



# Gold in Gabanintha Vanadium Deposit

## Up to 3g/t Au recorded in drill samples highlights potential for gold to augment nickel and copper mineral resources

- Bryah holds a suite of mineral rights over the Gabanintha Project including nickel, copper and gold. Australian Vanadium Limited (ASX:AVL) holds the tenements and mineral rights to vanadium, titanium, iron ore and cobalt
- Current Inferred Base Metals Mineral Resource of **14.3Mt containing 208 ppm Cobalt, 666ppm Nickel and 217ppm Copper**<sup>1</sup>
- Review of metallurgical testwork undertaken by AVL<sup>2</sup> on its Vanadium deposit at Gabanintha ("Project") showed the **presence of gold as well as cobalt, nickel and copper** in the non-magnetic tail after separation of the vanadium-titanium-magnetite
- Sulphide concentrates from flotation of non-magnetic fraction contained **up to 6.3% base metals** including up to 2.02% Cobalt, 2.58% Nickel and 1.70% Copper
- Sulphide concentrates from flotation contain **up to 23.4 g/t Au** indicating that gold is associated with the sulphide minerals in the deposit
- Gold testing initiated with 450 historical drill samples analysed for gold to date, including **217 archived samples tested in late 2020**
- **Up to 3 g/t Au recorded in latest sample assays**, with gold mineralisation being observed within the high-grade vanadium zone (HG10). Best gold intercepts<sup>3</sup>:
  - GRC0148 - 1m @ 0.48 g/t Au from 98m, and **16m @ 0.18 g/t Au from 104m**, including 5m @ 0.54g/t Au from 109m
  - 19RRC008 - **11m @ 0.10 g/t Au from 124m**, including 2m @ 0.41g/t Au from 128m 2m @ 1.72 g/t Au from 135m, including **1m @ 3.02 g/t Au** from 135m
- **Anomalous gold values recorded over 1.4 km of deposit strike** at the Project to date
- Follow-up program of gold analysis of archived drill samples underway
- Planning for **Cobalt-Nickel-Copper Mineral Resource update** with new drilling results
- The Project is the subject of a Bankable Feasibility Study by AVL. The **proposed 25 year mine life operation** is located on a newly granted Mining Lease<sup>4</sup>

<sup>1</sup> See BYH ASX announcement dated 28 November 2018 for full details.

<sup>2</sup> See AVL ASX announcement dated 22 May 2018 for full details.

<sup>3</sup> Drilling intervals are down hole widths

<sup>4</sup> See AVL ASX announcement dates 22 December 2020 for full details.

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### ASX Code: BYH

ABN: 59 616 795 245  
Shares on issue: 153,540,508  
Latest Share Price: \$0.068  
Market Capitalisation: \$10.4M

### Projects

Gabanintha – Copper, Gold  
Bryah Basin – Copper, Gold  
Manganese  
[bryah.com.au](http://bryah.com.au)

Bryah Resources Limited ("Bryah" or "the Company") is pleased to advise the results from gold assaying of an initial selection of drill samples from the Australian Vanadium Project ("Project") which is located within the Company's Gabanintha Project, approximately 40 km south of the town of Meekatharra in central Western Australia. Bryah holds a suite of mineral rights over tenements held by Australian Vanadium Limited ("AVL") covering 170km<sup>2</sup> (see Figure 1). Bryah's mineral rights are for all minerals, excluding vanadium, titanium, cobalt, chromium, uranium, lithium, tantalum, iron ore and manganese. The vanadium-titanium-magnetite deposit is approximately 11.5km long within the Project with most of this lying on Mining Lease M51/878 which was granted in 2020.

The Project is currently progressing through a Bankable Feasibility Study by AVL.

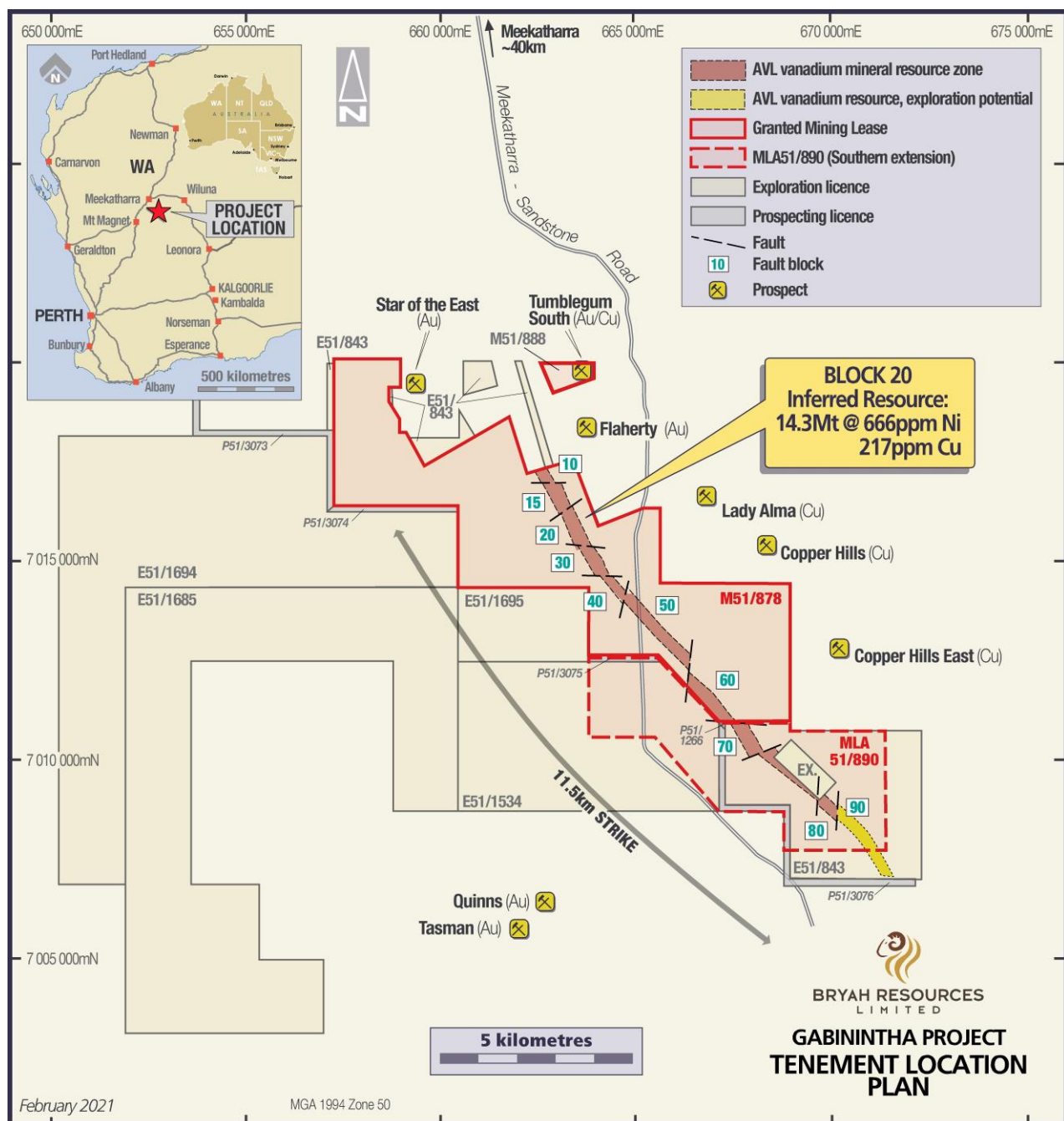


Figure 1 - Gabanintha Location Map

Commenting on the results of the recent findings, Managing Director Neil Marston said:

“We are very pleased to have identified the presence of gold mineralisation within Australian Vanadium Limited’s high-grade vanadium-titanium-magnetite deposit at Gabanintha.

“Given the sheer scale of the vanadium deposit and its long mine-life potential, these initial results warrant us undertaking a more detailed investigation on the extent of gold mineralisation. Further drilling samples will be submitted for gold analysis in the coming days with our expectation of more testing to follow.

“A review of AVL’s metallurgical testwork indicates the presence of gold in the nickel-copper-cobalt rich sulphide non-magnetic tailings stream of their planned vanadium-magnetite processing plant. The nickel-copper-cobalt sulphide mineralisation has consistently reported to the non-magnetic fraction during the magnetic separation of the vanadium bearing magnetite. This has effectively concentrated the sulphide minerals, enabling further concentration by flotation methods. The additional presence of gold in the sulphide nickel-copper-cobalt concentrate could significantly improve the economics of producing this by-product from the project.

“In 2020 Australian Vanadium updated their mineral resource estimate for the vanadium deposit and we are now working with them to update their 2018 nickel, copper and cobalt mineral resource estimate after extensive drilling since then. Bryah hold the mineral rights to, inter alia, all gold, nickel and copper on the project whilst Australian Vanadium holds the rights to cobalt as well as their large vanadium-titanium-magnetite resource.

“The project is expected to operate for at least 25 years based on the latest feasibility study so the potential for long-term production of a sulphide concentrate by-product containing gold, nickel and copper over the life of the operation represents a significant revenue-generating opportunity for Bryah.”

## Gold Sampling

Historical sampling of the vanadium-titanium-magnetite deposit for gold (Au) has been limited. Prior to 2020 gold sampling was limited to sporadic analysis on existing drilling pulps, totaling 233 analyses for gold, completed largely in 2010. The peak Au value detected in that generation of sampling was 0.14 g/t Au, and further precious metal analysis was not completed until 2020.

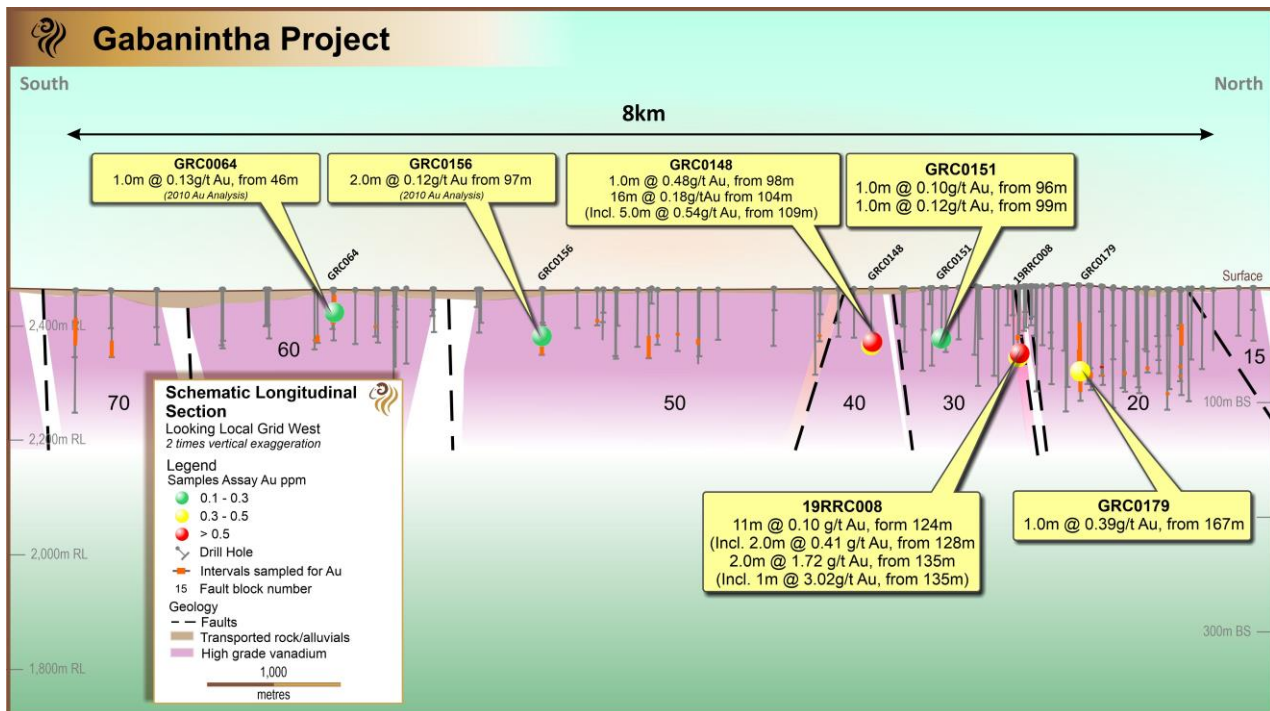
Sampling of 217 drill pulps in late 2020 has highlighted the presence of zones of anomalous gold, adjacent to, or within the high-grade vanadium-titanium-magnetite domain at the Project, with the strongest gold mineralisation occurring in proximity to cross cutting regional faults.

The best gold intercepts occur close to known fault locations. Further work is required to determine whether faults and brittle deformation of the high-grade vanadium-titanium-magnetite horizon are the main control for the gold mineralisation and to delineate the full extent of mineralisation. At present, the identified gold zones above 0.3 g/t Au fall within the vanadium optimized pit shell for the Project<sup>5</sup>.

A long section of the vanadium deposit (see Figure 2) shows the location of holes which have been partially assayed for gold, with highlights on the best intercepts received to date. The distance between drill holes GRC0148 and GRC0179 is approximately 1.4 kilometres in strike length.

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<sup>5</sup> See ASX:AVL announcement dated 22 December 2020 for full details on the Technical and Financial PFS Update for the Project



**Figure 2 - Long Section (Local Grid) view of the Project with all gold sampling locations and highlight intercepts**

A 2020 review of the metallurgical studies for the Project undertaken during 2018 identified anomalous gold results. Subsequently samples were selected for Au analysis during late 2020. Initial sample selection was based on the presence of anomalous sulphur and/or copper, within the high-grade vanadium domain (HG10). Platinum Group Elements (PGEs) were also analysed for. The first batch submitted consisted of 24 samples which were analysed by fire assay for Au and the full PGE suite of Platinum (Pt), Palladium (Pd), Rhodium (Rh), Ruthenium (Ru), Osmium (Os) and Iridium (Ir).

No values of exploration or economic interest were detected in the PGEs, but a peak gold value of 0.386 g/t Au was returned in a sample from hole GRC0179 from 167m down hole depth. In total, 4 of the 24 samples in the batch returned assays above 0.3 g/t Au.

An additional 193 pulps from drilling at the Project were then submitted to follow up on the initial results. Sample selection was based on extending the analysis up-hole through the layered gabbro stratigraphy around intercepts greater than 0.3 g/t Au in the first batch of 24 samples. Further samples with high sulphur and/or copper were also selected. Samples were not analysed for the full suite of PGEs but did include Pt and Pd in addition to Au fire assay analysis. PGEs again returned no significant intercepts.

Best down hole width gold intercepts returned from this second batch were:

- GRC0148 - (LG2 - Hangingwall Zone) 1m @ 0.48g/t Au from 98m, and (HG10 Zone) **16m @ 0.18g/t Au from 104m**, incl 5m @ 0.54g/t Au from 109m
- 19RRC008 - (HG10 Zone) **11m @ 0.10g/t Au from 124m**, incl 2m @ 0.41g/t Au from 128m, and (Footwall Zone) 2m @ 1.72g/t Au from 135m, incl **1m @ 3.02g/t Au from 135m**.



These intercepts are shown on local grid cross sections in Figure 3 and Figure 4 below. They are also highlighted on the long section (Figure 2), that shows the proximity of these intercepts to modelled large-scale regional faults. See Appendix 1 for details of all 2020 gold assay results.

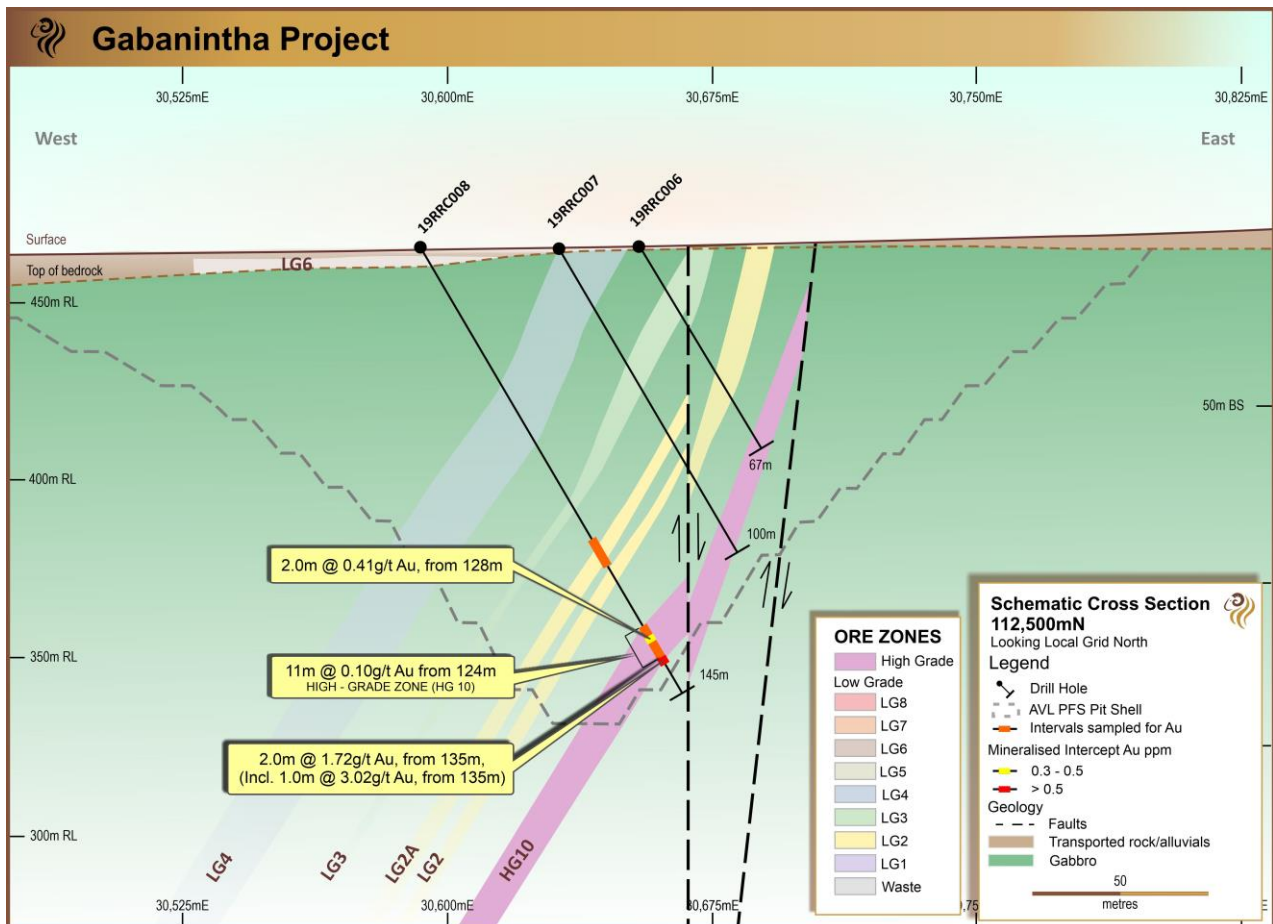


Figure 3 - Local Grid Cross Section at 112,500mN with gold intercepts in hole 19RRC008

## 2018 Metallurgical Testwork Program

Project bench-scale metallurgical testwork was conducted in March 2018<sup>6</sup>, where fresh HG10 material acquired from diamond drill core was subjected to magnetic separation to produce a V<sub>2</sub>O<sub>5</sub> concentrate. The non-magnetic fraction contained significant sulphide, and it was confirmed that a concentrate could be produced through flotation tests.

In the testwork, the composite samples were first crushed to size and beneficiated for V<sub>2</sub>O<sub>5</sub> recovery by low intensity magnetic separation (LIMS). The magnetic fraction mass yields for Composites 2 and 7 were 89.8% and 87.5% respectively after LIMS. The non-magnetic fraction of the remainder of the mass for these two composites, (10.2% and 12.5% respectively), was then tested via flotation to separate the sulphide from the silicate gangue.

Four sulphide flotation tests were conducted over the two composite samples with two duplicates.

<sup>6</sup> See AVL ASX announcement dated 22 May 2018 for full details of testwork results and JORC 2012 Table 1 disclosure

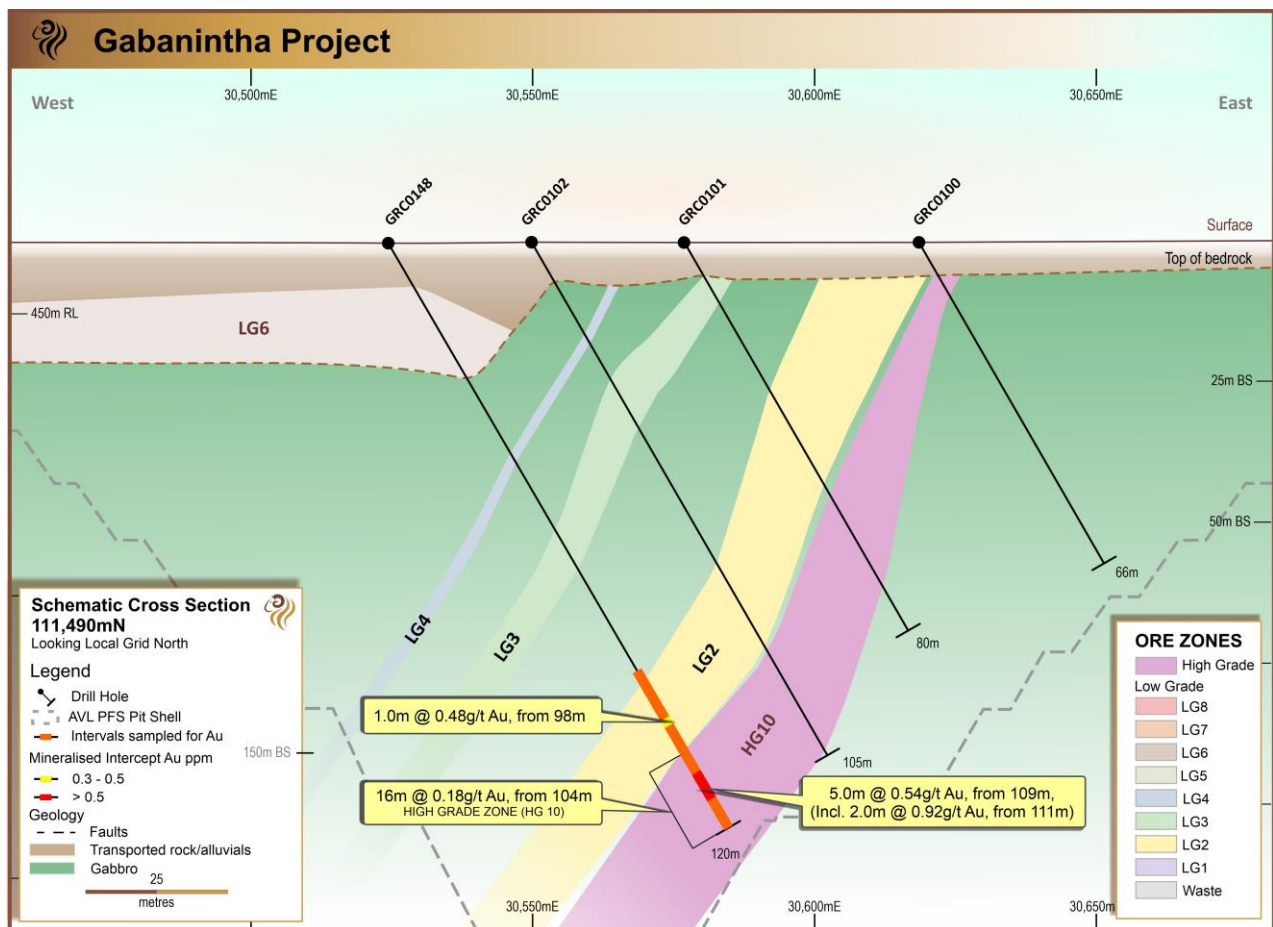


Figure 4 - Local Grid Cross Section at 111,490mN with gold intercepts in hole GRC0148

Apart from the gold, the flotation tests recorded from 4.14% to 6.30% base metals in the sulphide concentrate, being 1.61% - 2.58% Nickel, 0.82% - 1.70% Copper and 1.71% - 2.02% Cobalt.

The non-magnetic feed (LIMS tail) of each composite was assayed for gold, assays ranging from 0.95 g/t Au to 1.3 g/t Au, and again in the first rougher stage concentrates only (see Table 1). There were additional concentrate stages collected but these were not assayed for Au, nor was the total concentrate.

Table 1 - Sulphide Flotation Gold Results

Test	Sample	Feed - LIMS Tail		Concentrate (1 <sup>st</sup> Rougher)		Concentrate (Other Stages)		Concentrate (Total)	
		Mass (Kg)	Au g/t	Mass Yield (%)	Au g/t	Mass Yield (%)	Au g/t	Mass Yield (%)	Au g/t
T1	Composite 2	1.0	1.3	3.8	23.4	7.7	Unknown	11.5	Unknown
T2	Composite 2 (Duplicate)	1.0	1.3	3.9	22.4	8.6	Unknown	12.5	Unknown
T3	Composite 7	1.0	0.95	3.3	2.4	7.0	Unknown	10.3	Unknown
T4	Composite 7 (Duplicate)	1.0	0.95	3.3	2.9	8.1	Unknown	11.4	Unknown

The results of up to 23.4 g/t Au at the 1<sup>st</sup> rougher concentrate in Composite 2 would indicate that some of the gold is associated with the sulphide minerals in the deposit.

The tests indicate the presence of gold in the fresh HG10 material, more specifically to its association with the non-magnetic fraction and the sulphide component. While not being definitive, this discovery has prompted Bryah to return to the drill core and sample pulps across the Project to better identify the source and distribution of the gold.

Since the 1<sup>st</sup> rougher stage concentrate was the only portion tested for gold, it is unclear what other portions of the total concentrate have the potential to be gold bearing. Further work is required to understand what the gold associations with the other stages of the concentrate are, how much is collected from the full concentrate and how much remains in the post-flotation tail.

The gold values in the sulphide concentrate may add additional value to the base metals that also are recovered by flotation.

## Base Metals Minerals Resource

An Inferred Base Metal Mineral Resource for the Project was defined by AVL in July 2018, then updated in November 2018. The **Inferred Mineral Resource is 14.3Mt @ 208ppm Cobalt, 666ppm Nickel, 217ppm Copper and 0.16% Sulphur<sup>7</sup>.**

Due to the low number of informing samples for the fresh zone, the classification of sulphide hosted base metal material in the resource is Inferred. The base metal resource is constrained to the high-grade HG10 zone in Fault Block 20, which was the area of the highest drilling density of holes that penetrate into fresh material (see Figure 5).

Table 2 below shows the sulphide hosted base metal material classified as Inferred Resources.

**Table 2 - Australian Vanadium Project Base Metals Mineral Resource Estimate (November 2018)**

Zone	Classification	Mt	Co ppm	Ni ppm	Cu ppm	S %
<b>High-grade Fault Block 20</b>	Measured	-	-	-	-	-
	Indicated	-	-	-	-	-
<b>Fresh material</b>	Inferred	14.3	208	666	217	0.16
	<b>Total</b>	<b>14.3</b>	<b>208</b>	<b>666</b>	<b>217</b>	<b>0.16</b>

The Inferred Mineral Resource for Nickel, Copper and Cobalt resource was published on the basis that the Project beneficiation plant will be producing a tail that incorporates a high percentage of the available sulphides and these minerals are therefore potentially economically recoverable.

The base metal sulphide mineralisation has been found to consistently report to the non-magnetic fraction during the separation of the vanadium bearing magnetite, enabling further sulphide concentration by flotation.

Since this Inferred Mineral Resource was announced AVL has undertaken extensive additional drilling at the Project and these additional drill holes should enable the base metals Mineral Resource estimate to extend beyond Fault Block 20.

<sup>7</sup> See BYH ASX announcement dated 28 November 2018 for full details.



A total of 38 diamond drill holes and 49 RC drill holes for a total of 9,764.74 metres of drilling have been completed since the 2018 Base Metals Mineral Resource estimate<sup>8</sup>, all of which have been assayed for cobalt, nickel and copper.

No gold Mineral Resource estimate exists for the Project, and it is uncertain whether further work will result in estimation of a Mineral Resource for gold.

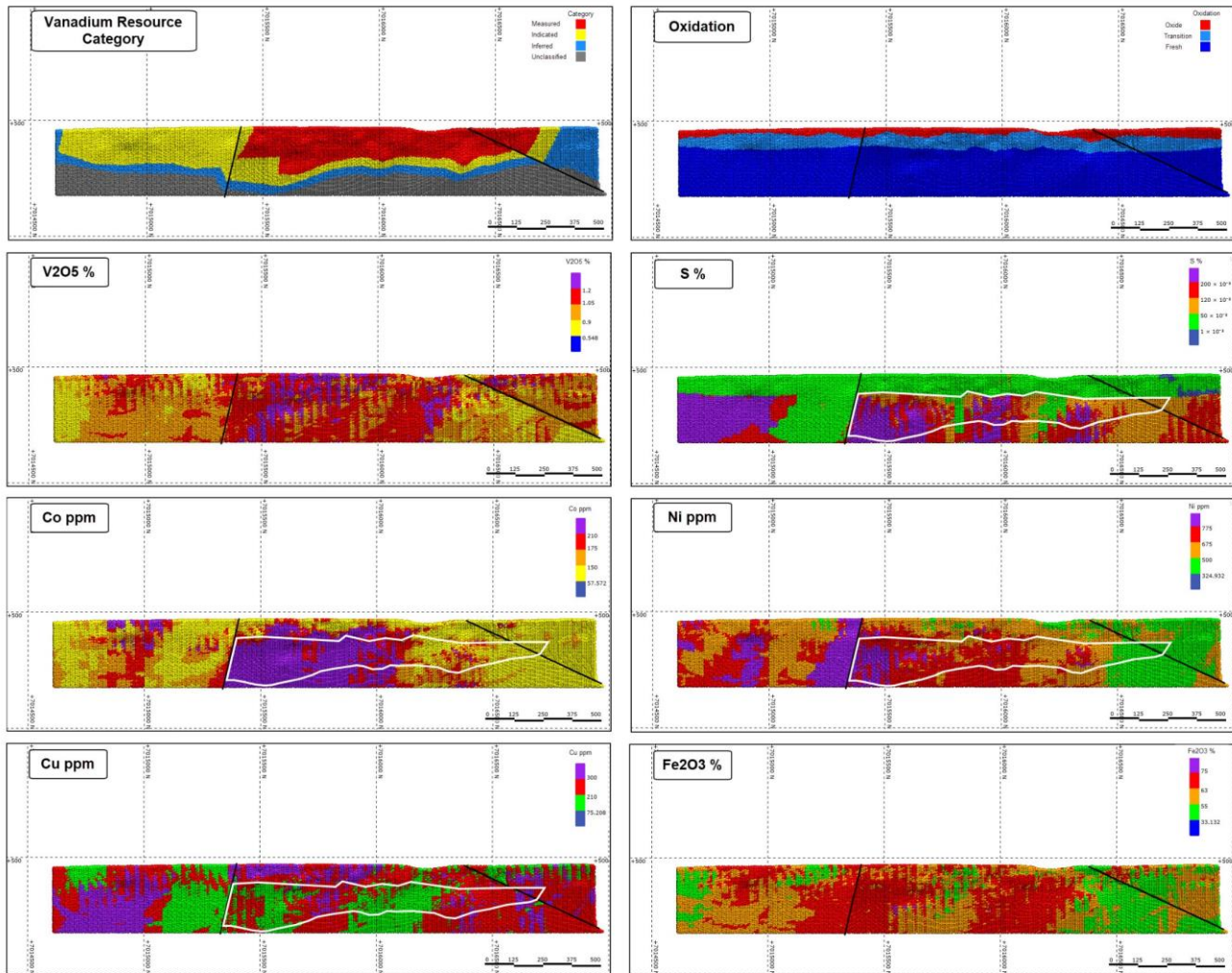


Figure 5 - Long Section View of the November 2018 Inferred Base Metals Resource at Project (outlined in white)<sup>9</sup>

<sup>8</sup> See AVL release dated 4 March 2020, "Total Vanadium Resource Rises to 208 Million Tonnes" and AVL release dated 24 November 2020 "Geotech Drilling at the Australian Vanadium Project" for full details.

<sup>9</sup> Bryah hold minerals rights for Nickel (Ni) and Copper (Cu); AVL hold mineral rights for vanadium (V<sub>2</sub>O<sub>5</sub>) and cobalt (Co).



## FOLLOW-UP WORK

Only 450 drill samples across 23 separate drill holes (see Appendix 1) have been analysed for gold to date on the Project. This represents less than 2% of the total Project drill samples.

Bryah are currently selecting further archived pulps from the Project to submit for Au, Pt and Pd analysis by Fire Assay. Sample selection criteria is:

- proximity to known faults;
- elevated copper and/or sulphur;
- within or close to the high grade vanadium domain (HG10); and/or
- testing continuity along strike or along fault planes around the significant intercepts recently identified.

Early indications are that there is an association between the presence of large-scale regional fault-related brittle deformation of the contacts of the high-grade vanadium domain, and the gold mineralisation. The next analysis campaign of archive pulps will aim to test this association.

The company will also work with AVL to update the cobalt-nickel-copper mineral resource for the Project utilising all the drilling completed in 2019 and 2020.

*The board of directors of Bryah Resources Limited has authorised this announcement to be given to the ASX.*

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## About Bryah Resources Limited

*Bryah Resources Limited is a copper-gold-manganese focused explorer with 2 projects located in central Western Australia, being the 1,185km<sup>2</sup> Bryah Basin Project and the 170km<sup>2</sup> Gabanintha Project.*

*The Bryah Basin is host to the high-grade copper-gold mines at DeGrussa, discovered by Sandfire Resources Limited in 2009, and at Horseshoe Lights, which was mined until 1994. The Bryah Basin also has several historical and current manganese mines including the Company's recently acquired Horseshoe South mine. The Company has a joint venture agreement with OM (Manganese) Limited in respect to its manganese rights only on approximately 660 km<sup>2</sup> of its Bryah Basin tenement holdings.*

*At Gabanintha, Bryah holds the rights to all minerals except Vanadium, Uranium, Cobalt, Chromium, Titanium, Lithium, Tantalum, Manganese & Iron Ore (Excluded Minerals). Australian Vanadium Limited retains 100% rights in the Excluded Minerals on the Gabanintha Project. Bryah has announced a maiden Inferred Mineral Resource at the Tumblegum South Prospect at Gabanintha of **600,000 tonnes @ 2.2 g/t Au for 42,500 oz Au<sup>10</sup>**.*

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<sup>10</sup> See BYH ASX Announcement dated 29 January 2020 for full details

## Competent Persons Statement – Exploration Results

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*The information in this announcement that relates to Exploration Results is based on information compiled by Mr Tony Standish, who is a Member of the Australian Institute of Geoscientists. Mr Standish is a consultant to Bryah Resources Limited (“the Company”). Tony Standish has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves’. Tony Standish consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.*

*Where the Company refers to Exploration Results in this announcement (referencing previous releases made to the ASX), the Company is not aware of any new information or data that materially affects the information included in the relevant market announcements.*

## Competent Person Statement — Mineral Resource Estimation

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*The information in this announcement that relates to Mineral Resources (see BYH ASX announcement dated 29 January 2020) is based on and fairly represents information compiled by Mr Ashley Jones, Consultant with Kamili Geology Pty Ltd. Mr Jones is a member of the Australasian Institute of Mining and Metallurgy (AusIMM).*

*The Company confirms that it is not aware of any new information or data that materially affects the information included in that announcement and all material assumptions and technical parameters underpinning the Mineral Resource estimate with that announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Persons findings are presented have not materially changed from the original announcement.*

## Forward Looking Statements

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*This report may contain certain “forward-looking statements” which may not have been based solely on historical facts, but rather may be based on the Company’s current expectations about future events and results. Where the Company expresses or implies an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and believed to have a reasonable basis. However, forward looking statements are subject to risks, uncertainties, assumptions and other factors which could cause actual results to differ materially from future results expressed, projected or implied by such forward-looking statements. Readers should not place undue reliance on forward looking information. The Company does not undertake any obligation to release publicly any revisions to any “forward looking statement” to reflect events or circumstances after the date of this report, or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws.*

## APPENDIX 1: Gold, Platinum and Palladium Results

### Collar Table in MGA94, Zone 50 co-ordinates and drill directions

Hole ID	Hole Type	East	North	RL	Hole Depth	Dip	Azimuth
18GERC016	RC	664,669	7,014,224	464	102	-60	50
19MTDH001	DDH	663,567	7,016,060	467	188.55	-55	230
19MTDH010	DDH	663,419	7,016,328	466	261.3	-55	230
19MTDT005	RCDT	663,555	7,015,754	468	181.9	-90	0
19MTDT007	RCDT	663,528	7,015,834	467	170.7	-90	0
19MTDT011	RCDT	663,395	7,016,126	465	145.8	-90	0
19MTDT014	RCDT	663,302	7,016,350	466	165.7	-90	0
19RRC008	RC	663,816	7,015,310	466	145	-60	50
19RRC012	RC	663,531	7,015,836	467	157	-80	50
19RRC025	RC	665,792	7,013,147	465	71	-60	50
19RRC036	RC	666,951	7,011,553	465	119	-60	50
19RRC038	RC	665,312	7,013,659	464	119	-60	50
19RRC040	RC	665,402	7,013,552	465	122	-60	50
19RRC041	RC	665,494	7,013,446	465	110	-60	50
19RRC043	RC	666,617	7,011,827	465	95	-60	50
GRC0148	RC	664,421	7,014,482	463	120	-60	50
GRC0151	RC	664,126	7,014,874	463	108	-60	50
GRC0155	RC	667,920	7,010,523	464	138	-60	50
GRC0179	RC	663,543	7,015,643	468	209	-60	50
GRC0177	RC	663,595	7,015,680	470	149	-60	50
GRC0178	RC	663,571	7,015,663	469	161	-60	50
GRC0064	RC	666,906	7,011,693	465	54	-60	50
GRC0156	RC	666,041	7,012,853	465	132	-60	50

### Au, Pt, Pd by Fire Assay Results Table

Hole ID	From (m)	To (m)	Au g/t	Pt g/t	Pd g/t	Domain
18GERC016	91	92	0.009	0.003	0.004	HG10
19MTDH001	183	183.3	0.008	0.002	0.023	HG10
19MTDH010	223.71	223.8	0.004	0.002	0.005	HG10
19MTDT005	157	158	0.017	0.004	0.003	HG10
19MTDT007	153	154	0.002	0.003	0.003	HG10
19MTDT011	138.65	139.7	0.005	0.003	0.006	HG10
19MTDT014	136.55	137.1	0.005	0.004	0.007	HG10
19MTDT014	153.8	154.8	0.002	0.004	0.005	HG10
19RRC008	95	96	0.001	BDL	BDL	W32
19RRC008	96	97	BDL	BDL	BDL	W32
19RRC008	97	98	0.020	BDL	BDL	W32
19RRC008	98	99	0.001	BDL	BDL	LG9
19RRC008	99	100	BDL	BDL	BDL	LG9
19RRC008	100	101	BDL	BDL	BDL	LG9
19RRC008	101	102	0.011	BDL	BDL	LG9
19RRC008	102	103	0.001	BDL	BDL	LG9
19RRC008	103	104	BDL	BDL	BDL	W22
19RRC008	124	125	0.015	BDL	BDL	HG10
19RRC008	125	126	0.021	BDL	BDL	HG10
19RRC008	126	127	0.014	BDL	BDL	HG10
19RRC008	127	128	0.069	BDL	BDL	HG10
<b>19RRC008</b>	<b>128</b>	<b>129</b>	<b>0.430</b>	BDL	BDL	HG10
<b>19RRC008</b>	<b>129</b>	<b>130</b>	<b>0.385</b>	0.006	0.006	HG10
19RRC008	130	131	0.051	BDL	BDL	HG10
19RRC008	131	132	0.015	BDL	BDL	HG10
19RRC008	132	133	0.032	BDL	BDL	HG10
19RRC008	133	134	0.058	BDL	BDL	HG10
19RRC008	134	135	0.018	BDL	BDL	HG10
<b>19RRC008</b>	<b>135</b>	<b>136</b>	<b>3.020</b>	BDL	0.01	FW
<b>19RRC008</b>	<b>136</b>	<b>137</b>	<b>0.425</b>	BDL	0.01	FW
19RRC012	140	141	0.070	0.006	0.005	HG10
19RRC025	64	65	0.012	0.002	0.002	HG10
19RRC036	101	102	0.004	0.005	0.006	HG10
19RRC038	104	105	0.009	0.002	0.01	HG10
19RRC040	87	88	0.008	0.012	0.008	LG2
19RRC041	92	93	0.008	0.003	0.004	HG10
19RRC043	74	75	0.003	0.002	0.002	HG10
GRC0148	88	89	0.010	BDL	BDL	W22
GRC0148	89	90	0.020	BDL	BDL	W22
GRC0148	90	91	0.010	BDL	BDL	LG2
GRC0148	91	92	BDL	BDL	BDL	LG2
GRC0148	92	93	BDL	BDL	BDL	LG2
GRC0148	93	94	BDL	BDL	BDL	LG2
GRC0148	94	95	0.003	BDL	BDL	LG2
GRC0148	95	96	BDL	BDL	BDL	LG2
GRC0148	96	97	BDL	BDL	BDL	LG2
GRC0148	97	98	BDL	BDL	BDL	LG2
<b>GRC0148</b>	<b>98</b>	<b>99</b>	<b>0.475</b>	0.005	BDL	LG2
GRC0148	99	100	0.004	BDL	BDL	LG2
GRC0148	100	101	BDL	BDL	BDL	LG2
GRC0148	101	102	0.002	BDL	BDL	LG2
GRC0148	102	103	0.062	BDL	BDL	LG2
GRC0148	103	104	0.006	0.005	0.005	LG2
GRC0148	104	105	0.005	BDL	BDL	HG10
GRC0148	105	106	0.004	0.005	BDL	HG10
GRC0148	106	107	0.002	0.005	BDL	HG10
GRC0148	107	108	0.021	BDL	BDL	HG10
GRC0148	108	109	0.002	0.005	0.005	HG10
<b>GRC0148</b>	<b>109</b>	<b>110</b>	<b>0.165</b>	BDL	BDL	HG10
<b>GRC0148</b>	<b>110</b>	<b>111</b>	<b>0.372</b>	0.003	0.003	HG10
<b>GRC0148</b>	<b>111</b>	<b>112</b>	<b>1.030</b>	0.005	BDL	HG10



Hole ID	From (m)	To (m)	Au g/t	Pt g/t	Pd g/t	Domain
<b>GRC0148</b>	<b>112</b>	<b>113</b>	<b>0.813</b>	BDL	BDL	<b>HG10</b>
<b>GRC0148</b>	<b>113</b>	<b>114</b>	<b>0.316</b>	0.004	0.008	<b>HG10</b>
GRC0148	114	115	0.022	BDL	BDL	<b>HG10</b>
GRC0148	115	116	0.020	BDL	BDL	<b>HG10</b>
GRC0148	116	117	0.024	BDL	BDL	<b>HG10</b>
GRC0148	117	118	0.010	BDL	BDL	<b>HG10</b>
GRC0148	118	119	0.020	BDL	BDL	<b>HG10</b>
GRC0148	119	120	0.019	0.003	0.005	<b>HG10</b>
GRC0151	95	96	0.023	BDL	BDL	<b>HG10</b>
<b>GRC0151</b>	<b>96</b>	<b>97</b>	<b>0.103</b>	BDL	BDL	<b>HG10</b>
GRC0151	97	98	0.029	BDL	BDL	<b>HG10</b>
GRC0151	98	99	0.019	BDL	BDL	<b>HG10</b>
<b>GRC0151</b>	<b>99</b>	<b>100</b>	<b>0.116</b>	0.006	0.01	<b>HG10</b>
GRC0151	100	101	0.006	0.005	BDL	FW
GRC0151	101	102	0.013	BDL	BDL	FW
GRC0151	102	103	0.001	BDL	BDL	FW
GRC0151	103	104	0.017	BDL	BDL	LG1
GRC0151	104	105	0.029	BDL	BDL	LG1
GRC0151	105	106	0.154	BDL	BDL	LG1
GRC0151	106	107	0.042	BDL	0.005	FW
GRC0151	107	108	0.012	BDL	BDL	FW
GRC0155	127	128	0.005	0.002	0.003	<b>HG10</b>
GRC0155	134	135	0.005	0.004	0.009	<b>HG10</b>
GRC0177	129	130	0.019	BDL	BDL	<b>HG10</b>
GRC0177	130	131	0.003	BDL	BDL	<b>HG10</b>
GRC0177	131	132	0.016	BDL	BDL	<b>HG10</b>
GRC0177	132	133	0.009	BDL	BDL	<b>HG10</b>
GRC0178	133	134	BDL	BDL	BDL	W21
GRC0178	134	135	BDL	BDL	BDL	<b>HG10</b>
GRC0178	135	136	BDL	BDL	BDL	<b>HG10</b>
GRC0178	136	137	BDL	0.01	0.005	<b>HG10</b>
GRC0178	137	138	BDL	0.005	0.01	<b>HG10</b>
GRC0178	138	139	BDL	0.005	0.01	<b>HG10</b>
GRC0178	139	140	0.002	BDL	0.01	<b>HG10</b>
GRC0178	140	141	0.005	BDL	BDL	<b>HG10</b>
GRC0178	141	142	0.005	BDL	BDL	<b>HG10</b>
GRC0178	142	143	BDL	0.005	BDL	<b>HG10</b>
GRC0178	143	144	0.023	BDL	BDL	<b>HG10</b>
GRC0178	144	145	0.004	BDL	BDL	<b>HG10</b>
GRC0178	145	146	0.002	BDL	BDL	<b>HG10</b>
GRC0178	146	147	BDL	BDL	BDL	<b>HG10</b>
GRC0178	147	148	0.001	BDL	BDL	<b>HG10</b>
GRC0178	151	152	BDL	0.015	0.015	FW
GRC0178	152	153	BDL	BDL	BDL	FW
GRC0179	82	83	BDL	BDL	BDL	W24
GRC0179	83	84	BDL	BDL	BDL	W24
GRC0179	84	85	0.005	BDL	BDL	W24
GRC0179	85	86	0.002	BDL	BDL	W24
GRC0179	86	87	0.006	BDL	BDL	W24
GRC0179	87	88	0.003	BDL	BDL	W24
GRC0179	88	89	0.001	BDL	BDL	W24
GRC0179	89	90	BDL	BDL	BDL	W24
GRC0179	90	91	BDL	BDL	BDL	W24
GRC0179	91	92	BDL	BDL	BDL	W24
GRC0179	92	93	BDL	BDL	BDL	LG4
GRC0179	93	94	BDL	BDL	BDL	LG4
GRC0179	94	95	BDL	BDL	BDL	LG4
GRC0179	95	96	0.003	BDL	BDL	LG4
GRC0179	96	97	0.016	BDL	BDL	LG4
GRC0179	97	98	0.013	BDL	BDL	LG4
GRC0179	98	99	0.002	BDL	BDL	LG4
GRC0179	99	100	0.001	BDL	BDL	LG4
GRC0179	100	101	BDL	BDL	BDL	LG4

Hole ID	From (m)	To (m)	Au g/t	Pt g/t	Pd g/t	Domain
GRC0179	101	102	0.003	BDL	BDL	LG4
GRC0179	102	103	0.013	BDL	BDL	LG4
GRC0179	103	104	0.002	BDL	BDL	LG4
GRC0179	104	105	0.004	BDL	BDL	LG4
GRC0179	105	106	0.001	BDL	BDL	LG4
GRC0179	106	107	BDL	BDL	BDL	W23
GRC0179	107	108	BDL	BDL	BDL	W23
GRC0179	108	109	BDL	BDL	BDL	W23
GRC0179	109	110	BDL	BDL	BDL	W23
GRC0179	110	111	BDL	BDL	BDL	W23
GRC0179	111	112	BDL	BDL	BDL	W23
GRC0179	112	113	BDL	BDL	BDL	W23
GRC0179	113	114	BDL	BDL	BDL	W23
GRC0179	114	115	BDL	BDL	BDL	W23
GRC0179	115	116	BDL	BDL	BDL	W23
GRC0179	116	117	0.002	BDL	BDL	W23
GRC0179	117	118	0.002	BDL	BDL	W23
GRC0179	118	119	BDL	BDL	BDL	W23
GRC0179	119	120	BDL	BDL	BDL	W23
GRC0179	120	121	BDL	BDL	BDL	W23
GRC0179	121	122	BDL	BDL	BDL	W23
GRC0179	122	123	BDL	BDL	BDL	LG3
GRC0179	123	124	BDL	BDL	BDL	LG3
GRC0179	124	125	BDL	BDL	BDL	W22
GRC0179	125	126	0.001	BDL	BDL	W22
GRC0179	126	127	BDL	BDL	BDL	W22
GRC0179	127	128	BDL	BDL	BDL	W22
GRC0179	128	129	0.016	BDL	BDL	W22
GRC0179	129	130	0.001	BDL	BDL	W22
GRC0179	130	131	BDL	BDL	BDL	W22
GRC0179	131	132	BDL	BDL	BDL	W22
GRC0179	132	133	BDL	BDL	BDL	W22
GRC0179	133	134	BDL	BDL	BDL	W22
GRC0179	134	135	BDL	BDL	BDL	W22
GRC0179	135	136	BDL	BDL	BDL	W22
GRC0179	136	137	BDL	BDL	BDL	LG2
GRC0179	137	138	BDL	BDL	BDL	LG2
GRC0179	138	139	0.002	BDL	BDL	LG2
GRC0179	139	140	BDL	BDL	BDL	LG2
GRC0179	140	141	BDL	BDL	BDL	LG2
GRC0179	141	142	BDL	BDL	0.005	LG2
GRC0179	142	143	BDL	BDL	BDL	LG2
GRC0179	144	145	BDL	BDL	BDL	LG2
GRC0179	145	146	BDL	BDL	BDL	LG2
GRC0179	146	147	BDL	BDL	BDL	LG2
GRC0179	147	148	0.002	BDL	BDL	LG2
GRC0179	148	149	BDL	BDL	BDL	LG2
GRC0179	149	150	BDL	BDL	BDL	W21
GRC0179	150	151	BDL	BDL	BDL	W21
GRC0179	151	152	BDL	BDL	BDL	W21
GRC0179	152	153	BDL	BDL	BDL	W21
GRC0179	153	154	BDL	BDL	BDL	W21
GRC0179	154	155	BDL	BDL	BDL	W21
GRC0179	155	156	BDL	BDL	BDL	W21
GRC0179	156	157	BDL	BDL	BDL	W21
GRC0179	157	158	BDL	BDL	BDL	W21
GRC0179	158	159	BDL	BDL	BDL	W21
GRC0179	159	160	BDL	BDL	BDL	W21
GRC0179	160	161	0.003	BDL	BDL	W21
GRC0179	161	162	0.004	BDL	0.005	W21
GRC0179	162	163	BDL	BDL	BDL	W21
GRC0179	163	164	BDL	BDL	BDL	W21
GRC0179	164	165	BDL	BDL	BDL	W21

Hole ID	From (m)	To (m)	Au g/t	Pt g/t	Pd g/t	Domain
GRC0179	165	166	0.001	BDL	0.005	W21
GRC0179	166	167	0.004	BDL	BDL	HG10
<b>GRC0179</b>	<b>167</b>	<b>168</b>	<b>0.386</b>	0.004	0.008	HG10
GRC0179	168	169	0.025	0.005	BDL	HG10
GRC0179	169	170	0.021	BDL	BDL	HG10
GRC0179	170	171	0.014	BDL	BDL	HG10
GRC0179	171	172	0.002	BDL	BDL	HG10
GRC0179	172	173	0.002	BDL	BDL	HG10
GRC0179	173	174	0.007	BDL	BDL	HG10
GRC0179	174	175	0.003	BDL	BDL	HG10
GRC0179	175	176	0.010	BDL	BDL	HG10
GRC0179	176	177	0.005	BDL	BDL	HG10
GRC0179	177	178	0.024	BDL	BDL	HG10
GRC0179	178	179	0.009	0.002	0.004	HG10
GRC0179	193	194	0.002	BDL	BDL	FW
GRC0179	194	195	BDL	BDL	BDL	FW
GRC0179	195	196	BDL	BDL	BDL	FW
GRC0179	196	197	BDL	BDL	BDL	FW
GRC0179	197	198	0.004	BDL	BDL	FW
GRC0179	198	199	0.014	BDL	0.005	FW
GRC0179	199	200	0.002	BDL	0.005	FW
GRC0179	200	201	BDL	BDL	0.005	FW
GRC0179	201	202	0.003	BDL	BDL	FW
GRC0179	202	203	0.003	BDL	BDL	FW
GRC0179	203	204	0.002	BDL	BDL	FW
GRC0179	204	205	0.004	BDL	BDL	FW
GRC0179	205	206	0.003	BDL	BDL	FW
GRC0179	206	207	0.003	BDL	BDL	FW
GRC0179	207	208	0.024	BDL	BDL	FW
GRC0179	208	209	0.006	BDL	BDL	FW
<b>GRC0156*</b>	<b>97</b>	<b>98</b>	<b>0.140</b>	NA	NA	99
<b>GRC0156*</b>	<b>98</b>	<b>99</b>	<b>0.100</b>	NA	NA	99
<b>GRC0064*</b>	<b>46</b>	<b>47</b>	<b>0.128</b>	NA	NA	FW

Notes: \*Results from 2010 Au analysis

NA = Not Assayed

BDL = Below Detection Limit

HG10 = High Grade Vanadium Domain; FW = Footwall; LG1 = Low Grade 1 (footwall domain); LG2 – LG9 = Hangingwall Low Grade Domains; W21 – W32 = Hangingwall Waste Domains; 99 = Unclassified

## APPENDIX 2: JORC, 2012 Edition Table 1, Sections 1 to 4

### Section 1 - Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
<b>Sampling Techniques</b>	Nature and quality of sampling (e.g. 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.	<p>The Australian Vanadium Project deposit was sampled using diamond core and reverse circulation (RC) percussion drilling from surface.</p> <p>During 2019 43 RC holes were drilled; 30 RC holes were drilled for 2,236m in the December 2019 drilling on blocks 16 and 8, and 13 RC holes for 1,224m drilled during October 2019.</p> <p>A further 30 PQ diamond drill holes were completed by March 2019, to collect metallurgy sample for a plant pilot study. 12 were drilled down-dip into the high-grade zone. These were complimented by an additional 18 PQ diamond drill tails on RC pre-collars, drilling vertically. The down dip holes were measured by hand-held XRF at 50 cm intervals to inform vanadium metallurgy characterisation. 14 of the 18 diamond tails were cut and a ¼ of the PQ sized core was sent for analysis.</p> <p>At the time of the latest AVL vanadium – titanium Mineral Resource estimation (does not include gold or other precious metals) (March 2020), a total of 280 RC holes and 50 diamond holes (24 of which are diamond tails) were drilled into the AVL portion of the deposit. 20 of the 330 holes were either too far north or east of the main mineralisation trend. One section in the southern part of the deposit (holes GRC0156, GRC0074, GRC0037 and GRC0038) was blocked out and excluded from the vanadium – titanium Mineral Resource due to what appeared to be an intrusion which affected the mineralised zones in this area. Of the remaining 310 drill holes, one had geological logging, but no assays and one was excluded due to poor sample return causing poor representation of the mineralised zones. Two diamond holes drilled during 2018 were not part of the vanadium – titanium Mineral Resource estimate, as they were drilled into the western wall for geotechnical purposes. The total metres of drilling available for use in the interpretation and grade estimation was 26 660.89m of drilling with 23,650.32 metres being RC and 3,010.57 metres of DDH over 305 holes at the date of the most recent Mineral Resource estimate. 18 down-dip metallurgical drillholes and 4 metallurgical diamond tails contribute magnetic susceptibility and geological logging to the Mineral Resource estimation, but not assay data, being drilled to provide metallurgical sample.</p> <p>The initial 17 RC drill holes were drilled by Intermin Resources NL (IRC) in 1998. These holes were not used in the 2015, 2017, 2018 and 2020 estimates due to very long unequal sample lengths and a different grade profile from subsequent drilling. 31 RC drill holes were drilled by Greater Pacific NL in 2000 and the remaining holes for the project were drilled by Australian Vanadium Ltd (previously Yellow Rock Resources Ltd) between 2007 and 2019. This drilling includes 50 diamond holes (24 of which are diamond tails) and 170 RC holes, for a total of 27,655.75m drilled.</p> <p>All of the drilling sampled both high and low-grade material and were sampled for XRF assaying of a typical iron ore suite, including vanadium and titanium plus base metals and sulphur. Loss on Ignition was also assayed.</p> <p>Of the available drill samples (greater than 26,000 samples) less than 2 percent have been assayed for gold, with 450 samples recording gold analysis in the database at the time of this report. All drill pulps prepared at commercial laboratories have been retained at the AVL storage facility and are available for additional analysis, with the exception of the very earliest drilling (pre-2002).</p>
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	<p>PQ core from 2019 diamond tails was ¼ cored and sent for assay. The remaining core went to make up the pilot plant metallurgical sample. The down dip 2019 PQ core has not been sampled, though handheld XRF datapoints were captured, as well as magnetic susceptibility data. Handheld XRF machines being used to take ½ metre measurements on the core have been calibrated using pulps from previous drilling by the Company, for which there are known head assays.</p> <p>2018 HQ diamond core was half-core sampled at regular intervals (usually one metre) with smaller sample intervals at geological boundaries.</p> <p>2015 diamond core was quarter-core sampled at regular intervals (usually one metre) and constrained to geological boundaries where appropriate.</p> <p>2009 HQ diamond core was half-core sampled at regular intervals (one metre) or to geological boundaries.</p> <p>Most of the RC drilling was sampled at one metre intervals, apart from the very earliest programme in 1998. RC samples have been split from the rig for all programmes with a cone splitter to obtain 2.5 – 3.5 kg of sample from each metre. Field duplicates were collected for every 40th drill metre to check sample grade representation from the drill rig splitter. During the October 2019 RC programme, field duplicates were collected from the rig splitter for every 30<sup>th</sup> drill metre. During the December 2019 RC programme, field duplicates were collected from the rig splitter for every 20<sup>th</sup> drill metre.</p>



Criteria	JORC Code Explanation	Commentary
		<p>Certified Reference Materials (CRMs) are inserted with each lab batch to verify accuracy on analysis. Vanadium CRMs are in use for the vanadium-titanium resource sampling and gold, base metals and PGE standards were inserted in the recent batches of archive pulps analysed for Au and PGEs. No large or consistent errors were detected in the results for the CRMs.</p>
	Aspects of the determination of mineralisation that are Material to the Public Report.	<p>RC drilling samples were collected at one metre intervals and passed through a cone splitter to obtain a nominal 2.5-3kg 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.</p> <p>Diamond core was drilled predominantly at HQ size for the earlier drilling (2009) and entirely HQ for the 2018 programme with the 2015 and 2019 drilling at PQ3 size.</p> <p>Field duplicates, standards and blanks have been inserted into the sampling stream at a rate of nominally 1:20 for blanks, 1:20 for standards (including internal laboratory), 1:40 for field duplicates, 1:20 for laboratory checks and 1:74 for umpire assays. For this RC programme completed in December 2019, the field duplicates were incorporated at a rate of 1:20, while standards 1:50 and blanks also 1:50.</p> <p>Analysis for Au and the full PGE suite used Nickel Suite 25-gram Fire Assay for the first 24 samples, with ICP-MS finish. The second batch of 193 samples was analysed for Au, Pt and Pd used 50-gram Fire Assay with ICP-AES finish.</p>
<b>Drilling Techniques</b>	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.).	<p>Diamond drill holes account for 16% of the drill metres used in the vanadium – titanium Resource Estimate and comprises HQ and PQ3 sized core. RC drilling (generally 135 mm to 140 mm face-sampling hammer) accounts for the remaining 84% of the drilled metres. Six of the diamond holes have RC pre-collars (GDH911, GDH913 &amp; GDH916, 18GEDH001, 002 and 003), otherwise all holes are drilled from surface.</p> <p>No core orientation data has been recorded in the database.</p> <p>17 RC holes were drilled during the 2018 programme and three HQ diamond tails were drilled on RC pre-collars for resource and geotechnical purposes. The core was not orientated but all diamond holes were logged by OTV and ATV televiewer. Six RC holes from the 2018 campaign are not used in the resource estimate due to results pending at the time of the update, and two diamond holes drilled during 2018 were not used as they are for geotechnical purposes and do not intersect the mineralised zones.</p> <p>During 2019 a further 12 PQ diamond holes were drilled down-dip on the high-grade zone for metallurgical sample but have not been sampled for assay analysis as they have been sampled for the metallurgy pilot study programme. As such they do not form part of any resource estimation. An addition 18 PQ diamond tails on RC pre-collars have been drilled vertically, of which 14 contribute to the resource. two were used for the metallurgy pilot study programme, one was not sampled due to core loss and a further core hole cut but not submitted for assay. A further 43 RC holes using a 140 mm face hammer on a Schramm drill rig have been completed during October and December 2019.</p>
<b>Drill Sample Recovery</b>	Method of recording and assessing core and chip sample recoveries and results assessed.	<p>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.</p> <p>For the 2019, 2018 and 2015 drilling, RC chip sample recovery was judged by how much of the sample was returned from the cone splitter. This was recorded as good, fair, poor or no sample. The older drilling programmes used a different splitter, but still compared and recorded how much sample was returned for the drilled intervals. All of the RC sample bags (non-split portion) from the 2018 programme were weighed as an additional check on recovery.</p> <p>An experienced AVL geologist was present during drilling and any issues noticed were immediately rectified.</p> <p>No significant sample recovery issues were encountered in the RC or PQ drilling in 2015.</p> <p>No significant sample recovery issues were encountered in the RC or PQ drilling in 2019 except where core loss occurred in three holes intersecting high grade ore. This involved holes 19MTDT012 between 142.9m and 143.3m; 19MTDT013 from 149m to 149.6m, 151m to 151.4m and 159.5m to 160m; as well as 19MTDT016 between 29.5m and 30.7m down hole. In each case the interval lost was included as zero grade for all elements for the estimation of the total mineralised intercept.</p>

Criteria	JORC Code Explanation	Commentary
	Measures taken to maximize sample recovery and ensure representative nature of the samples.	Core depths are checked against the depth given on the core blocks and rod counts are routinely carried out by the drillers. Recovered core was measured and compared against driller's blocks. 2019 diamond core samples had a coarse split created at the laboratory that was also analysed to evaluate laboratory splitting of the sample.  RC chip samples were actively monitored by the geologist whilst drilling. Field duplicates have been taken at a frequency between every 30th and every 50th metre in every RC drill campaign.  All drill holes are collared with PVC pipe for the first metres, to ensure the hole stays open and clean from debris.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	No relationship between sample recovery and grade has been demonstrated.  Two shallow diamond drill holes drilled to twin RC holes have been completed to assess sample bias due to preferential loss/gain of fine/coarse material. Bryah 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.
<b>Logging</b>	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. 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 through to 2019 was logged onto paper and was transferred to a SQL Server drill hole database using DataShed™ database management software. The database is managed by Mitchell River Group (MRG). The data was checked for accuracy when transferred to ensure that correct information was recorded. Any discrepancies were referred back to field personnel for checking and editing. After 2019 logging was completed in excel, then subject to the above same validation and database load process.  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 generally every 30 cm downhole. Holes GDH910 to GDH917 had readings every 50 cm and RC holes GRC0159 to GRC0221 had readings for each one metre green sample bag. 2018 RC drill holes also have magnetic susceptibility data for each one metre of drilling. Pulps from historic drill holes have been measured for magnetic susceptibility, with calibration on results applied from control sample measurement of pulps from drill programs from 2015 onwards where measurements of the RC bags already exist.  All resource (vs geotechnical) diamond core and RC samples have been logged to a level of detail to support Mineral Resource estimation and classification to Measured Mineral Resource at best.  Geotechnical logging and OTV/ATV data was collected on three diamond drill holes from the 2018 campaign, by consultant company Dempers and Seymour, adding to an existing dataset of geotechnical logging on 8 of the 2015 diamond drill holes and televiwer data for four of the same drill holes. In addition, during 2018 televiwer data was collected on a further 15 RC drill holes from various drill campaigns at the project.  PQ diamond drill holes completed during 2019 were geologically and geotechnically logged in detail by the site geologists.
	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.
<b>Sub-Sampling Techniques</b>	If core, whether cut or sawn and whether quarter, half or all core taken.	The 2018 and 2009 HQ diamond core were cut in half and the half core samples were sent to the laboratories for assaying. Sample intervals were marked on the core by the responsible geologist considering lithological and structural features. No core was selected for duplicate analysis.

Criteria	JORC Code Explanation	Commentary
<b>and Sample Preparation</b>		<p>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.</p> <p>14 of the 18 total vertical diamond PQ diamond drill holes from 2019 have been quarter core sampled and assayed. Sample intervals were marked on the core by the responsible geologist considering lithological and structural features.</p>
	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 2019, 2018 and 2015 drilling programmes; drilling was generally dry with a few damp samples and occasional wet samples. Older drilling programmes employed riffle splitters to produce the required sample splits for assaying. One in 40 to 50 RC samples was resampled as field duplicates for QAQC assaying, with this frequency increasing to one in 30 for the October 2019 RC drilling, and one in 20 for the December 2019 RC drilling.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	<p>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.</p> <p>All samples were pulverised to a nominal 90% passing 75 micron sizing and sub sampled for assaying and LOI determination tests. The remaining pulps are stored at an AVL storage facility.</p> <p>The sample preparation techniques are of industry standard and are appropriate for the sample types and proposed assaying methods.</p>
	Quality control procedures adopted for all sub-sampling stages to maximize representivity of samples.	Field duplicates, standards and blanks have been inserted into the sampling stream at a rate of nominally 1:20 for blanks, 1:20 for standards (including internal laboratory), 1:40 for field duplicates, 1:20 for laboratory checks and 1:74 for umpire assays. Also, for the recent XRF sampling at Bureau Veritas (BV), 1 in 20 samples were tested to check for pulp grind size. For 2019 diamond core samples, duplicates were created from the coarse crush at a frequency of 1 in 20 samples at the laboratory and assayed.
	Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.	<p>140mm diameter RC hammer was used to collect one metre samples and either HQ or PQ3 sized core was taken from the diamond holes. Given that the mineralisation at the Australian Vanadium Project is either massive or disseminated magnetite/martite hosted 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.</p> <p>Core is not split for duplicates, but RC samples are split at the collection stage to get representative (2.5-3kg) duplicate samples.</p> <p>The entire core sample and all the RC chips are crushed and /or mixed before splitting to smaller sub-samples for assaying.</p>
	Whether sample sizes are appropriate to the grain size of the material being sampled.	<p>As all of the variables being tested occur as moderate to high percentage values and generally have very low variances (apart from <math>\text{Cr}_2\text{O}_3</math>), the chosen sample sizes are deemed appropriate.</p> <p>Further studies are required to determine whether the sampling sizes are appropriate for adequate detection of gold mineralisation, however the RC sample size conforms to standard industry techniques for exploration.</p>
	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	<p>Gold assaying represents less than 2 percent of the drill sampling completed at the Project. For this reason the results are purely exploration results with no current connotation for Mineral Resource estimation for gold. Assaying techniques applied (Fire Assay) are deemed appropriate for full detection of gold present in the samples analysed.</p> <p>All samples for the Australian Vanadium Project were assayed for the full iron ore suite by XRF (24 elements) and for total LOI by thermo-gravimetric technique. The method used is designed to measure the total amount of each element in the sample. Some 2015 and 2018 RC samples in the oxide profile were also selected for SATMAGAN analysis that is a measure of the amount of total iron that is present as magnetite (or other magnetic iron spinel phases, such as maghemite or kenomagnetite). SATMAGAN analysis was conducted at the BV Laboratory during 2018.</p> <p>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.</p> <p>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.</p>

Criteria	JORC Code Explanation	Commentary
		<p>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 <math>V_2O_5</math> grades around 1.94%, 0.95% and 0.47%. The internal laboratory standards used have varied grade ranges but do cover these three grades as well. During 2018 and 2019, three Certified Reference Materials (CRMs) were used by AVL as field standards. These covered the <math>V_2O_5</math> 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, <math>TiO_2</math>, <math>Al_2O_3</math>, <math>SiO_2</math>, Co, Ni and Cu (amongst others).</p> <p>Most of the laboratory standards used show an apparent underestimation of <math>V_2O_5</math>, with the results plotting below the expected value lines, however the results generally fall within <math>\pm 5</math>-10% ranges of the expected values. The other elements show no obvious material bias.</p> <p>Standards used by AVL during 2015 generally showed good precision, falling within 3-5% of the mean value in any batch. The standards were not certified but compared with the internal laboratory standards (certified) they appear to show good accuracy as well.</p> <p>Field duplicate results from the 2015 drilling all fall within 10% of their original values.</p> <p>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.</p> <p>2019 PQ diamond core has been assayed, and studies on all results for QAQC sample performance is in progress.</p> <p>Bryah considers that the nature, quality and appropriateness of the assaying and laboratory procedures is at acceptable industry standards.</p>
	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.	<p>The geophysical readings taken for the Australian Vanadium Project core and RC samples and recorded in the database were magnetic susceptibility. For the 2009 diamond and 2015 RC and diamond drill campaigns this was undertaken using an RT1 hand magnetic susceptibility meter (CorMaGeo/Fugro) with a sensitivity of <math>1 \times 10^{-5}</math> (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 <math>1 \times 10^{-3}</math> ssi unit. 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 <math>20 \times 10^{-5}</math> with a resolution of 10cm.</p> <p>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.</p> <p>Four completed diamond drill holes were down hole surveyed by acoustic televiewer (GDH911, 912, 914 and 915) as a prequel to geotechnical logging during the 2015 drill campaign. A further six holes from the 2018 campaign have been down hole surveyed using acoustic televiewer and optical televiewer (18GEDH001, 002 and 003 and partial surveys of 18GERC005, 008 and 011) for 627 metres of data.</p> <p>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.</p> <p>All 12 of the 2019 down dip PQ holes have been televiewer surveyed.</p>
	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.
<b>Verification of Sampling and Assaying</b>	The verification of significant intersections by either independent or alternative company personnel.	Diamond drill core photographs have been reviewed for the recorded sample intervals. Tony Standish has visited and worked at the Australian Vanadium Project site on multiple occasions and the BV core shed and assay laboratories in 2015 and 2018. Whilst on site, the drill hole collars and remaining RC chip samples were inspected. All of the core was inspected in the BV facilities in Perth and selected sections of drill holes were examined in detail in conjunction with the geological logging and assaying.



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		Resource consultants from Trepanier have visited site during 2019 and the AVL core storage facility in Bayswater and reviewed the core trays for select diamond holes during 2018.
	The use of twinned holes.	Two diamond drill holes (GDH915 and GDH917) were drilled to twin the RC drill holes GRC0105 and GRC0162 respectively. The results show excellent reproducibility in both geology and XRF 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.
<b>Location of Data Points</b>	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 2019 and 2018 drilling, all collars were set out using a handheld GPS or DGPS. After drilling they were surveyed using a Trimble RTK GPS system. The base station accuracy on site was improved during the 2015 survey campaign and a global accuracy improvement was applied to all drill holes in the Company database. For the 2015 drilling, all of the collars were set out using a Trimble RTK GPS system. After completion of drilling all new collars were re-surveyed using the same tool.  Historical drill holes were surveyed with RTK GPS and DGPS from 2008 to 2015, using the remaining visible collar location positions. Only five of the early drill holes, drilled prior to 2000 by Intermin, had no obvious collar position when surveyed and a best estimate of their position was used based on planned position data.  Downhole surveys were completed for all diamond holes, using gyro surveying equipment, as well as the RC holes drilled in 2015 (from GRC0159). Some RC drill holes from the 2018 campaign do not have gyro survey as the hole closed before the survey could be done. These holes have single shot camera surveys, from which the dip readings were used with an interpreted azimuth (nominal hole setup azimuth). The holes with interpreted azimuth are all less than 120m depth. All other RC holes were given a nominal -60° dip measurement. These older RC holes were almost all 120m or less in depth.
	Specification of the grid system used.	The grid projection used for the Australian Vanadium Project is MGA_GDA94, Zone 50. A local grid has also been developed for the project and used for the latest vanadium – titanium Mineral Resource update (March 2020). The grid is a 40-degree rotation in the clockwise direction from MGA north.
	Quality and adequacy of topographic control.	High resolution Digital Elevation Data was captured by Arvista for AVL in June 2018 over the M51/878 tenement area using fixed wing aircraft, with survey captured at 12 cm GSD using an UltraCam camera system operated by Aerometrex. The data has been used to create a high-resolution Digital Elevation Model on a grid spacing of 5m x 5m, which is within 20 cm of all surveyed drill collar heights, once the database collar positions were corrected for the improved ground control survey, that was also used in this topography survey. The vertical accuracy that could be achieved with the 12 cm GSD is +/- 0.10m and the horizontal accuracy is +/-0.24m. 0.5m contour data has also been generated over the mining lease area. High quality orthophotography was also acquired during the survey at 12cm per pixel for the mining lease area, and the imagery shows excellent alignment with the drill collar positions.  Outside M51/878, high resolution Digital Elevation Data was supplied by Landgate. The northern two thirds of the elevation data is derived from ADS80 imagery flown September 2014. The data has a spacing of 5M and is the most accurate available. The southern third is film camera derived 2005 10m grid, resampled to match it with the 2014 DEM. Filtering was applied and height changes are generally within 0.5m. Some height errors in the 2005 data may be +/-1.5m when measured against AHD but within the whole area of interest any relative errors will mostly be no more than +/-1m.  In 2015 a DGPS survey of hole collars and additional points was taken at the conclusion of the drill program. Trepanier compared the elevations of the drill holes with the supplied DEM surface and found them to be within 1m accuracy.

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		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.
<b>Data Spacing and Distribution</b>	Data spacing for reporting of Exploration Results.	<p>Gold analysis is sporadic throughout the deposit and in preliminary exploration stages of delineation of mineralisation. No spatial continuity can be deduced from the current dataset and further work is required to determine the size, controls and continuity of any gold mineralisation present at the Project.</p> <p>Relevant to availability of samples for further gold analysis:</p> <p>2019 RC drilling in Fault Block 50 and 60 (previously 16 and 8 respectively) has drilled out portions of the fault block to 140m spaced lines with 30m drill centres on lines. Some sections are closer together where new drilling bracketed existing drill lines to maintain a minimum 140m spacing between lines. 2019 diamond tail drilling has intersected the HG10 zone at about 60m down-dip from the last existing drill hole on select sections that are at 80m spacing. The 2018 RC drilling in Fault Block 30 and 40 (previously 17 and 6 respectively) has infilled areas of 260m spaced drill lines to about 130m spaced drill lines, with holes on 30m centres on each line.</p> <p>The closer spaced drilled areas of the deposit now have approximately 80m to 100m spacing by northing and 25m to 30m spacing by easting. Occasionally these spacings are closer for some pairs of drill holes. Outside of the main area of relatively close spaced drilling (approximately 7015400mN to 7016600mN), the drill hole spacing increases to between 140m and 400m in the northing direction but maintains roughly the same easting separation as the closer spaced drilled area.</p>
	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.	<p>Data spacing and distribution of the gold analysis is sporadic throughout the deposit and in preliminary exploration stages of delineation of mineralisation. No spatial continuity can be deduced from the current dataset and further work is required to determine the size, controls and continuity of any gold mineralisation present at the Australian Vanadium Project.</p> <p>The degree of geological and grade continuity of the vanadium – titanium mineralisation 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.</p>
	Whether sample compositing has been applied.	<p>Gold intercepts have been provided as composites in the HG10 zone where possible and where Au &gt;0.3 g/t Au with no maximum internal waste or minimum interval width applied.</p> <p>All assay results have been composited to one metre lengths before being used in the vanadium – titanium Mineral Resource estimate. This was by far the most common sample interval for the diamond drill hole and RC drill hole data.</p>
<b>Orientation of Data in Relation to Geological Structure</b>	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	<p>All intervals reported for the gold mineralisation are down hole widths and the true widths of mineralisation are unknown. Further information on the controls and deportment of the gold mineralisation is required before true widths can be calculated.</p> <p>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 high-grade mineralised vanadium – titanium 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 vanadium – titanium mineralisation. The exception is 18 RC pre-collar, diamond tail holes drilled vertically to intersect the deposit at depth, and 12 down-dip diamond holes drilled from surface down-dip in the high-grade domain to gain a metallurgical sample. These holes do not contribute assay data to the estimation.</p>
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias,	<p>Any sampling bias introduced by the drilling orientation and the orientation of the gold mineralised structures is currently unknown. All reported intercepts are down hole and true width of the gold intercepts is unknown.</p> <p>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.</p>

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	this should be assessed and reported if material.	The 2019 PQ diamond holes are deliberately drilled down dip to maximise the amount of metallurgy sample collected for the pilot study, with all material used for metallurgy purposes (hence not being available for assay). They are not intended to add material to the resource estimation, or to define geological boundaries, though where further control on geological contacts is intercepted, this will be used to add more resolution to the geological model.
<b>Sample Security</b>	The measures taken to ensure sample security.	<p>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.</p> <p>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.</p> <p>Drilling sample residues (pulp) are stored securely in the AVL storage facility and have been readily accessed to provide samples for gold analyses.</p>
<b>Audits or Reviews</b>	The results of any audits or reviews of sampling techniques and data.	<p>No reviews of audits of the gold sampling techniques or data have been undertaken, however the robustness of sample quality work undertaken by AVL support that the sample qualities are high.</p> <p>A review of the sampling techniques and data for the vanadium – titanium deposit 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.</p>

## Section 2 - Reporting of Exploration Results

Criteria	JORC Code Explanation	Commentary
<b>Mineral tenement and land tenure status</b>	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.	There is no current native title claim on the proposed mine site or processing plant following a decision by the Federal Court that the Yugunga-Nya native title claim (WC1999/46) was not accepted for registration. A Heritage survey was undertaken prior to commencing each drilling campaign which only located isolated artefacts but no archaeological sites <i>per se</i> . Mining Lease M51/878, which was granted by DMIRS in August 2020, covers 70% of the Australian Vanadium Project. The remainder of the deposit resource area is covered by Mining Lease Application MLA51/890 that overlies a portion of E51/843, P51/3076 and E51/1534 that are held by AVL. AVL has no joint venture, environmental, national park or other ownership agreements on the lease area. A Mineral Rights Agreement was signed in 2017 on the Project tenements. Bryah Resources Limited 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 Bryah and holds a 0.75% Net Smelter Return royalty upon commencement of production by Bryah.
	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.
<b>Exploration done by other parties</b>	Acknowledgment and appraisal of exploration by other parties.	The Vanadium deposit was identified in the 1960s by Mangore P/L and investigated with shallow drilling, surface sampling and mapping. In 1998, drilling by Intermin Resources confirmed the down dip extent and strike continuation under cover between outcrops of the vanadium bearing horizons. Additional RC and initial diamond drilling was conducted by Greater Pacific NL and then AVL up until 2019. Previous Mineral Resource estimates have been completed for the deposit in 2001 (Mineral Engineering Technical Services Pty Ltd (METS) and Bryan Smith Geosciences Pty Ltd. (BSG)), 2007 (Schwann), 2008 (MASS & Schwann), 2011 (CSA), 2015 (AMC), 2017 (Trepanier) and 2018 (Trepanier). Gold has been explored for regionally by historical workers, but in the trends to the east, west and north of the Project. Very little gold analysis has ever been undertaken on the vanadium deposit and host Lady Alma Gabbro.
<b>Geology</b>	Deposit type, geological setting and style of mineralisation.	The Project at Gabanintha is located approximately 40kms south of Meekatharra in Western Australia and approximately 100kms along strike (north) of the Windimurra Vanadium Mine. The mineralisation is hosted in the same geological unit as Windimurra, which is part of the northern Murchison granite greenstone terrane in the north west Yilgarn Craton. The project lies within the Gabanintha and Polelle 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 titanomagnetite hosted within the gabbro. The mineralised package dips moderately to steeply to the west and is capped by Archaean acid volcanics and metasediments. The footwall is a talc carbonate altered ultramafic unit. The host sequence is disrupted by late stage dolerite and granite dykes and occasional east and northeast-southwest trending faults with apparent minor offsets. The mineralisation ranges in thickness from several metres to up to 20 to 30m in thickness. The oxidized and partially oxidised weathering surface extends in parts 40m to 80m below surface and the magnetite in the oxide zone is usually altered to Martite.

Criteria	JORC Code Explanation	Commentary
<b>Drill hole Information</b>	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 gold analysis have been tabulated in Appendix 1 to this report.
<b>Data aggregation methods</b>	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.	Gold intercepts within HG10 zone are stated with no parameters set on inclusion of internal waste or minimum thickness. Zones of higher internal grade (>0.3 g/t Au) within the HG10 intercepts are defined.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalents have been used in this release.
<b>Relationship between mineralisation widths and intercept lengths</b>	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	The relationship between the gold mineralisation orientation and the drill holes is unknown. All intercepts are down hole widths and true widths are unknown. Drill holes intersect the mineralisation at an angle of approximately 90 degrees. Diamond PQ holes in the 2019 program were drilled vertically (- 90 degrees). This decreases the angle of intersection with the mineralisation.
<b>Diagrams</b>	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 2, 3 and 4 in the body of this release for location of the gold mineralisation within the Project.
<b>Balanced reporting</b>	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 all drilling details has been provided in Appendix 1 of this announcement



Criteria	JORC Code Explanation	Commentary
<b>Other substantive exploration data</b>	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.	Metallurgical test work conducted by the company in 2018 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 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 Announcements dated 22 May 2018 and 5 July 2018. Relevant to this testwork, Bryah hold mineral rights for nickel and copper. AVL hold mineral rights for cobalt.
<b>Further work</b>	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	In the coming month, additional archived pulp samples will be selected and submitted for further Au, Pt and Pd analysis by Fire Assay. Results from that work will be interpreted then a decision made as to whether further assaying of archive samples is warranted.
	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 long section included in Figure 2 highlights the significant strike extent and numerous faults that could be tested for further gold mineralisation at the Project.