19th October 2021



# Drilling confirms multiple structural gold targets at Gabanintha

# Aircore program locates new gold bearing fault structure

- Initial results from recently completed aircore drilling program identified gold mineralisation in a new fault structure at Gabanintha Project:
  - 21GAC013 9 metres @ 1.43 g/t Au from 24m, including 4 metres @ 2.48 g/t Au and 0.064% Cu from 29m
- Results represent a new prospect, located 1.7 kilometres south-east along strike from the New Hope Prospect, where high-grade gold intersected previously included:
  - 19RRC006 10 metres @ 27.5 g/t Au from 53m, including 4 metres @ 64.3 g/t Au from 54m, including 1 metre @ 182.0 g/t Au from 55m, and 1 metre @ 6.4 g/t Au from 65m<sup>1</sup>
- Latest results support potential for significant gold mineralization in nine structural corridors over 11 km in cross-cutting fault zones adjacent to the vanadium-titaniummagnetite (VTM) deposit
- 113 aircore drill hole program for 5,539 metres completed in August 2021. 455 assay results have been received with over 1,000 outstanding
- Aircore drilling program was designed to investigate the extent and zonation of the Lady Alma Layered Igneous Complex, which has significant potential to host nickelcopper-gold and Platinum Group Elements (PGE) mineralisation
- RC drilling program targeting shallow gold mineralisation at New Hope Prospect and vicinity of 21GAC013 planned to commence in November 2021
- Bryah Resources Limited holds a suite of mineral rights over the Project including nickel, copper and gold. Australian Vanadium Limited (AVL) holds the mineral rights to vanadium, titanium, iron ore and cobalt and is a 5.0% shareholder of Bryah

Bryah Resources Limited ("Bryah" or "the Company") is pleased to announce the first results from a recently completed aircore drilling program across the Lady Alma Layered Igneous Complex (LALIC) within the Gabanintha Project ("Project"), which is located approximately 40km south-southeast of Meekatharra (see Figure 1).

The Lady Alma Layered Igneous Complex is an under-explored, yet highly prospective environment with significant potential to host copper-gold-nickel and Platinum Group Elements (PGE) mineralisation.

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Shares on issue: 224,207,175 Latest Share Price: \$0.052 Market Capitalisation: \$11.6M **Projects** 

Gabanintha – Copper, Gold Bryah Basin – Copper, Gold Manganese

bryah.com.au



The joint Bryah/Australian Vanadium Limited (ASX:AVL) program was undertaken with Exploration Incentive Scheme grant funding of up to \$53,000 from the Department of Mines, Industry Regulation and Safety (DMIRS) as a contribution towards drilling costs.

Commenting on the latest results, Managing Director Neil Marston said:

"There is growing evidence, further supported by these recent gold results from the latest drilling, that cross-faults adjacent to the vanadium-titanium-magnetite deposit at Gabanintha have significant gold potential. The drilling result adds a second structurally located prospect, providing us with an exciting opportunity to further investigate 9 targets over the 11 kilometres strike length of the deposit.

"Earlier this year we reported exceptionally high-grade gold assays of 10 metres grading 27.5 g/t gold, including a metre at 182 g/t Au within the New Hope Prospect, located about 1.7 kilometres to the north-west of this latest result. These results demonstrate to us that there is excellent gold potential in the area.

"We intend to have a drill rig on site next month to drill at New Hope and we will now put some additional holes in this latest gold discovery area."

## **Aircore Drilling**

Drilling was completed on five traverses, crossing the extent of the LALIC within Mining Lease 51/878. The holes were planned to extend out into the rocks both east and west of the intrusion, to define its boundaries.

113 holes were completed with a total of 5,539 metres drilled (5,000m planned). Vertical holes were generally spaced at intervals of 100 metres along each traverse line and drilled to blade refusal. Figure 2 shows the location of the completed aircore traverses on a geology interpretation by Ivanic, 2019.

To date results have been received for 31 holes (21GAC001-21GAC031, 455 samples) with over 1,000 composite and end of hole samples still outstanding. Samples were generally collected in 4 metre intervals down the hole with a separate bottom of hole sample collected. In 21GAC013 single metre samples were collected from 28 metres to the end of the hole at 37 metres due to the strong quartz veining observed in some of the drill cuttings by Company personnel.

Hole 21GAC013 is located 1.7 kilometres south-east of the New Hope prospect where previous sampling of drilling completed in 2019 recorded significant gold mineralisation including an outstanding **10 metres @ 27.5 g/t Au from 53 metres**, including 4m @ 64.3 g/t Au from 54m, which included 1m (55-56m) @ 182.0 g/t Au in 19RRC006 within a cross-cutting fault zone<sup>1</sup>.

The Company is completing a full multi-element suite, including whole rock geochemistry, rare earth elements and trace elements from the bottom of hole samples. This dataset will be applied in studies aimed to determine chemical zonation of the LALIC, to identify horizons that may be prospective for economic metal concentrations, both for Bryah and Australian Vanadium Limited<sup>2</sup>.

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<sup>&</sup>lt;sup>1</sup> See BYH ASX Announcement dated 30 March 2021 for full details

<sup>&</sup>lt;sup>2</sup> Bryah Resources Limited 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 and a 0.75% Royalty on any production by Bryah.



Potential economic concentrations of nickel, copper, chromium and/or platinum group elements ("PGE") may be present in the more basal parts of the LALIC. Results from drilling will assist in determining the base and the top of the intrusion, both potential locations for mineralisation.

A summary of the drill holes and significant results are set out in Appendix 1.

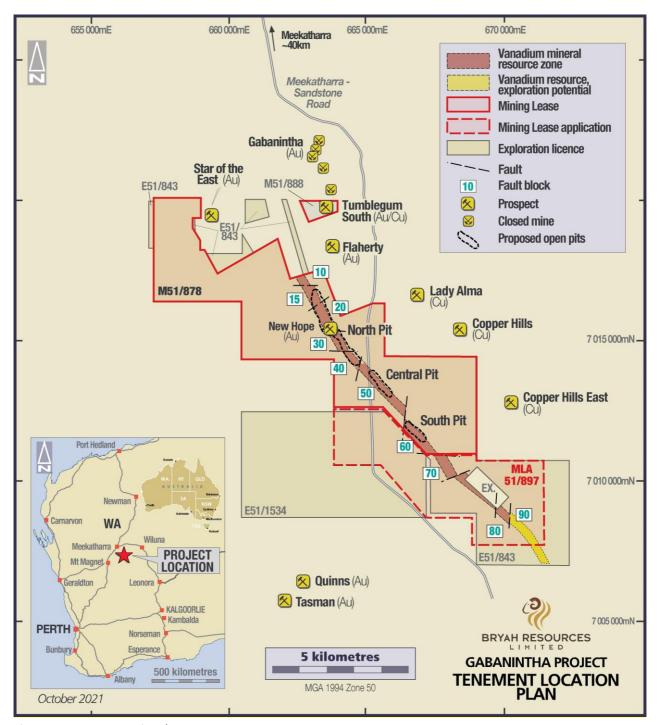


Figure 1 - Tenement Location Plan



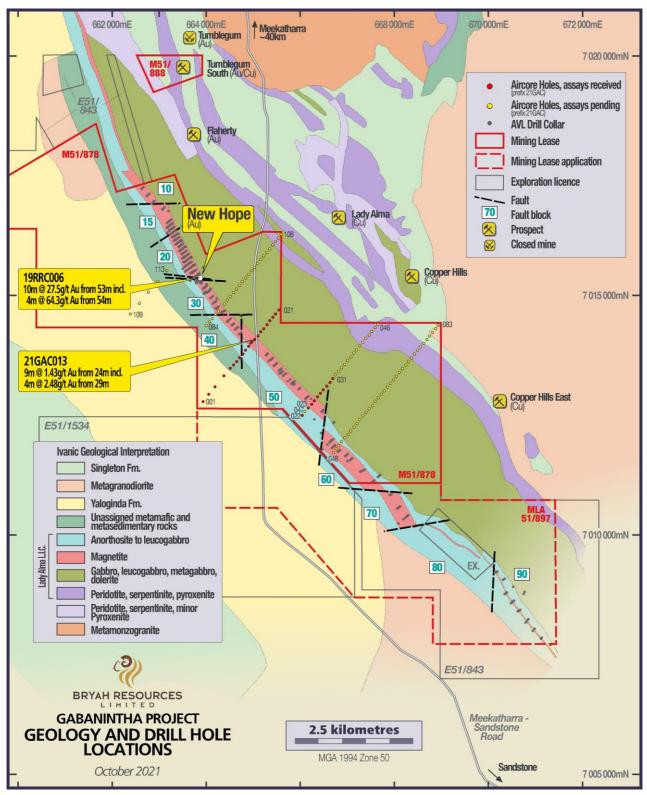


Figure 2 –Geology and Drill Hole Locations



#### Structural Gold Model

Gold mineralisation is interpreted to be controlled by the cross-cutting structures within the LALIC. There are 9 major faults interpreted from aeromagnetic survey data and drilling which offset the main massive magnetite unit into fault blocks (see Figure 2). The structural offsets are comprised of a corridor of faulting that dislocate the magnetite-gabbro package. The gold mineralisation model for this area currently involves two main concepts:

- a) Physical differences between rock types (rheological) when faulting intersects a strong layer like the magnetite, often caused refraction of the fault paths. These diffractions and further offsets then allow dilation to occur and focus mineralising fluids into the area. The drop out mechanisms for gold in this case are reductions in pressure and temperature, and
- b) The high iron content of the magnetite may allow for a chemical path of mineralisation. The differentiated gabbro of the LALIC has multiple layers of alternating high and low iron content. Iron can change the chemistry when combined with hot mineralising fluids and also cause precipitation of gold mineralisation.

## Follow-Up Work

The remaining assay results from the aircore drilling will be reported when they become available.

The New Hope Prospect and hole 21GAC013 will be the subject of a detailed ground magnetic survey to assist in better defining the potentially gold-bearing cross-cutting fault zones within the vanadium-titanium-magnetite deposit.

Follow-up reverse circulation drilling at New Hope and in the vicinity of 21GAC013 is planned for November 2021. Areas of immediate interest have heritage survey clearances so there are no impediments to the commencement of drilling.

Bryah will also select further archived drilling pulps from the Project to submit for Au, Pt and Pd analysis. Sample selection criteria remains:

- a) proximity to known faults;
- b) elevated copper, barium, arsenic and/or sulphur;
- c) within or close to the high-grade vanadium domain, and/or
- d) testing continuity along strike or along fault planes around the significant intercepts recently identified.

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 1,165km<sup>2</sup> Bryah Basin Project and the 80km<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 600 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>3</sup>. The Company recently announced the disposal of the Tumblegum South Deposit to Star Minerals Limited<sup>4</sup>.

#### Competent Persons Statement – Exploration Results

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

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

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.

<sup>&</sup>lt;sup>3</sup> See BYH ASX Announcement dated 29 January 2020 for full details.

<sup>&</sup>lt;sup>4</sup> See BYH ASX Announcement dated 9 March 2021 for full details



# **APPENDIX 1: Aircore Drilling Program**

## **Significant Results Table**

Hole ID	From (m)	To (m)	Au ppm	Cu ppm	Ni %	Co %	V₂O₅ %	Comments
21GAC013	24	28	0.549	60	0.025	0.005	0.158	Composite sample
21GAC013	28	29	0.797	240	0.031	0.013	0.262	
21GAC013	29	30	2.73	1010	0.069	0.035	1.002	
21GAC013	30	31	3.89	610	0.042	0.019	0.276	
21GAC013	31	32	1.89	370	0.017	0.017	0.146	
21GAC013	32	33	1.41	580	0.037	0.025	0.443	
21GAC013	33	34	0.131	140	0.076	0.031	1.212	
21GAC013	34	35	0.05	60	0.054	0.034	1.305	
21GAC013	35	36	0.008	80	0.058	0.049	1.402	

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

11.1.15	MGA94	MGA94	R.L.	Hole Depth	Dip &
Hole ID	East	North	AHD	(m)	Azimuth
21GAC001	663873	7012776	460.5	76	Vertical
21GAC002	663993	7012936	461.0	94	Vertical
21GAC003	664122	1013091	461.4	102	Vertical
21GAC004	664317	7013324	462.2	125	Vertical
21GAC005	664451	7013478	462.5	103	Vertical
21GAC006	664516	7013547	462.7	112	Vertical
21GAC007	664580	7013624	463.0	62	Vertical
21GAC008	664647	7013701	463.2	62	Vertical
21GAC009	664713	7013774	463.2	45	Vertical
21GAC010	664773	7013856	463.4	51	Vertical
21GAC011	664831	7013934	463.5	31	Vertical
21GAC012	664897	7014019	463.6	41	Vertical
21GAC013	664972	7014082	463.9	37	Vertical
21GAC014	995029	7014159	464.0	56	Vertical
21GAC015	665282	7014471	464.9	51	Vertical
21GAC016	665220	7014392	464.5	62	Vertical
21GAC017	665156	7014315	464.3	39	Vertical
21GAC018	665092	7014238	464.4	19	Vertical
21GAC019	665349	7014545	465.0	71	Vertical
21GAC020	665413	7014621	465.1	73	Vertical
21GAC021	665478	7014698	465.5	36	Vertical
21GAC022	665955	7012476	465.1	93	Vertical
21GAC023	666084	7012629	465.2	43	Vertical
21GAC024	666148	7012706	465.4	34	Vertical
21GAC025	666212	7012782	465.6	52	Vertical
21GAC026	666277	7012859	465.7	37	Vertical
21GAC027	666341	7012935	465.9	45	Vertical
21GAC028	666405	7013012	466.1	20	Vertical
21GAC029	666470	7013089	466.3	39	Vertical
21GAC030	666534	7013165	466.5	44	Vertical
21GAC031	666598	7013242	466.7	55	Vertical



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

## 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 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.	Aircore (AC) sampling reported in this announcement have been collected from a cyclone and placed in piles on the ground. Four metre composite samples were collected using a garden trowel to collect a 2-3kg sample from surface to just above bottom of hole. These are assayed by XRF for major whole rock elements, plus screened by fire assay for Au, Pt & Pd. The remaining last one to two metre samples were collected separately for assay full multi-element suite, including whole rock geochemistry, rare earth elements and trace elements.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	The aircore program used relevant Certified Reference Materials (CRMs) at a frequency of about 1 per 50 primary samples (or 3-4 CRMs per lab batch), with no field duplicate samples being collected due to the nature of the sampling technique.
	Aspects of the determination of mineralisation that are Material to the Public Report.	AC drilling samples were collected at one metre intervals and laid out on the ground. Any mineralisation encountered in this type of drilling will be tested with further drilling before resource determination.
Drilling Techniques	Drill type (e.g., core, reverse circulation, openhole 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.).	For this program, aircore drilling was drilled as vertical holes with only very occasional use of a hammer (slimline RC) to penetrate when blade refusal was encountered before near fresh rock was encountered (quartz veins being the main cause of this).
Drill Sample Recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	An experienced AVL geologist was present during drilling and any issues noticed were immediately rectified. No significant sample recovery issues were encountered in the AC program, which was within industry standards, however no record of recovery was estimated or recorded.
	Measures taken to maximize sample recovery and ensure representative nature of the samples.	AC chip samples were actively monitored by the geologist whilst drilling. No field duplicates have been taken.
	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.
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.	Aircore chips were logged with a representative sample of the bottom of hole rocks collected in chips trays, plus a sample of larger chips and/or core (aircore) to enable the selection of sample for petrology.



Criteria	JORC Code Explanation	Commentary
	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.
	The total length and percentage of the relevant intersections logged.	All recovered intervals were geologically logged.
Sub-Sampling Techniques	If core, whether cut or sawn and whether quarter, half or all core taken.	Not applicable
and Sample Preparation	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	During the aircore drilling, sample moisture was recorded on a paper sample log and transferred to a digital record post drilling.
	For all sample types, the nature, quality and	All samples were pulverised to a nominal 90% passing 75-micron sizing and sub sampled for assaying and LOI determination tests.
	appropriateness of the sample preparation technique.	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.	Standards have been inserted into the sampling stream at a rate of nominally 1:50.
	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.	Aircore (85mm in diameter) was used to collect one metre samples and the sample sizes are representative. Samples are collected in buckets from beneath the cyclone and laid out on the ground in piles in rows of 10 or 20. A 4m composite sample (2.5-3kg) was collected using a garden trowel to cut through the pile for a representative sample. The entire AC chip sample is crushed and /or mixed before splitting to smaller sub-samples for assaying.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	As this level of exploration is a screening exercise the sample sizes are considered appropriate for adequate detection of gold mineralisation, and the AC sample size conforms to standard industry techniques for exploration.
	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or	Gold assaying represents less than 38 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.
_	total.	All AC samples 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. Samples are dried at 105°C in gas fired ovens for 18-24 hours 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 Reference Material standards and umpire laboratory analysis are used for quality control. The standards inserted during the drill campaign were designed to test the Au, Pt & Pd more than anything else. The laboratory XRF machine calibrations are checked once per shift using calibration beads made using exact weights and they performed repeat analyses of sample pulps at a rate of 1:20 (5% of all samples). The lab repeats compare very closely with the original analysis for all elements.
		Bryah considers that the nature, quality and appropriateness of the assaying and laboratory procedures is at acceptable industry standards.
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	Not applicable



Criteria	JORC Code Explanation	Commentary
	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.  Additional QAQC checks and repeat analysis were performed by the commercial laboratory on the high-grade gold values previously reported. When additional drilling is completed for gold exploration, twin holes on some of the existing intercepts will be completed as additional verification of the mineralisation tenor.
Verification of Sampling and Assaying	The verification of significant intersections by either independent or alternative company personnel.	Tony Standish has visited and worked at the Project site on multiple occasions and the assay laboratories in 2015. Washed chip samples of the mineralised intercept 21GAC013 have been brought to Perth and inspected by other company personnel.
	The use of twinned holes.	No twinned holes have been completed for holes with gold mineralisation.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All primary geological data has been collected using paper logs and transferred into Excel spreadsheets and ultimately a SQL Server Database. The data were checked on import. Assay results were returned from the laboratories as electronic data which were imported directly into the SQL Server database. Survey and collar location data were received as electronic data and imported directly to the SQL database.
		All of the primary data have been collated and imported into a Microsoft SQL Server relational database, keyed on borehole identifiers and assay sample numbers. The database is managed using DataShed™ database management software. The data was verified as it was entered and checked by the database administrator (MRG) and AVL personnel
	Discuss any adjustment to assay data.	No adjustments or calibrations were made to any assay data, apart from resetting below detection limit values to half positive detection values.
Location of Data Points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	For the aircore drilling, all collars were set out using a handheld GPS. After drilling the collars were resurveyed again by handheld GPS with an assumed accuracy of +/- 3m. No downhole surveys were undertaken.
	Specification of the grid system used.	The grid projection used for the Project is MGA_GDA94, Zone 50.
	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. RL data for the aircore has been derived from this DEM.
Data Spacing and Distribution	Data spacing for reporting of Exploration Results.	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. All results are reported as down hole intervals and true width is currently unknown.



Criteria	JORC Code Explanation	Commentary
	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.	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 Project.
	Whether sample compositing has been applied.	Gold intercepts to date have been reported in full for the aircore drilling.
Orientation of Data in	Whether the orientation of sampling achieves unbiased sampling of possible structures and	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.
Relation to	the extent to which this is known, considering	The 2021 aircore drilling program were all drilled as vertical holes with no downhole survey control.
Geological Structure	the deposit type.	The occurrence of gold mineralisation in cross-cutting faults cannot be considered to be true thickness as the drilling is not perpendicular to the faults.
	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.	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.
Sample Security	The measures taken to ensure sample security.	Samples were collected onsite under supervision of a responsible geologist. AC samples were transported using only registered public transport companies. Sample dispatch sheets were compared against received samples and any discrepancies reported and corrected.
		Drilling sample residues (pulps) are stored securely in the AVL storage facility and have been readily accessed to provide samples for gold analyses.
Audits or Reviews	The results of any audits or reviews of sampling techniques and data.	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.
		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.



## 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.	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. Heritage surveys with Yugunga-Nya traditional owners have been and still are undertaken prior to commencing each drilling campaign which only located isolated artefacts but no archaeological sites <i>per se</i> identified to date.  Mining Lease M51/878, which was granted by DMIRS in August 2020, covers 70% of the Project. The remainder of the deposit resource area is covered by Mining Lease Application MLA51/897 that overlies a portion of E51/843, P51/3076 and E51/1534 that are held by AVL.  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.
Exploration	Acknowledgment and appraisal of	The Vanadium deposit was identified in the 1960s by Mangore P/L and investigated with shallow drilling, surface sampling and mapping.
done by other parties	exploration by other parties.	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.
Geology	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 northwest 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 titano-magnetite hosted within the gabbro. The mineralised package dips moderately to steeply to the west and is overlain by Archaean acid volcanics and metasediments to the west. 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
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:  easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole  down hole length and interception depth hole length.	All drill results relevant to the gold analysis have been tabulated in Appendix 1 to this report.
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated.	Length weighed averages used for exploration results are reported in spatial context when exploration results are reported. Cutting of high grades was not applied in the reporting of intercepts.
	Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	Intercepts stated in this release are based on a minimum intercept grade of 0.25 g/t Au with internal waste considered to be below 0.1 g/t Au.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalents have been used in this release.
Relationship between mineralisation widths and intercept lengths	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	The relationship between the gold mineralisation orientation and the drill holes is unknown. All intercepts are down hole widths and true widths are unknown.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	See Figures 2 in the body of this release for location and orientation of the gold mineralisation within the Project.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and	Comprehensive reporting of all drilling details has been provided in Appendix 1 of this announcement



Criteria	JORC Code Explanation	Commentary
	high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	
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.	Metallurgical test work conducted by AVL 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 gold, nickel and copper. AVL hold mineral rights for cobalt.
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).	In the coming weeks, additional archived pulp samples will be selected and submitted for further Au, Pt and Pd analysis by Fire Assay.  An RC drill program of approximately 1,000 metres is in planning.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Figures 1 and 2 highlight the significant strike extent and numerous faults that should be tested for further gold mineralisation at the Project.