ASX Announcement

Gabanintha Drilling Confirms High-Grade Vanadium Zone Continuity

Highlights:

- **Infill drilling at Gabanintha confirms thickness, grade and continuity of main vanadium magnetite horizon along strike of existing Measured and Indicated Resources**
- **Consistent internal high-grade zone over 1.2% V_2O_5 identified**
  - **Best intersections include;**
    - **17m at 1.03% V_2O_5 and 61.9% Fe_2O_3 from 38m in 18GERC003 including 7m at 1.29% V_2O_5 from 41m**
    - **17m at 1.14% V_2O_5 and 66.5% Fe_2O_3 from 81m in 18GERC011 including 10m at 1.28% V_2O_5 from 82m**
    - **12m at 1.12% V_2O_5 and 68.5% Fe_2O_3 from 47m in 18GERC010 including 8m at 1.24% V_2O_5 from 48m**
    - **26m at 0.94% V_2O_5 and 59% Fe_2O_3 from 47m in 18GERC007 including 9m at 1.27% V_2O_5 from 58m**
- **Drilling supports resource upgrade conversion of Inferred to Indicated resources – currently underway**
- **Drill program successfully captured important information for the final PFS report including;**
  - **Geotechnical data to optimise pit slope angles**
  - **Advanced downhole telemetry to resolve structural domains at depth**
  - **Increasing resolution of oxide, transitional and fresh mineralisation boundaries**
- **Program extends detailed drilling along strike at Gabanintha by another 700m, enlarging development area to 3km of total 11.5km available for resource extension**

Australian Vanadium Limited (ASX: AVL, "the Company" or AVL") is pleased to provide an update on recent drilling at its Gabanintha vanadium project near Meekatharra in Western Australia.

The Company recently completed a reverse circulation (RC) drilling, diamond drilling and geotechnical program at Gabanintha. A total of 1,089m of drilling was completed, including 383m of diamond core drilling.

30 October 2018

ASX ANNOUNCEMENT

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Projects:

Gabanintha - Vanadium
Blesberg,South Africa - Lithium/Tantalum
Nowthanna Hill – Uranium/Vanadium
Coates - Vanadium

10 RC holes and 3 diamond drill holes were completed. 10 Televiewer® surveys were conducted on new and existing drill holes for geotechnical and environmental data.

Drilling intersected the massive magnetite layer in all drill holes. The massive magnetite layer is the basis of the economic studies at Gabanintha and currently supports a mineral resource estimate of 93 Million Tonnes grading 1.0% V_2O_5 in the high grade (HG10) zone. The resource is composed of a global 175.5 MT at 0.77% V_2O_5 in Measured, Indicated and Inferred categories. See Resource Table in Appendix 1.

Managing Director Vincent Algar commented on the success and utility of the program, "The program has delivered us a raft of significant information to help us finalise the PFS. This includes vital geotechnical information as well as additional confirmation of our mineralisation's tenor and geometry. It also demonstrates the benefit of having significant strike length under our control, enabling us to quickly add high quality, low risk resources for minimal outlay, to feed the planned operation. Further drilling of blocks to the south are planned as we steadily grow AVL's Gabanintha project into an unassailable position as the world's next vanadium producer."

Results from the drilling are being used to improve the geotechnical parameters being used to update the Company's PFS (see ASX announcement *Gabanintha Presents Robust Base Case for PFS* dated 26th September 2018). Geological logging and assay results from the RC component of the program are being used to update and upgrade the Inferred Mineral Resource in Fault Block 17, (see Figure 1). Block 17's Inferred resources are currently included in the PFS base case mining schedule. Drilling Results in the Block 17 drilling are summarised in Table 1 below. Further details are supplied in Appendix 2 – JORC Table 1. A drill location plan, long section and cross sections are shown in Figures 2, 3 and 4 respectively.

Table 1 Intercepts from RC Drilling

MGA94 EAST	MGA94 NORTH	RL	Dip	Azimuth	Hole ID	m From	m To	Int. (m)	V_2O_5 %	Fe_2O_3 %	TiO_2 %	SiO_2 %	LOI %	S %	Co ppm	Ni ppm	Cu ppm
664002	7015246	466	-60	50	18GERC002	8	25	17	0.82	54.2	9.6	15.3	5.8	0.008	103.1	500.0	181.2
					including	*15*	*18*	*3*	*1.21*	*74.2*	*14.0*	*2.7*	*2.1*	*0.007*	*176.7*	*606.7*	*130.0*
663981	7015230	466	-60	50	18GERC003	38	55	17	1.03	61.9	11.5	11.3	4.1	0.006	99.4	540.6	235.3
					including	*41*	*48*	*7*	*1.29*	*74.4*	*14.4*	*2.5*	*2.0*	*0.006*	*115.7*	*608.6*	*155.7*
663959	7015212	465	-60	50	18GERC004	75	82	7	1.12	66.4	12.8	7.9	3.5	0.013	165.7	580.0	180.0
					including	*78*	*81*	*3*	*1.26*	*71.2*	*14.5*	*4.4*	*2.7*	*0.015*	*183.3*	*623.3*	*180.0*
663934	7015193	465	-60	50	18GERC005	107	110	3	0.72	45.8	8.7	23.1	6.1	0.068	96.7	690.0	303.3
664126	7015028	465	-60	50	18GERC006	24	36	12	1.07	67.3	12.1	7.5	3.3	0.014	235.0	580.0	174.2
					including	*32*	*35*	*3*	*1.23*	*72.5*	*13.6*	*4.1*	*2.2*	*0.013*	*246.7*	*643.3*	*173.3*
664103	7015009	465	-60	50	18GERC007	47	73	26	0.94	59.0	10.7	13.4	4.0	0.008	226.8	623.1	288.8
					including	*58*	*67*	*9*	*1.27*	*74.5*	*14.1*	*2.5*	*1.6*	*0.008*	*244.4*	*725.6*	*171.1*
664078	7014988	465	-60	50	18GERC008	84	98	14	0.90	54.6	10.2	18.3	4.3	0.033	220.7	613.6	302.9
					including	*91*	*94*	*3*	*1.28*	*69.7*	*14.7*	*4.9*	*2.6*	*0.026*	*220.0*	*710.0*	*303.3*
664245	7014811	463	-60	50	18GERC009	17	26	9	1.05	64.5	12.2	8.9	3.6	0.006	128.9	584.4	164.4
					including	*19*	*24*	*5*	*1.25*	*73.4*	*14.4*	*3.3*	*1.9*	*0.005*	*154.0*	*646.0*	*140.0*
664223	7014792	463	-60	50	18GERC010	47	59	12	1.12	68.9	12.6	7.7	2.3	0.006	112.5	561.7	180.0
					including	*48*	*56*	*8*	*1.24*	*74.6*	*14.0*	*2.9*	*1.5*	*0.006*	*76.3*	*537.5*	*126.3*
664199	7014771	463	-60	50	18GERC011	81	98	17	1.14	66.5	12.6	8.0	3.1	0.024	190.6	644.7	230.0
					including	*82*	*92*	*10*	*1.28*	*74.0*	*14.2*	*2.2*	*2.1*	*0.016*	*179.0*	*683.0*	*121.0*

Drilling Summary

The RC component of the September 2018 drill program was designed to provide data at a frequency appropriate to upgrade the resource category of material in the proposed open pit in Block 17 to an Indicated Mineral Resource status, (see Figure 1).

The massive magnetite layer averages 14m in thickness. The geometry of the high-grade zone is consistent with previous drilling thicknesses. Drilling in Block 17 completed in 2011 includes internal high-grade zones (greater than 1.2% V_2O_5 over 3m or more) in 4 of the 11 holes. The 2018 program has drilled a highly consistent zone, 3-10 m in thickness, grading over 1.2% V_2O_5 in 10 of the 11 holes completed.

Table 1 above outlines the intersections from the recent RC drill holes. Fault Block 17 is 700m long, with mineralisation dipping to the southwest from surface and open at depth. Best intersections include;

- 17m at 1.03% V_2O_5 and 61.9% Fe_2O_3 from 38m in 18GERC003 including 7m at 1.29% V_2O_5 from 41m
- 17m at 1.14% V_2O_5 and 66.5% Fe_2O_3 from 81m in 18GERC011 including 10m at 1.28% V_2O_5 from 82m
- 12m at 1.12% V_2O_5 and 68.5% Fe_2O_3 from 47m in 18GERC010 including 8m at 1.24% V_2O_5 from 48m
- 26m at 0.94% V_2O_5 and 59% Fe_2O_3 from 47m in 18GERC007 including 9m at 1.27% V_2O_5 from 58m

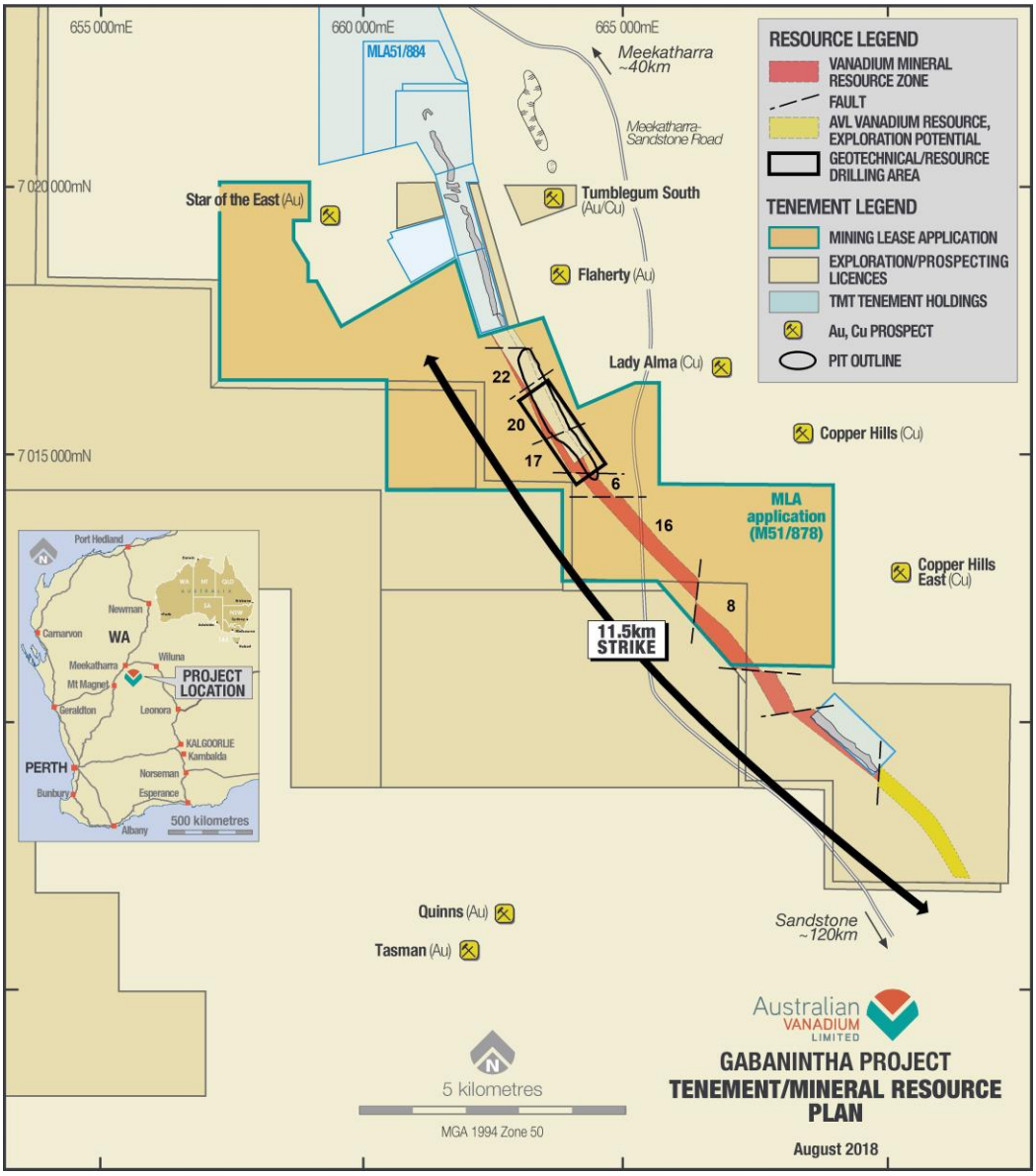

Figure 1 Location Diagram of Gabanintha Project. Fault block numbers labelled in black within MLA

2018 Geotechnical Drill Campaign

The new drill program provides valuable information to the ongoing PFS, focusing on geotechnical data (see Figures 1 and 2).

AVL appointed experienced geotechnical consultants Dempers & Seymour to manage the geotechnical requirements of the pit design being used in the ongoing PFS. This appointment will ensure the highest standard for geotechnical modelling and design for the PFS work.

The drilling program successfully achieved the goals set forth from ongoing PFS, which included:

- Evaluation of western pit slope angles by conducting diamond drilling (18GEDH001, 18GEDH002) into the proposed western pit wall (see Figure 2)
- Downhole telemetry (10 holes) to resolve structural domains at depth to de-risk the pit design
- Increase in the resolution of the ratio of feed material to strip material by improving oxide, transitional and fresh mineralisation understanding
- Opportunity to increase Indicated Mineral Resources by increasing the frequency of drill data in the current Inferred Mineral Resources to the south of the existing 2.4km zone of Measured and Indicated Mineral Resources (see Figures 1, 2 and 3)
- Increase cobalt and base metal resource and provide additional samples for flotation test work, refining the existing processing flowsheet (analysis of 18GEDH003)
- Improve understanding of groundwater at the deposit by way of hydrological testing of drill holes

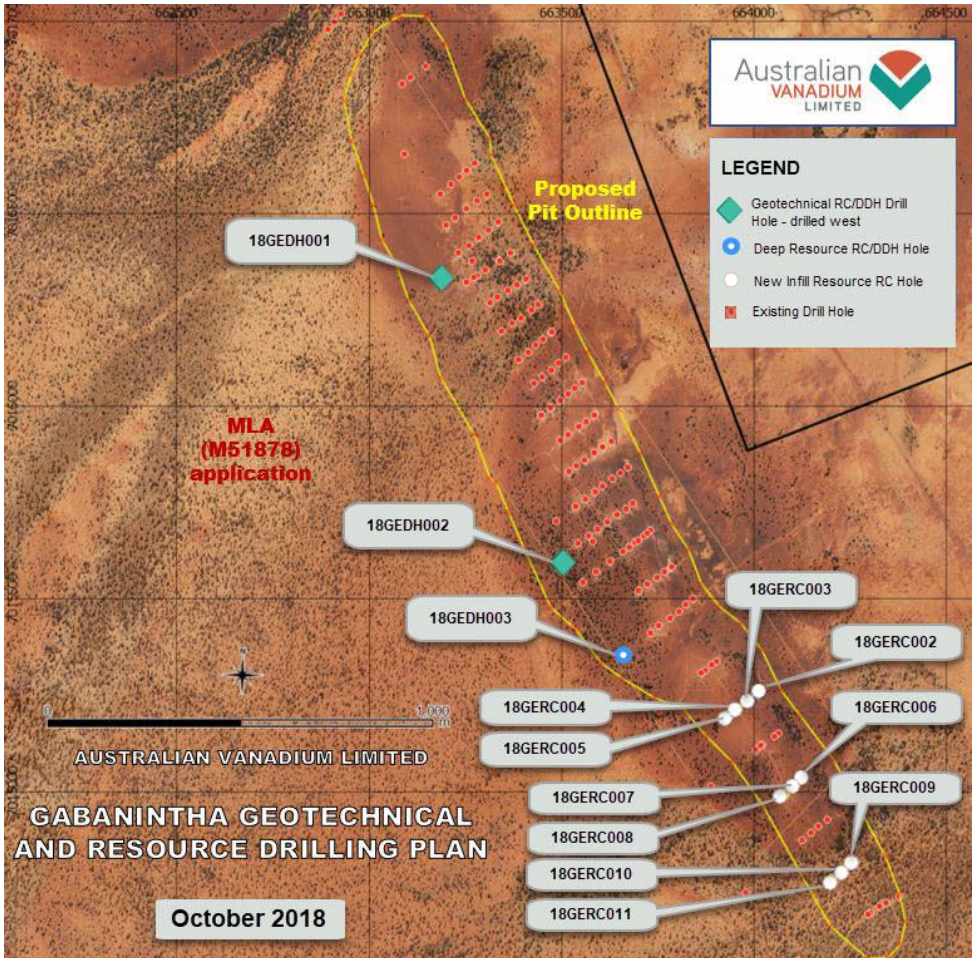

Figure 2 Drill Program Collar Plan

The Company appointed an experienced drilling contractor to carry out diamond and RC drilling at Gabanintha. RC holes were drilled into the existing resource area to identify geotechnical structures using downhole Televiewer® technology.

Drilling in Fault Block 17 and associated Geotechnical drilling was completed in late October 2018. AVL looks forward to reporting further progress on these exploration activities as they are completed.

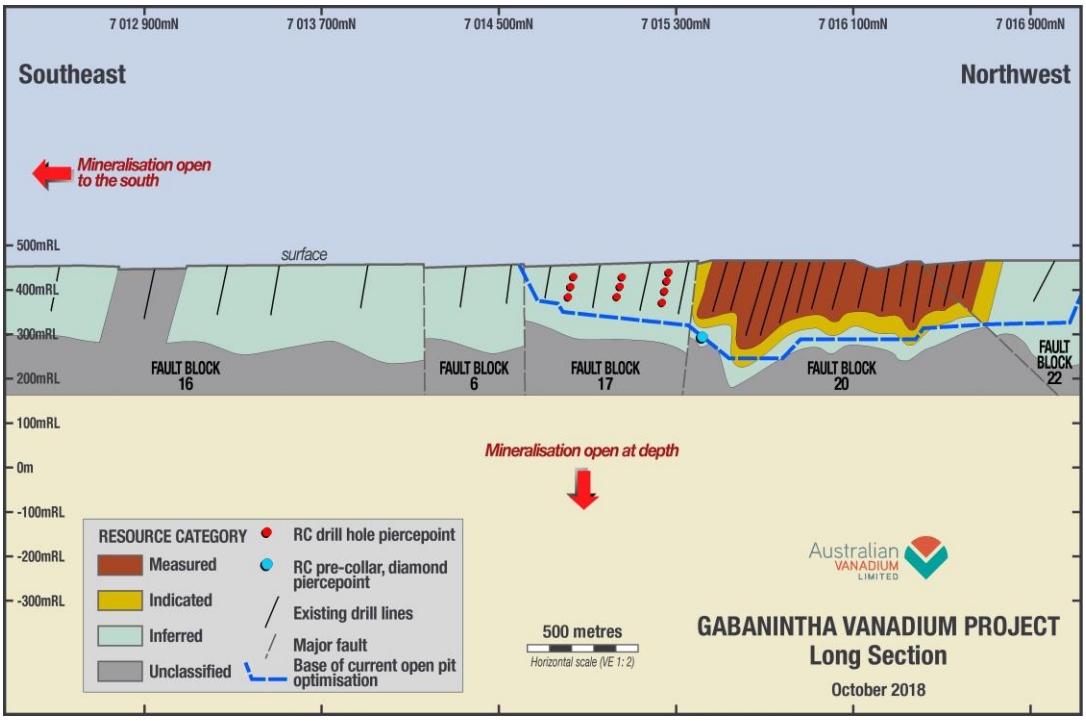

Figure 3 Long Section of Gabanintha Mineral Resource with Category and Location of New Drilling

PFS Progress Update

The Company has released its initial base case scenario for Gabanintha (see ASX announcement *Gabanintha Presents Robust Base Case for PFS* dated 26th September 2018). This is the first step in a series of activities that will allow the Company to deliver a realistic and achievable study, supporting future investment decisions. At present the Company is awaiting bid packages from suppliers to refine capital and operating costs for the final PFS.

One of the aims of the PFS is to define a low-risk, low-cost process for production of high purity vanadium products. The Company has begun to build relationships with end users and interim product producers such as those making vanadium carbon nitride (VCN) and vanadium electrolyte for vanadium redox flow batteries. Test work undertaken on the non-magnetic tailings has further identified potentially economically recoverable cobalt, nickel and copper that are being incorporated into the PFS.

The Company's intention is to produce a high quality PFS with a well-defined process flowsheet and is focused on de-risking the project to allow future investment. The PFS will further refine the options outlined in the base case to assure that the most viable, lowest cost mining and processing operation is pursued. The Company is basing the study on conservative economic assumptions and proven technologies. The goal is to develop a vanadium operation that is low-risk, low-cost and profitable in all business conditions.

Detailed option analysis to maximise economic returns and reduce capital and operating costs will continue during 2018. Favourable outcomes will allow the Company to quickly advance the project to a Definitive Feasibility Study.

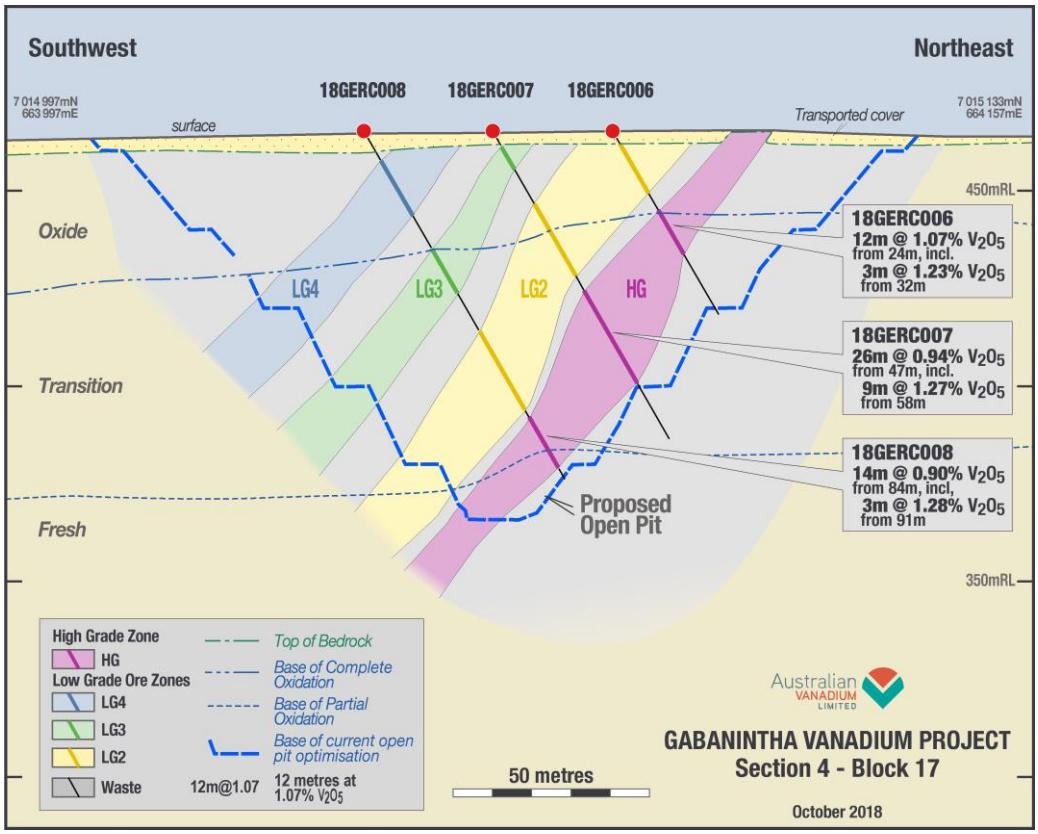

Figure 4 Cross Section of holes 18GERC006 to 18GERC008

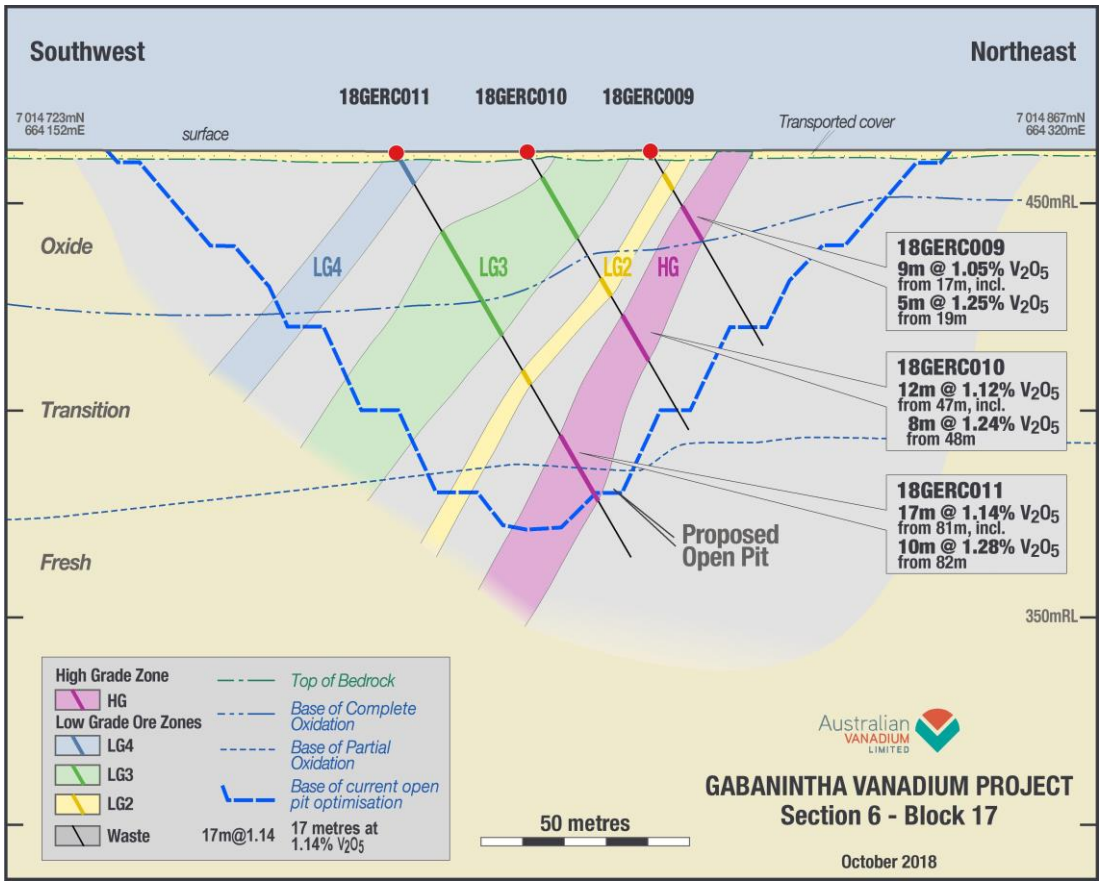

Figure 5 Cross Section of holes 18GERC009 to 18GERC011

For further information, please contact:

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Appendix 1 - Resource Table

Table 2 Gabanintha Project – Mineral Resource estimate by domain and resource classification using a nominal 0.4% V_2O_5 wireframed cut-off for low grade and nominal 0.7% V_2O_5 wireframed cut-off for high grade (total numbers may not add up due to rounding)

Zone	Classification	Mt	V_2O_5 %	Fe %	TiO_2 %	SiO_2 %	Al_2O_3 %	LOI %
HG 10	Measured	10.1	1.11	42.7	12.6	10.3	8.0	4.0
	Indicated	4.9	1.09	43.3	12.1	10.5	7.8	3.7
	Inferred	78.6	0.98	42.4	11.2	11.4	7.6	3.4
	Sub-total	**93.6**	**1.00**	**42.5**	**11.4**	**11.3**	**7.6**	**3.5**
LG 2-5	Measured	-	-	-	-	-	-	-
	Indicated	19.1	0.51	23.9	7.0	27.8	18.1	8.7
	Inferred	58.5	0.49	25.5	6.7	27.5	16.5	7.4
	Sub-total	**77.5**	**0.50**	**25.1**	**6.8**	**27.5**	**16.9**	**7.7**
Transported 6-8	Measured	-	-	-	-	-	-	-
	Indicated	-	-	-	-	-	-	-
	Inferred	4.3	0.65	28.1	7.2	24.7	16.7	8.5
	Sub-total	**4.3**	**0.65**	**28.1**	**7.2**	**24.7**	**16.7**	**8.5**
Total	Measured	10.1	1.11	42.7	12.6	10.3	8.0	4.0
	Indicated	24.0	0.63	27.9	8.0	24.2	16.0	7.7
	Inferred	141.4	0.77	35.0	9.2	18.5	11.5	5.2
	Sub-total	**175.5**	**0.77**	**34.5**	**9.3**	**18.8**	**11.9**	**5.5**

Competent Person's Statement

The information in this report that relates to Exploration Results is based on and fairly represents information and supporting documentation prepared by Mr Brian Davis (Consultant with Geologica Pty Ltd). Mr Davis is a shareholder of AVL. Mr Davis is a member of the Australasian Institute of Mining and Metallurgy and has sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to the activities undertaken to qualify as Competent Persons as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Specifically, Mr Davis consents to the inclusion in this report of the matters based on his information in the form and context in which they appear.

The information in this report that relates to Mineral Resources is based on and fairly represents information compiled by Mr Lauritz Barnes, (Consultant with Trepanier Pty Ltd) and Mr Brian Davis (Consultant with Geologica Pty Ltd). Mr Davis is a shareholder of AVL. Mr Barnes and Mr Davis are members of the Australasian Institute of Mining and Metallurgy and 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 JORC Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Specifically, Mr Barnes is the Competent Person for the estimation and Mr Davis is the Competent Person for the database, geological model and site visits. Mr Barnes and Mr Davis consent to the inclusion in this report of the matters based on their information in the form and context in which they appear

APPENDIX 2

2018 Gabanintha Mineral Resource Estimate (2012 JORC Code – Table 1)

Section 1: Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
Sampling techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialized industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	The Gabanintha deposit was sampled using diamond core and reverse circulation (RC) percussion drilling from surface. At the time of the latest Mineral Resource estimation, a total of 233 RC holes and 17 diamond holes (3 of which are diamond tails) were drilled into the deposit. 68 of the 250 holes were either too far north or east of the main mineralisation trend, or excised due to being on another tenancy. One section in the southern part of the deposit (holes GRC0156, GRC0074, GRC0037 and GRC0038) was blocked out and excluded from the resource due to what appeared to be an intrusion which affected the mineralised zones in this area. Of the remaining 182 drillholes, one had geological logging but no assays. The total metres of drilling available for use in the interpretation and grade estimation was 16,287m at the date of the most recent resource estimate. The initial 17 RC drillholes were drilled by Intermin Resources NL (IRC) in 1998. These holes were not used in the 2015 and 2017 estimates due to very long unequal sample lengths and a different grade profile from subsequent drilling. 31 RC drillholes were drilled by Greater Pacific NL in 2000 and the remaining holes for the project were drilled by AVL Australian Vanadium Ltd (Previously YRR) between 2007 and 2015. This drilling includes 17diamond holes (3 of which are diamond tails) and 57 RC holes, for a total of 17,144m drilled. All of the drilling sampled both high and low-grade material and were sampled for assaying of a typical iron ore suite, including vanadium and titanium plus base metals and sulphur. During 2018, a further 11 RC holes and three HQ diamond holes with RC pre-collars have been drilled, with 10 of the RC holes, all of the RC pre-collars and one of the diamond tails sampled and assayed to inform future resource estimates (ie, the totals summarized in paragraph two of this criteria do not include the 2018 drillholes as they are not yet included in a Mineral Resource Estimate). Two diamond holes are not yet sampled as they are drilled west into the pit walls for geotechnical purposes. One RC hole was abandoned due to poor positioning and has not been sampled.

	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	In 2015, the drillhole collars were originally set out using hand held GPS and on completion the collars were surveyed by survey contractors using high precision digital GPS. The earlier drilling programmes were retrospectively surveyed using DGPS at the remaining collar PVC pipe positions. Only a few of the very earliest drilled holes (1998) were not able to have their collars accurately surveyed, as they had been rehabilitated and their position was not completely clear. Downhole surveys were completed for all of the diamond holes, using gyro surveying equipment, as well as the RC holes drilled in 2015 (from GRC0159). All of the other RC holes were given a nominal -60º dip measurement. These older RC holes were almost all 120m or less in depth. Diamond core was quarter-core sampled at regular intervals (usually one metre) and constrained to geological boundaries where appropriate. Most of the RC drilling was sampled at one metre intervals, apart from the very earliest programme in 1998. The 2018 diamond core was half-core sampled at regular intervals (usually one metre) and constrained to geological boundaries where appropriate. The RC drilling was sampled at one metre intervals using a cone splitter on the rig to obtain a 2.5 – 3.5 kg sample of each metre. Field duplicates were collected for every 50th drill metre to check sample representativity from the drill rig splitter.

Criteria	JORC Code Explanation	Commentary
	Aspects of the determination of mineralisation that are Material to the Public Report.	RC drilling samples were collected at one metre intervals and passed through a cone splitter to obtain a nominal 2-5kg sample at an approximate 10% split ratio. These split samples were collected in pre-numbered calico sample bags. The sample was dried, crushed and pulverised to produce a sub sample (~200g) for laboratory analysis using XRF and total LOI by thermo-gravimetric analysis. Diamond core was drilled predominantly at HQ size for the earlier drilling (2009) and entirely HQ for the 2018 program, with the 2015 drilling at PQ3 size. Field duplicates, standards and blanks have been inserted into the sampling stream at a rate of nominally 1:25 for blanks, 1:11 for standards (including internal laboratory), 1:10 for field duplicates, 1:9 for lab checks and 1:74 for umpire assays.
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 drillholes account for 12% of the drill metres and comprises HQ and PQ3 sized core. RC drilling (generally 135 mm to 140 mm face-sampling hammer) accounts for the remaining 88% of the drilled metres. Six of the diamond holes have RC pre-collars (GDH911, GDH913 & GDH916, 18GEDH001, 002 and 003), otherwise all holes are drilled from surface. No core orientation data has been recorded in the database. 11 RC holes were drilled during the 2018 program and three HQ diamond tails were drilled on RC pre-collars for resource and geotechnical purposes. The core was not orientated but all diamond holes

		were logged by televiewer.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Diamond core recovery is measured when the core is recovered from the drill string. The length of core in the tray is compared with the expected drilled length and is recorded in the database. For the 2018 and 2015 drilling, RC chip sample recovery was gauged by how much of the sample was returned from the cone splitter. This was recorded as good, fair, poor or no sample. The older drilling programmes used a different splitter, but still compared and recorded how much sample was returned for the drilled intervals. All of the RC sample bags (non-split portion) from the 2018 programme were weighed as an additional check on recovery. An experienced AVL geologist was present during drilling and any issues noticed were immediately rectified. No significant sample recovery issues were encountered in the RC drilling.
	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. RC chip samples were actively monitored by the geologist whilst drilling. All drill holes are collared with PVC pipe for the first metre or two, to ensure the hole stays open and clean from debris.

Criteria	JORC Code Explanation	Commentary
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	No relationship between sample recovery and grade has been demonstrated. Two shallow diamond drillholes drilled to twin RC have been completed to assess sample bias due to preferential loss/gain of fine/coarse material. Geologica Pty Ltd 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.

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 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. Minimal structural measurements were recorded (bedding to core angle measurements) but have not yet been saved to the database. The logging was completed on site by the responsible geologist. All of the drilling was logged onto paper and was transferred to a SQL Server drillhole database using DataShed™ database management software. The database is managed by Mitchell River Group (MRG). The data was checked for accuracy when transferred to ensure that correct information was recorded. Any discrepancies were referred back to field personnel for checking and editing. All core trays were photographed wet and dry. RC chips were logged generally on metre intervals, with the abundance/proportions of specific minerals, material types, lithologies, weathering and colour recorded. Physical hardness for RC holes is estimated by chip recovery and properties (friability, angularity) and in diamond holes by scratch testing. From 2015, drilling also had magnetic susceptibility recorded, with the first nine diamond holes (GDH901-GDH909) having readings taken on the core every 30 cm or so downhole. Holes GDH910 to GDH917 had readings every 50 cm and RC holes GRC0159 to GRC0221 had readings for every one metre green sample bag. All of the 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.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	Logging was both qualitative and quantitative in nature, with general lithology information recorded as qualitative and most mineralisation records and geotechnical records being quantitative. Core photos were collected for all diamond drilling.
	The total length and percentage of the relevant intersections logged.	All recovered intervals were geologically logged.

Criteria	JORC Code Explanation	Commentary
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	The 2018 and 2009 HQ diamond core was cut in half and the half core samples were sent to the laboratories for assaying. Sample intervals were marked on the core by the responsible geologist considering lithological and structural features. No core was selected for duplicate analysis. The 2015 PQ Diamond core was cut in half and then the right hand side of the core (facing downhole) was halved again using a powered core saw. Quarter core samples were sent to the laboratories for assaying. Sample intervals were marked on the core by the responsible geologist considering lithological and structural features. No core was selected for duplicate analysis.
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	RC drilling was sampled by use of an automatic cone splitter for the 2018 and 2015 drilling programmes; drilling was generally dry with a few damp samples. Older drilling programmes employed riffle splitters to produce the required sample splits for assaying. One in 40 to 50 RC samples was resampled as field duplicates for QAQC assaying.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	The sample preparation techniques employed for the diamond core samples follow standard industry best practice. All samples were crushed by jaw and Boyd crushers and split if required to produce a standardised ~3kg sample for pulverising. The 2015 programme RC chips were split to produce the same sized sample. All samples were pulverised to a nominal 90% passing 75 micron mesh and sub sampled for assaying and LOI determination tests. The remaining pulps are stored at an AVL facility. The sample preparation techniques are of industry standard and are appropriate for the sample types and proposed assaying methods.
	Quality control procedures adopted for all sub-sampling stages to maximize representivity of samples.	Field duplicates, standards and blanks have been inserted into the sampling stream at a rate of nominally 1:25 for blanks, 1:11 for standards (including internal laboratory), 1:10 for field duplicates, 1:9 for lab checks and 1:74 for umpire assays. Also for the recent sampling at BV, 1 in 20 samples were tested to check for pulp grind size.

	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	To ensure the samples collected are representative of the in-situ material, a 140mm diameter RC hammer was used to collect one metre samples and either HQ or PQ3 sized core was taken from the diamond holes. Given that the mineralisation at Gabanintha is either massive or disseminated magnetite/martite hosted vanadium, which shows good consistency in interpretation between sections and occurs as percentage values in the samples, Geologica Pty Ltd considers the sample sizes to be representative. Core is not split for duplicates, but RC samples are split at the collection stage to get representative (2-3kg) duplicate samples. The entire core sample and all the RC chips are crushed and /or mixed before splitting to smaller sub-samples for assaying.

Criteria	JORC Code Explanation	Commentary
	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.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	All samples for Gabanintha were assayed for the full iron ore suite by XRF (24 elements) and for total LOI by thermo-gravimetric technique. The method used is designed to measure the total amount of each element in the sample. Some 2015 RC samples in the oxide profile were also selected for SATMAGAN analysis that is a measure of the amount of total iron that is present as magnetite (or other magnetic iron spinel phases, such as maghemite or kenomagnetite). SATMAGAN analysis was conducted at Bureau Veritas (BV) Laboratory in early 2018. Analysis results of the relevant portions of the RC holes by Satmagan are pending, but underway. Although the laboratories changed over time for different drilling programmes, the laboratory procedures all appear to be in line with industry standards and appropriate for iron ore deposits, and the commercial laboratories have been industry recognized and certified Samples are dried at 105ºC in gas fired ovens for 18-24 hours before RC samples being split 50:50. One portion is retained for future testing, while the other is then crushed and pulverised. Sub-samples are collected to produce a 66g sample that is used to produce a fused bead for XRF based analysing and reporting. Certified and non-certified Reference Material standards, field duplicates and umpire laboratory analysis are used for quality control. The standards inserted by AVL during the 2015 drill campaign were designed to test the V_2O_5 grades around 1.94%, 0.95% and 0.47%. The internal laboratory standards used have varied grade ranges, but do cover these three grades as well. During 2018, three Certified Reference Materials (CRMs) were used by AVL as field standards. These covered the V_2O_5 grade ranges around 0.327%, 0.790% and 1.233%. These CRMs are also certified for other relevant major element and oxide values, including Fe, TiO_2, Al_2O_3, SiO_2, Co, Ni and Cu (amongst others). Most of the laboratory standards used show an apparent underestimation of V_2O_5, with the results plotting below the expected value lines; however the results generally fall within ± 5-10% ranges of the expected values. The other elements show no obvious material bias. Standards used by AVL generally showed good precision, falling within 3-5% of the mean value in any batch. The standards were not certified however, but compared with the internal laboratory standards (certified) they appear to show good accuracy as well. Field duplicate results from the 2015 drilling all fall within 10% of their original values. The BV laboratory XRF machine calibrations are checked once per shift using calibration beads made using exact weights and they performed repeat analyses of sample pulps at a rate of 1:20 (5% of all samples). The lab repeats compare very closely with the original analysis for all elements.

Criteria	JORC Code Explanation	Commentary
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	The only geophysical readings taken for the Gabanintha core and RC samples and recorded in the database were magnetic susceptibility. 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). Four completed diamond drillholes were down hole surveyed by acoustic televiewer (GDH911, 912, 914 and 915) as a prequel to geotechnical logging during the 2015 drill campaign. A further six holes from the 2018 campaign have been down hole surveyed using acoustic televiewer and optical televiewer (18GEDH001, 002 and 003 and partial surveys of 18GERC005, 008 and 011) for 627 metres of data. Televiewer data was also collected during 2018 on some of the holes drilled in 2015 and prior. The holes surveyed were GRC0019, 0024, 0168, 0169, 0173, 0178, 0180, 0183, 0200 and Na253, Na258 and Na376 for a further 286.75 m of data.
	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 programmes.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Diamond drill core photographs have been reviewed for the recorded sample intervals. Geologica Pty Ltd Consultant, Brian Davis, visited the Gabanintha project site and the BV core shed and assay laboratories in September 2015 and on multiple occasions over a 10 year period. Whilst on site, the drillhole collars and remaining RC chip samples were inspected. All of the core was inspected in the BV facilities in Perth and selected sections of drillholes were examined in detail in conjunction with the geological logging and assaying.
	The use of twinned holes.	Two diamond drillholes (GDH915 and GDH917) were drilled to twin the RC drillholes GRC0105 and GRC0162 respectively. The results show excellent reproducibility in both geology and assayed grade for each pair.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All primary geological data has been collected using paper logs and transferred into Excel spreadsheets and ultimately a SQL Server Database. The data were checked on import. Assay results were returned from the laboratories as electronic data which were imported directly into the SQL Server database. Survey and collar location data were received as electronic data and imported directly to the SQL database. All of the primary data have been collated and imported into a Microsoft SQL Server relational database, keyed on borehole identifiers and assay sample numbers. The database is managed using DataShed ™ database management software. The data was verified as it was entered and checked by the database administrator (MRG) and AVL personnel

	Discuss any adjustment to assay data.	No adjustments or calibrations were made to any assay data, apart from resetting below detection limit values to half positive detection values.

Criteria	JORC Code Explanation	Commentary
Location of data points	Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	For the 2018 drilling, all collars were set out using a handheld GPS. After drilling they were surveyed using a Trimble real-time Kinematic (RTK) GPS system. The base station accuracy on site was improved during the 2015 survey campaign and a global accuracy improvement was applied to all drill holes in the Company database. For the 2015 drilling, all of the collars were set out using a Trimble RTK GPS system. After completion of drilling all of the collars were re- surveyed using the same tool. Historical drill holes were surveyed with RTK GPS and DGPS from 2008 to 2015, using the remaining visible collar location positions where necessary. Only five of the early drill holes, drilled prior to 2000, had no obvious collar position when surveyed and a best estimate of their position was used based on planned position data.
	Specification of the grid system used.	The grid projection used for Gabanintha is MGA_GDA94, Zone 50. All reported coordinates are referenced to this grid.
	Quality and adequacy of topographic control.	High resolution Digital Elevation Data was captured by the Company in June 2018 over the MLA51/878 tenement area using fixed wing aircraft, with survey captured at 12 cm GSD using an UltraCam camera system operated by Aerometrex. The data has been used to create a high-resolution Digital Elevation Model on a grid spacing of 5m x 5m, which is within 20 cm of all surveyed drill collar heights, once the database collar positions were corrected for the improved ground control survey, that was also used in this topography survey. The vertical accuracy that could be achieved with the 12 cm GSD is +/- 0.10 m and the horizontal accuracy is +/- 0.24m. 0.5m contour data has also been generated over the mining lease application. High quality orthophotography was also acquired during the survey at 12cm per pixel for the full lease area, and visual examination of the imagery shows excellent alignment with the drill collar positions. For the existing 2017 and 2018 Mineral Resource estimates high resolution Digital Elevation Data was supplied by Landgate. The northern two thirds of the elevation data is derived from ADS80 imagery flown September 2014. The data has a spacing of 5M and is the most accurate available. The southern third is film camera derived 2005 10M grid, resampled to match it with the 2014 DEM. Filtering was applied and height changes are generally within 0.5M. Some height errors in the 2005 data may be +/- 1.5M when measured against AHD but within the whole area of interest any relative errors will mostly be no more than +/- 1M. In 2015 a DGPS survey of hole collars and additional points was taken at conclusion of the drill program. Trepanier compared the elevations the drill holes with the supplied DEM surface and found them to be within 1m accuracy.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	The 2018 RC drilling has infilled areas of 260 m spaced drill lines to about 130 m spaced drill lines, with holes on 30 m centres on each line. The closer spaced drilled areas of the deposit now have approximately 80m to 100m spacing by northing and 25m to 30m spacing by easting. Occasionally these spacings are closer for some pairs of drill holes. Outside of the main area of relatively close spaced drilling (approximately 7015400mN to 7016600mN), the drill hole spacing increases to several hundred metres in the northing direction, but

		maintains roughly the same easting separation as the closer spaced drilled area.
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	The degree of geological and grade continuity demonstrated by the data density is sufficient to support the definition of Mineral Resources and the associated classifications applied to the Mineral Resource estimate as defined under the 2012 JORC Code. Variography studies have shown very little variance in the data for most of the estimated variables and primary ranges in the order of several hundred metres.
	Whether sample compositing has been applied.	All assay results have been composited to one metre lengths before being used in the Mineral Resource estimate. This was by far the most common sample interval for the diamond drill hole and RC drill hole data.
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	The grid rotation is approximately 45º to 50º magnetic to the west, with the holes dipping approximately 60º to the east. The drill fences are arranged along the average strike of the high grade mineralised horizon, which strikes approximately 310º to 315º magnetic south of a line at 7015000mN and approximately 330o magnetic north of that line. The mineralisation is interpreted to be moderate to steeply dipping, approximately tabular, with stratiform bedding striking approximately north-south and dipping to the west. The drilling is exclusively conducted perpendicular to the strike of the main mineralisation trend and dipping approximately 60º to the east, producing approximate true thickness sample intervals through the mineralisation.

Criteria	JORC Code Explanation	Commentary
	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. Drillholes intersect the mineralisation at an angle of approximately 90 degrees.
Sample security	The measures taken to ensure sample security.	Samples were collected onsite under supervision of a responsible geologist. The samples were then stored in lidded core trays and closed with straps before being transported by road to the BV core shed in Perth (or other laboratories for the historical data). RC chip samples were transported in bulk bags to the assay laboratory and the remaining green bags are either still at site or stored in Perth. RC and core samples were transported using only registered public transport companies. Sample dispatch sheets were compared against received samples and any discrepancies reported and corrected.

Audits or reviews	The results of any audits or reviews of sampling techniques and data.	A review of the sampling techniques and data was completed by Mining Assets Pty Ltd (MASS) and Schwann Consulting Pty Ltd (Schwann) in 2008 and by CSA in 2011. Neither found any material error. AMC also reviewed the data in the course of preparing a Mineral Resource estimate in 2015. The database has been audited and rebuilt by AVL and MRG in 2015. In 2017 geological data was revised after missing lithological data was sourced. Geologica Pty Ltd concludes that 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.	Exploration Prospects are located wholly within Lease P51/2567 and E51/843. The tenements are 100% owned by Australian Vanadium Ltd. The tenements lie within the Yugunga Nya Native Title Claim (WC1999/046). A Heritage survey was undertaken prior to commencing drilling which only located isolated artefacts but no archaeological sites *per se.* Mining Lease Application M51/878 covering most of E51/1843 and the vanadium project is currently under consideration by the Department of Mines and Petroleum. 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 copper and gold exploration on the AVL Gabanintha tenements.
	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 tenement is in good standing.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	The Gabanintha deposit was identified in the 1960's 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 Australian Vanadium up until 2015. 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) and 2015 (AMC).

Criteria	JORC Code Explanation	Commentary
Geology	Deposit type, geological setting and style of mineralisation.	The Gabanintha Project is located approximately 40kms south of Meekatharra in Western Australia and approximately 100kms along strike (north) of the Windimurra Vanadium Mine. The mineralisation is hosted in the same geological unit as Windimurra, which is part of the northern Murchison granite greenstone terrane in the north west Yilgarn Craton. The project lies within the Gabanintha and Porlell Archaean greenstone sequence oriented approximately NW-SE and is adjacent to the Meekatharra greenstone belt. Locally the mineralisation is massive or bands of disseminated vanadiferous titano-magnetite hosted within the gabbro. The mineralised package dips moderately to steeply to the west and is capped by Archaean acid volcanics and metasediments. The footwall is a talc carbonate altered ultramafic unit. The host sequence is disrupted by late stage dolerite and granite dykes and occasional east and northeast -southwest trending faults with apparent minor offsets. The mineralisation ranges in thickness from several metres to up to 20 to 30m in thickness. The oxidized weathering surface extends 50 to 80m below surface and the magnetite in the oxide zone is usually altered to Martite.
Drillhole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes: easting and northing of the drillhole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar dip and azimuth of the hole down hole length and interception depth hole length.	Refer drilling intercepts table in the body of this announcement for the 2018 RC drilling. Diamond results are pending.
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 the body of this announcement. Cutting of high grades was not applied in the reporting of intercepts.

Criteria	JORC Code Explanation	Commentary
	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 drillhole angle is known, its nature should be reported.	Drill holes intersect the mineralisation at an angle of approximately 90 degrees.
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 drillhole collar locations and appropriate sectional views.	See Figures 1-4
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.
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).	The decision as to the necessity for further exploration at Gabanintha is pending completion of mining technical studies on the currently available resource. The 2018 drilling was done to increase data density in an area under consideration for mining in the ongoing Pre Feasibility Study with a view to update the Mineral Resource to incorporate the new data

	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	The decision as to the necessity for further exploration at Gabanintha is pending completion of mining technical studies on the currently available resource.