Australian VANADIUM LIMITED

ASX ANNOUNCEMENT **7 MAY 2024**

39% INCREASE IN HIGH GRADE MEASURED AND INDICATED MINERAL RESOURCE

Resource update confirms Australian Vanadium Project as a Tier-1 high grade vanadium deposit

KEY POINTS

- **Updated Mineral Resource Estimate ('MRE') consolidating the AVL and TMT projects into one project on the contiguous orebody.**
- **Increase in MRE for high grade ('HG') domain in Measured and Indicated categories by 39% on previous estimates.**
- **Global vanadium MRE for combined project is 395.4Mt at 0.77% V_2O_5 of which 61% of updated HG domain is now classified as Measured or Indicated.**
- **Vanadium MRE for HG domain is 173.2Mt at 1.09% V_2O_5 including 105.4Mt at 1.12% V_2O_5 classified as Measured or Indicated.**
- **Updated MRE of combined project underpins ongoing work on the Optimised Feasibility Study ('OFS'), targeting improved early mine life cash flow derived from 1.6% V_2O_5 and 60% Fe concentrate grades.**

Australian Vanadium Limited (ASX: AVL, 'the Company' or 'AVL') is pleased to announce an updated Mineral Resource Estimate ('MRE') for its vanadium project near Meekatharra, Western Australia (see Figure 1). This resource update continues to build on AVL's aspirations to be the next primary producer of high purity vanadium underpinned by a quality, long life, Tier-1 asset.

On 1 February 2024, AVL completed its merger with Technology Metals Australia Limited ('TMT'), integrating AVL and TMT's two projects into the combined Australian Vanadium Project ('Project'),[1] located on one contiguous vanadium orebody with a unified 18km strike length. AVL has commenced work on an OFS focused on realising the potential economic benefits of the merger. As part of the ongoing OFS work, AVL assessed the high-grade areas of the orebody, previously straddling the two projects, which shows 1.6% vanadium pentoxide (V_2O_5) and 60% iron (Fe) concentrate grades.[2]

This updated MRE consolidated AVL and TMT's previous MREs[3] and includes additional reverse circulation drilling, diamond core drilling and down hole density data conducted during 2022. The updated MRE also unifies the model domaining and interpretation at the Project, a necessary step to progress the OFS.

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[1] See ASX announcement dated 1 February 2024 *'Successful implementation of AVL and TMT merger'*
[2] See ASX announcement dated 11 March 2024 *'Higher vanadium and iron concentrate grades highlighted in testwork'*
[3] See AVL ASX announcement dated 1 November 2021 '*Mineral Resource update for the Australian Vanadium Project*' and TMT ASX announcement dated 7 November 2022 '*MTMP Global Mineral Resource upgrade*'

Australian Vanadium Limited
Level 2, 50 Kings Park Road
West Perth, WA 6005

Phone: +61 8 9321 5594
Fax: +61 8 6268 2699
Email: info@avl.au

ASX: AVL
OTCQB: ATVVF
ABN: 90 116 221 740

On the resource update, AVL's CEO, Graham Arvidson, comments:

"AVL is pleased to provide this updated MRE for the Project with significant improvements in resource category. We are particularly pleased with the significant 39% increase in classification within the HG domain of the deposit.

"This MRE update strengthens our conviction that we will be able to define a 'stronger for longer' project capable of producing high grades of vanadium and iron in the magnetic concentrate with positive economic implications. Increased accuracy of the MRE from additional drilling by AVL during 2022, coupled with consolidation of the MRE over the whole deposit will be pivotal in moving the Optimised Feasibility Study forward, targeting improved early mine-life cash flow.

"AVL continues to make great progress on project development activities and approvals towards mining and vanadium oxide production while also continuing to hit key milestones in the production of electrolyte suitable for vanadium flow batteries at our electrolyte facility. The advanced stage of our Project positions us well as use of vanadium in batteries continues to grow exponentially."

AVL is progressing the Project at a key time in global markets for vanadium, with growth in the vanadium flow battery ('VFB') market expected to continue its rapid growth.

The Project is supported by a well-defined Mineral Resource base with the updated MRE encompassing the previous MREs for Blocks 15 to 70 of the former AVL project,[4] and the Gabanintha North and Yarrabubba (now Block 80) deposits of the former TMT project.[5] The Company has updated the Measured, Indicated and Inferred MRE contained within a massive magnetite high-grade domain ('HG domain' or 'HG') and overlying low-grade ('LG') disseminated magnetite domains for a total of 395.4 million tonnes ('Mt') at 0.77% V_2O_5.

This updated estimate includes a 107% increase in the Indicated category HG within southern Blocks 50 to 70. Also included is a Maiden Measured category mineral resource of 7.8Mt at 1.16% V_2O_5 within Blocks 50 to 62 in the HG, significantly improving the category of resources in those blocks to that previously reported in November 2021.[4] Table 1 includes an updated MRE table for the Project and Appendix 2 includes a table of the MRE by the major blocks, plus in a separate table by oxidation, a key criterion for recovery through magnetic separation beneficiation.

The MRE includes a vanadium-bearing massive magnetite HG domain. The Measured, Indicated and Inferred MRE for this HG domain is 173.2Mt at 1.09% V_2O_5, which includes:

- Measured: 30.6Mt at 1.13% V_2O_5;
- Indicated: 74.8Mt at 1.11% V_2O_5; and
- Inferred: 67.9Mt at 1.06% V_2O_5.

[4] See ASX announcement dated 1 November 2021 '*Mineral Resource update for the Australian Vanadium Project*'
[5] See TMT ASX announcement dated 7 November 2022 '*MTMP Global Mineral Resource upgrade*'

Please refer to Table 2 for comparison of this MRE update with the previous MRE updates.

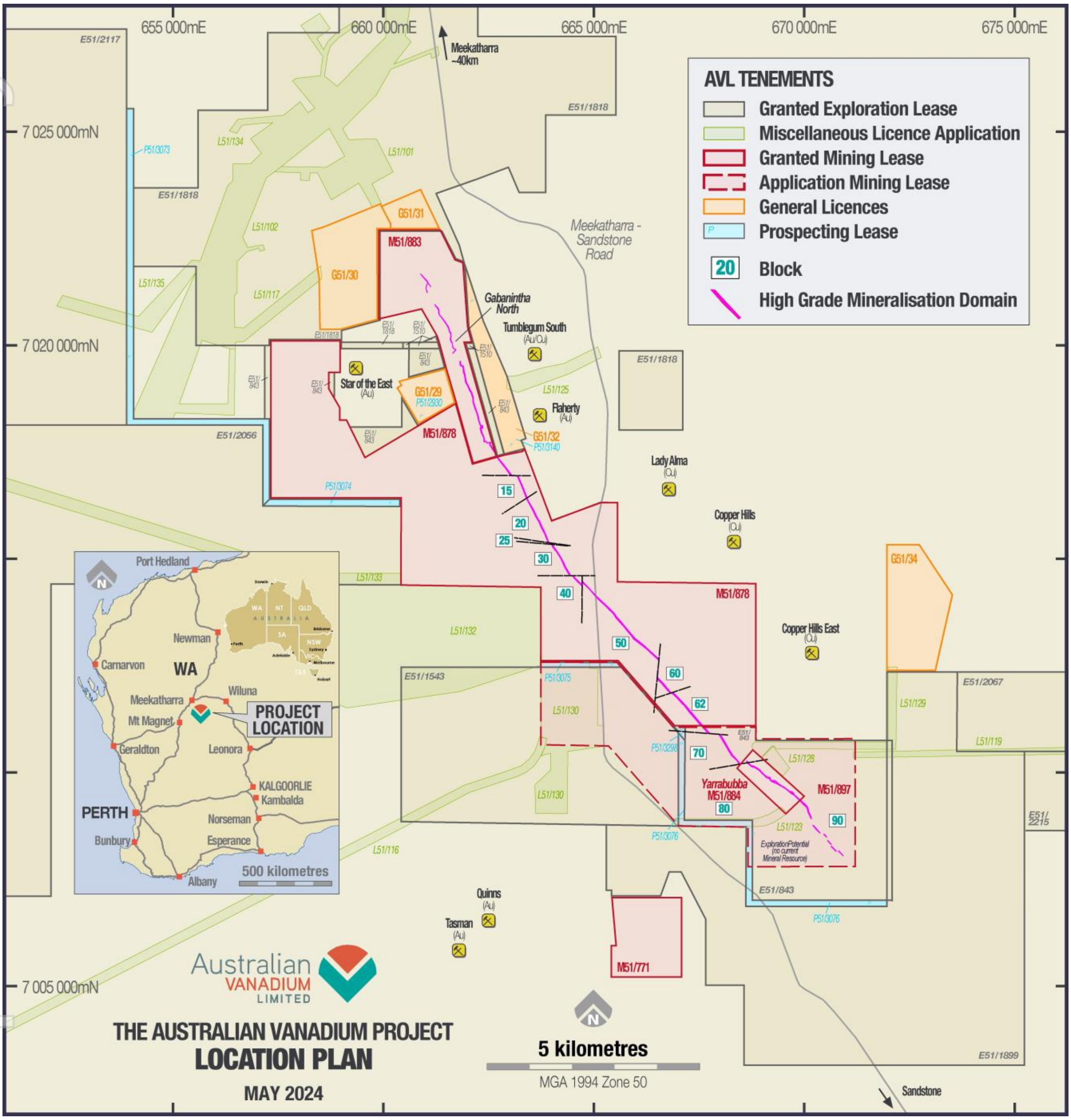

Figure 1 – **The Australian Vanadium Project Site Location**

MINERAL RESOURCE ESTIMATE UPDATE SUMMARY

Table 1 shows the Global MRE as at May 2024 for the reported in-situ V_2O_5 by geological domain (HG, combined LG and combined LG Transported) at the Project. The HG Mineral Resource inventory by block and category is shown in Figure 2 by Total Magnetic Intensity ('TMI') imagery.

Table 1 **– Australian Vanadium Project – May 2024 MRE by Domain**

Domains	Category	Mt	V_2O_5 %	Fe %	TiO_2 %	SiO_2 %	Al_2O_3 %
HG	Measured	30.6	1.13	46.3	12.9	7.4	6.2
	Indicated	74.8	1.11	47.5	12.6	7.0	5.7
	Inferred	67.9	1.06	45.3	12.1	9.0	6.6
	Subtotal	**173.2**	**1.09**	**46.5**	**12.5**	**7.8**	**6.1**
LG 2-5	Measured	-	-	-	-	-	-
	Indicated	61.8	0.55	26.1	7.1	26.6	16.3
	Inferred	142.5	0.48	24.9	6.6	28.9	15.2
	Subtotal	**204.3**	**0.50**	**25.3**	**6.8**	**28.2**	**15.5**
Trans 6-8	Measured	-	-	-	-	-	-
	Indicated	-	-	-	-	-	-
	Inferred	17.9	0.65	31.0	7.3	24.1	14.4
	Subtotal	**17.9**	**0.65**	**31.0**	**7.3**	**24.1**	**14.4**
Global	Measured	30.6	1.13	46.3	12.9	7.4	6.2
	Indicated	136.6	0.85	37.8	10.1	15.8	10.5
	Inferred	228.2	0.66	31.4	8.3	22.6	12.6
	Total	**395.4**	**0.77**	**34.8**	**9.3**	**19.1**	**11.4**

Note*: Totals may not add up due to rounding.*

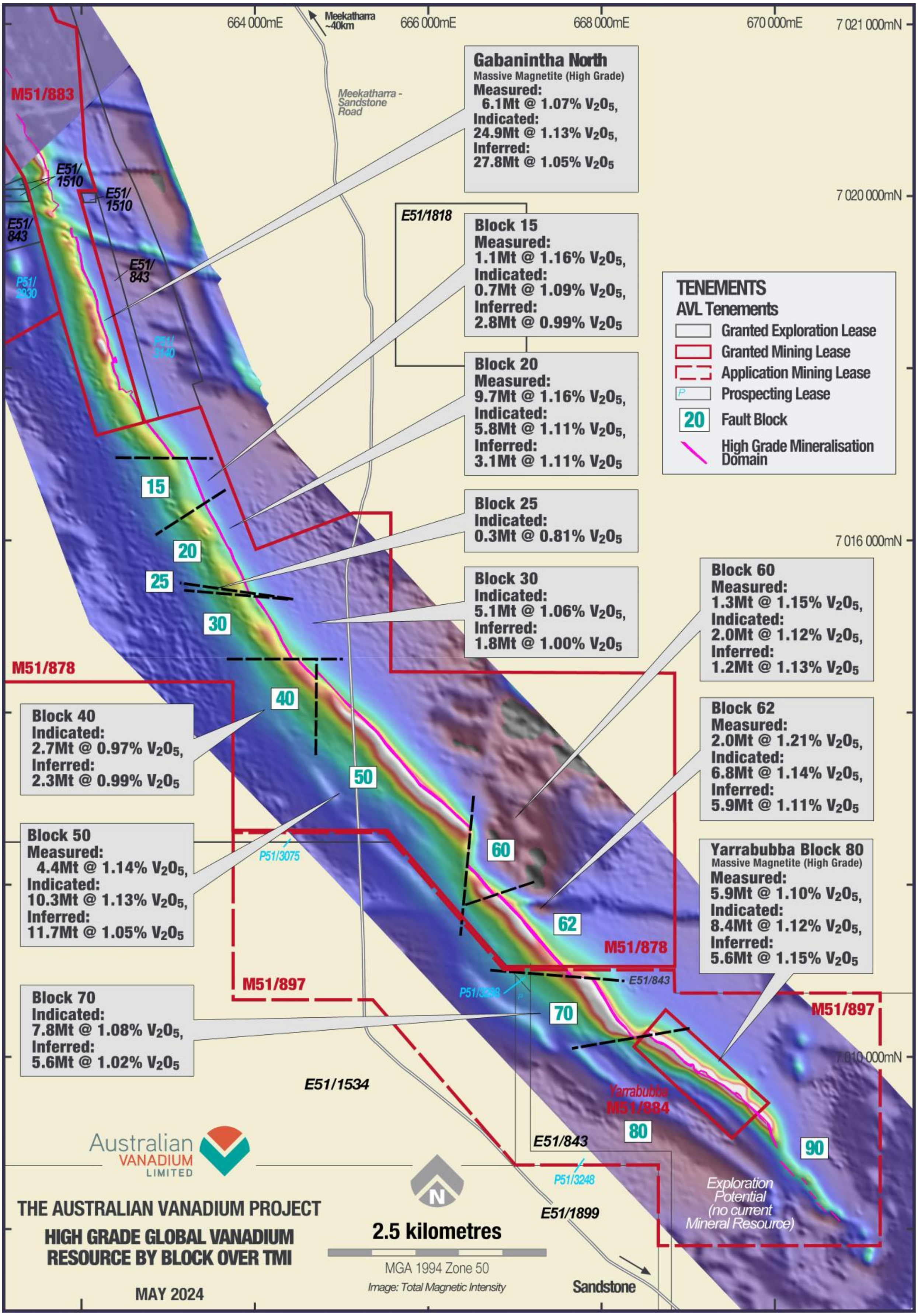

Figure 2 – TMI of the Project and May 2024 HG domain MRE by block

KEY UPDATES TO MINERAL RESOURCE ESTIMATE

Comparison with AVL November 2021 MRE and TMT November 2022 MRE

The Global and HG domain MRE totals remain similar to the sum of previous MREs for the Project, with the main change being an increase in classification category of HG within Blocks 50 to 70.

The material changes in Blocks 50, 60, 62 and 70 are due to additional drilling included in this MRE update, being:

- Maiden Measured MRE for the HG domain in Blocks 50, 60 and 62 of 7.8Mt at 1.16% V_2O_5
- 13.9Mt converted from Inferred to Indicated category in the HG massive magnetite domain in Blocks 50, 60, 62 and 70, for a 107% increase to 26.9Mt at 1.12% V_2O_5 in Indicated category HG material in these blocks, up from 13.0Mt in the 2021 MRE.

Table 2 shows a comparison of the updated May 2024 MRE compared to the previous MREs completed in 2021 and 2022. For comparison, the sum of the previous MREs is provided directly below the Global MRE for this update, followed by the individual Global MREs that contribute to the sum.

Table 2 – May 2024 Global MRE compared to previous MREs

	Category	Mt	V_2O_5 %	Fe %	TiO_2 %	SiO_2 %	Al_2O_3 %
Updated Global MRE (May 2024)	Measured	30.6	1.13	46.3	12.9	7.4	6.2
	Indicated	136.6	0.85	37.8	10.1	15.8	10.5
	Inferred	228.2	0.66	31.4	8.3	22.6	12.6
	Subtotal	**395.4**	**0.77**	**34.8**	**9.3**	**19.1**	**11.4**
Sum of Previous MREs listed below for the Project (TMT, November 2022 and AVL, November 2021)	Measured	23.4	1.09	44.0	12.2	10.1	7.0
	Indicated	133.5	0.78	34.5	9.2	19.1	11.7
	Inferred	235.8	0.74	34.2	9.0	19.8	11.1
	Subtotal	**392.7**	**0.78**	**34.9**	**9.3**	**19.0**	**11.1**
Gabanintha North deposit (TMT, November 2022)	Measured	6.2	1.10	45.0	11.6	10.4	6.1
	Indicated	36.2	0.90	38.9	10.1	15.7	8.9
	Inferred	73.4	0.80	36.6	9.6	18.0	9.5
	Subtotal	**115.8**	**0.80**	**37.8**	**9.9**	**16.9**	**9.1**
Yarrabubba deposit (TMT, November 2022)	Measured	5.9	1.00	43.5	11.2	11.4	6.8
	Indicated	14.9	0.90	39.0	10.1	15.5	8.7
	Inferred	17.1	0.80	34.4	8.9	19.8	10.3
	Subtotal	**37.9**	**0.80**	**37.6**	**9.7**	**16.8**	**9.1**
Blocks 10 – 70 (AVL, November 2021)	Measured	11.3	1.14	43.8	13	9.2	7.5
	Indicated	82.4	0.7	31.7	8.7	21.2	13.5
	Inferred	145.3	0.71	33	8.7	20.7	12
	Subtotal	**239.0**	**0.73**	**33.1**	**8.9**	**20.4**	**12.3**

Note: *Totals may not add up due to rounding.*

Reverse Circulation and Diamond Core Drilling

From August to October 2022, AVL completed infill drill programs for diamond drill holes ('DDH') and reverse circulation ('RC') holes in the southern area of the Project, at Blocks 50, 60, 62 and 70. Nine

DDH holes for 813.5 metres of diamond core were drilled for quality assurance of the RC drilling in the MRE via drilling of twin holes, geotechnical information for the footwall of Block 70, and to provide additional metallurgical drill core sample. Eighty-six RC holes were drilled for 7,283 metres of new resource development drilling.[6]

RC infill drilling was completed to a depth of 100m to 120m below surface on drill sections at 70m spacing with 30m drill centres on section within the early mine life pit optimisation shells of the April 2022 Bankable Feasibility Study ('BFS').[7] A fourth hole was added to existing sections through this pattern to provide data at depth extending drill data to between 120 and 150m below surface on every second drill line. In the remainder of the southern blocks where there was end of mine life Inferred portions of the BFS optimisations, drilling was infilled to 140m spaced sections with 30m drill centres on section, also to a depth of 100m below surface.

DDH holes provide coverage of diamond core sample to 300m section spacing through Blocks 50, 62 and 70, achieving a regular pattern of metallurgy test work variability sample.

Figure 3 shows the extent of the vanadium-titanium-magnetite (VTM) deposit with the collars for the new drilling in the MRE update, and pre-existing drilling.

Sub-domaining of HG domain

A key change is sub-domaining of the HG domain to define an internal zone of very low silica (SiO_2), high iron (Fe) and high vanadium (V_2O_5) at a cut-off grade of less than 7% SiO_2. The HG domain is still reported as one continuous domain at greater than 0.7% V_2O_5 cut-off, however, sub-domaining results in an estimation that better defines high V_2O_5 and Fe and low SiO_2 in the core of the massive magnetite HG. Sections provided in Figure 4, Figure 5, Figure 6 and Figure 7 show the internal sub-domain within the HG domain in Blocks 50, 62, 70 and Yarrabubba (Block 80), respectively. Figure 3 shows the location of the sections on the drill collar plan for the Project, and the spatial relation between the local grid applied at the Project, and Map Grid Australia 1994 (MGA94).

[6] See ASX: AVL announcement dated 4 April 2023, '*High Grade Results from Infill Drilling at the Australian Vanadium Project'*
[7] See ASX: AVL announcement dated 6 April 2022, '*Bankable Feasibility Study for the Australian Vanadium Project'*

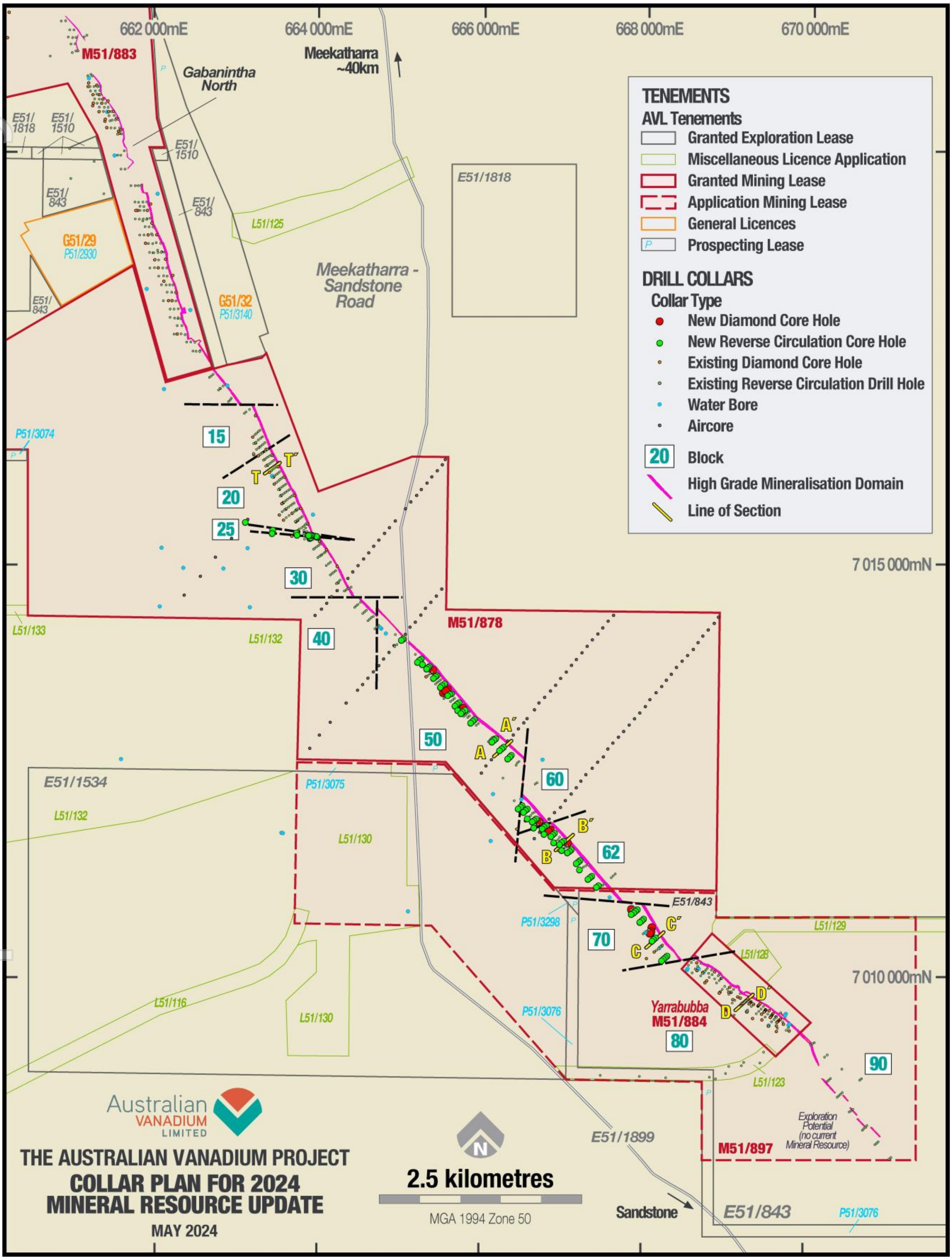

Figure 3 – The Australian Vanadium Project – Drill Collar Plan – May 2024 MRE Update

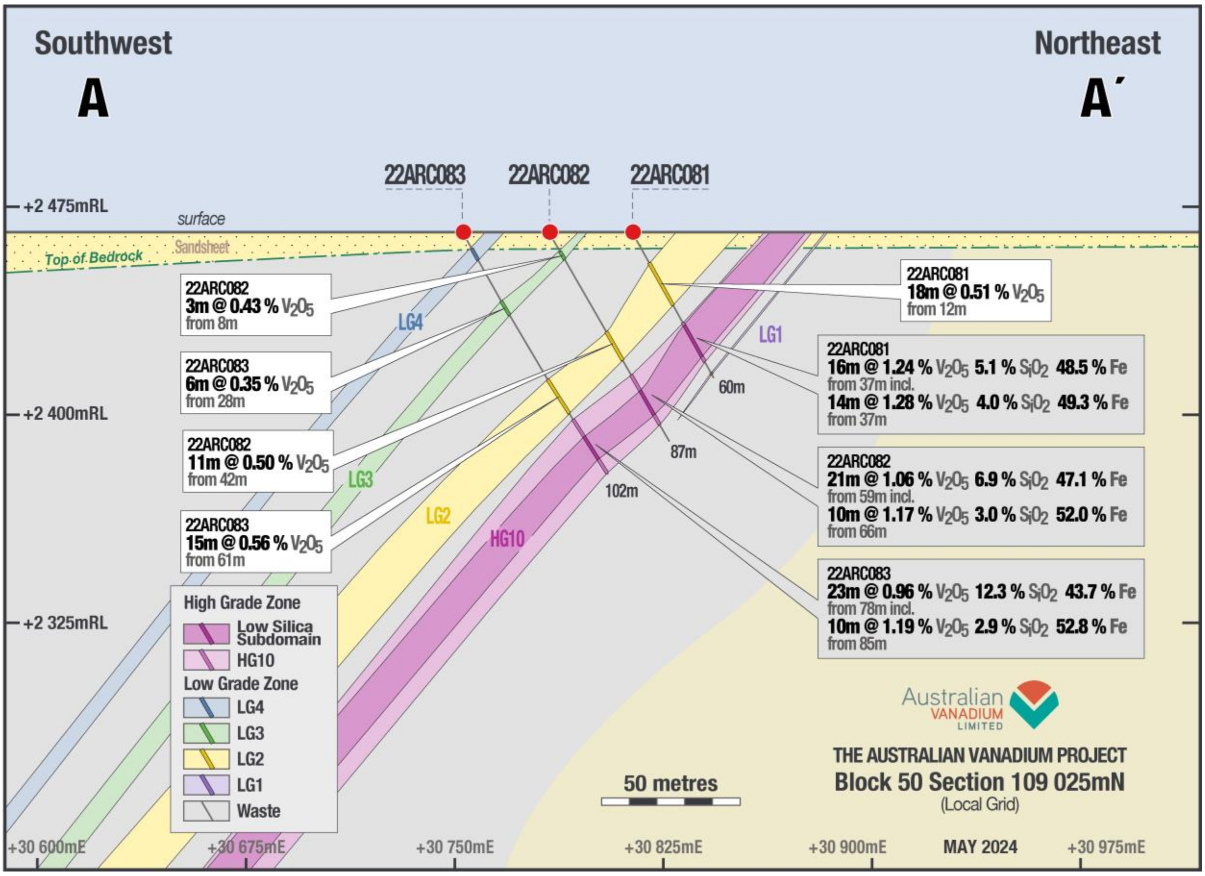

Figure 4 – Block 50 – Section 109,025m North

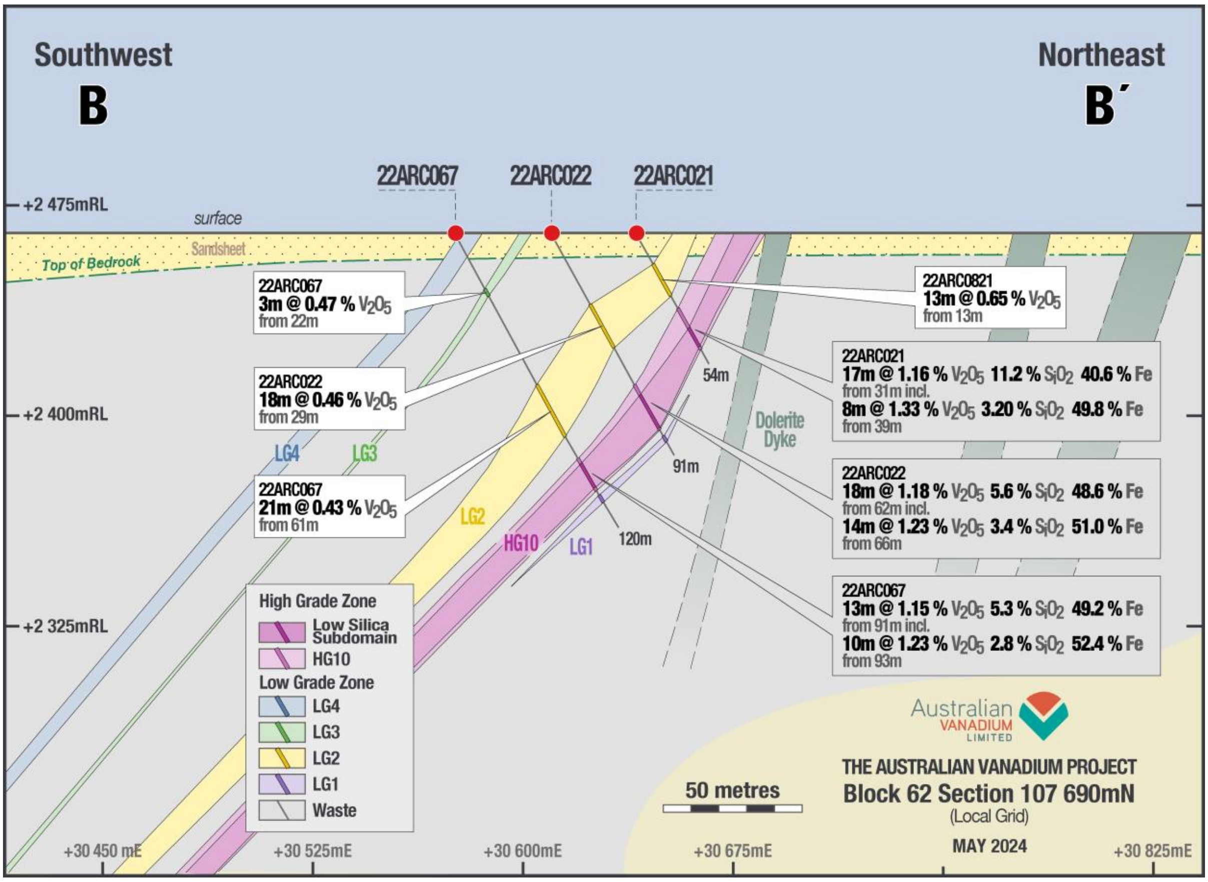

Figure 5 – Block 62 – Section 107,690m North

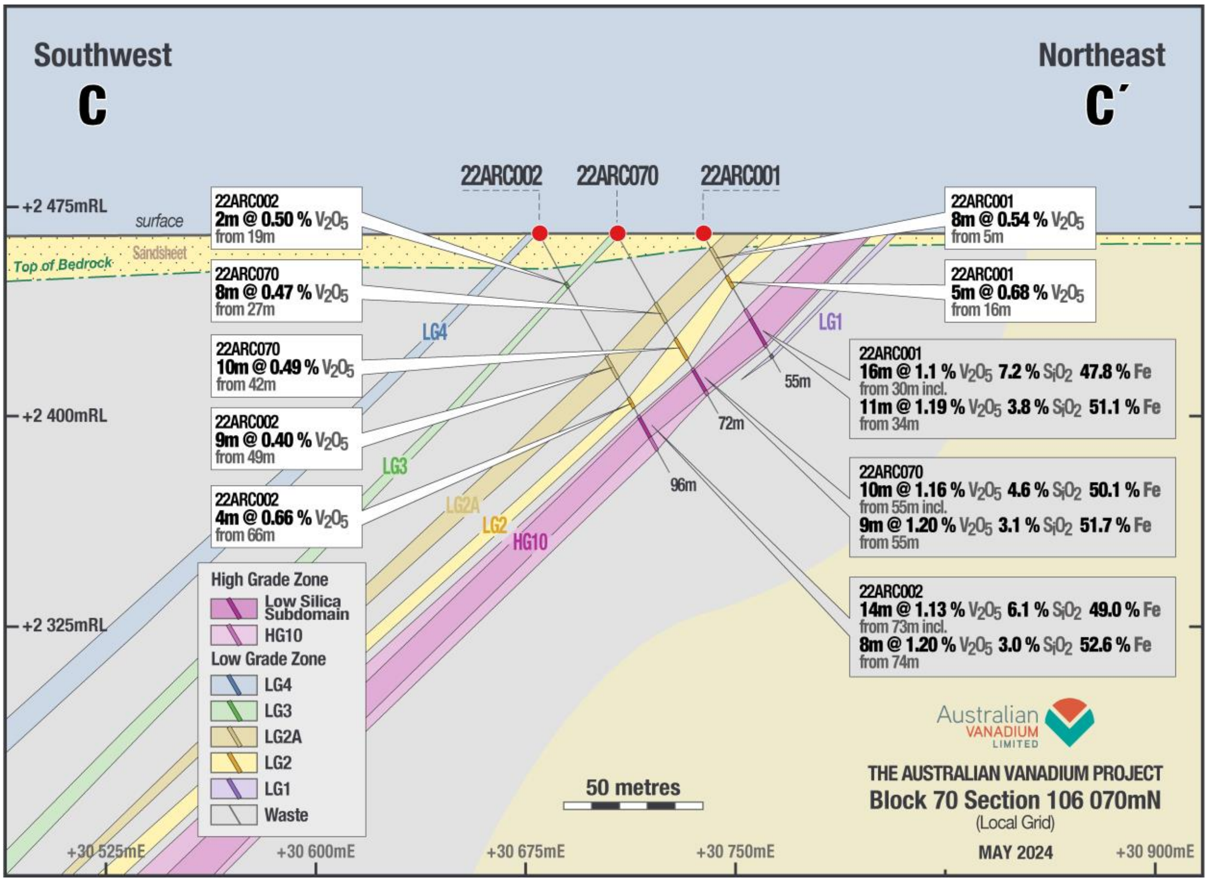

Figure 6 – Block 70 – Section 106,070m North

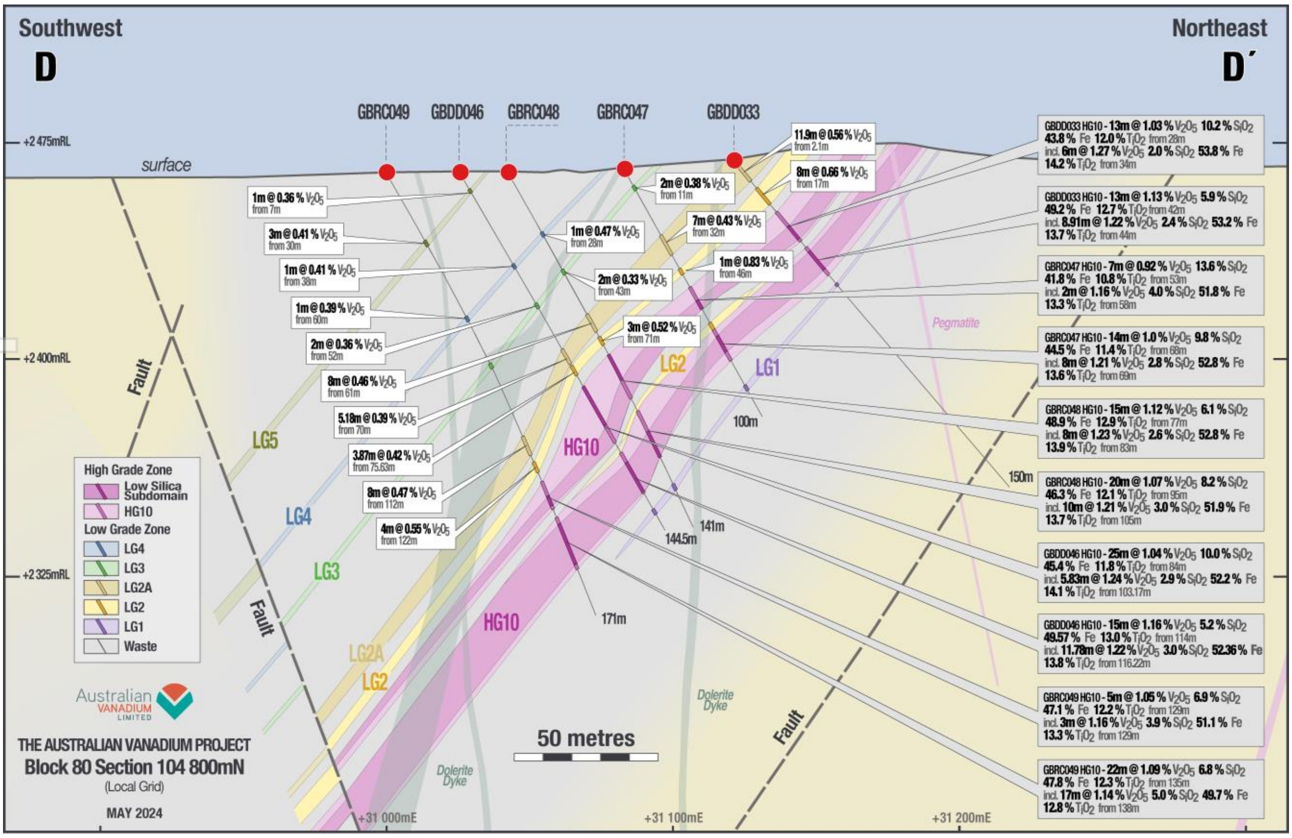

Figure 7 – Yarrabubba (Block 80) – Section 104,800m North

Summary of Resource Estimate and Reporting Criteria

As per ASX Listing Rule 5.8 and the 2012 JORC reporting guidelines, a summary of material information used to complete the MRE update in this release is detailed below (for more detail please refer to Table 1, Sections 1 to 3 included in Appendix 4).

Geology and geological interpretation

The Australian Vanadium Project deposit, located 40km south of the town of Meekatharra, Western Australia, is a sequence of magnetite rich units that host vanadium and titanium within the Lady Alma Gabbro of the Meeline Suite that is a large differentiated intrusive mafic – ultramafic sill that is 18km long and up to 3km wide.

The layered gabbro sequence is tilted with the units striking about 145 degrees from Blocks 15 to 80, and about 160 degrees at Gabanintha North. The gabbro dips between 42 and 65 degrees to the southwest, with the steepest dips at Gabanintha North, and the shallowest dips in Blocks 40, 60 and 70. The mineralised bedrock is overlain in places by an in-situ lateritic LG domain, one or two transported detrital LG domains and barren surface cover domain that is modern granite-derived alluvial sand sheet overlying colluvial lag from erosion of the gabbro sequence.

Summarising all domains in the geological model for the deposit, section 113,400 mN in fault block 20 is a type-section (see Figure 8 below). This section is not representative of the entire deposit, with cover sequences much thinner and lacking domains 6 and 8 over the majority of the Project, and some portions of the deposit having bedrock within 1m of surface. The bedrock domains are consistently present, except LG5 domain that is only currently modelled at Gabanintha North, Block 15, Block 20 and Yarrabubba (Block 80). LG2 domain occurs as a bifurcated lens in much of Gabanintha North, Block 30, Block 70 and Block 80. The location of the type section is shown on Figure 3, denoted by T – T'. Ten mineralised domains were defined during the logging, interpretation and statistical modelling process which are composed of:

- one massive magnetite HG domain with an average thickness of about 14m, with an internal low SiO_2 and high V_2O_5 and Fe sub-domain;
- one semi-continuous, thin structural raft of LG-HG in the footwall that is not included in the classified MRE due to the lack of continuity and grade variability;
- four to five hangingwall disseminated magnetite LG domains;
- one sub-horizontal laterite LG domain; and
- two sub-horizontal transported detrital massive magnetite LG domains.

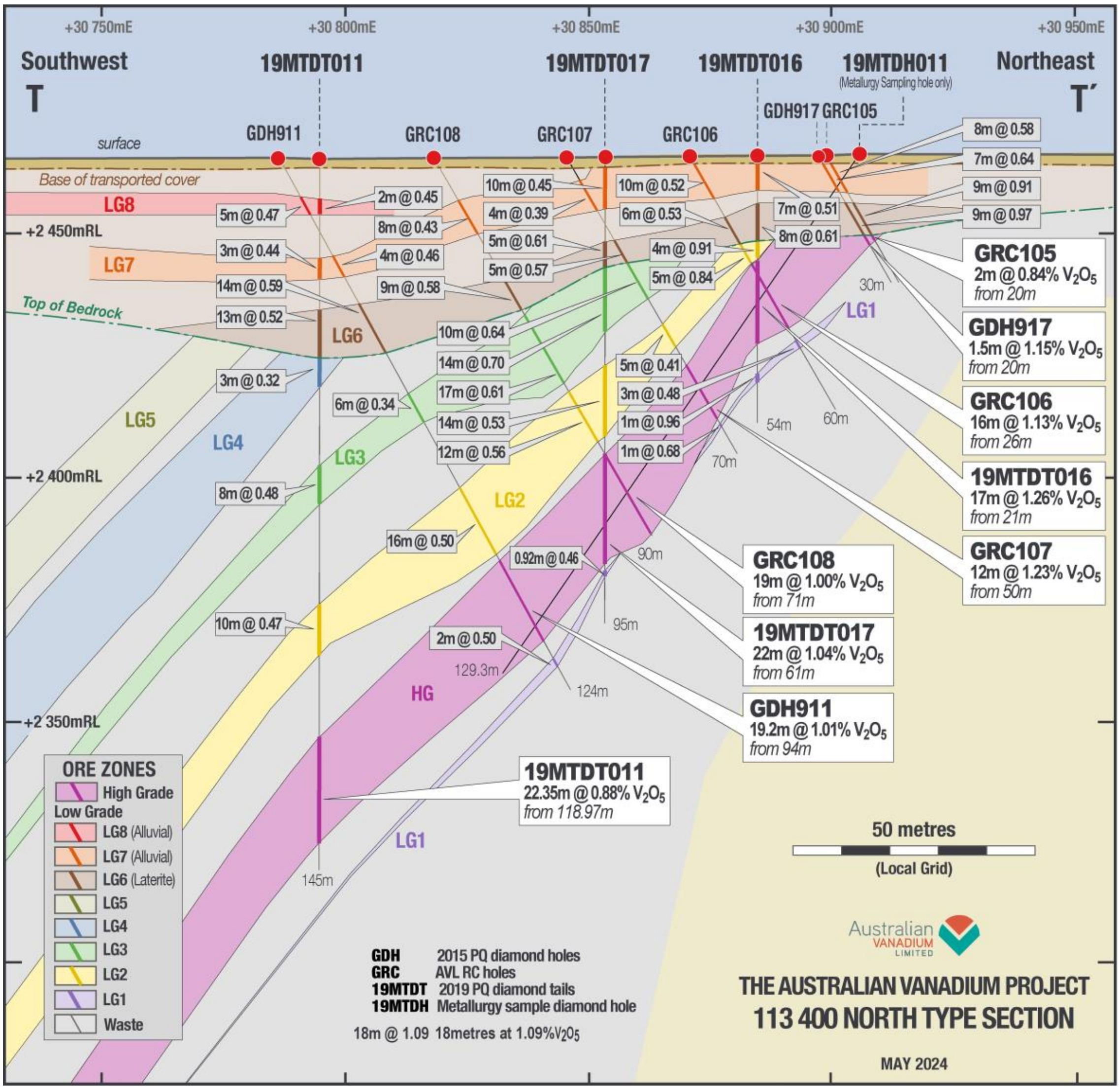

Figure 8 **- Local grid – 113,400m North, Block 20 – Type section showing all geology model domains**

The north-northwest striking deposit is affected by regional scale faults which offset the entire deposit into a series of blocks ranging from 0.5km to 2.5km in strike length. The blocks have relatively little internal deformation, with domain layering visible in drilling and over long distances between drill holes.

The TMI geophysical image shows the trace of the HG massive magnetite, and the location of faults (Figure 2). Aerial magnetics imagery and a corresponding 3D magnetic inversion model from the 50m spaced line data is used to guide modelling of the HG and define faults that are the block boundaries.

Weathering has been modelled using the natural log of the magnetic susceptibility divided by Fe% to determine oxidation of the HG, related back to recovery of the material through magnetic beneficiation testwork (*Weathering = Ln(magsus/Fe%)* where < -1 is fully oxidised and > 2 is fresh rock).

In the hangingwall and footwall units, oxidation surfaces are modelled using these criteria:

- Base of Completed Oxidation
  - Near complete magnesium depletion above, disregarding some regolith formation of dolomite
  - Elevated Loss on Ignition above – related to goethite, carbonate, and sulphate species in the most oxidised portion of the weathering profile
  - Magnetic Susceptibility in the bedrock less than 5, often less than 10
  - Coinciding as sub-horizontal surface with *Ln(magsus/Fe%)* values less than -1 in the HG domain.
- Top of Fresh (base of partial oxidation)
  - Near complete sulphur (as sulphide) depletion above, disregarding some regolith formation of gypsum that is a sulphate mineral
  - Magnetic Susceptibility greater than 25, often greater than 50
  - Coinciding as sub-horizontal surface with *Ln(magsus/Fe%)* values greater than 2 in the HG domain.

The hard surface oxidation profile interpretation at the deposit is shown in Figure 9 below.

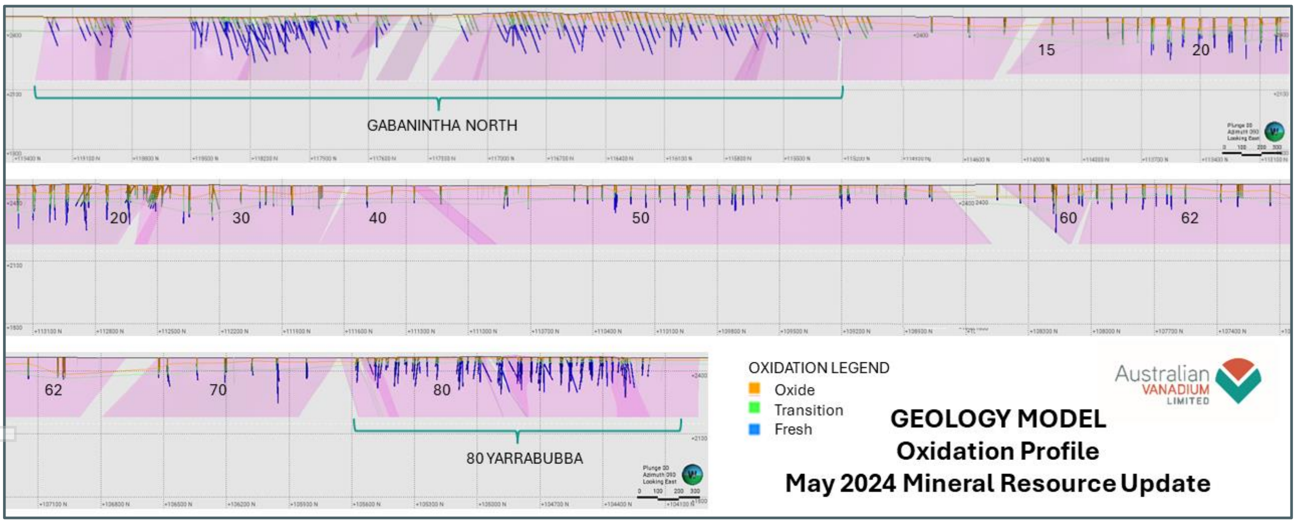

Figure 9 – The Australian Vanadium Project – Oxidation modelling

Infill drilling in Blocks 50 to 70 during 2022 defined thin cross-cutting dolerite intrusions, striking northeast – southwest through to east – west. Modelling of these intrusions has resolved pinches in previous AVL interpretations of the HG (see Figure 10 and Figure 11). The late-intrusion model results in little volume change in the HG but increases accuracy of the spatial extent. Block 80 has thin cross cutting dolerite and pegmatite intrusions (see Figure 11). Quartz diorite intrusions and thicker dolerite units intrude the Gabanintha North portion of the deposit (see Figure 12).

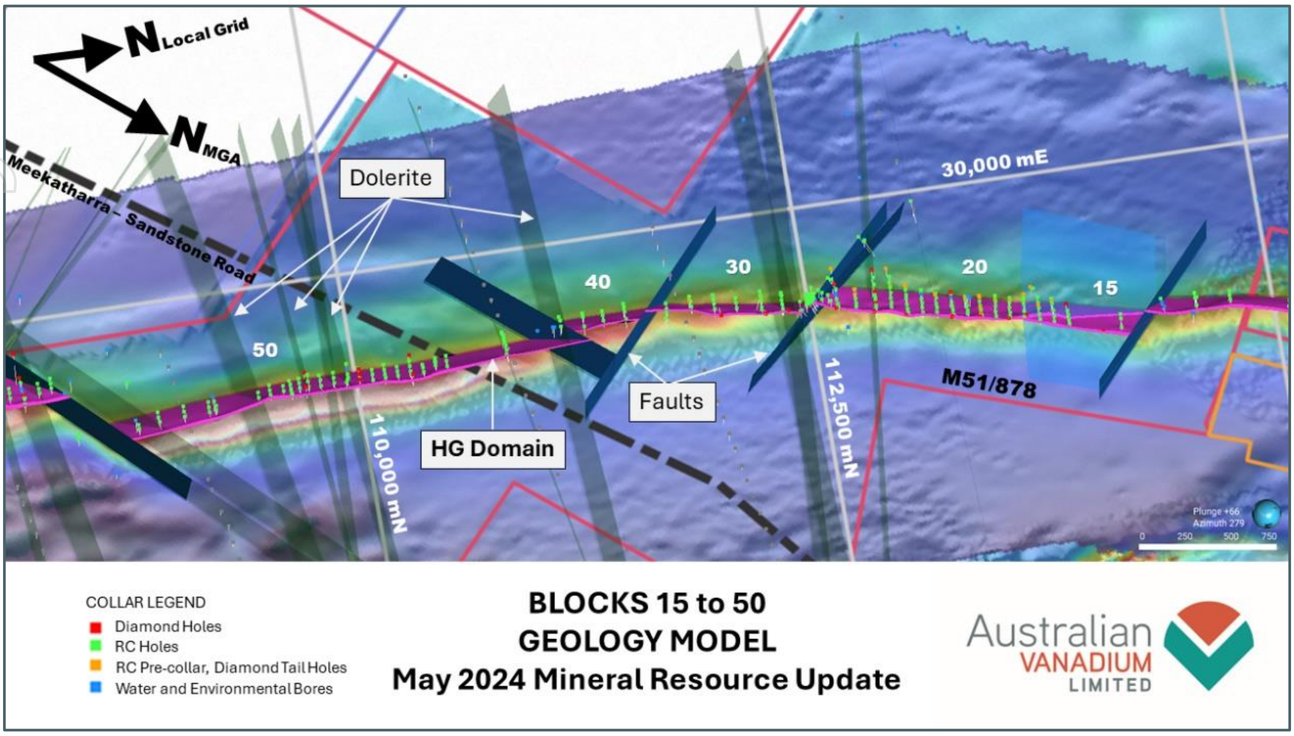

Figure 10 – Oblique View Looking Southwest – Block 15 to 50 geology model on regional magnetics composite image

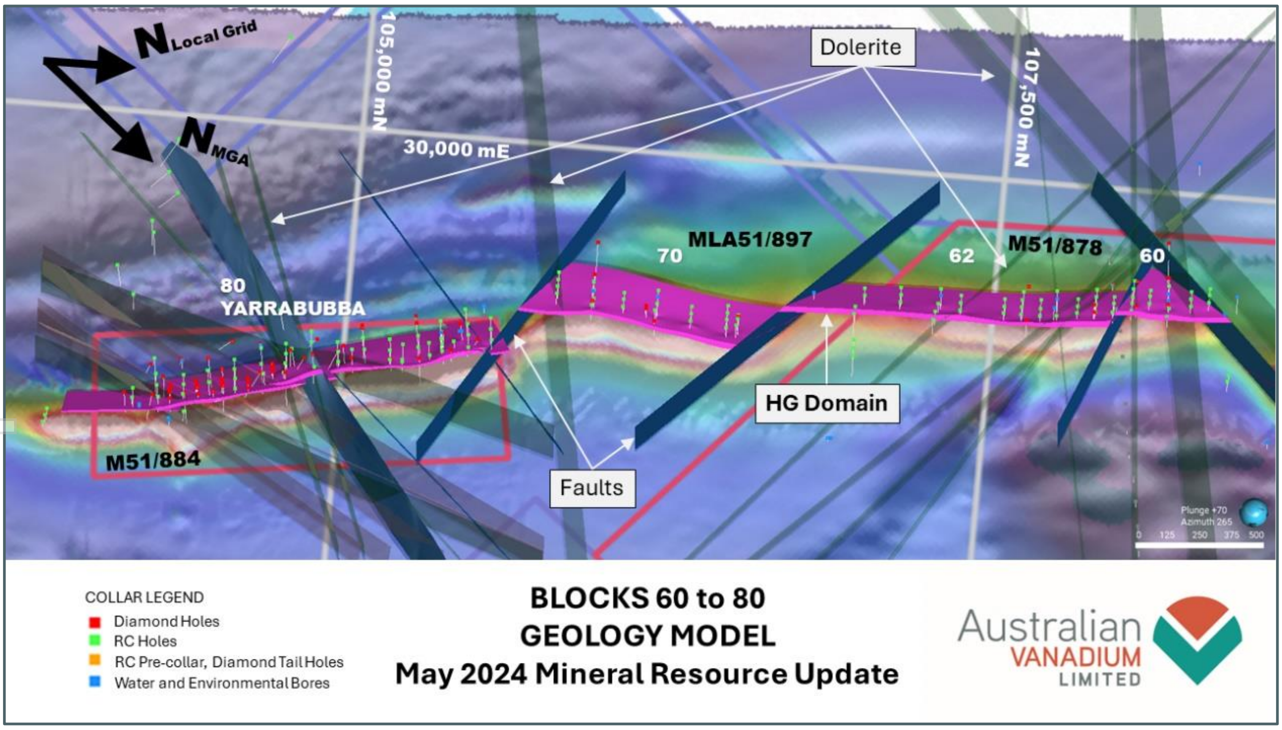

Figure 11 – Oblique View Looking Southwest – Block 60 to Block 80 geology model on regional magnetics composite image

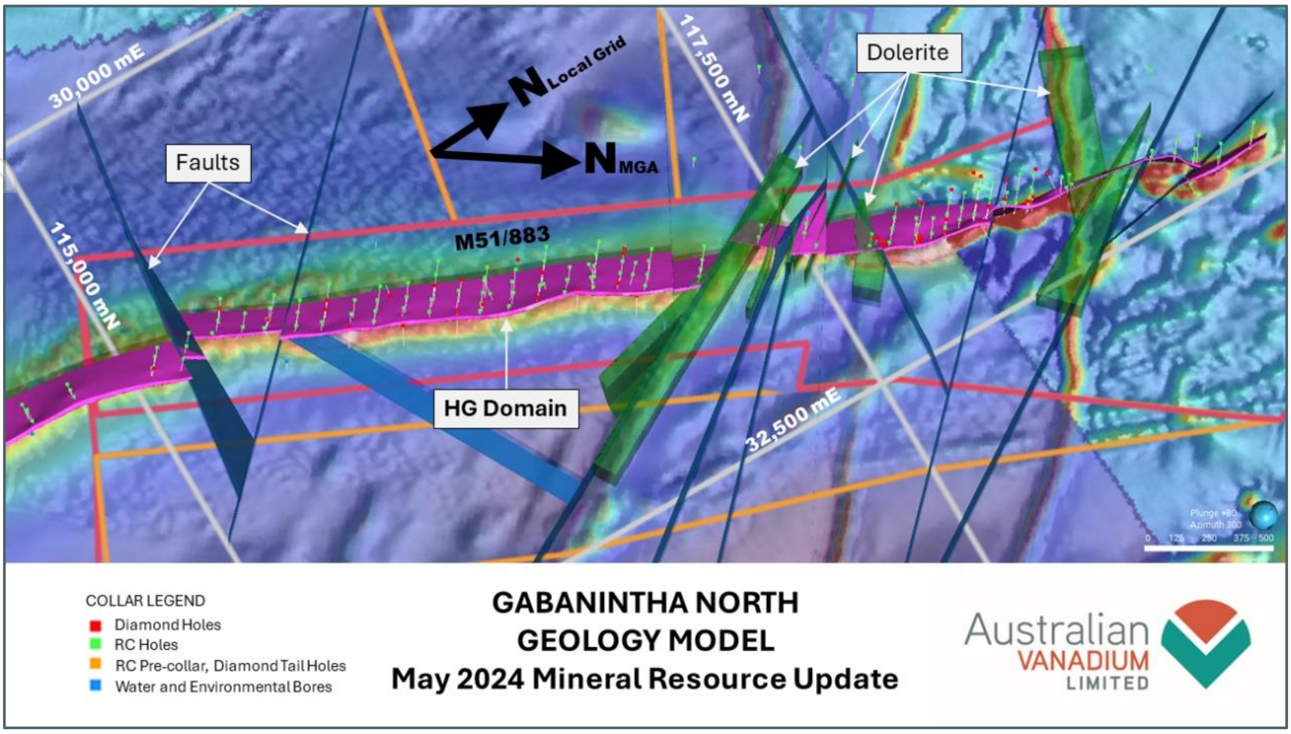

Figure 12 – Oblique View Looking West – Gabanintha North geology model on regional magnetics composite image

Drilling techniques and hole spacing

Diamond drill hole assay samples account for 22% of the drill metres comprising HQ and PQ3 sized core. RC drilling (140mm to 143mm face-sampling hammer) accounts for the remaining 78% of the drilled and assayed metres.

Drill section spacing in Blocks 15 to 70 is 70m to 140m through the better-defined portions of the deposit, with section spacing up to 280m where the mineral resource classification is lowest, and one section gap of 330m strike in the northern portion of Block 50 where the Meekatharra – Sandstone Road corridor is located. On all drill sections for Blocks 15 to 70, drill centres are typically spaced 25 to 30m.

Drill section spacing is mostly at 100m or 50m at Gabanintha North, and largely at 50m section spacing at Block 80, with drill centres at an average of 50m spacing on section at both areas. Some broader spaced sections are present in areas of lower mineral resource category at Gabanintha North where there are breaks in the mineralisation due to intrusions and faults.

Twin holes exist that are RC to DDH and RC to RC to evaluate volumetric effect for different hole diameters, repeatability and sample recovery of the different drill campaigns and drill methods – these are further detailed in JORC 2012 Table 1 in Appendix 4.

At the time of this MRE update RC or diamond core samples have been used from 673 drill holes in the geological model, consisting of:

- 524 RC holes for 49,430m of total drilling with assay data for 47,431m of 1m samples;
- 22 RC pre-collar, diamond tail holes for 2,296m of RC samples and 1,161m of diamond core samples; and
- 127 DDH holes for 14,775m of total drilling, with assay data for 12,776m of diamond core sampling.

Of the total 67,662m of drill length used in the geological model, 62,581m of assayed sample were used in the MRE. The remaining metres were not assayed because:

- the sample was used for metallurgy studies; or
- the hole did not intersect relevant bedrock domains being targeted to test for gold mineralisation in fault zones; or
- the hole was not assayed, being drilled for geotechnical studies and not intercepting mineralisation.

Sampling and Sub-Sampling Techniques

Diamond core has been collected in two sizes, PQ (85mm) and HQ (63.5mm), over the generations of drilling by both AVL and TMT. Standard procedure has been to use an automated core cutting saw or brick saw to cut PQ core into a quarter, and HQ core into a half for assay submission. Where core was used for metallurgy sample by TMT, 1/6 fraction of the PQ core was assayed. At the laboratory, a second coarse crush of AVL diamond core is taken every 20th sample, and both splits pulverised and assayed, creating a duplicate sample to test laboratory sample splitting. For TMT assay work, quarter core or 1/6 core was cut every 20th sample with two portions of the same interval submitted as a field duplicate.

RC samples are collected at 1m intervals. Approximately 2.0 – 3.5 kg per metre is captured from the rig cyclone into a calico for assay submission. Every 20th sample, a duplicate split is collected from the second cyclone chute. Sample is held in the cyclone for the full metre then dropped in one batch through the rotary cyclone splitter to ensure even distribution of heavy and light fractions. TMT samples all have weights recorded at the laboratory. AVL and TMT sample recovery data is collected as percentage recovery or qualitative logs by the field technicians or geologist prior to sample collection from the hole. Both companies recorded sample moisture at the hole, as either dry, moist or wet. Wet samples were minimal and typically on deeper holes at rod change only.

Prior to 2022, AVL RC reject was captured into a green bag and retained at the drill hole until results were returned from the laboratory. 2022 RC drilling had the reject material put directly on the ground, with a second calico sample split from the cyclone collected for every metre to be held in archive in case of lost samples, and for metallurgy material. Where a duplicate sample occurred every 20th metre, the second calico from the cyclone was taken as the duplicate, and an archive sample riffle split from the reject material prior to the reject material being put on the ground.

TMT programs used the same methodology as the AVL 2022 RC program, being sample placed on the ground with two calico sample bags collected from the two cyclone chutes for every metre with no reject collected into green bags.

Duplicate coarse crush diamond samples and RC field duplicates have performed well for most samples throughout the various exploration campaigns, including 2022.

Sample Analysis Method

Samples are dried at 105°C in gas fired ovens for 18-24 hours before RC samples are split 50:50. One portion is retained for future testing, while the other is crushed then pulverised. Sub-samples are collected to produce a 66g sample that is used to produce a lithium-borate fused bead for XRF based analysis and reporting.

All samples for the Project were assayed for a full iron ore suite by XRF (24 elements for AVL; 21 elements for TMT) and for total Loss On Ignition (LOI) by thermo-gravimetric technique. The method used measures the total amount of each element in the sample for full detection. ICP-OES checks on some pulps were performed during 2019 by AVL and confirmed the XRF analysis is repeatable with the ICP method. TMT and AVL both submitted umpire laboratory batches determining quality and repeatability of assay results from the primary laboratories.

The commercial laboratories used for drill programs at the Project have been industry recognised and certified and their laboratory procedures appear to be in line with industry standards and appropriate for the deposit.

Drilling, sampling, preparation and analysis techniques are detailed in Appendix 4, JORC 2012 Table 1.

Cut-Off Grades

For wireframing of mineralised domains, the below cut-off grades were applied:

- HG massive magnetite at cut-off > 0.7% V_2O_5
- HG internal subdomain, with low SiO_2 and high V_2O_5 and Fe at cut-off < 7.0% SiO_2
- One footwall domain, that is a structural raft of the HG domain, at cut-off > 0.5% V_2O_5. Due to its discontinuous nature, this domain is not included as classified Mineral Resource
- Four to five disseminated magnetite LG domains in the hangingwall (LG2, LG2A, LG3, LG4, LG5) at typically > 0.4% V_2O_5
- One laterite LG domain at typically > 0.4% V_2O_5

- Two transported LG domains at typically > 0.4% V_2O_5.

Basis for the above cut-off grades is the presence of distinct geological horizons within the layered gabbro, and statistical stationarity within domains modelled at those cut-off grades. These cut-off grades are comparable to vanadium deposits under development in other parts of the world.

Marker horizons in the waste domains are present, consisting of co-incident Na_2O and K_2O peaks, and TiO_2 lows in two leucocratic waste horizons in the hangingwall sequence. These marker horizons are used to interpret the mineralised domains ensuring consistency of interpretation along strike.

Mining and Metallurgical Methods and Parameters

Previous mining study optimisation work on the deposit has demonstrated the mineralisation is amenable to open pit mining, using conventional methods.

Concentration of the material mined prior to vanadium pentoxide production has been investigated with magnetic recovery circuits, with testwork completed with Low Intensity Magnetic Separation (LIMS), Medium Intensity Magnetic Separation (MIMS) and Wet High Intensity Magnetic Separation (WHIMS). Concentrate produced is suitable for the established technology of salt-roast leaching. Metallurgical studies are expanded upon in Table 1 JORC 2012 in Appendix 4.

Estimation Methodology

Trepanier Pty Ltd (Trepanier) completed Ordinary Kriged (OK) estimates for V_2O_5, TiO_2, Fe_2O_3, SiO_2, Al_2O_3, Cr_2O_3, Co, Cu, Ni, S, magnetic susceptibility and loss on ignition (LOI) using Dassault Systemes GEOVIA Surpac™ software. Potential top-cuts were checked by completing an outlier analysis, but in this instance, no top-cutting was required.

Variograms were completed for the estimated variables in the HG domain and the combined LG sub-domains. Grade estimates are keyed on the combined fault block and domain codes for the HG domain and the LG domains. Domains 6, 7 and 8 are interpreted to be shallow, flat lying colluvial material and are estimated separately. Grade is estimated into parent cells with dimensions of 40mN, 8mE and 10mRL with sub-celling allowed to ensure accurate volume representation of the wireframed mineralisation interpretation. All sub-cells are assigned the same grade as its parent.

Bulk density regression values are calculated by Fe_2O_3 content of the parent block, with different regressions applied for HG; LG and waste gabbro as one unit; and LG transported material, with a regression for each material type according to weathering state - oxide, transition and fresh. Barren transported material is assigned a bulk density of 2.18. The bulk density regression development applied data from Archimedes measurements, compensated density log (CDL) down hole surveys and metallurgy bulk density measurements. Additional CDL down hole survey data from an extensive campaign of surveying 2022 drill holes was used to update the regressions for reporting of this May

2024 MRE update, with little change in the order of 1 – 3% for each domain and state of weathering. Evaluation of a TMT commissioned CDL dataset has resulted in a discrete set of regressions (to Fe_2O_3) being developed for Block 80 portion of the deposit, as there was marked difference in the rock density, validated by Archimedes measurements of TMT diamond core.

Classification Criteria

The estimate is classified according to the guidelines of the 2012 JORC Code as Measured, Indicated and Inferred Mineral Resource. The classification considers the relative confidence in tonnage and grade estimations, the reliability of the input data, the Competent Person's confidence in the continuity of geology and grade values and the quality, quantity and distribution of the drill hole and supporting input data.

In applying the classification, Measured Mineral Resource has been restricted to the oxide, transition and fresh portion of the HG domain where the drill hole section spacing is less than 80mN to 100mN with 25 – 30m drill centres on the section, or 50m spaced sections with 50m drill centres on section.

Indicated Mineral Resource is restricted to the oxide, transition and fresh HG and LG2 in areas where drill line spacing is between 100mN and 160mN with 25 – 50m drill centres on the section, or where drilling is closer spaced but cross cutting intrusions are present.

The remainder of the modelled domains with supporting drilling at section spacing greater than 140mN have been classified as Inferred Mineral Resource, with strike and depth extensions supported by mapping and geophysical data, with depth extension support also including 3D inversion modelling of aeromagnetics data and some deep holes along the strike of the deposit.

The classification applied relates to the global estimate of V_2O_5 and at the reported wireframed cut-off grades only. At different V_2O_5 grade cut-offs, the applied classification scheme may not be valid. Details of the cut-off grades and resource estimation parameters are expanded upon in Table 1, Appendix 4 at the end of this report.

For further information, please contact:

Graham Arvidson, CEO

+61 8 9321 5594

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

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 Ms Gemma Lee who is employed by Australian Vanadium Ltd as Principal Geologist. Ms Lee is a member of the Australian Institute of Geoscientists. Ms Lee has sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to the activities undertaken, to qualify as Competent Persons as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Specifically, Ms Lee consents 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 Ms Gemma Lee (Principal Geologist – Australian Vanadium Ltd). Mr Barnes is a member of the Australasian Institute of Mining and Metallurgy (AusIMM) and both Mr Barnes and Ms Lee are members of 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 Ms Lee is the Competent Person for the database, geological model and site visits. Mr Barnes and Ms Lee consent to the inclusion in this announcement of the matters based on their information in the form and context in which they appear.

ASX CHAPTER 5 COMPLIANCE AND CAUTIONARY AND FORWARD LOOKING STATEMENTS

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.

APPENDIX 1

The Australian Vanadium Project – May 2024 Global MRE 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.

Domains	Category	Mt	V_2O_5 %	Fe %	TiO_2 %	SiO_2 %	Al_2O_3 %
HG	Measured	30.6	1.13	46.3	12.9	7.4	6.2
	Indicated	74.8	1.11	47.5	12.6	7.0	5.7
	Inferred	67.9	1.06	45.3	12.1	9.0	6.6
	Subtotal	**173.2**	**1.09**	**46.5**	**12.5**	**7.8**	**6.1**
LG 2-5	Measured	-	-	-	-	-	-
	Indicated	61.8	0.55	26.1	7.1	26.6	16.3
	Inferred	142.5	0.48	24.9	6.6	28.9	15.2
	Subtotal	**204.3**	**0.50**	**25.3**	**6.8**	**28.2**	**15.5**
Trans 6-8	Measured	-	-	-	-	-	-
	Indicated	-	-	-	-	-	-
	Inferred	17.9	0.65	31.0	7.3	24.1	14.4
	Subtotal	**17.9**	**0.65**	**31.0**	**7.3**	**24.1**	**14.4**
Global	Measured	30.6	1.13	46.3	12.9	7.4	6.2
	Indicated	136.6	0.85	37.8	10.1	15.8	10.5
	Inferred	228.2	0.66	31.4	8.3	22.6	12.6
	Total	**395.4**	**0.77**	**34.8**	**9.3**	**19.1**	**11.4**

Note: *Totals may not add up due to rounding.*

APPENDIX 2

The Australian Vanadium Project – May 2024 MRE for Blocks 15 to 70 by domain, fault block and resource classification. Note that Block 10 values represent Gabanintha North in entirety.

Domains	Block	Category	Mt	V_2O_5 %	Fe %	TiO_2 %	SiO_2 %	Al_2O_3 %
HG	10	Measured	6.1	1.07	48.1	12.3	7.1	5.4
	15		1.1	1.16	43.5	13.3	8.8	8.3
	20		9.7	1.16	44.7	13.3	8.3	7.0
	50		4.4	1.14	46.1	13.0	7.1	6.0
	60		1.3	1.15	46.3	13.0	7.1	6.0
	62		2.0	1.21	46.3	13.5	6.5	6.2
	80		5.9	1.10	48.0	12.4	6.7	5.4
	Measured Sub-Total		**30.6**	**1.13**	**46.3**	**12.9**	**7.4**	**6.2**
	10	Indicated	24.9	1.13	49.2	12.9	5.6	5.2
	15		0.7	1.09	40.7	12.8	11.2	9.6
	20		5.8	1.11	45.4	12.5	8.9	6.6
	25		0.3	0.81	37.7	9.7	17.7	9.5
	30		5.1	1.06	45.7	12.2	9.1	6.7
	40		2.7	0.97	43.5	11.2	11.7	6.8
	50		10.3	1.13	47.0	12.8	6.9	5.7
	60		2.0	1.12	48.0	12.5	6.6	5.5
	62		6.8	1.14	46.5	12.7	6.9	6.2
	70		7.8	1.08	47.4	12.0	7.1	5.6
	80		8.4	1.12	49.0	12.7	6.0	5.1
	Indicated Sub-Total		**74.8**	**1.11**	**47.5**	**12.6**	**7.0**	**5.7**
	10	Inferred	27.8	1.05	45.1	12.2	9.4	6.5
	15		2.8	0.99	39.4	12.3	12.6	10.8
	20		3.1	1.11	44.8	12.6	9.2	7.0
	25		0.0	0.78	37.4	9.2	17.7	9.2
	30		1.8	1.00	44.0	11.5	10.9	7.0
	40		2.3	0.99	44.3	11.4	10.8	6.7
	50		11.7	1.05	44.3	12.0	9.3	6.8
	60		1.2	1.13	48.6	12.6	6.9	5.7
	62		5.9	1.11	46.9	12.3	7.1	6.0
	70		5.6	1.02	45.5	11.5	9.3	6.1
	80		5.6	1.15	49.7	12.8	5.2	4.9
	Inferred Sub-Total		**67.9**	**1.06**	**45.3**	**12.1**	**9.0**	**6.6**
	ALL	**Sub-total**	**173.2**	**1.09**	**46.5**	**12.5**	**7.8**	**6.1**
LG	10	Indicated	18.9	0.54	26.9	7.2	26.8	14.5
	15		0.6	0.59	27.1	7.4	23.8	17.2
	20		8.2	0.55	24.3	7.2	26.3	19.2
	25		0.2	0.49	24.6	6.6	30.8	18.0
	30		3.3	0.57	27.2	7.4	26.1	17.4
	40		1.5	0.48	24.6	6.5	27.5	17.8
	50		8.4	0.53	25.8	6.9	26.2	17.5

Domains	Block	Category	Mt	V_2O_5 %	Fe %	TiO_2 %	SiO_2 %	Al_2O_3 %
	60		2.4	0.54	26.1	6.9	25.7	18.1
	62		5.5	0.54	25.1	6.9	27.0	17.7
	70		4.6	0.55	26.4	6.9	26.8	15.4
	80		8.2	0.56	26.7	7.0	26.6	14.4
		Indicated Sub-Total	**61.8**	**0.55**	**26.1**	**7.1**	**26.6**	**16.3**
	10	Inferred	47.3	0.48	25.1	6.8	28.7	15.0
	15		9.8	0.47	25.6	6.9	27.1	16.8
	20		22.6	0.49	24.0	7.0	28.3	17.1
	25		0.4	0.49	26.8	6.6	29.6	15.7
	30		11.6	0.50	26.2	6.9	27.1	17.6
	40		3.6	0.45	27.2	6.3	26.7	15.1
	50		18.3	0.45	24.4	6.1	29.9	13.9
	60		1.5	0.45	22.9	5.8	32.1	14.8
	62		8.1	0.51	24.5	6.5	30.7	15.2
	70		9.3	0.45	23.9	5.9	32.0	12.7
	80		10.1	0.50	25.3	6.5	29.4	12.0
		Inferred Sub-Total	**142.5**	**0.48**	**24.9**	**6.6**	**28.9**	**15.2**
	ALL	**Sub-total**	**204.3**	**0.50**	**25.3**	**6.8**	**28.2**	**15.5**
TLG	10	Inferred	0.9	0.47	26.6	5.8	26.7	16.6
	15		0.9	0.44	22.8	6.2	28.7	17.5
	20		4.4	0.61	25.9	6.6	28.0	17.9
	25		0.3	0.62	29.0	6.8	26.6	15.7
	30		1.5	0.56	29.4	6.6	29.1	14.1
	40		1.0	0.50	30.7	5.5	26.5	14.3
	50		0.8	0.52	25.8	6.3	31.3	14.0
	60		1.9	0.87	37.6	8.6	17.6	10.7
	62		3.1	0.71	33.4	8.7	20.4	13.4
	70		2.9	0.76	38.3	8.1	18.6	11.3
		Inferred Sub-Total	**17.9**	**0.65**	**31.0**	**7.3**	**24.1**	**14.4**
ALL	**ALL**	**Global**	**395.4**	**0.77**	**34.8**	**9.3**	**19.1**	**11.4**

Note: *Totals may not add up due to rounding.*

The Australian Vanadium Project – May 2024 Global MRE by oxidation.

Oxidation	Domain	Category	Mt	V_2O_5 %	Fe %	TiO_2 %	SiO_2 %	Al_2O_3 %
OXIDE	HG	Measured	2.3	1.18	43.6	13.6	8.5	7.8
		Indicated	6.2	1.12	47.0	12.9	7.2	6.2
		Inferred	2.7	1.07	43.4	12.6	9.9	7.8
		HG OXIDE Sub-total	11.2	1.12	45.4	12.9	8.1	6.9
	LG	Measured	-	-	-	-	-	-
		Indicated	6.7	0.55	24.8	7.2	26.6	18.5
		Inferred	19.2	0.48	24.3	6.8	28.0	17.6
		LG OXIDE Sub-Total	25.9	0.50	24.4	6.9	27.6	17.8
	TLG	Measured	-	-	-	-	-	-
		Indicated	-	-	-	-	-	-
		Inferred	17.9	0.65	31.0	7.3	24.1	14.4
		TLG OXIDE Total	17.9	0.65	31.0	7.3	24.1	14.4
	OXIDE SUBTOTAL		**55.0**	**0.67**	**30.8**	**8.3**	**22.5**	**14.5**
TRANSITIONAL	HG	Measured	12.3	1.15	44.9	13.2	8.0	6.8
		Indicated	15.7	1.12	46.7	12.8	7.3	6.1
		Inferred	8.7	1.01	42.0	11.9	11.5	8.0
		HG TRANSITIONAL Sub-total	36.7	1.11	45.0	12.7	8.6	6.8
	LG	Measured	-	-	-	-	-	-
		Indicated	19.0	0.55	25.6	7.1	26.7	17.6
		Inferred	37.3	0.47	24.7	6.7	29.0	15.8
		LG TRANSITIONAL Sub-Total	56.3	0.50	25.0	6.8	28.2	16.4
	TLG	Measured	-	-	-	-	-	-
		Indicated	-	-	-	-	-	-
		Inferred	-	-	-	-	-	-
		TLG TRANSITIONAL Total	-	-	-	-	-	-
	TRANSITIONAL SUBTOTAL		**93.0**	**0.74**	**32.9**	**9.2**	**20.5**	**12.6**
FRESH	HG	Measured	16.0	1.11	47.9	12.5	6.8	5.5
		Indicated	52.9	1.10	47.9	12.5	6.8	5.6
		Inferred	56.5	1.07	45.9	12.1	8.5	6.3
		HG FRESH Sub-total	125.4	1.09	47.0	12.3	7.6	5.9
	LG	Measured	-	-	-	-	-	-
		Indicated	36.1	0.54	26.6	7.0	26.5	15.2
		Inferred	86.0	0.48	25.1	6.6	29.1	14.4
		LG FRESH Sub-Total	122.1	0.50	25.6	6.7	28.3	14.6
	TLG	Measured	-	-	-	-	-	-
		Indicated	-	-	-	-	-	-
		Inferred	-	-	-	-	-	-
		TLG FRESH Total	-	-	-	-	-	-
	FRESH SUBTOTAL		**247.4**	**0.80**	**36.4**	**9.6**	**17.8**	**10.2**
GLOBAL TOTAL:			**395.4**	**0.77**	**34.8**	**9.3**	**19.1**	**11.4**

Note: *Totals may not add up due to rounding.*

APPENDIX 3 – Collar Details and New Drill Intercepts in May 2024 MRE by for Blocks 15 to 70 by block and domain

Collar Details for new drilling in May 2024 MRE update – MGA94, Zone 50

Hole ID	Hole Type	Easting	Northing	RL	Hole Depth	Dip	Azimuth	Local Grid Northing	Block
20GDH002	DDH	665,728	7,013,259	465	120.25	-80	050	109,710	50
20GDH003	DDH	665,369	7,013,720	464	120.03	-80	050	110,290	50
20GDH006	DDH	666,657	7,011,883	465	95	-80	050	108,060	60
20GDH008	DDH	667,000	7,011,623	465	100	-70	050	107,640	62
22ARC001	RC	668,065	7,010,473	463	55	-60	050	106,075	70
22ARC002	RC	668,020	7,010,435	463	96	-60	050	106,075	70
22ARC003	RC	667,899	7,010,680	463	81	-60	050	106,340	70
22ARC004	RC	667,876	7,010,661	463	120	-60	050	106,340	70
22ARC005	RC	667,843	7,010,816	464	78	-60	050	106,480	70
22ARC006	RC	667,819	7,010,796	464	108	-60	050	106,480	70
22ARC007	RC	667,797	7,010,777	464	132	-60	050	106,480	70
22ARC008	RC	667,774	7,010,758	464	159	-60	050	106,480	70
22ARC009	RC	667,371	7,011,105	464	102	-60	050	107,005	62
22ARC010	RC	667,348	7,011,086	464	108	-60	050	107,005	62
22ARC011	RC	667,293	7,011,222	464	60	-60	050	107,145	62
22ARC012	RC	667,269	7,011,202	464	84	-60	050	107,145	62
22ARC013	RC	667,247	7,011,184	464	114	-60	050	107,145	62
22ARC014	RC	667,142	7,011,298	464	120	-60	050	107,300	62
22ARC015	RC	667,151	7,011,410	464	48	-60	050	107,380	62
22ARC016	RC	667,106	7,011,373	464	96	-60	050	107,380	62
22ARC017	RC	667,042	7,011,540	464	54	-60	050	107,550	62
22ARC018	RC	667,020	7,011,522	464	78	-60	050	107,550	62
22ARC019	RC	666,997	7,011,503	464	106	-60	050	107,550	62
22ARC020	RC	666,925	7,011,534	464	138	-60	050	107,620	62
22ARC021	RC	666,951	7,011,646	465	54	-60	050	107,690	62
22ARC022	RC	666,928	7,011,627	465	91	-60	050	107,690	62
22ARC023	RC	666,831	7,011,625	464	138	-60	050	107,750	62
22ARC024	RC	666,841	7,011,742	465	54	-60	050	107,830	62
22ARC025	RC	666,819	7,011,723	464	85	-60	050	107,830	62
22ARC026	RC	666,797	7,011,704	464	102	-60	050	107,830	62
22ARC027	RC	666,718	7,011,729	464	135	-60	050	107,900	62
22ARC028	RC	666,712	7,011,816	465	78	-60	050	107,970	62
22ARC029	RC	666,693	7,011,798	465	106	-60	050	107,970	62
22ARC030	RC	666,589	7,011,807	464	118	-60	050	108,045	60
22ARC031	RC	666,616	7,011,914	465	63	-60	050	108,110	60
22ARC032	RC	666,592	7,011,894	465	72	-60	050	108,110	60
22ARC033	RC	666,573	7,011,878	464	100	-60	050	108,110	60
22ARC034	RC	666,510	7,011,917	464	114	-60	050	108,180	60
22ARC035	RC	666,511	7,012,034	465	54	-60	050	108,270	60
22ARC036	RC	666,488	7,012,016	465	72	-60	050	108,270	60
22ARC037	RC	666,464	7,011,996	465	96	-60	050	108,270	60
22ARC038	RC	666,450	7,012,075	465	66	-60	050	108,340	60
22ARC039	RC	666,428	7,012,057	465	78	-60	050	108,340	60
22ARC040	RC	666,405	7,012,037	465	102	-60	050	108,340	60
22ARC041	RC	666,128	7,012,887	465	60	-60	050	109,170	50
22ARC042	RC	666,105	7,012,868	465	84	-60	050	109,170	50
22ARC043	RC	666,083	7,012,850	465	96	-60	050	109,170	50
22ARC044	RC	665,872	7,013,118	464	45	-60	050	109,510	50
22ARC045	RC	665,850	7,013,099	464	60	-60	050	109,510	50

Hole ID	Hole Type	Easting	Northing	RL	Hole Depth	Dip	Azimuth	Local Grid Northing	Block
22ARC046	RC	665,825	7,013,078	464	90	-60	050	109,510	50
22ARC047	RC	665,756	7,013,234	465	60	-60	050	109,675	50
22ARC048	RC	665,731	7,013,214	464	84	-60	050	109,675	50
22ARC049	RC	665,709	7,013,196	464	110	-60	050	109,675	50
22ARC050	RC	665,669	7,013,228	464	108	-60	050	109,725	50
22ARC051	RC	665,686	7,013,327	465	54	-60	050	109,790	50
22ARC052	RC	665,656	7,013,302	464	78	-60	050	109,790	50
22ARC053	RC	665,596	7,013,434	464	48	-60	050	109,930	50
22ARC054	RC	665,510	7,013,551	464	36	-60	050	110,075	50
22ARC055	RC	665,461	7,013,510	464	95	-60	050	110,075	50
22ARC056	RC	665,551	7,013,415	464	18	-60	050	109,940	50
22ARC057	RC	665,396	7,013,638	464	80	-60	050	110,215	50
22ARC058	RC	665,374	7,013,620	464	104	-60	050	110,215	50
22ARC059	RC	665,326	7,013,762	464	52	-60	050	110,355	50
22ARC060	RC	665,306	7,013,745	464	70	-60	050	110,355	50
22ARC061	RC	665,292	7,013,733	464	84	-60	050	110,355	50
22ARC062	RC	665,414	7,013,654	464	54	-60	050	110,215	50
22ARC063	RC	665,480	7,013,530	464	66	-60	050	110,080	50
22ARC064	RC	665,576	7,013,429	464	72	-60	050	109,940	50
22ARC065	RC	665,637	7,013,285	464	108	-60	050	109,790	50
22ARC066	RC	666,741	7,011,836	465	60	-60	050	107,970	62
22ARC067	RC	666,901	7,011,605	464	120	-60	050	107,690	62
22ARC068	RC	667,129	7,011,392	464	84	-60	050	107,380	62
22ARC069	RC	667,921	7,010,699	464	60	-60	050	106,340	70
22ARC070	RC	668,041	7,010,453	463	72	-60	050	106,075	70
22ARC071	RC	665,242	7,013,783	464	78	-60	050	110,425	50
22ARC072	RC	665,228	7,013,854	464	48	-60	050	110,490	50
22ARC073	RC	665,205	7,013,834	464	72	-60	050	110,490	50
22ARC074	RC	665,183	7,013,816	464	90	-60	050	110,490	50
22ARC075	RC	668,182	7,010,233	463	66	-60	050	105,815	70
22ARC076	RC	668,161	7,010,215	463	108	-60	050	105,815	70
22ARC077	RC	668,139	7,010,196	463	114	-60	050	105,815	70
22ARC078	RC	668,207	7,010,253	463	72	-60	050	105,815	70
22ARC079	RC	668,095	7,010,342	463	84	-60	050	105,960	70
22ARC080	RC	668,071	7,010,322	463	102	-60	050	105,960	70
22ARC081	RC	666,223	7,012,784	465	60	-60	050	109,030	50
22ARC082	RC	666,200	7,012,764	465	87	-60	050	109,030	50
22ARC083	RC	666,175	7,012,745	465	102	-60	050	109,030	50
22ARC084	RC	666,318	7,012,684	465	78	-60	050	108,890	50
22ARC085	RC	666,298	7,012,664	465	87	-60	050	108,890	50
22ARC086	RC	666,276	7,012,644	465	108	-60	050	108,890	50
22GDH001	DDH	667,778	7,010,819	464	114.5	-60	050	106,520	70
22GDH002	DDH	668,020	7,010,600	463	99.7	-75	050	106,200	70
22GDH003	DDH	668,008	7,010,543	463	72.6	-60	050	106,160	70
22GDH004	DDH	667,998	7,010,532	463	129.7	-75	050	106,160	70
22GDH005	DDH	666,792	7,011,786	464	60.4	-60	050	107,900	62
22GDH006	DDH	666,769	7,011,766	464	87.4	-60	050	107,900	62
22GDH007	DDH	665,544	7,013,488	464	51.3	-60	050	110,005	50
22GDH008	DDH	665,520	7,013,468	464	86.3	-60	050	110,005	50
22GDH009	DDH	665,496	7,013,448	464	111.6	-60	050	110,005	50
NHRC001	RC	663,876	7,015,344	466	78	-60	010	112,500	30
NHRC002	RC	663,849	7,015,328	466	120	-60	010	112,500	20
NHRC003	RC	663,865	7,015,326	466	130	-60	010	112,490	30
NHRC004	RC	663,879	7,015,323	466	130	-60	010	112,480	30

Hole ID	Hole Type	Easting	Northing	RL	Hole Depth	Dip	Azimuth	Local Grid Northing	Block
NHRC005	RC	663,891	7,015,342	466	70	-60	010	112,490	30
NHRC006	RC	663,903	7,015,355	466	100	-60	010	112,490	30
NHRC007	RC	663,887	7,015,357	466	78	-60	010	112,500	20
NHRC008	RC	663,872	7,015,359	466	63	-60	010	112,510	20
NHRC009	RC	663,861	7,015,347	466	90	-60	010	112,510	20
NHRC010	RC	663,840	7,015,335	465	100	-60	010	112,515	20
NHRC011	RC	663,963	7,015,334	466	50	-50	050	112,440	30
NHRC012	RC	663,955	7,015,340	466	50	-50	010	112,440	30
NHRC013	RC	663,715	7,015,382	465	50	-50	010	112,630	20
NHRC014	RC	663,721	7,015,359	465	111	-50	010	112,610	20
NHRC015	RC	663,428	7,015,416	462	126	-50	010	112,840	20
NHRC016	RC	663,422	7,015,378	462	129	-50	010	112,820	20
NHRC017	RC	663,095	7,015,512	463	141	-50	040	113,130	20
YORC001	RC	665,003	7,014,094	463	58	-60	040	110,820	50
YORC002	RC	664,983	7,014,080	463	79	-60	040	110,820	50
YORC003	RC	664,963	7,014,063	463	127	-60	040	110,820	50

Australian VANADIUM LIMITED

New Drill Intercepts in May 2024 MRE update

Hole ID	From (m)	To (m)	Interval	V_2O_5 %	Fe %	TiO_2 %	SiO_2 %	Al_2O_3 %	Domain	Comments
20GDH002	46.38	60.9	14.52	1.12	46.5	12.8	6.9	5.9	HG	
including	*50*	*60.9*	*10.9*	*1.26*	*50.4*	*14.1*	*2.6*	*4.5*	*HG Subdom*	
20GDH002	17	37	20	0.6	26.5	7.8	24.6	19	LG2	
20GDH003	34.35	51.3	16.95	1.16	48.4	13	5.6	5.2	HG	
including	*41*	*49.7*	*8.7*	*1.27*	*52.9*	*14.1*	*1.7*	*4*	*HG Subdom*	
20GDH003	22.5	23.7	1.2	1.08	43.1	13.5	8.3	7.1	LG2	
20GDH006	16.45	26.4	9.95	1.33	49	14.7	5	4.6	HG	
including	*16.45*	*25.7*	*9.25*	*1.35*	*49.6*	*15.1*	*4.3*	*4.3*	*HG Subdom*	
20GDH006	10.55	15	4.45	1.06	39.4	12.5	16	7.9	TLG7	
20GDH008	9.2	24.6	15.4	1.4	42.4	18.2	5.4	6.7	HG	
including	*10*	*24.6*	*14.6*	*1.44*	*43.5*	*18.7*	*4.4*	*6.5*	*HG Subdom*	
22ARC001	30	46	16	1.1	47.8	12	7.2	5.4	HG	
including	*34*	*45*	*11*	*1.19*	*51.1*	*12.7*	*3.8*	*4.6*	*HG Subdom*	
22ARC001	16	21	5	0.68	31.6	8.8	21.4	14.2	LG2	
22ARC001	5	13	8	0.54	25.8	6.9	25.6	18.3	LG2A	
22ARC002	73	87	14	1.13	49	12.3	6.1	5.3	HG	
including	*74*	*82*	*8*	*1.2*	*52.6*	*13.3*	*3*	*4.2*	*HG Subdom*	
22ARC002	66	70	4	0.66	30.2	7.8	24.2	9.9	LG2	
22ARC002	49	58	9	0.4	20.8	5.1	32.1	16.1	LG2A	
22ARC002	19	21	2	0.5	27.8	6.2	32.3	8.7	LG3	
22ARC003	55	73	18	1.01	44.2	11.2	8.8	7.4	HG	
including	*65*	*73*	*8*	*1.24*	*51.8*	*13.5*	*2.8*	*4.2*	*HG Subdom*	
22ARC003	44	54	10	0.62	28.9	7.8	24.4	15.2	LG2	
22ARC003	35	41	6	0.45	22.6	5.9	30.4	20.1	LG2A	
22ARC003	10	18	8	0.46	25.2	5.7	33.9	15.2	LG3	
22ARC004	95	112	17	1.1	47.1	11.9	8	6	HG	
including	*100*	*108*	*8*	*1.24*	*52.7*	*13.2*	*3.2*	*4.2*	*HG Subdom*	
22ARC004	86	88	2	0.67	29.3	8.2	23.9	13.1	LG2	
22ARC004	77	83	6	0.52	24.4	6.3	27.9	16.3	LG2A	
22ARC004	54	56	2	0.39	22	4.9	34.8	11.3	LG3	
22ARC004	29	39	10	0.39	24.3	5.5	36.4	11.6	LG4	
22ARC004	6	12	6	0.84	40.5	7.6	16.6	11.1	TLG7	
22ARC005	48	72	24	1.2	48.5	13.1	5.8	5.1	HG	
including	*53*	*70*	*17*	*1.23*	*50.2*	*13.3*	*4.2*	*4.6*	*HG Subdom*	
22ARC005	44	45	1	0.76	31.4	9.5	24.8	12.5	LG2	
22ARC005	29	39	10	0.49	24.5	5.7	30.2	18.4	LG2A	
22ARC005	13	27	14	0.72	33.5	6.5	25.2	12.3	TLG7	
22ARC006	81	102	21	1.04	46.6	11.4	7.9	5.9	HG	
including	*89*	*101*	*12*	*1.18*	*51.6*	*12.8*	*3.6*	*4.3*	*HG Subdom*	
22ARC006	77	81	4	0.58	28.6	7.1	24.5	12.1	LG2	
22ARC006	38	60	22	0.47	24.4	6.2	28.2	17.8	LG2A	
22ARC006	11	31	20	0.76	36.2	7.5	23.3	10.7	TLG7	
22ARC007	107	116	9	1.21	52.8	13.1	3.1	4.2	HG	
including	*108*	*116*	*8*	*1.23*	*53.4*	*13.2*	*2.6*	*4.1*	*HG Subdom*	
22ARC007	101	103	2	0.63	30.8	7.5	25.5	9.5	LG2	

Hole ID	From (m)	To (m)	Interval	V_2O_5 %	Fe %	TiO_2 %	SiO_2 %	Al_2O_3 %	Domain	Comments
22ARC007	62	76	14	0.44	22.6	5.8	29.8	16.3	LG2A	
22ARC007	33	39	6	0.47	28.5	5.7	33	10.2	LG3	
22ARC007	12	29	17	0.71	37.3	7.2	21	11.9	TLG7	
22ARC008	126	139	13	0.9	41	10.4	13.3	7	HG	
including	*132*	*137*	*5*	*1.17*	*51.5*	*13.3*	*3.1*	*4.3*	*HG Subdom*	
22ARC008	121	123	2	0.42	24.7	5.5	32.6	10.7	LG2	
22ARC008	90	102	12	0.46	22.9	5.8	29.6	17.2	LG2A	
22ARC008	65	68	3	0.41	22.8	5.3	33.1	8.6	LG3	
22ARC008	30	38	8	0.47	27.2	5	35.4	10.3	LG4	
22ARC008	13	30	17	0.71	39.7	7.8	17.8	11.6	TLG7	
22ARC009	NSI								HG	Incised channel - HG not intercepted
22ARC009	51	61	10	0.7	31.2	7.9	19	17.6	TLG7	
22ARC010	78	98	20	1.14	47.4	12.9	6.8	5.6	HG	
including	*88*	*98*	*10*	*1.18*	*50.1*	*13.1*	*4.2*	*4.9*	*HG Subdom*	
22ARC010	52	68	16	0.65	28.8	8.4	21.3	17.7	TLG7	
22ARC011	35	49	14	1.17	45	12.8	8.4	7.2	HG	
including	*39*	*45*	*6*	*1.27*	*49.8*	*14.1*	*4.4*	*4.7*	*HG Subdom*	
22ARC011	30	35	5	0.6	23.8	6.8	36.7	12.2	LG2	
22ARC011	24	28	4	0.64	28.5	6.8	30.6	10.7	TLG7	
22ARC012	61	72	11	1.19	47.2	13.1	6.6	5.8	HG	
including	*64*	*72*	*8*	*1.27*	*50.5*	*13.8*	*3.2*	*4.6*	*HG Subdom*	
22ARC012	36	52	16	0.53	21.9	6.5	28.7	20.4	LG2	
22ARC012	25	27	2	0.44	24.1	3.3	34.8	15.5	TLG7	
22ARC013	91	108	17	1.08	45.7	11.5	7.3	6.2	HG	
including	*93*	*103*	*10*	*1.17*	*48.9*	*12.6*	*4.6*	*5.1*	*HG Subdom*	
22ARC013	63	80	17	0.55	28.2	7	23.2	17.3	LG2	
22ARC013	27	35	8	0.46	24.3	5.5	34.1	14.3	LG3	
22ARC013	26	27	1	0.6	31.8	5.6	26.5	11.9	TLG7	
22ARC014	88	110	22	1.04	46.9	11.5	7.7	6.3	HG	
22ARC014	*98*	*110*	*12*	*1.18*	*51.7*	*12.8*	*4*	*4.8*	*HG Subdom*	
22ARC014	72	85	13	0.5	24.9	6.5	27.8	16.8	LG2	
22ARC014	40	46	6	0.49	23.1	6.4	32.1	14.3	LG3	
22ARC014	28	33	5	0.39	13.8	5.6	40.9	20.7	LG4	
22ARC014	14	16	2	0.46	29.7	4.6	30.6	13.3	TLG7	
22ARC015	18	41	23	1.25	42.8	14.5	8.6	7.7	HG	
including	*23*	*37*	*14*	*1.37*	*46.5*	*15.7*	*5.2*	*5.9*	*HG Subdom*	
22ARC015	15	17	2	0.77	25.2	12.7	22.3	17.3	LG2	
22ARC016	80	88	8	1.02	44.2	11.5	9.6	6.6	HG	
including	*83*	*87*	*4*	*1.19*	*50.1*	*13.3*	*3.6*	*4.8*	*HG Subdom*	
22ARC016	48	62	14	0.45	25.6	6	26.9	17.5	LG2	
22ARC016	12	19	7	0.47	27.9	6.1	32.5	13.1	LG3	
22ARC017	33	48	15	1.31	45.6	14.4	6.2	6.4	HG	
including	*35*	*45*	*10*	*1.38*	*49*	*15.2*	*3.5*	*5*	*HG Subdom*	
22ARC017	12	30	18	0.67	22.6	7.9	26.7	21.1	LG2	
22ARC018	54	71	17	1.13	44.9	12.5	8.1	6.4	HG	
including	*60*	*70*	*10*	*1.29*	*50.4*	*14.1*	*3*	*4.2*	*HG Subdom*	

Hole ID	From (m)	To (m)	Interval	V_2O_5 %	Fe %	TiO_2 %	SiO_2 %	Al_2O_3 %	Domain	Comments
22ARC018	27	51	24	0.61	25.6	7.6	25.3	19.8	LG2	
22ARC019	82	97	15	1.21	51.9	13.3	3.2	4.6	HG	
including	*82*	*94*	*12*	*1.23*	*52.8*	*13.7*	*2.3*	*4.1*	*HG Subdom*	
22ARC019	53	80	27	0.55	27.8	6.7	23.9	17	LG2	
22ARC019	16	22	6	0.47	34.7	5.5	22.8	10.7	LG3	
22ARC020	121	131	10	1.17	51.2	13.1	4.4	4.8	HG	
including	*122*	*130*	*8*	*1.2*	*52.5*	*13.4*	*3.2*	*4.5*	*HG Subdom*	
22ARC020	104	120	16	0.53	25.9	6.6	27.4	14.8	LG2	
22ARC020	60	62	2	0.39	22.8	5	34	7.9	LG3	
22ARC020	22	31	9	0.55	26.4	7.3	28.2	15.6	LG4	
22ARC021	31	48	17	1.16	40.6	12.9	11.2	9.4	HG	
including	*39*	*47*	*8*	*1.33*	*49.8*	*14.7*	*3.2*	*4.4*	*HG Subdom*	
22ARC021	13	26	13	0.65	21.6	9	27.1	21.1	LG2	
22ARC022	62	80	18	1.18	48.6	13	5.6	4.8	HG	
including	*66*	*80*	*14*	*1.23*	*51*	*13.4*	*3.4*	*4.2*	*HG Subdom*	
22ARC022	29	47	18	0.46	26.6	6	27.1	17.9	LG2	
22ARC023	105	112	7	1.1	47.5	12.5	7.7	5.6	HG	
including	*110*	*112*	*2*	*1.26*	*54.4*	*14*	*1.8*	*3.7*	*HG Subdom*	
22ARC023	94	102	8	0.46	22.4	5.6	32.1	13.7	LG2	
22ARC023	50	52	2	0.4	22.8	5.2	33.8	8.8	LG3	
22ARC023	33	38	5	0.35	18.2	5.2	40.5	18	LG4	
22ARC024	29	48	19	1.28	38.7	14.3	10.8	10.2	HG	
including	*38*	*46*	*8*	*1.49*	*47.9*	*16.7*	*2.8*	*4.8*	*HG Subdom*	
22ARC024	11	26	15	0.58	18.8	7.6	31	23.4	LG2	
22ARC025	56	78	22	1.13	38.7	12.3	11	9.9	HG	
including	*66*	*74*	*8*	*1.55*	*48.8*	*16.5*	*2.1*	*4.5*	*HG Subdom*	
22ARC025	34	50	16	0.56	24.4	7.1	27.2	21.1	LG2	
22ARC026	77	80	3	0.79	31.8	9.3	18.3	12.3	HG	
22ARC026	58	66	8	0.39	21.9	5	31	17.2	LG2	
22ARC027	105	126	21	1.06	47.3	11.7	8	5.7	HG	
including	*109*	*120*	*11*	*1.21*	*53.4*	*13.4*	*2.5*	*4.2*	*HG Subdom*	
22ARC027	71	78	7	0.48	22.7	6.1	29.2	17.3	LG2	
22ARC027	56	57	1	0.41	23.1	5.3	33.4	9	LG3	
22ARC027	12	20	8	0.7	31.4	7	29.1	11.2	TLG7	
22ARC028	61	72	11	1.26	49.9	14.1	3.5	4.5	HG	
including	*62*	*72*	*10*	*1.3*	*51.3*	*14.5*	*2.4*	*4*	*HG Subdom*	
22ARC028	38	59	21	0.51	24.6	6.4	27	19.4	LG2	
22ARC029	75	98	23	1.14	46.9	12.7	6.4	6.2	HG	
including	*81*	*95*	*14*	*1.23*	*50.8*	*13.5*	*3.4*	*4.8*	*HG Subdom*	
22ARC029	51	66	15	0.47	26.2	6	25.9	18.8	LG2	
22ARC029	12	22	10	0.38	24.6	4.2	39.5	10.2	LG3	
22ARC030	95	109	14	1.13	49.5	12.6	5.7	5.3	HG	
including	*97*	*108*	*11*	*1.18*	*51.2*	*13.1*	*4.2*	*5*	*HG Subdom*	
22ARC030	67	84	17	0.48	25.1	6.1	25.9	18.9	LG2	
22ARC030	33	36	3	0.39	23.2	5	42	9.6	LG3	
22ARC030	15	31	16	0.91	37.3	8.7	20.7	10.6	TLG7	

Hole ID	From (m)	To (m)	Interval	V_2O_5 %	Fe %	TiO_2 %	SiO_2 %	Al_2O_3 %	Domain	Comments
22ARC031	32	54	22	1.23	44.2	13.7	7.9	7.6	HG	
including	*36*	*48*	*12*	*1.36*	*49.5*	*15.2*	*3.3*	*4.8*	*HG Subdom*	
22ARC031	14	29	15	0.61	20.9	7.7	30.9	21	LG2	
22ARC032	53	64	11	1.14	45.4	12.8	9.1	5	HG	
including	*58*	*64*	*6*	*1.23*	*49.1*	*13.7*	*4.5*	*4.5*	*HG Subdom*	
22ARC032	27	40	13	0.55	23.8	6.8	27.8	20.5	LG2	
22ARC032	13	21	8	1.02	43.7	10.3	12.6	8.5	TLG7	
22ARC033	68	86	18	1.01	43.3	11.3	10.4	7.3	HG	
including	*75*	*85*	*10*	*1.25*	*51.2*	*13.8*	*2.8*	*4.2*	*HG Subdom*	
22ARC033	45	63	18	0.51	27.2	6.4	24.9	17.8	LG2	
22ARC033	14	32	18	0.94	42.5	9.1	14.6	9	TLG7	
22ARC034	85	104	19	1.1	47.1	12.3	7.7	5.7	HG	
including	*87*	*96*	*9*	*1.26*	*53.2*	*14*	*1.8*	*3.8*	*HG Subdom*	
22ARC034	62	81	19	0.48	26.2	6	25.5	17.8	LG2	
22ARC034	17	35	18	1.07	44.3	10.8	12.8	7.8	TLG7	
22ARC035	41	44	3	1.15	45.9	12.4	8.9	5.9	HG	
including	*41*	*43*	*2*	*1.2*	*47.9*	*13*	*6.8*	*5.2*	*HG Subdom*	
22ARC036	52	64	12	1.2	51.5	13.2	3.2	4.2	HG	
including	*53*	*64*	*11*	*1.22*	*52.3*	*13.4*	*2.4*	*3.9*	*HG Subdom*	
22ARC036	24	46	22	0.54	23.5	6.9	28.3	19.8	LG2	
22ARC036	18	24	6	0.52	30.8	5.3	26.5	15.3	TLG7	
22ARC037	70	87	17	1.04	46.8	11.9	8.2	6	HG	
including	*77*	*86*	*9*	*1.2*	*52.7*	*13.4*	*2.8*	*4.3*	*HG Subdom*	
22ARC037	49	68	19	0.51	27.2	6.5	24.3	18.2	LG2	
22ARC037	19	29	10	0.75	35	7.6	24.1	10.9	TLG7	
22ARC038	42	58	16	1.11	48.5	12.3	6.5	4.6	HG	
including	*43*	*52*	*9*	*1.24*	*52.2*	*13.7*	*2.3*	*4*	*HG Subdom*	
22ARC038	34	40	6	0.86	40.6	10.2	15.8	7.8	LG2	
22ARC038	21	29	8	0.84	34.2	9.2	22	12.5	TLG7	
22ARC039	55	69	14	1.07	48.3	12	6.5	5	HG	
including	*60*	*67*	*7*	*1.18*	*51.6*	*13*	*3.3*	*4*	*HG Subdom*	
22ARC039	36	54	18	0.55	22.3	7.2	27.3	21.3	LG2	
22ARC039	25	28	3	0.72	35.7	7.3	22.2	11.6	TLG7	
22ARC040	NSI								HG	Fault at north end of Block 60
22ARC040	29	38	9	0.66	35.4	6.6	18.5	10.4	TLG7	
22ARC041	29	50	21	1.21	37.4	14.6	12.2	9.7	HG	
including	*37*	*47*	*10*	*1.47*	*44.4*	*17.9*	*4.9*	*5.7*	*HG Subdom*	
22ARC041	14	25	11	0.57	25.6	7.5	25.7	19.5	LG2	
22ARC042	52	78	26	1.08	45.2	12.2	8.3	6	HG	
including	*59*	*74*	*15*	*1.18*	*50.5*	*13.1*	*4.2*	*4.6*	*HG Subdom*	
22ARC042	36	51	15	0.61	26	7.9	25.3	18.9	LG2	
22ARC042	9	11	2	0.43	23.6	5.7	36.7	11.3	LG3	
22ARC043	75	81	6	1.11	47.4	12.7	6.5	5.8	HG	
including	*76*	*81*	*5*	*1.14*	*48.5*	*13*	*5.5*	*5.6*	*HG Subdom*	
22ARC043	55	73	18	0.49	24.4	6.3	26.9	17.2	LG2	
22ARC043	27	33	6	0.38	21.7	5.2	34.7	9.9	LG3	

Hole ID	From (m)	To (m)	Interval	V_2O_5 %	Fe %	TiO_2 %	SiO_2 %	Al_2O_3 %	Domain	Comments
22ARC043	6	7	1	0.49	18.3	8.6	43	14.1	TLG7	
22ARC044	11	19	8	1.24	41.6	13.7	11.8	6.8	HG	
including	*15*	*17*	*2*	*1.43*	*46*	*15.5*	*6.2*	*5.7*	*HG Subdom*	
22ARC045	32	53	21	1.13	47.2	12.5	6.8	5.6	HG	
including	*38*	*53*	*15*	*1.24*	*50.9*	*13.5*	*3.2*	*4.3*	*HG Subdom*	
22ARC045	11	22	11	0.55	25.4	7.4	29	17.9	LG2	
22ARC046	68	82	14	1.08	47.4	12	7.5	5.8	HG	
including	*70*	*81*	*11*	*1.2*	*51.6*	*13.3*	*3.3*	*4.6*	*HG Subdom*	
22ARC046	55	66	11	0.55	27.2	7	26.4	14.5	LG2	
22ARC046	27	29	2	0.39	24.8	5.3	31.8	9.6	LG3	
22ARC047	32	52	20	1.15	44.1	13.3	7.9	6.4	HG	
including	*37*	*46*	*9*	*1.3*	*47.7*	*14.8*	*4.4*	*5.1*	*HG Subdom*	
22ARC047	9	19	10	0.54	22.2	7	29.3	20.2	LG2	
22ARC048	62	79	17	1.09	44.9	12.1	8.1	5.7	HG	
including	*67*	*73*	*6*	*1.28*	*50.6*	*14.3*	*2.5*	*3.9*	*HG Subdom*	
22ARC048	39	54	15	0.52	26.9	6.8	25.5	17.8	LG2	
22ARC048	11	12	1	0.44	23.6	6.1	37.9	11.5	LG3	
22ARC049	82	102	20	0.97	42.9	11.1	11.4	7.4	HG	
22ARC049	*90*	*97*	*7*	*1.25*	*52.3*	*14.1*	*2.9*	*4.2*	*HG Subdom*	
22ARC049	64	73	9	0.53	25.8	6.6	26.3	16.3	LG2	
22ARC049	36	40	4	0.43	25.7	5.5	30.7	9.3	LG3	
22ARC049	20	22	2	0.35	23.1	5.3	31.2	12.5	LG4	
22ARC050	87	101	14	1.17	51.1	13.3	3.8	4.8	HG	
including	*90*	*101*	*11*	*1.19*	*52.2*	*13.4*	*3*	*4.7*	*HG Subdom*	
22ARC050	65	75	10	0.5	25	6.8	27	17.2	LG2	
22ARC050	37	42	5	0.36	21.6	4.8	35.2	9.5	LG3	
22ARC050	15	17	2	0.54	28.9	7.5	22	8.7	LG4	
22ARC051	25	40	15	1.35	46	15.1	5.9	5.8	HG	
including	*26*	*40*	*14*	*1.39*	*47.1*	*15.5*	*4.7*	*5.3*	*HG Subdom*	
22ARC051	7	10	3	0.34	11.9	4.3	40.7	22.4	LG2	
22ARC052	61	76	15	1.08	45.9	12.1	7.4	5.7	HG	
including	*62*	*72*	*10*	*1.2*	*50.6*	*13.5*	*2.9*	*4.3*	*HG Subdom*	
22ARC052	32	43	11	0.52	28.9	6.7	24.1	16.9	LG2	
22ARC052	7	9	2	0.26	17.3	3.5	44	11.9	LG3	
22ARC053	25	40	15	1.21	42.3	15	9	8.1	HG	
including	*30*	*37*	*7*	*1.33*	*46.7*	*16.8*	*5.1*	*5.5*	*HG Subdom*	
22ARC053	6	24	18	0.63	21.3	8.7	24.6	19.1	LG2	
22ARC054	13	27	14	1.21	43.8	14.1	7.2	7	HG	
including	*19*	*25*	*6*	*1.38*	*50.6*	*15.6*	*2.7*	*4.5*	*HG Subdom*	
22ARC054	7	8	1	0.91	29.9	12.1	24.2	11.9	LG2	
22ARC055	73	89	16	1.06	41.3	11.9	11.3	7.4	HG	
including	*78*	*88*	*10*	*1.27*	*48.6*	*14.1*	*4.4*	*5.1*	*HG Subdom*	
22ARC055	50	63	13	0.52	27.3	6.6	25.4	17.6	LG2	
22ARC055	22	26	4	0.45	25.3	5.9	31.2	11.1	LG3	
22ARC056	NSI								HG	Abandoned due to drilling issues - HG not intercepted - Block 50
22ARC057	51	69	18	1.13	47	12.9	6.5	5	HG	

Hole ID	From (m)	To (m)	Interval	V_2O_5 %	Fe %	TiO_2 %	SiO_2 %	Al_2O_3 %	Domain	Comments
including	57	69	12	1.23	50.2	13.8	3.1	4.5	HG Subdom	
22ARC057	31	45	14	0.57	26.4	7.6	25.3	19.1	LG2	
22ARC057	5	6	1	0.45	24.5	5.3	37.9	13.4	TLG7	
22ARC058	77	96	19	0.96	42.7	11.2	12.5	7	HG	
including	86	96	10	1.21	51.9	13.8	3.3	4.7	HG Subdom	
22ARC058	58	75	17	0.52	27.1	6.8	25.3	17.3	LG2	
22ARC058	25	28	3	0.44	23.9	6	33.4	12.7	LG3	
22ARC058	5	8	3	0.66	32.5	8	28.6	10.1	TLG7	
22ARC059	28	44	16	1.17	47.5	13.3	6.4	5.3	HG	
including	31	44	13	1.25	50	14.1	3.4	4.7	HG Subdom	
22ARC059	12	24	12	0.65	27.1	8.3	20.9	15.7	LG2	
22ARC060	50	64	14	1.16	49.9	13	4.4	5.1	HG	
including	51	59	8	1.24	52.6	13.9	1.9	4	HG Subdom	
22ARC060	26	48	22	0.53	29.1	6.9	24.8	15.4	LG2	
22ARC061	61	72	11	1.06	46.9	12	7.3	5.7	HG	
including	64	71	7	1.22	52.9	13.8	2.1	4.1	HG Subdom	
22ARC061	40	57	17	0.53	27.8	6.8	25	16.6	LG2	
22ARC061	8	12	4	0.51	31.2	6.3	27.7	9.7	LG3	
22ARC062	29	53	24	1.1	40.1	12.5	10	8.6	HG	
including	36	48	12	1.28	46.5	14.7	4.7	5.9	HG Subdom	
22ARC062	5	27	22	0.56	23.5	7.3	29.2	20	LG2	
22ARC063	49	64	15	1.18	42.2	13.4	8.9	7.1	HG	
including	55	60	5	1.36	50.2	15.2	2.1	4.3	HG Subdom	
22ARC063	21	34	13	0.52	24.6	6.7	27.4	19.5	LG2	
22ARC064	46	54	8	1.04	41.2	12.1	11.2	8	HG	
including	50	54	4	1.29	49.5	14.8	3.5	4.3	HG Subdom	
22ARC064	19	31	12	0.58	24.1	7.7	26.6	20.8	LG2	
22ARC065	83	97	14	1.05	46.5	11.7	8.8	5.9	HG	
including	84	92	8	1.23	52.9	13.9	2.4	4	HG Subdom	
22ARC065	55	70	15	0.47	24.1	6.1	28.2	18.1	LG2	
22ARC065	28	32	4	0.39	24.6	5.1	32.1	9.3	LG3	
22ARC065	8	9	1	0.57	26.6	8	27.2	9.2	LG4	
22ARC066	29	52	23	1.1	33.9	12.9	16.1	12	HG	
including	45	48	3	1.53	45.2	18	4.4	5.1	HG Subdom	
22ARC066	13	27	14	0.55	18.5	7.3	30.8	24.4	LG2	
22ARC067	91	104	13	1.15	49.2	13	5.3	5.2	HG	
including	93	103	10	1.23	52.4	13.7	2.8	4	HG Subdom	
22ARC067	61	82	21	0.43	22.8	5.8	29.9	17.9	LG2	
22ARC067	22	25	3	0.47	20.4	6.2	38	16.3	LG3	
22ARC068	59	67	8	1.01	43.4	11	10.3	8.2	HG	
including	60	63	3	1.23	51.4	13.4	2.8	4.2	HG Subdom	
22ARC069	40	52	12	1.15	50.4	12.7	4.4	4.6	HG	
including	43	52	9	1.22	52	13.3	2.8	4.1	HG Subdom	
22ARC069	23	34	11	0.78	34.2	9.4	18.7	14.8	LG2	
22ARC069	12	22	10	0.44	24.3	6.1	29.1	20.5	LG2A	
22ARC070	55	65	10	1.16	50.1	12.9	4.6	4.7	HG	

Hole ID	From (m)	To (m)	Interval	V_2O_5 %	Fe %	TiO_2 %	SiO_2 %	Al_2O_3 %	Domain	Comments
including	*55*	*64*	*9*	*1.2*	*51.7*	*13.2*	*3.1*	*4.3*	*HG Subdom*	
22ARC070	42	52	10	0.49	24.5	6	30.5	14.1	LG2	
22ARC070	27	35	8	0.47	22.2	6.1	29.2	17.3	LG2A	
22ARC071	50	69	19	0.97	40.9	11.4	12.5	8	HG	
including	*60*	*68*	*8*	*1.24*	*51.6*	*14.1*	*2.2*	*4.1*	*HG Subdom*	
22ARC071	31	48	17	0.5	25.7	6.6	27.3	18.5	LG2	
22ARC072	19	37	18	1.15	42.9	13.7	7.8	7.4	HG	
including	*24*	*32*	*8*	*1.31*	*50.3*	*15.3*	*2.4*	*4.7*	*HG Subdom*	
22ARC072	7	15	8	0.52	20	7.6	22.9	17.2	LG2	
22ARC073	41	64	23	0.94	40.6	10.7	13.5	8	HG	
including	*50*	*61*	*11*	*1.18*	*49*	*13.3*	*4.6*	*4.9*	*HG Subdom*	
22ARC073	18	35	17	0.49	22.6	6.4	31.6	18.3	LG2	
22ARC074	72	87	15	1.1	49.7	12.3	5.8	4.8	HG	
including	*72*	*85*	*13*	*1.14*	*51.1*	*12.8*	*4.4*	*4.7*	*HG Subdom*	
22ARC074	44	60	16	0.48	25.6	6.4	26.5	18.6	LG2	
22ARC074	12	13	1	0.4	25.4	5.5	29.1	8.3	LG3	
22ARC075	NSI								HG	South end of Block 70 - hole finished too early
22ARC075	60	63	3	0.74	33.4	9	20.6	10.9	LG2	
22ARC075	52	57	5	0.38	19.4	5	33.1	19.1	LG2A	
22ARC075	27	31	4	0.36	20.9	4.7	36.3	8.7	LG3	
22ARC075	6	8	2	0.44	24.1	5.9	34.1	9.4	LG4	
22ARC076	95	103	8	0.87	40	10.3	13.9	7.9	HG	
including	*99*	*102*	*3*	*1.12*	*50*	*13*	*5.2*	*4.8*	*HG Subdom*	
22ARC076	90	93	3	0.61	29.9	7.9	23.8	11.4	LG2	
22ARC076	84	87	3	0.45	22.6	5.8	29.5	15.9	LG2A	
22ARC076	27	28	1	0.6	30.8	7.9	25.3	7	LG4	
22ARC077	NSI								HG	South end of Block 70 - hole finished too early
22ARC077	103	112	9	0.67	29.8	8	23.7	12.8	LG2	
22ARC077	93	97	4	0.35	17.7	4.5	34.8	17.7	LG2A	
22ARC077	74	76	2	0.35	20.3	4.5	36.3	8.9	LG3	
22ARC077	8	9	1	0.92	41.9	11.6	11.3	6.8	TLG7	
22ARC078	55	66	11	1.18	50.9	12.9	4.9	4.6	HG	
including	*57*	*65*	*8*	*1.22*	*52.4*	*13.3*	*3.6*	*4.2*	*HG Subdom*	
22ARC078	43	48	5	0.66	31.4	7.9	23.3	10.4	LG2	
22ARC078	28	38	10	0.46	22.2	5.9	30.1	17.1	LG2A	
22ARC079	66	78	12	1.17	51.1	12.9	4.7	4.3	HG	
including	*66*	*77*	*11*	*1.19*	*52*	*13.2*	*3.8*	*4.3*	*HG Subdom*	
22ARC079	55	62	7	0.58	27.1	7.1	26.5	13.6	LG2	
22ARC079	49	53	4	0.62	29.1	7.8	25.2	13.7	LG2A	
22ARC079	15	19	4	0.4	22.8	5.4	33.2	9.1	LG3	
22ARC080	86	95	9	1.14	50.4	12.6	5.3	4.8	HG	
including	*86*	*94*	*8*	*1.18*	*51.9*	*13*	*3.9*	*4.5*	*HG Subdom*	
22ARC080	75	80	5	0.7	33.1	8.5	21.4	11.5	LG2	
22ARC080	70	73	3	0.56	26.2	7.1	26.7	15.6	LG2A	
22ARC080	39	44	5	0.38	21.6	4.8	37.6	9.4	LG3	
22ARC080	16	19	3	0.44	25.6	6.2	31.7	8.3	LG4	

Hole ID	From (m)	To (m)	Interval	V_2O_5 %	Fe %	TiO_2 %	SiO_2 %	Al_2O_3 %	Domain	Comments
22ARC081	37	53	16	1.24	48.5	14	5.1	4.9	HG	
including	*37*	*51*	*14*	*1.28*	*49.3*	*14.5*	*4*	*4.7*	*HG Subdom*	
22ARC081	12	30	18	0.51	22.5	6.9	30.2	20	LG2	
22ARC082	59	80	21	1.06	47.1	12.2	6.9	5.5	HG	
including	*66*	*76*	*10*	*1.17*	*52*	*13.3*	*3*	*4.5*	*HG Subdom*	
22ARC082	42	53	11	0.5	25.9	6.7	26	19.5	LG2	
22ARC082	8	11	3	0.43	25.7	5.6	36.3	11.1	LG3	
22ARC083	78	101	23	0.96	43.7	10.9	12.3	6.2	HG	
including	*85*	*95*	*10*	*1.19*	*52.8*	*13.5*	*2.9*	*4.6*	*HG Subdom*	
22ARC083	61	76	15	0.56	27.8	7.2	24	16.7	LG2	
22ARC083	28	34	6	0.35	19.6	4.8	37	14.2	LG3	
22ARC084	47	49	2	0.93	34.9	11.1	18.4	9.4	HG	
22ARC084	20	34	14	0.53	26.2	6.9	26.9	18.7	LG2	
22ARC085	63	79	16	1.01	44	11.6	8.5	6.4	HG	
including	*68*	*75*	*7*	*1.23*	*53.3*	*13.8*	*1.7*	*3.9*	*HG Subdom*	
22ARC085	35	42	7	0.51	22.7	6.7	29.1	20.7	LG2	
22ARC086	86	100	14	1.14	50.6	12.8	5	4.9	HG	
including	*87*	*96*	*9*	*1.22*	*53.7*	*13.8*	*2.2*	*4.2*	*HG Subdom*	
22ARC086	53	57	4	0.48	22.9	6.4	28.8	20.6	LG2	
22ARC086	32	35	3	0.37	22.9	5.3	32.3	8.5	LG3	
22ARC086	9	12	3	0.7	35.5	8.4	23.9	9.4	TLG7	
22GDH001	88	100.4	12.4	1.06	46.6	12	8	5.7	HG	
including	*89.37*	*96.96*	*7.59*	*1.25*	*52.2*	*14.2*	*2*	*4.1*	*HG Subdom*	
22GDH001	82.5	87	4.5	0.76	35.1	9.1	21.6	8	LG2	
22GDH001	61	75	14	0.51	25.1	6.7	26.4	18	LG2A	
22GDH002	19	34.4	15.4	1.23	49.9	13.6	4.7	4.5	HG	
including	*19*	*33*	*14*	*1.24*	*50.2*	*13.7*	*4.3*	*4.5*	*HG Subdom*	
22GDH002	7.11	15.7	8.59	1.17	45.7	14	8.1	6.2	LG2	
22GDH002	3.9	4.8	0.9	0.96	34	13.5	17.9	10.6	LG2A	
22GDH003	41.75	53.5	11.75	1.24	51.7	13.6	2.6	4.1	HG	
including	*41.75*	*52.4*	*10.65*	*1.26*	*52.2*	*13.9*	*2.1*	*3.8*	*HG Subdom*	
22GDH003	36.6	41	4.4	0.68	32.4	7.8	22.5	10.6	LG2	
22GDH003	12.6	26	13.4	0.68	28.9	8.7	23.7	17.9	LG2A	
22GDH004	58.17	76.9	18.73	1.13	48.2	12.5	6.4	5	HG	
including	*58.2*	*73*	*14.8*	*1.21*	*51*	*13.4*	*3.7*	*4.4*	*HG Subdom*	
22GDH004	48.3	56	7.7	0.66	29.8	8	23.3	12.3	LG2	
22GDH004	20.3	35.6	15.3	0.62	27	7.9	24.9	18.5	LG2A	
22GDH005									HG	Not assayed - retained for metallurgy sample
22GDH006	58.65	75.26	16.61	1.23	47.4	13.9	5	5.7	HG	
including	*60.94*	*71.8*	*10.86*	*1.35*	*50*	*15.3*	*2.4*	*4.5*	*HG Subdom*	
22GDH006	30.4	57.69	27.29	0.53	27.2	6.5	26	18.2	LG2	
22GDH007	27.2	42.43	15.23	1.23	43.2	14.7	8.5	7.9	HG	
including	*31*	*38*	*7*	*1.4*	*47.1*	*16.7*	*4.9*	*5.3*	*HG Subdom*	
22GDH007	6.2	19.8	13.6	0.66	25.2	8.5	24.2	18.3	LG2	
22GDH008									HG	Not assayed - retained for metallurgy sample
22GDH009	81.25	93.11	11.86	1.24	49.4	13.6	4.9	5.5	HG	

Hole ID	From (m)	To (m)	Interval	V_2O_5 %	Fe %	TiO_2 %	SiO_2 %	Al_2O_3 %	Domain	Comments
including	*82*	*91.72*	*9.72*	*1.29*	*51.3*	*14.2*	*3.1*	*5*	*HG Subdom*	
22GDH009	61	70.9	9.9	0.52	26.3	6.5	26.3	16.9	LG2	
22GDH009	34.7	39	4.3	0.4	25.3	5.1	32	8.9	LG3	
NHRC001	44	55	11	0.69	26.7	9	26.7	17	HG	
NHRC001	24	37	13	0.35	22.5	4.4	29.5	23.1	LG2	
NHRC001	0	2	2	0.5	25.3	7.2	31.3	16.1	LG3	
NHRC001	15	16	1	0.42	23	5.3	28.9	22	LG3	
NHRC002	81	86	5	1.02	44.5	12	12	6	HG	
NHRC002	74	76	2	0.77	33.8	10	21.9	12.1	LG2	
NHRC002	41	50	9	0.5	26.7	6.2	34.6	12.8	LG3	
NHRC002	52	54	2	0.33	20.1	4.6	39.5	17.9	LG3	
NHRC002	0	20	20	0.51	26.6	7.6	26.8	17.8	LG4	
NHRC003	80	89	9	0.21	14.7	3.3	47.1	15.7	HG	Fault zone
NHRC003	57	68	11	0.48	22.6	6.4	30	21	LG2	
NHRC003	50	52	2	0.32	17.6	4.4	40.1	20.5	LG2A	
NHRC003	24	29	5	0.51	29.4	6.3	28.5	14.6	LG3	
NHRC003	0	7	7	0.51	25.5	7	30	17.1	LG4	
NHRC004	79	82	3	1.03	46.6	12.3	8.9	5.7	HG	Fault zone
NHRC004	54	56	2	0.45	18	6	32	25	LG2	
NHRC004	63	76	13	0.59	26.7	7.8	26.9	17.3	LG2	
NHRC004	40	52	12	0.48	19.5	6.5	31.1	23.8	LG2A	
NHRC004	13	23	10	0.52	25.4	7.2	28.9	17.6	LG3	
NHRC004	0	4	4	0.51	30.4	6.1	29.4	12.6	LG4	
NHRC005	53	54	1	0.58	27.4	8	32.4	11	HG	Fault zone
NHRC005	35	39	4	0.17	12.5	2.2	52.6	18.9	LG2	
NHRC006	13	23	10	1.01	46.5	11.9	9.3	6.9	HG	
NHRC007	21	25	4	0.54	29.9	7	22.6	18.1	HG	
NHRC007	3	16	13	0.36	22.4	5	30.8	21.7	LG2	
NHRC008	22	24	2	0.68	25.3	10.1	24.1	20	HG	Fault zone
NHRC008	13	17	4	0.39	21.5	5.2	29.2	23.9	LG2	
NHRC009	52	53	1	0.67	28.5	8.8	24.2	16.9	HG	Fault zone
NHRC009	42	45	3	0.49	21	6.7	31.3	21.8	LG2	
NHRC009	13	22	9	0.45	31.5	6.4	24	15.4	LG3	
NHRC010	75	78	3	0.59	27.7	7.8	25.6	16.6	HG	Fault zone
NHRC010	67	73	6	0.57	26.3	7.5	28.1	17.6	LG2	
NHRC010	46	54	8	0.43	26.5	6.3	33.8	13.1	LG3	
NHRC010	3	25	22	0.51	24.5	7.7	29.2	18.7	LG4	
NHRC011	2	14	12	1.15	45.8	13.1	8	7	HG	
including	*5*	*13*	*8*	*1.26*	*50.3*	*14.1*	*4*	*4.8*	*HG Subdom*	
NHRC012	3	19	16	1.2	47.7	13.9	6.3	6.2	HG	
including	*7*	*17*	*10*	*1.25*	*50.6*	*14.4*	*3.6*	*4.9*	*HG Subdom*	
NHRC013	NSI								HG	HG not intersected due to position and orientation for gold targeting
NHRC013	18	25	7	0.41	19.5	6.6	28.6	21.8	LG4	
NHRC013	0	1	1	0.5	24.8	4.1	38.4	14	TLG7	
NHRC014	NSI								HG	HG not intersected due to position and orientation for gold targeting
NHRC014	78	92	14	0.38	20.3	5.8	39.1	15.5	LG4	

Hole ID	From (m)	To (m)	Interval	V_2O_5 %	Fe %	TiO_2 %	SiO_2 %	Al_2O_3 %	Domain	Comments
NHRC014	0	1	1	0.42	22.7	4.7	40.2	13.2	TLG7	
NHRC015	NSI								HG	HG not intersected due to position and orientation for gold targeting
NHRC015	10	29	19	0.65	28.1	6.9	22.2	18.5	TLG7	
NHRC016	NSI								HG	HG not intersected due to position and orientation for gold targeting
NHRC016	11	34	23	0.67	26.7	8.3	22.3	18.9	TLG7	
NHRC017	NSI								HG	HG not intersected due to position and orientation for gold targeting
YORC001	3	14	11	0.76	29.5	10.3	20.2	11	HG	Fault zone – hole targeting gold.
including	*6*	*7*	*1*	*1.38*	*47.1*	*16.4*	*4.7*	*4.7*	*HG Subdom*	
YORC002	39	46	7	0.9	42.4	10.6	11.3	8.2	HG	Fault zone – hole targeting gold.
including	*42*	*46*	*4*	*1.08*	*47.8*	*12.4*	*6.6*	*5.8*	*HG Subdom*	
YORC002	18	21	3	0.97	35	11.6	18.3	9.4	LG2	
YORC003	69	76	7	0.54	27.4	6.9	26.6	13.7	HG	Fault zone – hole targeting gold.

NSI = No Significant Intercept

APPENDIX 4

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.	Sampling at the Project has consisted of drilling and associated diamond core or RC sampling, with various campaigns between 1998 and 2022. Sampling at the Project has solely been completed by AVL (formerly Yellow Rock Resources between 2007 and 2016, then AVL and TMT between 2017 and 2022. Prior to the Project being acquired by AVL (formerly Yellow Rock Resources), 17 RC drill holes were completed in 1998 by Intermin Resources (NL). These holes have not been used in any Mineral Resource estimate from 2015 onwards due to broad compositing of samples and uncertainty around survey control. Greater Pacific Gold drilled 31 RC holes in 2000, and these holes are used in the Mineral Resource where they intersect the relevant domains. One metre samples were submitted for assay. There is little data available for their sub-sampling techniques, and these holes are now supported by more recent drilling, verifying the historical results. Since 2007, all drilling completed at the Project has been completed by AVL (formerly Yellow Rock Resources) or TMT. All RC samples were collected at 1m intervals from a cyclone splitter on the rig. Reject material was retained at the hole in a green bag until drill results were returned by AVL, with the exception of 2022 drilling, where archive 1m calicos were collected and retained from the second cyclone chute for all drill metres. TMT RC drilling between 2017 and 2022 was placed on the ground and archive 1m calicoes were collected and retained from the second cyclone chute for all drill metres. RC sample splits from the rig were monitored by both Companies to ensure sample hygiene and collection of a consistent sample weight between 2.5 – 3.5 kg, nominally 10% of the downhole sample mass drilled per metre. Diamond core drilled at the Project by AVL and TMT between 2009 and 2022 has been drilled at HQ or PQ diameter. HQ core was half core cut with an automated core saw or brick saw to produce a half core laboratory sample. TMT collected two quarter core samples in HQ for every 20th sample as part of the QAQC regime. PQ core was quarter core cut with an automated core saw to produce a quarter core laboratory sample. Archive core has been retained for the entire hole in some instances, but in most cases used for extensive metallurgical testing programs of the HG domain. Full core photography has been captured and retained. Down hole magnetic susceptibility and density surveys have been completed, with compensated density data (in-hole sampling) used to develop regressions for density to Fe_2O_3 for the deposit. These 'samples' have been validated against Archimedes specific gravity measurements, volumetric measurements on core and density data collected during metallurgy programs. At the time of this Mineral Resource update RC or diamond core samples have been used from 673 drill holes in the geological model, consisting of: - 524 RC holes for 49,430m of total drilling with assay data for 47,431m of 1m samples - 22 RC pre-collar, diamond tail holes for 2,296m of RC drilling and 1,160.9m of diamond core drilling - 127 DDH holes for 14,775.23m of total drilling, with assay data for 12,776.41m of diamond core sampling Of the total 67,662.63m of drill sample used in the geological model, 62,581.08m of assayed sample were used in the Mineral Resource estimate. The remaining metres were not assayed because:

Criteria	JORC Code Explanation	Commentary
		• The sample was used for metallurgy studies; or • The hole did not intersect relevant bedrock domains being targeted to test for gold mineralisation in fault zones; or • The hole was not assayed as they were drilled for geotechnical studies and did not intercept mineralisation.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Down dip 2019 PQ core drilled by AVL has not been sampled and assayed, 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. Handheld XRF data is not used in the Mineral Resource estimate; magnetic susceptibility data is used in the estimate. All diamond core has been sampled to geological boundaries, or defaulting to 1m intervals where consistent rock types exist in that metre. All RC drilling is sampled at one metre intervals, apart from the very earliest program in 1998 (resulting in exclusion of these holes from the Mineral Resource estimate). RC samples have been split with a cone splitter on the drill rig to obtain 2.5 – 3.5 kg of sample from each metre (nominally a 10% sample split). AVL field duplicates were collected for every 40th drill metre to check sample grade representation from the drill rig splitter during the 2015 drill program. During the October 2019 RC program, field duplicates were collected from the rig splitter for every 30th drill metre. During the December 2019 and 2022 RC programs, field duplicates were collected from the rig splitter for every 20th drill metre. TMT field duplicates were collected for every 20th sample from the second cyclone chute and submitted for assay. AVL diamond core sampling has second coarse crush samples split for every 20th samples with assaying of the second crush to check laboratory splitting. TMT diamond core sampling was completed with two quarter core samples submitted for every 20th sample as a field duplicate. Magnetic susceptibility has been collected using a KT-10 on the majority of RC and diamond core at the Project by AVL and TMT. Data that was previously collected using a KT-9 meter or Fugro meter has since been repeated with a KT-10 unit as part of a Project wide data validation and quality assurance program. Duplicate magnetic susceptibility readings at a frequency of 5% were collected as part of this program to demonstrate repeatability of the dataset. Pulps from historic drill holes (pre 2015) have been measured for magnetic susceptibility where pulps were available, with calibration on results applied from control sample measurement of pulps from drill programs from 2015 onwards where measurements of the RC bags already exist. Diamond core from the Project has been measured with a KT-10 at a frequency of between 2 readings per metre to 5 readings per metre. These measurements have been converted to intervals for use downhole.

Criteria	JORC Code Explanation	Commentary
	Aspects of the determination of mineralisation that are Material to the Public Report.	All assaying has been completed using a standard iron ore suite of minerals by lithium-borate fused bead XRF at commercial laboratories based in Perth, Western Australia. Some check assays have been completed using ICP methods to ensure full reporting of economic minerals is achieved. Results confirm good determination of the major elements and transition and base metals by XRF. Magnetic susceptibility is material to the project to determine oxidation of the bedrock geology, important for beneficiation parameters. Data has been verified through repeat measurement programs using hand held devices, in addition to down hole magnetic susceptibility surveys. Satmagan has been used to determine magnetite content for select samples from the HG domain. The satmagan results have a strong relationship with magnetic susceptibility results, validating both datasets. Down hole compensated density logs have been validated against an Archimedes density dataset, volumetric dataset and metallurgy density datasets to verify accuracy of the Fe_2O_3 regressions used to populate the deposit density. Survey control has been consistently linked to established base stations for the Project, with consistent datum points used by all workers for collar pickups and aerial survey to create a topographic digital elevation model. Calibration between AVL and TMT collected survey data and survey control has been checked and verified to be accurate relative to each other and the topographic surface at the Project.
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 22% 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 78% of the drilled metres. 22 of the diamond holes have RC pre-collars (GDH911, GDH913 & GDH916, 18GEDH003, 19MTDT001 – 018), otherwise all holes are drilled from surface. Where HQ sized holes did not achieve adequate core recovery, programs were switched to PQ diameter, which improved core recovery. All diamond core holes were oriented wherever possible with the exception of the vertical diamond tail holes drilled during 2019. Core orientation units were used since 2015 being Reflex ACT III™ units. The type of core orientation used for 2009 diamond core drilling is unknown.
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. Recovery was maximised by use of triple core in the weathered portion of the deposit. For the AVL and TMT RC drilling, 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 programs 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 program were weighed as an additional check on recovery. TMT assay files included weight reporting, with comparison of primary and duplicate sample weights analysed to determine variability. An experienced AVL or TMT geologist was present during drilling and any issues noticed were immediately rectified. Green bag weights were recorded for 10 percent of the 2022 RC drilling (on select holes that used green bags for the reject material for this purpose). Weights of the reject material do not suggest material issues with down hole concatenation on each rod or small sample return for the holes in any particular geological zone.

Criteria	JORC Code Explanation	Commentary
		Caliper data has been collected during down hole density and magnetic susceptibility logging. This data indicates low rugosity (ie, good hole integrity) in the HG domain.
	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. AVL 2019, 2020 and 2022 diamond core samples had a coarse split created at the laboratory for every 20th sample that was also assayed to evaluate laboratory splitting of the sample. TMT diamond core samples were submitted with two quarter core samples (primary and duplicate) for every 20th sample. Recovery was maximised in diamond core drilling by using triple tube through weathered rock. TMT fresh core drilling has core recovery exceeding 98%. 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, with a frequency of one in 20 for all AVL programs since December 2019, and all TMT programs since 2017. All drill holes are collared with PVC pipe for the first metres, to ensure the hole stays open and clean from debris. RC drill sample is held in the cyclone for the entire metre, then dropped through the splitter at the end of the drilled metre to ensure representative splitting of heavy and fine fractions and clear separation of sample between drilled metres.
	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 in AVL or TMT drilling. 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 in the northern Block 20 during 2015. During 2022, in Block 50, three diamond core holes were drilled as RC twins, with two of them sampled (the other being held for metallurgy material); in Block 62 two diamond core holes were drilled as RC twins, with one assayed and one retained for metallurgy sample; in Block 70 four diamond core holes were drilled, with one being an RC twin that was assayed, and the other three being assayed, but too far from existing RC holes to be considered twins. Results demonstrate repeatability of the RC assays with diamond core assaying suggesting there is no material issue with loss of fines in RC drilling. TMT drilled five RC to diamond core twin holes at Gabanintha North with results demonstrating excellent repeatability. At Yarrabubba, four RC twins to diamond core holes were drilled, also with good repeatability. These results suggest there are no issues with loss of fines or volumetric differences between RC and diamond holes in drilling by TMT. Twin RC holes were also drilled during 2022 for three existing RC holes drilled in 2000, and 2007 to determine repeatability of the earliest RC drilling at the Project. Results demonstrate the historical holes are repeatable. 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.

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 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 (alpha and beta measurements using a kenometer) and have been saved to the database. The logging was completed on site by the responsible geologist. All of the drilling for early programs (pre 2017) was logged onto paper then transferred to a SQL Server drill hole database using DataShed™ database management software. Later programs used excel templates with libraries for logging, then a point of entry validation data capture program with a SQL backend. The database is managed by Mitchell River Group (MRG). 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 regolith, lithology, texture, alteration, weathering, hardness and colour recorded. RC chip trays have been photographed, at 4m intervals for AVL holes and at 20 – entire hole intervals for TMT holes. 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. PQ diamond drill holes completed during 2019 were geologically and geotechnically logged in detail by the site geologists. TMT core holes have all been geologically logged by independent geotechnical consultants. PQ and HQ diamond drill holes completed during 2020 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. ATV or OTV down hole logging was completed for geotechnical studies on 90 holes for 6,676.49 metres of RC and DDH drilling from programs between 2015 and 2022.
	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, magnetic susceptibility, density and geotechnical records being quantitative. Core photos were collected for all diamond drilling, and chip tray photos taken for all RC drilling since 2015.
	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.	2022, 2020, 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. 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.

Criteria	JORC Code Explanation	Commentary
		14 of the 18 total vertical diamond PQ diamond drill holes from 2019 were quarter core sampled using an automated Almonte core saw to cut the samples. Sample intervals were marked on the core by the responsible geologist considering lithological and structural features. 2020 PQ core from the geotechnical drill program (20GDH002 and 003) were quarter core cut using an Almonte core saw. 2020 and 2022 HQ core was half core cut using an Almonte core saw. TMT diamond core drilled between 2017 and 2023 was typically PQ diameter core, drilled with triple tube in the oxidised profile. Core was quarter core cut for sampling in all holes with exception of metallurgical holes, where 1/6 diameter was cut and sampled to maximise metallurgical material available.
	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 all AVL and TMT drilling programs since 2015; drilling was generally dry with a few damp samples and occasional wet samples at rod change in the deepest holes. Older drilling programs employed riffle splitters to produce the required sample splits for assaying.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	The sample preparation techniques employed for RC and diamond core samples follow standard industry best practice. All samples were crushed by jaw and Boyd crushers after being rotary split if required to produce a standardised ~3kg sample for pulverising. All samples were pulverised to a nominal 90% passing 75 micron sizing and sub sampled for assaying and LOI determination tests. The remaining pulps for all programs since 2007 are stored at AVL facilities in Perth. 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.	RC drill sample is retained within the rig cyclone for the entire drilled metre, then dropped in one batch to ensure mixing and even splitting of heavy and coarse fractions at the cyclone point of collection into calicos. Field blanks have been inserted at the start or end of each drill hole for all AVL programs since 2015, with the exception of an October 2019 program at the fault between Blocks 20 and 30. Typically, blanks inserted by AVL demonstrate little contamination for V_2O_5. TMT procedures were to insert a blank standard every 50 samples for both RC and diamond core programs. Field duplicates for AVL RC samples have increased in frequency from about 1:38 between 2015 and October 2019; increasing in frequency to 1:19 for December 2019 and 2022 RC drill programs. TMT procedures have inserted field duplicates in RC programs for every 20th sample since 2017. Field duplicates have generally performed well for all programs since 2015. For AVL diamond samples, an additional coarse crush (3.5mm) split was taken for every 20th sample and analysed for the 2019, 2020 and 2022 core samples, to test splitting at the lab. No material issues were identified with the laboratory splitting. TMT diamond sampling programs submitted two quarter core samples as duplicates for the same interval every 20th sample, with good repeatability demonstrated. Less QAQC information is available for RC and DDH programs prior to 2015, however, the majority of drill metres in the Mineral Resource estimate are from the drill programs completed since 2015.
	Measures taken to ensure that the sampling is representative of the in-situ	140 - 143mm 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

Criteria	JORC Code Explanation	Commentary
	material collected, including for instance results for field duplicate/second-half sampling.	hosted vanadium, which shows good consistency in interpretation between sections and occurs as percentage values in the samples, the sample sizes are representative. RC samples are split at the collection stage to get representative (2.5-3kg) duplicate samples. Core has been cut with a saw to produce half or quarter core for lab samples. The entire core sample and all the RC chips are crushed and /or mixed before splitting to smaller sub-samples by the laboratory for assaying. Internal laboratory procedures are designed to test all stages of sub-splitting at the laboratory, and have been completed for all campaigns of drilling, with records retained in lab certificates for each batch. No material issues with laboratory sub-splitting techniques have been identified. Field duplicates for RC by both AVL and TMT and duplicate quarter core intervals submitted by TMT for diamond drilling do not show material issues with repeatability of sample results.
	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 an iron ore suite by XRF (24 elements) on a lithium-borate fused bead, 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, 2018 and 2022 RC samples have SATMAGAN analysis on the pulps, 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 and 2022. 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. Most of the AVL and 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 2 standard deviations of the expected values. The other elements show no obvious material bias. TMT standards, analysed at a different laboratory, are closer to the expected value lines, with some drift observed that was corrected prior to results deviating from within 2 standard deviations of the expected values. The 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. ICP check analysis on select pulps from the Project in 2019 demonstrated repeatability of the degree of detection for all XRF elements, supporting the results by XRF are total detection. Umpire laboratory sampling by both AVL and TMT show good repeatability by different laboratories.

Criteria	JORC Code Explanation	Commentary
		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.	Magnetic susceptibility geophysical readings are taken for the Australian Vanadium Project core and RC samples and recorded in the database. 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. All 2020 DDH and 2022 RC and DDH drilling has KT-10 magnetic susceptibility data, collected at 50cm intervals on 2020 core, 33cm intervals on 2022 core and 1m intervals on 2022 RC samples. During early 2024, magnetic susceptibility data for the TMT drill holes in domains 2, 21 and 10 were repeated with a KT-10 unit to standardise and validate the existing 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. 2022 diamond holes and select 2022 RC holes were also surveyed with a down-hole magnetic susceptibility tool, using a Geovista Sonde tool, with an SI unit of 10^{-5}. 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. Televiewer surveys using both Optical Televiewer (OTV) above the water table and Acoustic Televiewer (ATV) below the water table were completed on select drill holes from 2019 onwards. In total 6,676.5m of hole have been surveyed over 90 holes at the Project, with data used to inform geotechnical studies.
	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 from both the primary and secondary assay laboratories show no material issues with the main variables of interest for the recent assaying programs. Blanks, Field Duplicates, CRMs and secondary coarse crush splits of diamond samples or second quarter core diamond duplicate samples have all been employed by AVL and TMT to determine accuracy of sub-sampling and subsequent analysis. No material issues with analysis or sub-splitting have been identified. CRMs tend to assay with a bias slightly lower than the certified values for V_2O_5, but are still within 2 standard deviations of the expected mean.
Verification of Sampling and Assaying	The verification of significant intersections by either independent or alternative company personnel.	Logging and assay results for significant intersections has been reviewed by internal AVL geologists including the Exploration Manager and Principal Geologist, including inspection of core holes and chip trays relative to assay results and the model interpretation. AVL and TMT geologists have reviewed drill material from programs by both companies as a further verification of results. Independent Resource Consultant, Lauritz Barnes from Trepanier has visited site during 2019 and the Company core storage facility in Bayswater and reviewed the core trays for select diamond holes during 2018 and 2019.
	The use of twinned holes.	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 in the northern Block 20 during 2015. During 2022, in Block 50, three diamond core holes were drilled as RC twins,

Criteria	JORC Code Explanation	Commentary
		with two of them sampled (the other being held for metallurgy material); in Block 62 two diamond core holes were drilled as RC twins, with one assayed and one retained for metallurgy sample; in Block 70 four diamond core holes were drilled, with one being an RC twin that was assayed, and the other three being assayed, but too far from existing RC holes to be considered twins. Results demonstrate repeatability of the RC assays with diamond core assaying. No issues are apparent with bias of sample through loss of fines or volumetric differences between RC and diamond in AVL drilling. TMT drilled five RC to diamond core twin holes at Gabanintha North with results demonstrating excellent repeatability. At Yarrabubba, four RC twins to diamond core holes were drilled, also with good repeatability. These results suggest there are no issues with loss of fines or volumetric differences between RC and diamond holes in drilling by TMT. Twin RC holes were also drilled for three existing RC holes drilled in 2000, and 2007 to determine repeatability of the earliest RC drilling at the Project. Results demonstrate the historical holes are repeatable.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Prior to October 2019 all primary AVL geological data has been collected using paper logs and transferred into Excel spreadsheets. Since that time all geological logs have been collected digitally into library-attributed excel tables; then post 2019, directly into LogChief, that is a point of entry validation field data program. TMT data has been collected into Microsoft Excel logging sheets with libraries attached to assist in validation of data entered. Data was validated by the Company geologists, then loaded to the Company Database, hosted by external database consultants in the case of AVL, and internally by TMT. AVL have merged the TMT database into the AVL database hosted by external consultants, and a full audit and validation was completed along with QAQC review as part of that process in early 2024. All 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. Native lab files and certificates are retained for all programs of drilling, with the exception of the earliest 1998 and 2000 era drilling.
	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 drilling from 2018 onwards, 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 2018 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. TMT survey control has been verified to align with AVL survey control through communication and re-issue of TMT collar pick ups with a survey company that was used by both AVL and TMT. 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 2015 (from GRC0159). Some AVL 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

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		measurement. These older RC holes were almost all 120m or less in depth, limiting the possibility of significant deviation by the end of the hole.
	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 Mineral Resource updates since March 2020, including this one. 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 and Gabanintha north 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. South of 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. Adjustment of this surface down 1.25m was applied before it was merged with the higher quality data to the north, to better align to the collar pick ups by professional survey companies in Blocks 70 and 80 (Yarrabubba). In 2015 a DGPS survey of hole collars and additional points was taken at conclusion of the drill program. 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.	Drill spacing from the 2022 diamond and RC programs infilled portions of Blocks 50 and 60 to at least 70m spaced sections with 30m centres on sections throughout early mine-life portions of previous BFS pit optimisations (April 2022 study). In areas of BFS pit optimisation in the southern blocks that were Inferred in Blocks 50 and 60, and in Block 70 that has never been optimised, drill sections were infilled to at least 140m spaced sections with 30m spaced drill centres on section. Overall, the deposit between Blocks 15 and 70 is now drilled to 70m spaced sections in areas of Measured or Indicated category; 140m spaced sections in the remainder of the Indicated category; and up to 280m and in a single instance 350m spaced sections in the Inferred category areas. All drill sections have 25 - 30m spaced drill centres, with the number of drill holes per section ranging from 2 to 11, testing HG mineralisation to depths between 60m vertical distance to 300m vertical distance.

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		TMT drilling is typically on a 50 or 100m spaced sections with 50m spaced drill centres on each section. There are sections of the deposit at Gabanintha north where large intrusions dislocate the mineralisation that are drilled at broader spacing. These are within areas of no mineral resource or Inferred mineral resource.
	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 45° to 50° magnetic to the west, with the holes dipping approximately 60° to the east. The drill fences are arranged along the average strike of the HG mineralised horizon, which strikes approximately 310° to 315° magnetic south of a line at 7015000mN and approximately 330° 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 exceptions are 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 HG domain to gain metallurgical sample, drilled during 2019 (these holes do not contribute assay data to the estimation) and geotechnical diamond core holes drilled in Blocks 50 and 60 during 2020 that are drilled towards 050 degrees at -70 or -80 degrees. TMT drilling at -60 degrees results in downhole intercepts that are approximately 120% of the true width intercepts. Some holes drilled for metallurgy sample at -70 or -80 degrees have thicker apparent intercepts compared to the true widths.
	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, with rare exceptions. Typically, holes in the Mineral Resource estimate intersect the HG from the top of the domain to the bottom of the domain, representing the full zone. The AVL 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 Company core shed in Perth, or stored in a secure location at a local station close to site. RC chip samples were transported in bulk bags to the assay laboratory. Archive 1m calicos and all reject material from assaying have been retained wherever material. Green bags are rehabilitated once assays results are back (if used). 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.

Criteria	JORC Code Explanation	Commentary
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, and the TMT database audited and merged with the AVL database in early 2024. In 2017 geological data was revised after missing lithological data was sourced. The data integrity and consistency of the drill hole database shows sufficient quality to support resource estimation.

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. AVL are working collaboratively with the Prescribed Body Corporate for Yugunga-Nya People, and the Traditional Owner group to progress surveys and heritage agreements for the Project. Mining Lease M51/878 covering most of E 51/843 and all of P51/2566, P51/2567, P51/2634 and E51/1396 was granted by DMIRS during 2020. The remainder of the deposit resource area within Blocks 15 to 70 is covered by Mining Lease Application MLA51/897 that overlies a portion of E51/843, P51/3076 and E51/1534 and all of P51/3075 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). All tenure in the name of KOP Ventures is now owned by AVL following the successful Scheme of Arrangement for AVL to acquire all TMT shares. This tenure consists of approved mining licences over the Gabanintha (M 51/883) and Yarrabubba (M 51/884) portions of the deposit. The tenure also includes granted and pending exploration licences, prospecting licences, general licences and miscellaneous licences as part of the overall tenement package. 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 select AVL tenements (E 51/843; M 51/878; E 51/1534; E 51/1899). 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 2022. 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). TMT has completed extensive resource development drilling and studies on the Gabanintha North and Yarrabubba extensions of the Block 15 to 70 portion of the deposit between 2016 and 2023. Drill data from this work forms the basis for the Gabanintha North and Yarrabubba (Block 80) portions of this Mineral Resource update. Prior to this update, the previous Mineral Resource update for the TMT Gabanintha and Yarrabubba portions of the deposit (MTMP) were completed by Environmental Resources Management - ERM (formerly CSA Global) during 2022.
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 northwest Yilgarn Craton. The project lies within the Gabanintha and Porlell Archaean greenstone sequence, specifically the Meeline Suite, oriented approximately NW-SE and is adjacent to the Meekatharra greenstone belt. 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. Sheared norite forms the immediate footwall to the massive magnetite layer at the base of the sequence of mineralised units, with leucogabbro extending hundreds of metres to the east. Cross cutting late dolerites trending northeast to northwest cut the deposit in some places, and there are thin cross cutting pegmatite intrusions in the Yarrabubba Block 80 portion, and thin cross cutting quartz diorites in the Gabanintha north portion of the deposit. The high grade mineralisation ranges in thickness from several metres to up to 20 to 30m in thickness. Low grade units range from 1 – 2 m thick to 20m thick down hole. The bedrock geology is overlain by modern granite derived sandsheet throughout the middle portion of the strike extent, with sub-horizontal deposits of low grade units that are detrital high grade cobbles in sandsheet matrix overlying the western flanks in areas of significant erosion and deposition (largely throughout the middle of the deposit in Blocks 15 to 70).

		The oxidized and partially oxidised weathering surface extends 20 to 80m below surface and the magnetite in the completely oxidised 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. This Mineral Resource update ASX release contains full details of new drillhole intercepts included in the revised model. For further information in addition to this release, see ASX:AVL announcements dated 1 November 2021, 4 March 2020, and 28 November 2018; and see TMT announcements dated 7 November 2022, 10 November 2021, 1 July 2020, and 29 March 2019. Historical TMT announcements listed here are available on the Technology Metals website at https://www.tmtlimited.com.au/investors/asx-announcements/ .
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.
	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) and 2020 geotechnical diamond core was drilled at -70 or -80 degrees. This decreases the angle of intersection with the mineralisation for those holes.

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:AVL releases of 1 November 2021, 4 March 2020, and 18 November 2018 and TMT releases of 7 November 2022, 10 November 2021, 1 July 2020, and 29 March 2019 which list drilling intercepts, maps and sections for the previous three Mineral Resource updates. Drill plans (Figure 3) and sections (Figure 4, Figure 5, Figure 6, Figure 7) are provided within the body of this report to contextualise new drill results in this Mineral Resource update.
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 this announcement and previous announcements for Mineral Resource updates.
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).	Shallow intercept drilling and extensional resource drilling to very southern-most end of the deposit (Block 90 – see Figure 2 and Figure 3) are under consideration. Should pit optimisation updates planned for 2024 be drilling constrained with results demonstrating economics of mining deeper, deep drilling could extend the Mineral Resource to depth.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Figure 2 in this report shows total magnetics imagery over the strike extent of the project, with existing drill collars. The entire strongly magnetic trend is considered prospective for massive magnetite V-Ti mineralisation.

Section 3 - Estimation and Reporting of Mineral Resources

Criteria	JORC Code Explanation	Commentary
Database Integrity	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	All the drilling was logged into Logchief Field Capture software, Microsoft Excel, or logged onto paper and then transferred to a digital form and loaded into a Microsoft SQL Server relational drill hole database using DataShed™ management software. Logging information was reviewed by the responsible geologist and database administrator prior to final load into the database. All assay results were received as digital files, as well as the collar and survey data. These data were transferred directly from the received files into the database. All other data collected for the Australian Vanadium Project were recorded as Excel spreadsheets prior to loading into SQL Server. Magnetic susceptibility data is both written on paper and downloaded from the KT-10 unit and merged against the sample data prior to load to the Company database. The data have been periodically checked by AVL and TMT personnel, the database administrator as well as the personnel involved in all previous Mineral Resource estimates for the Project.
	Data validation procedures used.	The data validation was initially completed by the responsible geologist logging RC holes or the core and marking up the drill hole for assaying. Data was captured into a point of entry validation package (LogChief) for all AVL programs after 2019. For earlier programs, the logging was captured directly into Excel files with libraries applied or recorded on paper then entered into excel. Assay dispatch sheets were compared with the record of samples received by the assay laboratories. TMT drill programs all utilised Excel templates with attached libraries, and validated by both the field personnel and the database administrator. Normal data validation checks were completed on import to the SQL database. Data has also been checked back against hard copy results and previous mines department reports to verify assays and logging intervals. Both internal (AVL) and external (Schwann, MASS, ERM - formerly CSA and AMC) validations are/were completed when data was loaded into spatial software for geological interpretation and resource estimation. All data have been checked for overlapping intervals, missing samples, FROM values greater than TO values, missing stratigraphy or rock type codes, downhole survey deviations of ±10° in azimuth and ±5° in dip, assay values greater than or less than expected values and several other possible error types. Furthermore, each assay record was examined and mineral resource intervals were picked by the Competent Person. QAQC data and reports have been checked by the database administrator, MRG. MASS & Schwann and CSA both reported on the available QAQC data for the Australian Vanadium Project.
Site Visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	The drill location was inspected by John Tyrrell of AMC in 2015 for the initial JORC 2012 compliant resource estimation. AVL Principal Geologist, Gemma Lee, has visited the Australian Vanadium Project regularly since 2019, including working on campaigns of drill supervision and mapping. Gemma has been familiar with the Australian Vanadium Project iron-titanium-vanadium orebody since 2017. Resource Consultant, Lauritz Barnes of Trepanier Pty Ltd, visited the Australian Vanadium Project drilling sites and inspected outcrops in March 2019. The geology, sampling, sample preparation and transport, data collection and storage procedures were all discussed and reviewed with the responsible geologist for the 2015, 2017, 2018 and 2019 drilling. ERM (formerly CSA) personnel that were competent persons for the TMT mineral resource updates visited site during two drill programs (2017 and 2018) and a third site visit was conducted in 2021 to verify collar locations and review outcrop of mineralisation at the Project. A laboratory visit was also undertaken by the competent person for the TMT mineral resource in 2021 to review sample preparation and assay methods.

Criteria	JORC Code Explanation	Commentary
	If no site visits have been undertaken indicate why this is the case.	Not applicable. Site visits by Competent Persons have been undertaken.
Geological Interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	The Australian Vanadium Project's vanadium mineralisation lies along strike from the Windimurra Vanadium Mine and the oxidised portion of the HG massive magnetite/martite mineralisation outcrops for almost 14km in the company held lease area. Detailed mapping and mineralogical studies have been completed by AVL and TMT company personnel and contracted specialists between 2000 and 2019, as well as multiple infill drilling programs to test the mineralisation and continuity of the structures. These data and the relatively closely-spaced drilling has led to a good understanding of the mineralisation controls. 3D magnetic inversion modelling from 50m spaced flight lines (2006 survey by SGC) provides strong evidence of deposit continuity and the major fault boundaries along strike. The mineralisation is hosted within altered gabbro and is easy to visually identify by the magnetite/martite content. The main HG unit shows consistent thickness and grade along strike and down dip and has a clearly defined sharp boundary. The lower grade disseminated bands also show good continuity, but their boundaries are occasionally less easy to identify visually as they are more diffuse over a metre or so.
	Nature of the data used and of any assumptions made.	No assumptions are made regarding the input data.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	Alternative interpretations were considered in the current estimation and close comparison with the previous resource models was made to see the effect of the new density data and revised geology model. Continuity of the LG units, more closely defined from lithology logs, is now better understood and the resulting interpretation is more effective as a potential mining model. The near-surface alluvial and transported material has again been modelled in this estimation. The impact of the current interpretation as compared to the previous interpretation is a greater confidence in areas of infill drilling. Comparison of the TMT and AVL modelling styles during the integration of the Mineral Resource into one geology model and estimate for this update has demonstrated both companies have defined the HG and LG mineralised units in very similar and consistent manners, validating the geological modelling.
	The use of geology in guiding and controlling Mineral Resource estimation.	Geological observation has underpinned the resource estimation and geological model. The HG mineralisation domain has a clear and sharp boundary and has been tightly constrained by the interpreted wireframe shapes. A low silica sub-domain has now been included within the HG which improves the accuracy of the estimation within the HG. The LG mineralisation is also constrained within wireframes, which are defined and guided by visual (from core) and grade boundaries from assay results. The LG mineralisation has been defined as four sub-domains, which strike sub-parallel to the HG domain. In addition there is a sub parallel laterite zone and two transported domains above the top of bedrock surface. The resource estimate is constrained by these wireframes. Domains were also coded for oxide, transition and fresh, as well as above and below the alluvial and bedrock surfaces. The extents of the geological model were constrained by fault block boundaries. Geological boundaries were extrapolated to the edges of these fault blocks, as indicated by geological continuity in the logging and the magnetic geophysical data.

Criteria	JORC Code Explanation	Commentary
	The factors affecting continuity both of grade and geology.	Key factors that are likely to affect the continuity of grade are: • The thickness and presence of the HG massive magnetite/martite unit, which to date has been very consistent in both structural continuity and grade continuity. • The thickness and presence of the LG banded and disseminated mineralisation along strike and down dip. The LG sub-domains are less consistent in their thickness along strike and down dip with more pinching and swelling than for the HG domain. • SW-NE oriented faulting occurs at a deposit scale and offsets the main orientation of the mineralisation. These regional faults divide the deposit along strike into kilometre scale blocks. Internally the mineralised blocks show very few signs of structural disturbance at the current level of drilling. • The presence of zones of HG stoping caused by post-mineralisation cross cutting dolerites and pegmatites at Yarrabubba and quartz diorite units at Gabanintha North.
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	The massive magnetite/martite unit strikes approximately 18 km, with around 15.2 km of that strike included in this Mineral Resource update, including Gabanintha North, Blocks 15 – 70 and Block 80 - Yarrabubba. The HG zone is stratiform and ranges in thickness from less than 10m to over 20m true thickness. The LG mineralised units are sub-parallel to the HG zone, and also vary in thickness from less than 10m to over 20m. All of the units dip moderately to steeply towards the southwest, with the exception of two predominantly alluvial units (domains 7 and 8) and a laterite unit (domain 6) which are sub-horizontal with about 10 degrees dip towards the southwest. All units outcrop at surface in some places, but the LG units are difficult to locate as they are more weathered and have a less prominent surface expression than the HG unit. In Blocks 40 to 70 there is no surface expression, with the bedrock geology covered by a modern sandsheet unit that averages 10m thick. Gabanintha North, Block 20 and 30 and Yarrabubba Block 80 have moderate to significant surface outcrop of the HG unit. The HG and LG units are currently interpreted to have a depth extent of at least approximately 300m below surface based on the deepest holes, with the 3D magnetics inversion model implying a much deeper extent. Mineralisation is currently open to the south of Yarrabubba Block 80 and at depth.
Estimation and Modelling Techniques	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	Grade estimation was completed using Ordinary Kriging (OK) for the Mineral Resource estimate. Dassault Systemes GEOVIA Surpac™ software was used to estimate grades for V_2O_5, TiO_2, Fe_2O_3, SiO_2, Al_2O_3, Cr_2O_3, Co, Cu, Ni, S, magnetic susceptibility and loss on ignition (LOI) using parameters derived from statistical and variography studies. The majority of the variables estimated have coefficients of variation of significantly less than 1.0, with Cr_2O_3 being the exception. Drill hole spacing varies from approximately 70 m to 100 m along strike by 25 m to 50 m down dip, to 350 m along strike by 30 m to 90 m down dip with the largest down dip spacing where deep diamond holes were drilled on select sections in 2009. Drill hole sample data was flagged with numeric domain codes unique to each mineralisation domain. Sample data was composited to 1 m downhole length and composites were terminated by a change in domain or oxidation state coding. No grade top cuts were applied to any of the estimated variables as statistical studies showed that there were no extreme outliers present within any of the domain groupings. Grade was estimated into separate mineralisation domains including a HG bedrock domain with low silica sub-domain, four LG bedrock domains and LG alluvial and laterite domains. Each domain was further subdivided into a fault block, and each fault block was assigned its own orientation ellipse for grade interpolation. Downhole variography and directional variography were performed for all estimated variables for the HG domain and the grouped LG domains. Grade continuity varied from hundreds

Criteria	JORC Code Explanation	Commentary
		of metres in the along strike directions to sub-two hundred metres in the down-dip direction although the down-dip limitation is likely related to the extent of drilling to date.
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	Prior to 2017, there had been five Mineral Resource estimates for the Block 15 to 70 portion of the Australian Vanadium Project deposit. The first, in 2001 was a polygonal sectional estimate completed by METS & BSG. The subsequent models by Schwann (2007), MASS & Schwann (2008) and CSA (2011) are kriged estimates. AMC (2015) reviewed the geological interpretation of the most recent previous model (CSA 2011), but used a new interpretation based on additional new drilling for the 2015 estimate. In 2017 a complete review of the geological data, weathering profiles, magnetic intensity and topographic data as well as incorporation of additional density data and more accurate modelling techniques resulted in a re-interpreted mineral resource. This was revised in July and December 2018. A Mineral Resource update (adding magnetic susceptibility and new drill data) was completed in March 2020. A further Mineral Resource update was completed in November 2021, incorporating improved density regression work and additional magnetic susceptibility data. This Mineral Resource update in May 2024 is the most recent for the deposit, incorporating over 8,000 additional metres of RC and diamond drilling, additional down-hole density data with updated density regressions and also including re-modelling of the entire deposit strike (including Gabanintha North and Yarrabubba Block 80 in addition to Block 15 to 70 previously reported by AVL) into one consistent set of domains, following the merger to acquire the TMT portion of the deposit. Mineral resource updates for the Gabanintha North and Yarrabubba Block 80 portions of the deposit were completed by ERM Group (CSA Global Pty Ltd) as per the below list: - November 2022 – Gabanintha North and Yarrabubba Block 80 - November 2021 – Yarrabubba Block 80 - July 2020 – Yarrabubba Block 80 - March 2019 – Gabanintha North - March 2018 – Gabanintha North - December 2017 – Yarrabubba Block 80 - June 2017 – Gabanintha North No mining has occurred to date at the Australian Vanadium Project, so there are no production records.

Criteria	JORC Code Explanation	Commentary
	The assumptions made regarding recovery of by-products.	Test work conducted by the company in 2015 identified the presence of sulphide hosted cobalt, nickel and copper, specifically partitioned into the silicate phases of the massive titaniferous vanadiferous iron oxides which make up the vanadium mineralisation at the Australian Vanadium Project. Subsequent test work has shown the ability to recover a sulphide flotation concentrate containing between 3.8 % and 6.3% of combined base metals treating the non-magnetic tailings produced as a result of the magnetic separation of a vanadium iron concentrate from fresh massive magnetite. See ASX:AVL Announcement dated 6 April 2022 for additional information on metallurgy and by-products. Leached calcine of 53.3% Fe, 8.89% Ti, 0.93% Si and 1.55% Al has been generated from the pilot scale testwork and is considered an iron-titanium co-product when generated from AVL's relocated processing plant site at Tenindewa. Further characterisation testwork and exploration of avenues to improve the calcine product quality are under review. TMT completed significant testwork for gravity separation of a titanium co-product from the tails of the beneficiated magnetite concentrate. Further work is planned to prove and cost this by-product.
	Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterization).	Estimates were undertaken for Fe_2O_3, SiO_2, TiO_2, and Al_2O_3, which are non-commodity variables, but are useful for determining recoveries and metallurgical performance of the treated material. Estimated Fe_2O_3% grades were converted to Fe% grades in the final for reporting (Fe% = Fe_2O_3/1.4297). Estimates were also undertaken for Cr_2O_3 which is a potential deleterious element.
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units.	The Australian Vanadium Project block model uses a parent cell size of 40 m in northing, 8 m in easting and 10 m in RL. This corresponds to approximately half the distance between drill holes in the northing and easting directions. Variable sub-blocking to 10m in the northing, 1 metre in the easting and 2.5 metres in the RL was allowed. Accurate volume representation of the interpretation was achieved. Grade was estimated into parent cells, with all sub-cells receiving the same grade as their relevant parent cell. Search ellipse dimensions and directions were adjusted for each fault block. Three search passes were used for each estimate in each domain. The first search was 120m and allowed a minimum of 8 composites and a maximum of 24 composites. For the second pass, the first pass search ranges were expanded by 2 times. The third pass search ellipse dimensions were extended to a large distance to allow remaining unfilled blocks to be estimated. A limit of 5 composites from a single drill hole was permitted on each pass. In domains of limited data, these parameters were adjusted appropriately. No selective mining units were considered in this estimate apart from an assumed five metre bench height for open pit mining. Model block sizes were determined primarily by drill hole spacing and statistical analysis of the effect of changing block sizes on the final estimates.
	Any assumptions about correlation between variables.	All elements within a domain used the same sample selection routine for block grade estimation. No co-kriging was performed at the Australian Vanadium Project.
	Description of how the geological interpretation was used to control the resource estimates.	The geological interpretation is used to define the mineralisation, bedrock waste, oxidation/transition/fresh and alluvial domains. All of the domains are used as hard boundaries to select sample populations for variography and grade estimation.

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	Discussion of basis for using or not using grade cutting or capping.	Analysis showed that none of the domains had statistical outlier values that required top-cut values to be applied.
	The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	Validation of the block model consisted of: • Volumetric comparison of the mineralisation wireframes to the block model volumes. • Visual comparison of estimated grades against composite grades. • Comparison of block model grades to the input data using swathe plots. • Statistical comparison of composite grades and block model grades. As no mining has taken place at the Australian Vanadium Project to date, there is no reconciliation data available.
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	All mineralisation tonnages are estimated on a dry basis. Compensated density logs are an insitu density, with further work planned to calculate a porosity and a moisture factor using down hole resistivity data. Archimedes SG determinations have been used to validate the compensated density log data, with excellent correlation in the massive magnetite HG domain. Low grade and waste units demonstrate lower Archimedes results compared to the compensated density log. As such, a 5% reduction has been applied to the density calculated for via regression for these domains.
Cut-Off Parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	A nominal 0.4% V_2O_5 wireframed cut off for LG and a nominal 0.7% V_2O_5 wireframed cut off for HG has been used to report the Mineral Resource at the Australian Vanadium Project. Consideration of previous estimates, as well as the current mining, metallurgical and pricing assumptions, suggest that the currently interpreted mineralised material has a reasonable prospect for eventual economic extraction at these cut off grades.
Mining Factors or Assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	AVL completed a mining Scoping Study in October 2016 for the Australian Vanadium Project. The primary mining scenario being considered is conventional open pit mining. In September 2018, AVL released a base case PFS which included key assumptions supporting a planned open pit vanadium mining operation at the Australian Vanadium Project. The March 2020 Mineral Resource was the basis for new optimisation studies during 2020 for an open pit mine plan incorporating the additional Indicated resources, upon which a PFS Update released in December 2020 was based. The previous AVL November 2021 Mineral Resource was the basis for the BFS released by AVL in April 2022 for a Project with open pit mining of Blocks 15 to 62 for a 25 year mine life, with open pit optimisations, mine schedule, metallurgical processing at site (Crushing, Milling and Beneficiation) and a vanadium pentoxide processing plant at Tenindewa in the Shire of Geraldton, with all associated financial modelling. This May 2024 Mineral Resource update provides the basis for an updated Optimised Feasibility Study that is in progress, that will optimise the entire Project including pit optimisations, updated recovery parameters based on ongoing metallurgical studies, trade off studies for key infrastructure locations, mine schedules and current costing to underpin the Financial Model for the Project.

Criteria	JORC Code Explanation	Commentary
Metallurgical Factors or Assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	Studies have been completed at the Project for numerous phases of feasibility study by both AVL and TMT with a large body of data and analytics available to demonstrate amenability to magnetic beneficiation and AMV roasting to produce high purity vanadium pentoxide. Suitability of co-products calcined iron ore and titanium concentrate have also been studied and analysed with work on-going. The metallurgical testwork program for the AVL BFS followed on from the PFS conducted from 2017 to 2018 and historical testwork dating from 2004. This earlier work focussed on comminution and beneficiation. It concluded that ores from the Project are relatively soft and amenable to conventional Autogenous Grinding (AG) or Semi-Autogenous Grinding (SAG) and that beneficiation through magnetic separation was effective, achieving concentrate grades of about 1.4% V_2O_5. Preliminary roast-leach work for fresh concentrate demonstrated vanadium extractions up to 86%. These conclusions justified the funding of the Bankable Feasibility Study, which included: • A pilot scale study of the crushing, milling and beneficiation (CMB) circuit • Benchscale roast-leach optimisation testwork • A pyrometallurgy pilot scale study • A leaching pilot plant and precipitation work • Evaluation of an FeTi coproduct potential. The results of the CMB pilot, benchscale roast-leach optimisation work, and partial results of the pyrometallurgy pilot were released as a PFS Update in December 2020. Remaining testwork for the BFS concluded in November 2021. Samples for the BFS pilot-scale testwork were obtained in January 2019 through a diamond (PQ) drilling program that provided 28 t of core. Core from 13 holes was delivered to ALS Metallurgy in Balcatta, Western Australia. Fresh, oxide and transitional domains within the core were identified and selected sections were blended into two samples in ratios expected for the first five years of mining and for the life of mine. Representative footwall and hanging wall dilution samples were included in the pilot plant feed. Selected core intervals from each weathering zone and domain underwent small-scale variability and comminution testwork. The CMB pilot comprised a sequence of SAG milling, medium intensity magnetic separation (MIMS), wet high intensity magnetic separation (WHIMS), and reverse silica flotation. This novel arrangement of well-established processes was designed to recover oxide and transitional components of the ore that are normally rejected in conventional plants. This process, which is being patented by AVL, demonstrated an overall vanadium recovery of 76% for the LOM blend at a grade of 1.37 % V_2O_5 and 1.68% SiO_2. The vanadium recovery for the Y0-5 blend was 69% at a grade of 1.39% V_2O_5 and 1.83% SiO_2. The lower recovery for the Y0-5 sample is likely due to the higher proportion of weakly-magnetic oxide material in the early years of mining. Concentrates generated in the CMB pilot were subjected to the pilot scale salt-roast process at Metso's Danville facility in the USA. A key finding was that pelletising the concentrate significantly improved the extraction of vanadium to soluble vanadate in the roasted product. Extractions of up to 94% for the Y0-5 concentrate were achieved, compared to 86% reported in the 2018 PFS. Extractions of 92-93% were achieved for the LOM concentrate. Pelletisation establishes an intimate contact between the reagents and concentrate, enabling a more complete conversion to a soluble vanadate during the roasting process. An optimisation program showed that vanadium conversion was maximised with a roast temperature in the range of 1250°C to 1325°C. The conversion was not dependent on kiln residence times at the points tested, or the ramp-up times used.

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		The roasted pellets were run through the hydrometallurgy pilot plant at ALS in Perth. The leach was conducted in a rotating drum, fed by a vibrating feeder and hopper. Surveys showed a vanadium extraction of 88% for Y0-5 and 85% for LOM. A re-pulp wash of samples from the residues increased the recovery for both the Y0-5 and the LOM, leading to the design of a counter-current wash step to maximise vanadium recovery and provide a saleable FeTi coproduct. The counter-current wash was conducted in a series of columns, designed to simulate a full-scale heap-wash process. The vanadium extraction from these columns was 23% to 31%, meaning the combined drum leach and wash extraction was 91-92%. Upon completion of the wash program, a sample of the barren residue was subjected to an agitated hot water wash at 90°C, as a diagnostic leach for soluble vanadium in the residue. The residual vanadium after the hot water wash was 0.062%, comparable to a range of 0.066%-0.078% for the residue in the columns. It was concluded that 98-99% of soluble vanadium was extracted in the drum leach/column wash process. The majority of the residual vanadium is likely locked up as insoluble phases such as vanadium silicates. Vanadium was recovered from leach solutions via the ammonium metavanadate (AMV) precipitation process. The AMV process is applicable to the highly concentrated vanadium solutions generated in AVL's leach process. It is conducted at ambient temperature, near-neutral pH and has simple process control requirements. The final product averaged 99.5% V_2O_5 over three runs, a complete suite of assays for the V_2O_5 product is shown below. Assays from three V_2O_5 production runs.

	V_2O_5	Fe	Cu	Zn	Pb	Cr	Si	Mg	Al	K	Na
Sample 1	99.25	0.000	0.001	0.001	0.002	0.033	0.001	0.000	0.207	0.002	0.070
Sample 2	99.60	0.020	0.003	0.001	0.004	0.036	0.000	0.000	0.133	0.000	0.020
Sample 3	99.60	0.000	0.004	-0.001	0.002	0.039	0.000	0.000	0.157	0.000	0.020

		FeTi Coproduct The iron titanium coproduct generated by the Project will be exported through the Port of Geraldton, without further beneficiation or treatment. The coproduct is a low-cost titanium source that can be used as an additive to blast furnace operations. Titanium is added to sintering blends to improve furnace refractory protection and to minimise maintenance costs associated with furnace relines. AVL's FeTi coproduct will enter the market as a stable alternative to existing sources of similar material. Importantly the FeTi coproduct contains low grades of other contaminants such as sulphur (0.038%) and phosphorous (0.002%). The FeTi coproduct has an average iron grade of 54-55% and has high TiO2 levels at 15%. The expected output is 0.9 million tonnes per year. Beneficiation at a lab-scale has been demonstrated through reduction roasting, with iron grades of up 67% Fe. AVL has signed two Letters of Intent for the intended sale of the FeTi coproduct, the first with Shenglong Metallurgy International. Shenglong Metallurgy International is the Hong Kong based commercial arm of Guangxi Shenglong Metallurgy Co. Ltd, a 12 Mtpa steel producer located in southern China's Fangchenggang port. The second is with Wingsing International Limited (Wingsing), the commercial arm of Tianzhu Steel which is a 5 Mtpa steel producer, currently under relocation and an expansion project to increase the steel capacity to approximately 7 Mtpa. The LOI with Wingsing relates to 100,000 tpa of the FeTi coproduct.

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		The Company's consultant in China continues to build relationships with steel producers to secure further interest in the product. Post BFS, AVL has continued to work on variability testwork for the Crushing, Milling and Beneficiation circuit design, and further comminution testwork on southern blocks HG material. Further pyromet sample work has demonstrated an ultra-high purity vanadium pentoxide product can be produced. TMT also completed studies demonstrating transitional and fresh feed beneficiate well with a P80 of 150um at Yarrabubba and P80 of 250um at Gabanintha producing a concentrate with low silica and high vanadium and iron, suitable for roast leaching. The finer grind size at Yarrabubba was more suitable for ilmenite recovery from tails through a gravity circuit. Further work is in progress to refine CMB design for feed from the entire deposit strike, with consideration to mine schedules still in development. For further detail on metallurgical studies, see ASX:AVL announcements dated 25 March 2024, 11 March 2024, 6 April 2022, 13 December 2021 and 21 September 2021. See TMT announcements dated 21 April 2022, 10 November 2021, 13 April 2021, 21 August 2019 and 26 March 2019.
Environmental Factors or Assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfield project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	Environmental studies and impact assessment are currently being undertaken for Feasibility and approvals work. For the AVL April 2022 BFS a commensurate level of study and design was completed for a Tailings Storage Facility (TSF) that will form part of an Integrated Waste Landform (IWL), the other portion of the IWL being waste rock from the mined pits. This work was undertaken by Golder and confirmed that the tails stream from the concentrator can be effectively stored and rehabilitated. Tailings seepage characterisation at Gabanintha has been completed, with controls required to prevent adverse impacts from tailings seepage into subterranean fauna habitat well considered. Waste streams from the processing plant at Tenindewa, including calcine residue and a sodium sulphate rich bleed solution are assumed to be managed within a lined storage facility. The location and design for the tailings storage facility and mineral waste storage areas will be reviewed as part of the ongoing approvals pathway and the Optimised Feasibility Study progresses.
Bulk Density	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.	Multiple campaigns of Archimedes SG determinations have been completed, on diamond core ranging from HQ to PQ size, and either whole, half or quarter core. The majority of Archimedes measurements (SG = Weight in Air/(Weight in Air – Weight in Water)) were completed on plastic wrapped core to account for porosity. The measurements are assumed to be dry mass basis. Samples were selected from all bedrock rock types at the deposit. Samples were selected from all oxidation states within the bedrock geology. Additional data sets collected were pycnometry (problematic due to no account for porosity); Down hole Compensated Density logs (gamma gamma method with two collimated detectors short and long distances from with source, with an eccentring arm to hold the tool against the wall of the hole, with measurements that account for hole rugosity, fluids in hole and porosity); and 'XSG' data that is a regression developed from Compton values to measured Archimedes SG determinations, applied to portions

Criteria	JORC Code Explanation	Commentary
		of diamond holes where continual XRF scanning was applied. All methods are determinations, rather than assumptions, with varying precision and accuracy. The following table lists all density determinations applied at the project:

Year	Data Type	Sample Count	Company	Description/ Comments
2010	Archimedes Method - HQ Core	97	Spectro Laboratory	Assumed unwrapped
2015	Archimedes Method - PQ Core	26	Bureau Veritas	Wrapped
2015	Pycnometry - RC Samples	200	Bureau Veritas	No porosity factor
2016	Archimedes Method – Half PQ Core	200	Bureau Veritas	Wrapped
2016	Pycnometry – PQ or HQ Half Core	100	Bureau Veritas	To determine porosity factor – samples measured with wrapped Archimedes Method prior to crushing and pycnometry
2018	Archimedes Method - HQ half core	13	Bureau Veritas	Wrapped
2019	Archimedes Method - PQ whole core or quarter core	486	AVL - SG Station	Wrapped, with check measurements unwrapped on 193 of the samples
2020	Down-hole Compensated Density Log Survey	16,766	Surtech Systems	10 cm readings over 1,674.8 metres on 18 holes
2021	XSG data from Minalyze XRF Scanning	467	Minalyze	1m composite SG measurements collected from portions of 15 core holes
2022	AVL Down-hole Compensated Density Log Survey	272,070	ABIMS	1 cm readings over 2,720.7 metres on 51 holes
2022	TMT Down-hole Compensated Density Log Survey	37,958	ABIMS	10 cm readings over 3,795.8 metres on 42 holes

<table>
<tr><th>Criteria</th><th>JORC Code Explanation</th><th>Commentary</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>2017 – 2022</td><td>TMT Caliper Measurement Volumetric Determinations</td><td>316</td><td>TMT - caliper</td><td>Caliper measured core cylinders with volumetric to mass SG calculation</td></tr>
<tr><td>2017 - 2022</td><td>TMT Archimedes Method – diamond core samples</td><td>788</td><td>TMT – SG Station</td><td>Unwrapped SG on samples from 74 diamond holes, caliper check samples completed</td></tr>
</table>
</td></tr>
<tr><td></td><td>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.</td><td>
The Archimedes method (SG = Weight in Air/(Weight in Air – Weight in Water)) was used for direct core measurements.
Downhole Compensated Density Logs (gamma-gamma survey) are calibrated (compensated) to account for rock porosity (voids) and fluids down hole.
XSG data, being calibrated to wrapped Archimedes SG determinations, also account for voids.
Sample selection for all of the bulk density determinations covered all bedrock units and all oxidation states, with some bias in Archimedes determinations to more competent rock.
</td></tr>
<tr><td></td><td>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</td><td>
Assumptions for bulk density determination for the Mineral Resource, underpinning decision to use Fe2O3 regressions for bulk density based on the Compensated Density Log dataset are:

Porosity of the rocks is low, based on visual observations of rock in many diamond core holes.
Unwrapped Archimedes determinations plotted against the CDL data down hole show reasonable validation of the CDL data
CDL data is a more robust measurement of the bulk density of the deposit, as it is not biased to more competent rock in the deposit with highly friable units not amenable to SG measurement by Archimedes or caliper volumetric-mass methods.
Data density is adequate to form regressions for the entire deposit strike length.
The regressions for bulk density to Fe_2O_3 percent of the rock is more robust than estimating using limited data points for either CDL or Archimedes data.

Regressions used to determine bulk density based on iron oxide content are as follows:
<table>
<tr><th>SG Lith Type</th><th>Block Model Domains</th><th>Oxidation State</th><th>Criteria</th><th>2024 Regression Formula</th><th>Area</th></tr>
<tr><td rowspan="2">HG10</td><td rowspan="2">10</td><td>Weak Magnetics (oxide)</td><td>Ln(magsus/Fe) < -1</td><td>bd_reg_24 = 0.0441 x Fe_2O_3 + 0.7448</td><td>Gabanintha North to end of Block 70</td></tr>
<tr><td>Moderate Magnetics (transitional)</td><td>Ln(magsus/Fe) < 2 and >= -1</td><td>bd_reg_24 = 0.0462 x Fe_2O_3 + 0.7243</td><td>Gabanintha North to end of Block 70</td></tr>
</table>
</td></tr>
</table>

Criteria	JORC Code Explanation	Commentary					
				Strong Magnetics (fresh)	Ln(magsus/Fe) > 2	bd_reg_24 = 0.0469 x Fe_2O_3 + 0.7297	Gabanintha North to end of Block 70
		Bedrock Waste and LG	1 - 5, 9 and 20 - 25	Oxide	Above base of complete oxidation surface	bd_reg_24 = 0.0064 x Fe_2O_3 + 2.331	Gabanintha North to end of Block 70
				Transition	Between base of complete oxidation surface and base of partial oxidation surface	bd_reg_24 = 0.011 x Fe_2O_3 + 2.5438	Gabanintha North to end of Block 70
				Fresh	Below base of partial oxidation surface	bd_reg_24 = 0.0086 x Fe_2O_3 + 2.9287	Gabanintha North to end of Block 70
		Barren Transp. Cover	27	Oxide	Above top of bedrock and not Transported LG 6, 7, 8.	Assign bd_reg_24 value: 2.18	Gabanintha North to end of Block 70
		Transp. LG	6, 7 and 8	Oxide	Above top of bedrock surface and where Fe_2O_3 >10% in domain 27	bd_reg_24 = 0.0034 x Fe_2O_3 + 2.4974	Gabanintha North to end of Block 70
		Dolerite	40	All	Dolerite intrusions	Assign bd_reg_24 value: 3.1	Whole deposit
		HG10	10	Weak Magnetics (oxide)	Ln(magsus/Fe) < -1	bd_reg_24 = 0.0441 x Fe_2O_3 + 0.7448	Yarrabubba Block 80
				Moderate Magnetics (transitional)	Ln(magsus/Fe) < 2 and >= -1	bd_reg_24 = y = 0.0433 xFe2O3 + 0.8907	Yarrabubba Block 80
				Strong Magnetics (fresh)	Ln(magsus/Fe) > 2	bd_reg_24 = 0.0313 x Fe2O3 + 2.0121	Yarrabubba Block 80
		Bedrock Waste and LG	1 - 5, 9 and 20 - 25	Oxide	Above base of complete oxidation surface	bd_reg_24 = 0.0042 x Fe2O3 + 2.1281	Yarrabubba Block 80
				Transition	Between base of complete oxidation surface and base of partial oxidation surface	bd_reg_24 = 0.007 x Fe2O3 + 2.5902	Yarrabubba Block 80
				Fresh	Below base of partial oxidation surface	bd_reg_24 = 0.0191 x Fe2O3 + 2.7216	Yarrabubba Block 80

Criteria	JORC Code Explanation	Commentary
		<table><tr><td>**Barren Transp. Cover**</td><td>27</td><td>Oxide</td><td>Above top of bedrock and not Transported LG 6, 7, 8.</td><td>Assign bd_reg_24 value: 2.18</td><td>Yarrabubba Block 80</td></tr><tr><td>**Transp. LG**</td><td>6, 7 and 8</td><td>Oxide</td><td>Above top of bedrock surface and where Fe_2O_3 >10% in domain 27</td><td>bd_reg_24 = 0.0034 x Fe_2O_3 + 2.4974</td><td>Yarrabubba Block 80</td></tr><tr><td>**Pegmatite**</td><td>60</td><td>All</td><td>Pegmatite intrusions</td><td>Assign bd_reg_24 value: 2.5</td><td>Yarrabubba Block 80</td></tr><tr><td>**Dolerite**</td><td>40</td><td>All</td><td>Dolerite intrusions</td><td>Assign bd_reg_24 value: 3.1</td><td>Whole deposit</td></tr><tr><td>**Quartz Diorite**</td><td></td><td>All</td><td>Quartz Diorite intrusions</td><td>Assign bd_reg_24 value: 2.7 - standard value of granitic rocks</td><td>Gabanintha North</td></tr></table> The final bulk density used for reporting of the Australian Vanadium Project Mineral Resource is based on the regression as it provides a more reliable local estimated bulk density.
Classification	The basis for the classification of the Mineral Resources into varying confidence categories.	Classification for the Australian Vanadium Project Mineral Resource estimate is based upon continuity of geology, mineralisation and grade, consideration of drill hole and density data spacing and quality, variography and estimation statistics (number of samples used and estimation pass). This Mineral Resource update considers Mineral Resource classification in terms of beneficiation and economic recovery of domains based on existing metallurgy and mining studies that underpin the prior AVL Bankable and Feasibility Study and TMT Definitive Feasibility Study. The lowest classification of Inferred is allocated to LG domains that require further metallurgy to determine current economic processing, regardless of where high data support and geological continuity evidence exists. Higher classification of Indicated and Measured is allocated to LG2 and HG domains that have been the subject of the majority of extractive and processing studies and financial modelling by AVL and TMT, where geological continuity and data are also in support of these classifications. The current classification is considered valid for the global resource and applicable for the nominated grade cut-offs.
	Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	The estimate is classified according to the guidelines of the 2012 JORC Code as Measured, Indicated and Inferred Mineral Resource. The classification considers the relative confidence in tonnage and grade estimations, the reliability of the input data, the Competent Person's confidence in the continuity of geology and grade values and the quality, quantity and distribution of the drill hole and supporting input data. In applying the classification, Measured Mineral Resource has generally been restricted to the oxide, transition and fresh portion of the HG domain where the drill hole section spacing is less than 80mN to 100mN with 25 – 30m drill centres on the section, or 50m spaced sections with 50m drill centres on section. Indicated Mineral Resource is generally restricted to the oxide, transition and fresh HG and LG2 in areas where drill line spacing is between 100mN and 160mN with 25 – 50m drill centres on the section, or where drilling is closer spaced but cross cutting intrusions are present. The remainder of the modelled areas to

Criteria	JORC Code Explanation	Commentary
		the north and south of the Measured and Indicated Resource with supporting drilling at section spacing greater than 140mN have been classified as Inferred Mineral Resource, supported by mapping and geophysical data. The classification applied relates to the global estimate of V_2O_5 and at the reported cut-off grades only. At different V_2O_5 grade cut-offs, the applied classification scheme may not be valid.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	Trepanier Pty Ltd believe that the classification appropriately reflects their confidence in the grade estimates and robustness of the interpretations.
Audits or Reviews	The results of any audits or reviews of Mineral Resource estimates.	The current Mineral Resource estimate has not been audited.
Discussion of Relative Accuracy/ Confidence	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.	The resource classification represents the relative confidence in the resource estimate as determined by the Competent Persons. Issues contributing to or detracting from that confidence are discussed above. No quantitative approach has been conducted to determine the relative accuracy of the resource estimate. The Ordinary Kriged estimate is considered to be a global estimate with no further adjustments for Selective Mining Unit (SMU) dimensions. Accurate mining scenarios for this Mineral Resource update are yet to be determined by mining studies. No production data is available for comparison to the estimate. The local accuracy of the resource is adequate for the expected use of the model in mining studies. Infill drilling will be required to further raise the level of resource classification in areas not yet in the Measured category.
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	These levels of confidence and accuracy relate to the global estimates of grade and tonnes for the deposit.
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	There has been no production from the Australian Vanadium Project deposit to date.