to the resource estimation, or to define geological boundaries, though where further control on geological contacts is intercepted, this will be used to add more resolution to the geological model.
Sample Security	The measures taken to ensure sample security.	Samples were collected onsite under supervision of a responsible geologist. The samples were then stored in lidded core trays and closed with straps before being transported by road to the BV core shed in Perth (or other laboratories for the historical data). RC chip samples were transported in bulk bags to the assay laboratory and the remaining green bags are either still at site or stored in Perth. RC and core samples were transported using only registered public transport companies. Sample dispatch sheets were compared against received samples and any discrepancies reported and corrected.
Audits or Reviews	The results of any audits or reviews of sampling techniques and data.	A review of the sampling techniques and data was completed by Mining Assets Pty Ltd (MASS) and Schwann Consulting Pty Ltd (Schwann) in 2008 and by CSA in 2011. Neither found any material error. AMC also reviewed the data in the course of preparing a Mineral Resource estimate in 2015. The database has been audited and rebuilt by AVL and MRG in 2015. In 2017 geological data was revised after missing lithological data was sourced. Geologica Pty Ltd concludes the data integrity and consistency of the drill hole database shows sufficient quality to support resource estimation.

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Section 2 - Reporting of Exploration Results

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	Following a decision by the Federal Court the Yugunga-Nya native title claim (WC1999/46) was not accepted for registration. Subsequent to the grant of M51/878, native title claim WCD2021/008 has become the NTT registration for the Yugunga Nya peoples covering the proposed mine site. A Heritage survey was undertaken prior to commencing each drilling campaign. The Company have been completing heritage survey clearance work with the same group throughout the life of the project. Mining Lease M51/878 covering most of E 51/843 and P51/2567, and all of P51/2566 and E51/1396 was granted by DMIRS during 2020, covering 70% of the Vanadium Project. The remainder of the deposit resource area is covered by Mining Lease Application MLA51/897 that overlies a portion of E51/843, P51/3076 and E51/1534 that are held by AVL. Miscellaneous licence applications have been submitted for a haul and access road plus water pipeline corridor connecting the project through to the Great Northern Highway (Application L 51/116) to the west, and for borefields (Application L 51/119). AVL has no joint venture, environmental, national park or other ownership agreements on the lease area. A Mineral Rights Agreement has been signed with Bryah Resources Ltd for base metals and gold exploration on the AVL Gabanintha tenements. Bryah Resources Limited (ASX: BYH) holds the Mineral Rights for all minerals except V/U/Co/Cr/Ti/Li/Ta/Mn & iron ore which are retained 100% by AVL. AVL owns shares in BYH and holds a 0.75% Net Smelter Return royalty upon commencement of production by BYH.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	At the time of reporting, there are no known impediments to obtaining a licence to operate in the area and the tenements are in good standing.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	The Australian Vanadium deposit was identified in the 1960s by Mangore P/L and investigated with shallow drilling, surface sampling and mapping. In 1998, Drilling by Intermin Resources confirmed the down dip extent and strike continuation under cover between outcrops of the vanadium bearing horizons. Additional RC and initial diamond drilling was conducted by Greater Pacific NL and then AVL up until 2019. Previous Mineral Resource estimates have been completed for the deposit in 2001 (Mineral Engineering Technical Services Pty Ltd (METS) and Bryan Smith Geosciences Pty Ltd. (BSG)), 2007 (Schwann), 2008 (MASS & Schwann), 2011 (CSA), 2015 (AMC), 2017 (Trepanier) and 2018 (Trepanier).
Geology	Deposit type, geological setting and style of mineralisation.	The Australian Vanadium Project at Gabanintha is located approximately 40kms south of Meekatharra in Western Australia and approximately 100kms along strike (north) of the Windimurra Vanadium Mine. The mineralisation is hosted in the same geological unit as Windimurra, which is part of the northern Murchison granite greenstone terrane in the north west Yilgarn Craton. The project lies within the Gabanintha and Porlell Archaean greenstone sequence oriented approximately NW-SE and is adjacent to the Meekatharra greenstone belt.

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		Locally the mineralisation is massive or bands of disseminated vanadiferous titano-magnetite hosted within the gabbro. The mineralised package dips moderately to steeply to the west and is capped by Archaean acid volcanics and metasediments. The footwall is a talc carbonate altered ultramafic unit. The host sequence is disrupted by late stage dolerite and granite dykes and occasional east and northeast -southwest trending faults with apparent minor offsets. The mineralisation ranges in thickness from several metres to up to 20 to 30m in thickness. The oxidized and partially oxidised weathering surface extends 40 to 80m below surface and the magnetite in the oxide zone is usually altered to Martite.
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length.	All drill results relevant to the mineral resource updates were disclosed at the time of each resource publication. For further information in addition to this release, see Announcement dated 4th March 2020 and 28th November 2018 for previous two Mineral Resource updates.
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	Length weighed averages used for exploration results are reported in spatial context when exploration results are reported. Cutting of high grades was not applied in the reporting of intercepts.
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	There were negligible residual composite lengths, and where present these were excluded from the estimate.

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	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values have been used.
Relationship between mineralisation widths and intercept lengths	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	Drill holes intersect the mineralisation at an angle of approximately 90 degrees. Diamond PQ holes in the 2019 program were drilled vertically (-90 degrees). This decreases the angle of intersection with the mineralisation. Diamond PQ holes in the 2020 geotechnical program (designed to test pit wall competency) were drilled at -80 degrees, which is oblique to the high grade domain dip.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	See Figures in the ASX releases of 1st November 2021, 4th March 2020, and 18th November 2018, which list drilling intercepts, maps and sections for the previous three Mineral Resource updates.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	Comprehensive reporting of drilling details has been provided in the body of the announcement of 4th March 2020. Results reported for the 2022 RC drilling and 2020 geotechnical diamond holes include all intercepts, with notes in the collar table or body of text where there were no significant intercepts.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	All meaningful & material exploration data has been reported
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	Extensional resource infill drilling is under consideration for the remaining 5 km of mineralisation that is currently drilled at broad spacing.

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Criteria	JORC Code Explanation	Commentary
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	The decision as to the necessity for further exploration at the Australian Vanadium Project is pending completion of mining technical studies on this resource update. Figure 1 in this report shows the high grade domain over the strike extent of the project. The entire trend is considered prospective for massive magnetite V-Ti mineralisation.