

AVL identifies Cobalt at Gabanintha Vanadium Project

Gabanintha drilling review adds new opportunity for critical battery metal.

Highlights:

- **Significant Cobalt mineralisation identified in review of the Gabanintha data**
- **1,270 samples report above 200ppm Co, at an average of 275ppm Co**
- **Maximum assay of 0.18% (1828ppm) Co recorded in GRC102 (42m-43m)**
- **Earlier metallurgical testwork results indicate potential to produce cobalt by-product**
- **Opportunity to extend Gabanintha as a unique battery metals source**
- **Additional evaluation to be undertaken of Cobalt potential**

Australian Vanadium Limited (ASX:AVL, “the Company” or AVL”) has identified a potential new battery metal opportunity at the Gabanintha Vanadium Project. During a review of data from previous drill programs, significant cobalt assays were identified.

Cobalt is currently undergoing a massive re-rating as a strategic battery metal. The increasing use of cobalt, as well as the demand from consumers for ethically sourced cobalt, has contributed to a price rise to over US\$52,000 per metric tonne.

Previous work by the Company at Gabanintha has focused on the vanadium-titanium-iron mineral resource with no major analysis conducted of the cobalt potential to date.

Cobalt and other metals

Cobalt, together with copper, chrome, manganese and nickel have all previously been identified at Gabanintha.

Upon review of the other metals data ahead of a planned Mineral Resource review, cobalt has been found to be present in the layered mafic igneous sequence at Gabanintha, distributed within the magnetite rich layers which form the bulk of the vanadium resource. The cobalt is

16 March 2017

ASX ANNOUNCEMENT

Australian Vanadium Limited

ASX: AVL
FRA: JT7.F

ABN: 90 116 221 740

T: +61 8 9321 5594
F: +61 8 6268 2699
E: info@australianvanadium.com.au
W: australianvanadium.com.au

Street Address:

Level 1, 85 Havelock Street
West Perth WA 6005

Postal Address:

Level 1, 85 Havelock Street
West Perth WA 6005

Projects:

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

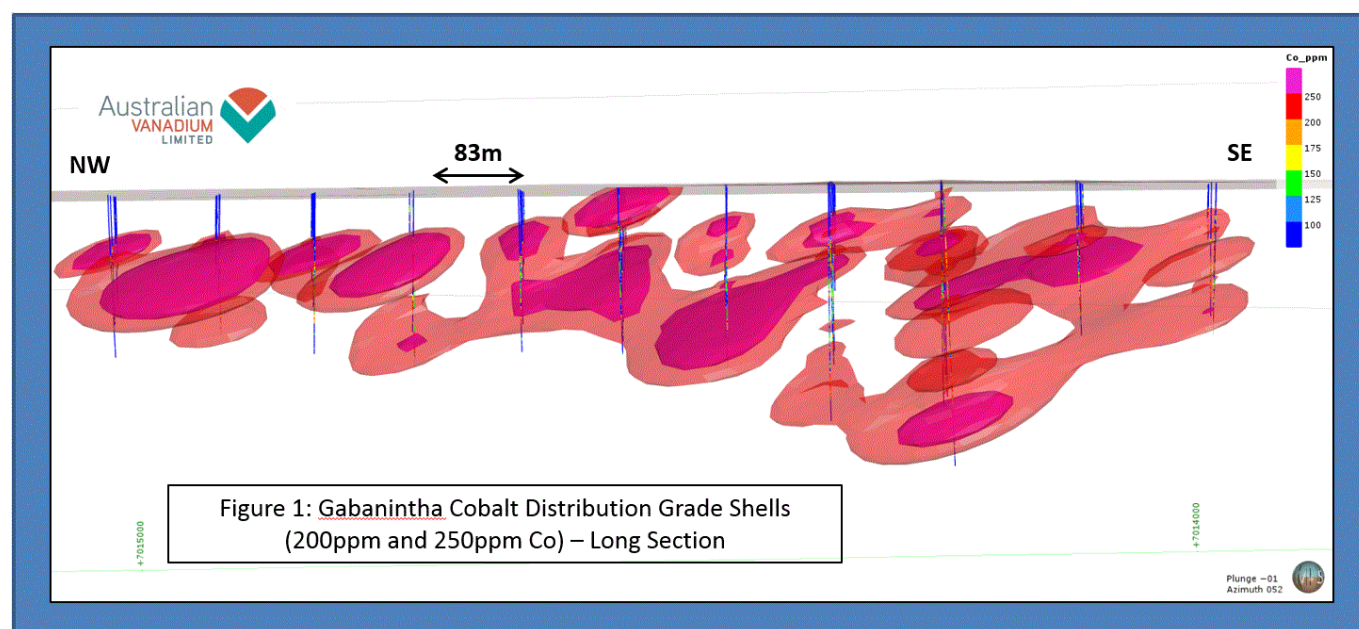


likely to be present in a non-magnetic sulphide component present in the ore.

The following key information is currently available from this review:

- The resource database contains 10,979 x 1m cobalt assay results (RC and diamond) from previous drilling.
- Of these, 1,270 x 1m samples assayed over 200ppm Co and an average 275ppm Co.
- The maximum assay is 0.18% (1828ppm) Co (in GRC102 from 42-43m).
- A close association of cobalt exists with the existing vanadium horizons, but appears located in non-magnetic fraction, indicating a by-product opportunity.
- A review of the November 2015 beneficiation program indicates cobalt and copper reporting to the non-magnetic fraction in Davis Tube and LIMS/WHIMS test work in the transitional material.
- Cobalt appears to be mostly absent from the oxidised material, providing an excellent proxy for the base of oxidation.
- Chrome, manganese and nickel appear commonly in the magnetic fraction.

The cobalt assays have been modelled using Leapfrog software and demonstrate a consistent distribution within parts of the overall deposit (see Figure 1 below).



The Company is currently undertaking a more detailed review of all the available information on cobalt as well as other minor metals in the resource and identifying possible recovery pathways for them.

AVL recognises the importance of analysing the cobalt content further as part of the Gabanintha project studies that are currently underway. This will involve a resource estimation and review of metallurgical results generated as part of the beneficiation test work conducted in 2015. Additional cobalt specific testwork will be undertaken as required.

Gabanimtha Vanadium Deposit

The Gabanimtha Project is hosted in a gabbroic layered igneous complex containing bands of massive and disseminated titanomagnetite in a sequence over 200m in thickness. The style of mineralisation is similar to a number of deposit types around the world with the most similarity to vanadium deposits of the Bushveld Complex of South Africa.

The Gabanimtha Vanadium Project is currently one of the highest-grade vanadium projects being advanced globally with existing Measured Resources of 7.0Mt at 1.09% grade V_2O_5 , Indicated Resources of 17.8Mt at 0.68% grade V_2O_5 and Inferred Resources of 66.7Mt at 0.83% grade V_2O_5 , a total of 91.4Mt, grading 0.82% V_2O_5 and containing a discrete high-grade zone of 56.8Mt, grading 1.0% V_2O_5 reported in compliance with the JORC Code 2012 (see YRR ASX Announcement 10 November 2015).

The updated Mineral Resource estimate incorporated 97% of the historical drilling data including data from the Company's 2009 and 2015 RC and diamond drilling programs. This included 233 RC and 17 Diamond Core holes for 20,086 metres over a 12 kilometre strike length. Of these holes 19,431metres were used in the grade estimate.

Deed of Variation for Bryah Resources

As announced on 20 January 2017, AVL and the proposed new Copper-Gold exploration company Bryah Resources Limited, agreed to the sale and purchase of mineral rights and tenements.

AVL and Bryah are pleased to announce that it has agreed to extend the mineral rights agreement to include the two recently acquired exploration licences (E51/1694 and E51/1695) adjacent to the Gabanimtha Vanadium Mineral Resource near Meekatharra, (see ASX announcement dated 13 March 2017). The inclusion of the new licences and the inclusion of cobalt in the metals retained by AVL has been agreed to in a deed of variation signed by the companies.

The licences are considered prospective for vanadium, iron, titanium, uranium, precious and base metals and will be jointly explored and utilized by the companies.

AVL has acquired the additional ground as part of securing future infrastructure access for the planned Gabanimtha vanadium project development.

AVL Strategic Objectives

AVL's vertical integration strategy, which is focused on vanadium and other battery metals, includes four pillars of activity to drive cashflow generation and shareholder value. These are:

- Progressing the Company's flagship Gabanimtha vanadium project in Western Australia, through the identification of cornerstone investors and the completion of additional studies.
- Growing AVL's subsidiary, VSUN Energy Pty Ltd to deliver additional vanadium battery sales into the many niches being identified in the commercial energy storage sector across Australia.
- The planned production and sale of high-purity vanadium electrolyte – a core component of flow batteries, to be achieved through the development of an Australian vanadium electrolyte plant.
- Investigation of other potential battery metal projects around the world, with the latest acquisition being the Blesberg lithium-tantalum project (see ASX Announcement dated 4 November 2016).

The Company is broadening its strategic focus to encompass the wider energy storage minerals market by this initial acquisition of a quality lithium asset at Blesberg in South Africa. It is apparent that there is

exceptional growth underway in energy storage markets, including storage raw materials. AVL intends to utilise its knowledge and structure to generate additional shareholder wealth by the development of a project pipeline. This strategy offers both diversification and opportunity to shareholders.

For further information, please contact:

Vincent Algar, Managing Director

+61 8 9321 5594

Competent Person Statement – Exploration Results

The information in this statement that relates to Exploration Results is based on information compiled by independent consulting geologist Brian Davis BSc DipEd who is a Member of The Australian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists and is employed by Geologica Pty Ltd.

Brian Davis has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which is undertaken 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'.

Mr. Davis consents to the inclusion in the report of the matters based on the information made available to him, in the form and context in which it appears.

Competent Person Statement – Mineral Resource Estimation

The information relating to the Gabanintha Project 2015 Mineral Resource estimate reported in this announcement is based on information compiled by Mr John Tyrrell. Mr Tyrrell is a Member of The Australian Institute of Mining and Metallurgy (AusIMM) and a full-time employee of AMC (AMC Consultants Pty Ltd). Mr Tyrrell has more than 25 years' experience in the field of Mineral Resource Estimation. He has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and in resource model development 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'.

Mr. Tyrrell consents to the inclusion in the report of the matters based on the information made available to him, in the form and context in which it appears.

The information is extracted from the report entitled "Substantial high-grade vanadium resource highlights Gabanintha's world-class potential" released to ASX on 10 November 2015 and is available on the company website at australianvanadium.com.au.

The company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resource or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The company confirms that the form and context in which the competent person's findings are presented has not been materially modified from the original announcement

Appendix 1 JORC 2012 Table 1 Exploration Results		
JORC 2012 TABLE 1 – CHECKLIST OF ASSESSMENT AND REPORTING CRITERIA GABANINTHA VANADIUM PROSPECT – MAY 2015		
CRITERIA		EXPLANATION
SECTION 1 - SAMPLING TECHNIQUES AND DATA		
Sampling techniques	<ul style="list-style-type: none"> 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information. 	<ul style="list-style-type: none"> Reverse Circulation (RC) drilling was used to obtain 1.0m downhole interval chip samples. The samples were collected through a cone splitter to obtain a nominal 2.0-5.0kg sample at an approximate 10% split ratio. One 2-5kg (average) sample taken for each one metre sample length and collected in pre-numbered calico sample bags. Sample was dried, crushed and pulverised (total prep) to produce a sub sample for laboratory analysis using XRF and total LOI by TGA. Quality of sampling continuously monitored by field geologist during drilling. To monitor the representivity of the sample, 5 duplicates are taken for every 200 samples (1:40). Sampling carried out under company protocols and QAQC procedures as per industry best practice. Sampling of core is conducted by marking up in the field, then detailed logging on log sheets and first pass geotechnical logging and photography of each core tray. The digital photos are retained in the database. Core then transported to Bureau Veritas Mineral Laboratory secure warehouse facility in Canning Vale, Perth, where detailed geotechnical logging was undertaken, before selected intervals cut as quarter core. Sample intervals identified based on predominantly 1 metre intervals. Submission of samples to the laboratory for XRF analysis for the full iron ore suite of 24 elements which included cobalt, copper and nickel. Use of standards and blanks in core assay every 10th sample.
Drilling techniques	<ul style="list-style-type: none"> 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.). 	<ul style="list-style-type: none"> Reverse Circulation (RC) drilling employing a 140mm diameter face sampling hammer. A nominal drill spacing of 75mN by 25mE has been completed. Diamond drilling was completed at PQ3 size and 8 holes were completed
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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. 	<ul style="list-style-type: none"> RC sample recovery is recorded by the geologist and is based on how much of the sample is returned from the cone splitter. This is recorded as good, fair, poor or no sample. To ensure maximum sample recovery and the representivity of the samples, an experienced company geologist is present during drilling and monitors the sampling process. Any issues are immediately rectified. No significant sample recovery issues were encountered in the RC drilling. Where core loss occurred, the interval was logged and the loss calculated at a percentage of the drilled interval, and recorded in the database.

		<ul style="list-style-type: none"> No twin RC holes have been completed to assess sample bias due to preferential loss/gain of fine/coarse material or due to wet drilling. Two shallow diamond drill holes were drilled to twin RC have been completed to assess sample bias due to preferential loss/gain of fine/coarse material. AVL is satisfied that the RC holes have taken a sufficiently representative sample of the mineralisation and minimal loss of fines has occurred in the RC drilling resulting in minimal sample bias. No relationship between sample recovery and grade has been demonstrated.
Logging	<ul style="list-style-type: none"> 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. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> Logging of lithological intervals by collecting chips or clay sample every 1m corresponding with 1m sampled interval. This level of detail supports appropriate Mineral Resource estimation, mining studies and metallurgical studies. RC logging is both qualitative and quantitative in nature. RC logging records the abundance/proportions of specific minerals and material types, lithologies, weathering, colour and physical hardness is estimated by chip recovery and properties (friability, angularity). The entire length of RC holes were logged on lithological intervals, 100% of the drilling was logged. Where no sample was returned due to cavities/voids it is recorded as such. Diamond drill core was also logged on lithological intervals, with estimations of magnetite content, crystal size and weathering recorded. Drilled intervals were recorded, with core loss and RQD calculated for those intervals. An estimate of rock hardness was made based on friability and scratchability. Each tray of drill core was weighed within 3 days of drilling and this weight was utilised to estimate bulk Specific Gravity for where rock types were the same in that tray. The only geophysical data collected from available RC holes is Magnetic Susceptibility collected by RT1 hand magnetic susceptibility meter on the outside of the green bags (1m intervals). Diamond core was tested at 0.5m intervals on all available core. Results are recorded and downloaded onto the computer at the end of the day.
Sub-sample techniques and sample preparation	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximize representivity of samples. 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. Whether sample sizes are appropriate to the grain size of the material being sampled. 	<ul style="list-style-type: none"> Sampling technique: <ul style="list-style-type: none"> RC Chip Samples: <ul style="list-style-type: none"> ~4kg RC chip samples are collected via cone splitter for each 1m interval drilled in a pre-numbered calico bag. Samples are kept dry where possible. Diamond Drill Core Samples: <ul style="list-style-type: none"> ¼ drill core sample cut by diamond saw using right hand rule (cut in half approximately 1cm to the right of the bottom of core orientation line, then the right hand half core cut in half again, the right hand piece being taken for sample and the remaining ¾ core returned to the tray. Sample intervals collected were determined by observed mineralisation in the lithology, and the assay values in adjacent RC holes. The sample sizes are considered to be appropriate to correctly represent the mineralisation based on the style of mineralisation (massive magnetite/martite), the thickness and consistency of

		<p>intersections, the sampling methodology and percent value assay ranges for the primary elements.</p> <ul style="list-style-type: none"> • Quality Control Procedures <ul style="list-style-type: none"> ▪ Duplicated sample: 5 every 200 samples for RC (1:40), and none for diamond core. ▪ Certified Reference Material were prepared for the company by Quantum Analytical Services in Perth containing a range of vanadium values. The assay standards were inserted: 5 in every 100 samples (1:20) for RC and diamond samples. ▪ Blank washed sand material: 5 every 200 samples (1:40) for RC and 5 every 100 for diamond samples. ▪ Overall QAQC insertion rate of 1:10. ▪ Sample weights recorded for all samples. The recorded weight included the entire sample (large green bag ~20kg) and the ~4kg calico bag ▪ Lab duplicates taken where large samples required splitting down by the lab. ▪ Lab repeats taken and standards inserted at predetermined level specified by the lab. <p>Sample preparation in the laboratory:</p> <ul style="list-style-type: none"> ▪ Sample dried at 105°C for 18-24 hrs. ▪ RC Sample split 50:50. One portion retained for future testing (metallurgical) ▪ Second portion crushed to nominal -3mm by Boyd crusher. ▪ Pulverised to 90% passing at 75µm using a LM2 mill. ▪ Sub-sample pulp to produce a 66 gram sample for analysis
<p>Quality of assay data and laboratory tests</p>	<ul style="list-style-type: none"> • The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. • 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. • 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. 	<ul style="list-style-type: none"> • All samples reported from the 2015 drilling program were submitted to Quantum Analytical Services in Perth and Bureau Veritas in Perth and assayed for the full iron ore suite by XRF (24 elements) and for total LOI by thermos-gravimetric technique. The method used is designed to measure the total amount of each element in the sample. • Laboratory procedures are in line with industry standards and appropriate for iron ore deposits. • 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 to a nominal -3mm size by Boyd crusher, then pulverised to 90% passing 75 micron using a LM2 mill. Sub-samples are collected to produce a 0.66g sample that is dried further, fused at 1100C for 10 minutes poured into a platinum mould and placed in the XRF machine for analysing and reporting. • A total LOI is measured by Thermo-gravimetric methods (TGA). • Certified Reference Material assay standards, field duplicates and umpire laboratory analysis are used for quality control. • There were no discernable issues with sample representivity and all duplicate samples were within 10% of the original sample value. • Acceptable levels of precision have been achieved with all standard assays reporting within 2 standard deviations of the certified mean grade for the 12 main elements of interest.

		<ul style="list-style-type: none"> • Certified Reference Material assay standards having a good range of values were inserted at predefined intervals by the company and randomly by the lab at set levels. Results highlight that sample assay values are accurate and precise. • Analysis of field duplicate and lab pulp repeat samples reveals that greater than 90% of pairs have less than 10% difference and the precision of samples is within acceptable limits, which concurs with industry best practice. The lab also inserts its own standards at set frequencies and monitors the precision of the XRF analysis. These results also reported well within the specified 2 standard deviations of the mean grades for all 12 main elements of interest. • XRF calibrations are checked once per shift using calibration beads made using exact weights. • The Laboratory performs repeat analyses of sample pulps at a rate of 1:20 (5% of all samples) these compare very closely with the original analysis for all elements.
Verification of sampling and assaying	<ul style="list-style-type: none"> • The verification of significant intersections by either independent or alternative company personnel. • The use of twinned holes. • Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. • Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> • Significant intersections have been independently verified by alternative company personnel. • The Competent Person has visited site and inspected the sampling process in the field and also inspected the Laboratory. • All primary data are captured on paper logs and entered into excel templates. • All paper copies have been scanned and both digital and paper copies stored. • All data is sent to Perth and stored in the secure, centralised Datashed SQL database which is managed by a database administrator. • Documentation related to data custody, validation and storage are maintained on the company's server. • No adjustments or calibrations were made to any assay data, apart from resetting below detection values to half positive detection.
Location of data points	<ul style="list-style-type: none"> • 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. • Specification of the grid system used. • Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> • All Collars were initially surveyed by MHR Surveyors, Surveyed using Trimble RTK GPS then company personnel shifted pegs into straight lines by sight as a variation on planned drill hole location. • MHR Surveyors then picked up final hole coordinates using Trimble RTK GPS with expected relative accuracy of 0.03m E,N and 0.05m RL • The grid system for Gabanintha Vanadium prospect is MGA_GDA94 Zone 50. • Topographic data collected by Fugro Airborne Surveys Pty Ltd based on 2m vertical contour interval resolution derived from 5m DTM. Aerial survey flown in September 2011. Data supplied in projection MGA_GDA94 Zone 50. • Downhole gyroscopic surveys are attempted on all RC and diamond holes by McKay Drilling or their subcontractors. Readings are taken at 10 m intervals downhole using a Reflex Gyro E723 survey tool with a stated accuracy of +/-1° in azimuth and +/-0.1° in inclination. QC of the gyro tool involved calibration testing on the 27/04/2014 by Reflex Technology International.
Data spacing and	<ul style="list-style-type: none"> • Data spacing for reporting of Exploration Results. • Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral 	<ul style="list-style-type: none"> • Drill spacing on an approximate 75m by 25m grid, however due to variable previous drilling this is sometimes not achievable. • Pre-2015 drillhole spacing of 200m-500m along strike and 100m across

distribution	<p>Resource and Ore Reserve estimation procedure(s) and classifications applied.</p> <ul style="list-style-type: none"> Whether sample compositing has been applied. 	<p>strike</p> <ul style="list-style-type: none"> This drill spacing is sufficient to establish the degree of geological and grade continuity applied under the 2012 JORC code and is suitable for this style of deposit. Sample compositing has not been applied to the RC samples; all RC samples are collected at 1m intervals.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 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. 	<ul style="list-style-type: none"> The attitude of the lithological units is dominantly west-south-westerly dipping from 40-80 degrees and is drilled to the northwest with drill holes inclined at -60 degrees towards perpendicular to the strike of the orientation of the lithological units. Due to locally varying intersection angles between drill holes and lithological units all results are defined as downhole widths. No drilling orientation and sampling bias has been recognized at this time and is not considered to have introduced a sampling bias.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Samples are packed into polyweave bags and then placed inside sealed Bulka bags. Samples are delivered to a 3rd party despatch point in Meekathara by company staff. Chain of custody is managed by the company. Samples are transported to the relevant Perth laboratory by courier (TOLL). Once received at the laboratory, samples are stored in a secure yard until analysis. Drill core stacked on pallets, strapped with steel bands and shrink plastic wrapped, before being loaded onto a dedicated courier trailer for transport to Perth and delivery to Diamond core samples cut and collected by Yellow Rock personnel in secure Bureau Veritas Mineral Processing Laboratory, and transported to the assay laboratory by Bureau Veritas personnel. The lab receipts received samples against the sample dispatch documents and issues a reconciliation report for every sample batch. Sample security was not considered a significant risk to the project.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> The company database has been compiled from primary data by independent database consultants Mitchell River Group based on original assay data and historical database compilations. The Datashed database, managed by Mitchell River Group is considered to be of sufficient quality for use in reporting of assay results, QA/QC results and for use in Mineral Resource estimation. A regular review of the data and sampling techniques is carried out internally. Mitchell River Group (completed an audit of the existing database prior to the new compilation into a Datashed SQL database in April 2015. Following the construction of a new database, a QA/QC audit was completed on all historical data and the current drilling results reported in this release.

SECTION 2 - REPORTING OF EXPLORATION RESULTS

Mineral tenement and land	<ul style="list-style-type: none"> Type, reference name/number, location and ownership include agreements or material issues with third parties such as joint ventures, 	<ul style="list-style-type: none"> Exploration Prospects are located wholly within Lease P51/2567 and E51/843. The tenements are 100% owned by Australian Vanadium.
----------------------------------	--	--

tenure status	<ul style="list-style-type: none"> partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. 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. 	<ul style="list-style-type: none"> The tenements lie within the Yugunga Nya Native Title Claim (WC1999/046). A Heritage survey was undertaken prior to commencing drilling which only located isolated artefacts but no archaeological sites <i>per se</i>. At the time of reporting, there are no known impediments to obtaining a licence to operate in the area and the tenement is in good standing. Mining Lease Application M51/878 covering most of E51/1843 and the vanadium project is currently under consideration by the Department of Mines and Petroleum.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> The Gabanintha deposit was identified in the 1960's by Mangore P/L and investigated with shallow drilling, surface sampling and mapping. In 1998, Drilling by Intermin Resources confirmed the down dip extent and strike continuation under cover between outcrops of the vaniderfous horizons. Additional RC and initial diamond drilling was conducted by Greater Pacific NL and then Yellow Rock Resources up until 2011. Mineral Resource estimates have been conducted on the deposit
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> The vanadium resource is located in a massive to disseminated ad cumulate titaniferous magnetite layer as part of a differentiated gabbroic sill.
Drill hole information	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	<ul style="list-style-type: none"> Refer to Appendix 1 above.
Data aggregation methods	<ul style="list-style-type: none"> 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. 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. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<ul style="list-style-type: none"> A nominal 200ppm lower cobalt cut is applied to the existing sample database to identify potentially significant intervals. These criteria have been selected to most appropriately represent the mineralisation, taking into account overall deposit grade and geological continuity. The total number of drill samples, and total number of cobalt assays are referred to in the report. No aggregation has been applied to the reported intervals in this report. All sample intercepts are not shown.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known'). 	<ul style="list-style-type: none"> The attitude of the lithological units is dominantly west-south-westerly dipping from 40-70 degrees and is drilled to the northeast with drillholes inclined at -60 degrees toward the orientation of the lithological units. Due to locally varying intersection angles between drill holes and lithological units all results are defined as downhole widths. The drilled downhole depths are taken to be well correlated to the true width due to the relative orientations.

Diagrams	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Collar plan and sections through the deposit with stratigraphic and Vanadium mineralisation interpretations are available. Likewise initial interpretations of the Cobalt assays are available.
Balanced reporting	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> All cobalt results are reported above a cutoff of 200ppm. Cobalt assays (10,979 samples) from the resource database have been assessed. 1,270 samples are above a 200ppm cutoff and show a consistent occurrence throughout the Vanadium orebody at Gabanintha. Modelling and further estimations of distribution, grades and volumes of Cobalt are in progress.
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Surface Geological (simple regolith, lithological and structural) mapping of the Gabanintha Vanadium prospect where possible has been completed by AVL geologists. Routine multi-element analysis of potential deleterious or contaminating substances such as Arsenic, Lead, Phosphorus and Sulphur is completed for all samples.
Further work	<ul style="list-style-type: none"> The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). 	<ul style="list-style-type: none"> Compile database and recalculate the resource model for cobalt. Undertake further metallurgical test work to incorporate cobalt into the feasibility study Additional drilling will be conducted as required by feasibility study investigations

Appendix 2 - Gabanintha Project – Mineral Resource estimate using a 0.3% V₂O₅ cutoff for low grade and 0.7% V₂O₅ cutoff for high grade

(total numbers may not add up due to rounding)

Material	JORC Resource Class	Million Tonnes	In situ bulk density	V ₂ O ₅ %	Fe%	TiO ₂ %	SiO ₂ %	Al ₂ O ₃ %	LOI%
High grade	Measured	7.0	3.73	1.09	43	12	10	8	3.4
	Indicated	4.3	3.29	1.07	41	12	12	9	4.6
	Inferred	45.5	3.67	0.97	42	11	12	8	2.8
Subtotal		56.8	3.65	1.00	42	11	12	8	3.0
Low grade	Indicated	13.4	2.39	0.55	24	7	27	19	8.7
	Inferred	21.1	2.48	0.53	25	7	27	17	7.0
Subtotal		34.6	2.45	0.53	25	7	27	18	7.6
Subtotal	Measured	7.0	3.73	1.09	43	12	10	8	3.4
Subtotal	Indicated	17.8	2.61	0.68	28	8	23	16	7.7
Subtotal	Inferred	66.7	3.29	0.83	37	10	17	11	4.1
	TOTAL	91.4	3.19	0.82	35	10	18	11	4.8