ASX Announcement

8 September 2017

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Directors

Michael Fry:
Chairman

Ian Prentice:
Executive Director

Sonu Cheema:
Director and Company Secretary

Issued Capital

21,300,001 ("TMT") Fully Paid Ordinary Shares

13,800,000 Fully Paid Ordinary Shares classified as restricted securities

15,000,000 Unquoted Options exercisable at $0.25 on or before 31 December 2019 classified as restricted securities

10,000,000 Class B Performance Shares classified as restricted securities

ASX Code: TMT

FRA Code: TN6

EXCELLENT PRELIMINARY METALLURGICAL TESTWORK AT GABANINTHA

HIGHLIGHTS

Preliminary magnetic separation testwork completed on four composite samples predominantly from the basal massive magnetite zone.

Exceptional vanadium recoveries in to a magnetic concentrate at a relatively coarse grind size of 106 microns.

Davis Tube Recovery delivering vanadium grades of 1.40 to 1.53% V_2O_5 in to a magnetic concentrate.

Very low combined grade of silica (SiO_2) in the magnetic concentrate is potentially highly beneficial for efficient and effective processing.

Ongoing testwork will focus on the metallurgical characteristics of the medium grade hanging wall disseminated mineralisation as well as the basal massive magnetite zone.

BACKGROUND

Technology Metals Australia Limited (ASX: **TMT**) ("**Technology Metals**" or the "**Company**") is pleased to announce results of the preliminary (sighter) round of metallurgical (magnetic separation) testwork ("**Testwork**") completed on composite RC drill samples from its Gabanintha Vanadium Project ("**Project**"). The Testwork was planned and managed by Mineral Engineering Technical Services Pty Ltd ("**METS**"), the Company's metallurgical consultant.

Four composite RC drill samples were collected from within the area of the previously announced maiden Inferred Mineral Resource[1] ("**Resource**") on the Northern Block of tenements at the Project. The samples consisted of two oxide, one transitional and one fresh composite predominantly from the basal massive magnetite zone.

Executive Director Ian Prentice commented; "This preliminary metallurgical testwork on a limited number of RC composite samples has delivered outstanding results, highlighted by the exceptional vanadium recoveries in to a magnetic concentrate. We are now eagerly awaiting the results of the next round of metallurgical testwork looking at the metallurgical characteristics of the medium grade hanging wall disseminated mineralisation"

1 – Technology Metals Australia – ASX Announcement dated 13 June 2017, Maiden Inferred Resource Defined at Gabanintha Including High Grade Component of 29.5Mt at 1.1% V_2O_5. Ian Prentice.

METALLURGICAL TESTWORK – PRELIMINARY (SIGHTER) MAGNETIC SEPARATION TESTWORK

The Company engaged Mineral Engineering Technical Services Pty Ltd ("**METS**") as its metallurgical consultant to plan, manage and report on the preliminary (sighter) round of metallurgical (magnetic separation) testwork ("**Testwork**") on the Gabanintha Vanadium Project ("**Project**"). Four composite samples from the Company's original RC drilling program were selected for the Testwork; two shallow / oxide composites (Oxide A and Oxide B), one transitional and one fresh from within the maiden Inferred Mineral Resource ("**Resource**") on the Northern Block of tenements at the Project. The samples were predominantly from the basal massive magnetite zone. The Testwork was undertaken at ALS Metallurgy's Iron Ore Technical Centre.

The Testwork was designed to test the viability of producing a magnetic concentrate from each of the composites and provide data on the standard magnetic separation processing routes for this type of material. The tests undertaken include Davis Tube Recovery ("**DTR**"), Davis Tube Wash Test ("**DTW**") and Low Intensity Magnetic Separation ("**LIMS**").

For the DTR, a low intensity magnetic recovery method, the composite samples were pulverised down to 45 microns and then passed through a Davis Tube, an inclined water filled glass tube with electromagnets mid-way down the tube. The tube oscillates and water washes the non-magnetic material out the bottom of the tube and the magnetic portion is trapped in the magnetic field.

		Mass	Fe		V_2O_5		TiO_2		SiO_2		Al_2O_3	
		Pull (%)	Grade (%)	Recovery (%)	Grade (%)	Recovery (%)	Grade (%)	Recovery (%)	Grade (%)	Recovery (%)	Grade (%)	Recovery (%)
Oxide A	Mags	66.9	58.7	81.6	1.4	88.6	12.6	69.1	0.5	4.7	2.8	30.2
	Non Mags	33.1	26.7	18.4	0.4	11.4	11.4	30.9	21.5	95.3	13.2	69.8
Oxide B	Mags	5.6	55.0	6.6	1.5	6.8	14.0	5.5	0.8	0.7	2.7	2.3
	Non Mags	94.4	46.5	93.4	1.2	93.2	14.3	94.5	6.2	99.3	6.9	97.7
Transition	Mags	39.4	56.3	56.1	1.5	59.5	13.5	50.2	1.2	2.9	2.5	13.9
	Non Mags	60.6	28.6	43.9	0.7	40.5	8.7	49.8	26.7	97.1	10.0	86.1
Fresh	Mags	69.5	58.8	84.4	1.4	90.4	12.9	74.9	0.4	3.7	2.1	26.9
	Non Mags	30.5	24.8	15.6	0.3	9.6	9.9	25.1	24.5	96.3	12.9	73.1

Table 1: DTR Testwork Results

The DTR testing delivered vanadium grades reporting to the magnetic concentrate of 1.40 to 1.53% V_2O_5, with very high recoveries in to the magnetic concentrate for the Fresh and Oxide A composites and a relatively high recovery for the Transition composite. Note that the Oxide A composite was from the northern portion of the resource which appears to demonstrate a much shallower weathering profile, therefore this sample was significantly less oxidised than Oxide B (see Figure 1). Recoveries for the Oxide B material were in line with expectations given the lower levels of magnetic material present in the oxidised material.

Potential deleterious elements aluminium (Al_2O_3) and silica (SiO_2) in the magnetic concentrate are very low, ranging from 2.1 to 2.8% and 0.4 to 1.2% respectively for a combined total at or below 4% of the concentrate, with the vast majority of this material reporting to the non-magnetic concentrate (waste). Low silica grades are an important factor for the efficient and effective salt roasting of vanadium concentrates.

Figure 1: Oxide A Composite Material (top) versus Oxide B Composite Material (bottom)

The DTW tests are similar to a DTR test, with the exception that the material is not pulverised but subjected to the Davis Tube separation at a chosen size. These DTW tests were carried out at a P80 of 106 microns on all composites, with additional grind sizes of 75 and 210 micron conducted on the Fresh composite to investigate the sensitivity of concentrate grade and recovery to grind size. These tests delivered exceptional vanadium recoveries at 106 micron, ranging from 75.4% for the Transition composite (for a 1.51% V_2O_5 grade in concentrate) up to 91% for the Fresh composite (for a 1.39% V_2O_5 grade in concentrate). The testing of the Fresh composite at varying grind sizes indicates that the vanadium grade in concentrate and recoveries are not sensitive to grind size variations (see Figure 2). This has potential to have positive implications for capital and operating costs in the magnetic concentration stage of a possible processing facility.

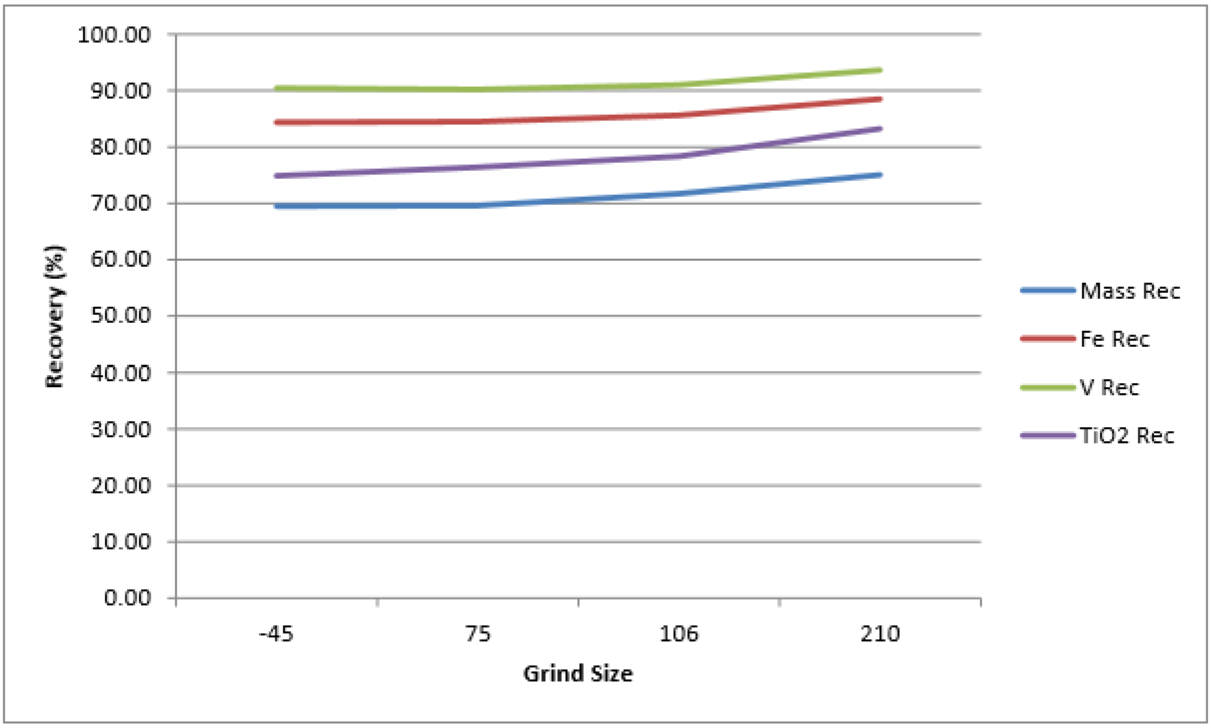

Figure 2: Fresh Composite – Grind Size versus Recovery

The LIMS testing, designed to confirm the findings of the DTR and DTW testwork under conditions that are representative of those that would occur in a processing plant, was conducted on composite samples at a grind size of 106 microns and at 900 Gauss. The results from this work were in line with the DTR and DTW testing, with exceptional recoveries ranging from 73.6% for the Transition concentrate up to 92.4% for the Fresh composite.

<u>Future Testwork</u>

Following completion of this preliminary (sighter) round of testwork the focus of the ongoing metallurgical testwork will be to assess the magnetic separation characteristics of the medium grade hanging wall disseminated mineralisation independent of the basal massive magnetite zone. METS are of the view that the medium grade hanging wall disseminated mineralisation may beneficiate to produce a higher vanadium grade in a concentrate, largely due to the higher proportion of gangue minerals in this material which will report to the non-magnetic concentrate. This is supported by the higher concentrate grades reported for the Transition composite which contained some material from the hanging wall disseminated zone.

Additional samples have been collected from the Company's original RC drilling program to form composites for this further testwork.

METS are developing a testwork program for the diamond core samples that are being generated from the diamond drilling component of the current resource infill and extension program, which consists of 13 holes for approximately 1,200m. The diamond core samples will be used for comminution testwork, generation of in-situ bulk density data and detailed metallurgical (magnetic separation) testwork across a range of zones within the Resource.

ABOUT VANADIUM

Vanadium is a hard, silvery grey, ductile and malleable speciality metal with a resistance to corrosion, good structural strength and stability against alkalis, acids and salt water. The elemental metal is rarely found in nature. The main use of vanadium is in the steel industry where it is primarily used in metal alloys such as rebar and structural steel, high speed tools, titanium alloys and aircraft. The addition of a small amount of vanadium can increase steel strength by up to 100% and reduces weight by up to 30%. Vanadium high-carbon steel alloys contain in the order of 0.15 to 0.25% vanadium while high-speed tool steels, used in surgical instruments and speciality tools, contain in the range of 1 to 5% vanadium content. Global economic growth and increased intensity of use of vanadium in steel in developing countries will drive near term growth in vanadium demand.

An emerging and likely very significant use for vanadium is the rapidly developing energy storage (battery) sector with the expanding use and increasing penetration of the vanadium redox batteries ("**VRB's"**). VRB's are a rechargeable flow battery that uses vanadium in different oxidation states to store energy, using the unique ability of vanadium to exist in solution in four different oxidation states. VRB's provide an efficient storage and re-supply solution for renewable energy – being able to time-shift large amounts of previously generated energy for later use – ideally suited to micro-grid to large scale energy storage solutions (grid stabilisation). Some of the unique advantages of VRB's are:

- a lifespan of 20 years with very high cycle life (up to 20,000 cycles) and no capacity loss,
- rapid recharge and discharge,
- easily scalable into large MW applications,
- excellent long term charge retention,
- improved safety (non-flammable) compared to Li-ion batteries, and
- can discharge to 100% with no damage.

Global economic growth and increased intensity of use of vanadium in steel in developing countries will drive near term growth in vanadium demand.

The global vanadium market has been operating in a deficit position for the past five years (source: TTP Squared Inc), with a forecast deficit of 9,700 tonnes in 2017. As a result vanadium inventories have been in steady decline since 2010 and they are forecast to be fully depleted in 2017 (source: TTP Squared Inc). Significant production declines in China and Russia have exacerbated this situation, with further short term production curtailment expected in China as a result of potential mine closures resulting from impending environmental inspections.

The tightening supplies of vanadium are resulting in a global shortage, with prices appreciating dramatically in recent months. Reports out of China have indicated significant increases in the "spot" market for vanadium pentoxide in recent weeks, with trades completed at US$12.30 to US$13.00 per lb V_2O_5, a four-fold increase over the past 12 months.

For, and on behalf of, the Board of the Company,

Ian Prentice
Executive Director
Technology Metals Australia Limited

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About Technology Metals Australia Limited

Technology Metals Australia Limited (ASX: TMT) was incorporated on 20 May 2016 for the primary purpose of identifying exploration projects in Australia and overseas with the aim of discovering commercially significant mineral deposits. The Company's primary exploration focus is on the Gabanintha Vanadium Project located 40km south east of Meekatharra in the mid-west region of Western Australia with the aim to develop this project to potentially supply high-quality V2O5 flake product to both the steel market and the emerging vanadium redox battery (VRB) market.

The Project, which consists of five granted tenements and one exploration licence application, is on strike from, and covers the same geological sequence as, Australian Vanadium Limited's (ASX: AVL) Gabanintha Vanadium project. Vanadium mineralisation is hosted by a north west – south east trending layered mafic igneous unit with a distinct magnetic signature. Mineralisation at Gabanintha is similar to the Windimurra Vanadium Deposit, located 270km to the south, and the Barambie Vanadium-Titanium Deposit, located 155km to the south east. The key difference between Gabanintha and these deposits is the consistent presence of the high grade massive vanadium – titanium – magnetite basal unit, which is expected to result in an overall higher grade for the Gabanintha Vanadium Project.

Data from the Company's maiden drilling program was used by independent geological consultants CSA Global to generate a maiden Inferred Resource estimate, reported in accordance with the JORC Code 2012, for the Northern Block of tenements at the Project. The resource estimate confirmed the position of the Gabanintha Vanadium Project as one of the highest grade vanadium projects in the world.

Table 2: Mineral Resource estimate for Technology Metals Gabanintha Vanadium Project as at 12 Jun 2017

Mineral Resource estimate for Technology Metals Gabanintha Vanadium Project as at 12 Jun 2017									
Mineralised Zone	Classification	Million Tonnes	V2O5 %	Fe %	Al2O3 %	SiO2 %	TiO2 %	LOI %	Density t/m3
Basal massive magnetite	Inferred	29.5	1.1	46.4	6.1	8.2	12.6	1	3.6
Hanging wall disseminated	Inferred	33.2	0.5	26.6	14.9	27.1	7.2	5.1	2.4
Combined Total	**Inferred**	**62.8**	**0.8**	**35.9**	**10.8**	**18.3**	**9.7**	**3.2**	**2.8**
* Note: The Mineral Resource was estimated within constraining wireframe solids using a nominal 0.9% V2O5 lower cut off for the basal massive magnetite zone and using a nominal 0.4% V2O5 lower cut off for the hanging wall disseminated mineralisation zones. The Mineral Resource is quoted from all classified blocks within these wireframe solids above a lower cut-off grade of 0.4% V2O5. Differences may occur due to rounding.									

Capital Structure	
Tradeable Fully Paid Ordinary Shares	*21.3m*
Escrowed Fully paid Ordinary Shares[1]	*13.8m*
Fully Paid Ordinary Shares on Issue	*35.1m*
Unquoted Options[2] *($0.25 – 31/12/19 expiry)*	*15.0m*
Class B Performance Shares[3]	*10.0m*

1 – 1.3 million fully paid ordinary shares will be tradeable from 21 September 2017 and 2.5 million fully paid ordinary shares will be tradeable from 21 December 2018.
2 – 1.3 million unquoted options are subject to restriction until 21 September 2017 and 13.7 million unquoted options are subject to restriction until 21 December 2018.
3 - Convert in to 10 million fully paid ordinary shares on achievement of an indicated resource of 20 Million tonnes at greater than 0.8% V_2O_5 on or before 31 December 2019. All Performance Shares and any fully paid ordinary shares issued on conversion of the Performance Shares are subject to restriction until 21 December 2018.

About Mineral Engineering Technical Services Pty Ltd

Mineral Engineering Technical Services Pty Ltd ("**METS**") is an industry leading independen consultancy that has nearly 30 years experience across a wide range of projects. METS'vanadium specific experience has been developed by working on a range of vanadium projects throughout the World, including work on the Barrambie, Mount Peake, Youanmi, Mustavaara and Windimurra projects.

Forward-Looking Statements

This document includes forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning Technology Metal Australia Limited's planned exploration programs, corporate activities and any, and all, statements that are not historical facts. When used in this document, words such as "could," "plan," "estimate," "expect," "intend," "may", "potential," "should" and similar expressions are forward-looking statements. Technology Metal Australia Limited believes that its forward-looking statements are reasonable; however, forward-looking statements involve risks and uncertainties and no assurance can be given that actual future results will be consistent with these forward-looking statements. All figures presented in this document are unaudited and this document does not contain any forecasts of profitability or loss.

Competent Persons Statement

*The information in this report that relates to Exploration Results are based on information compiled by Mr Ian Prentice. Mr Prentice is a Director of the Company and a member of the Australian Institute of Mining and Metallurgy. Mr Prentice has sufficient experience relevant to the styles of mineralisation and types of deposits which are covered in this report and to the activity which they are 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' ("**JORC Code**"). Mr Prentice consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.*

*The information in this report that relates to Mineral Resources are based on information compiled by Mr Galen White. Mr White is a Principal Consultant with CSA Global and a Fellow of the Australian Institute of Mining and Metallurgy. Mr White has sufficient experience relevant to the styles of mineralisation and types of deposits which are covered in this report and to the activity which they are 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' ("**JORC Code**"). Mr White consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.*

The information in this report that relates to the Processing and Metallurgy for the Gabanintha project is based on and fairly represents, information and supporting documentation compiled by Damian Connelly who is a Fellow of The Australasian Institute of Mining and Metallurgy and a full time employee of METS. Damian Connelly has sufficient experience 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'. Damian Connelly consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

APPENDIX 1

JORC Code, 2012 Edition – Table 1

1.1 Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

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.* • *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 1 m 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.*	• Reverse circulation drilling was used to obtain 1m samples. The samples are cone split off the rig cyclone, with sample weights of 2 to 3 kg being collected. • Duplicate 2 – 3kg samples were collected from every metre sample. • Individual metre samples were selected for analysis based on geological logging, with zones below the mineralised intervals not submitted for analysis. • Duplicate samples were submitted for analysis for every 20m down hole, ensuring duplicates were submitted for mineralised zones (based on geological logging and hand-held Olympus Vanta XRF results). • Samples analysed by XRF spectrometry following digestion and Fused Disk preparation.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Reverse circulation drilling with face-sampling hammer
Drill sample recovery	• *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.*	• Duplicate 2 – 3kg samples were collected from every metre sample. • Sample recovery was assessed based on the estimated bulk sample collected for each metre. Each bag was not weighed. For 1 in 3 holes a spring gauge was used to ensure the cone split remained within the 2 to 3 Kg range. • There does not appear to be any relationship between recovery and grade in this "massive" mineralisation.
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.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Drill samples were logged in the field, with the total length of holes logged in detail. • Drill chips for every metre were collected in trays and photographed. • No geotechnical logging was undertaken due to all drilling being RC, thus a sample medium amenable to collecting geotechnical data.

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *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 maximise 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.*	• Duplicate 2 – 3kg samples were collected from every metre sample. • Samples were cone split at the drill rig, and represent approximately 5% of the total material for each metre sampled. • The majority of samples were dry. • Samples were dried and pulverised in the laboratory and fused with a lithium borate flux and cast in to disks for analysis. • Field duplicates were submitted such that there were at least 1 duplicate sample for every 20 samples analysed. • No diamond twin drilling has been completed to date to determine any potential relationship between current RC sampling size, grain size and grade, however the sample size is considered to be appropriate to the material being sampled.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *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.*	• Pulverised samples from every metre were fused with a lithium borate flux and cast in to disks and analysed by XRF spectrometry – method FB1/XRF77. • Field duplicates (at least 1 duplicate sample for every 20 samples analysed), laboratory check samples and standards are considered to be suitable quality control procedures. • Quality control procedures demonstrate acceptable levels of accuracy and precision have been achieved. CRM materials inserted to the sample stream at the laboratory have performed acceptably, and field duplicate samples have performed well.
Verification of sampling and assaying	• *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.*	• Significant intersections correlate with mineralised zones as defined from geological logging. All sampling was completed by an independent geologist. • The estimation of significant intersections has been verified by alternate company personnel. • There were no adjustments to assay data.
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.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• The grid system used for collar positions was MGA94 – Zone 50. • Planned hole collar positions were located using hand held GPS. • RL's for the collar positions are estimated based on a digital elevation model with an accuracy within 3m. • Down hole surveys were completed using an Axis Gyro every 30m down hole and near the collar.

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	• *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 Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• The drill data is on nominal 100m line spacing with holes located every 50m along the drill lines. • Detailed airborne magnetics supports strike and down dip continuity assumptions of the massive magnetite zone which is known to host high grade mineralisation. • This continuity has been additionally supported by drilling data. • Data is considered appropriate for use in estimating a Mineral Resource. • No sample compositing was applied.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• The drilling has been completed at an orientation that would have been unlikely to have introduced a sampling bias. The drill holes are drilled orthogonal to the measured strike +-10°, the apparent thickness is 0.85 X the true thickness, drill deviations were not noticeably higher through the mineralised zone
Sample security	• *The measures taken to ensure sample security.*	• Samples were collected in polyweave bags, sealed securely and transported by Company personnel until handover to a commercial transport company, which delivered the samples by road transport to the laboratory.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits or reviews have been completed to date.

1.2 Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

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.* • *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.*	• The areas drilled are located on current Prospecting Licences 51/2943 and 51/2944 and Exploration Licence 51/1510). • The tenements are granted and held by The KOP Ventures Pty Ltd, a wholly owned subsidiary of Technology Metals Australia Limited.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Reverse circulation drilling was completed in 1998 by Intermin Resources NL under an option agreement on tenements held by Oakland Nominees Pty Ltd – consisting of GRC9801 to GRC9805 (on Prospecting Licences 51/2164) and GRC9815 to GRC9817 (on Prospecting Licence 51/2183). • The areas drilled are located on current Prospecting Licences 51/2943 (GRC9801, GRC9802), 51/2944 (GRC9803, GRC9804, GRC9805) and 51/2942 (GRC9815 to GRC9817) held by The

Criteria	JORC Code explanation	Commentary
		KOP Ventures Pty Ltd, a wholly owned subsidiary of Technology Metals Australia Limited. • Exploration prior to this drilling included geological mapping and limited rock chip sampling completed across a zone of outcropping vanadiferous titanomagnetite layered mafic igneous unit by various parties.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Massive vanadiferous titanomagnetite layered mafic igneous unit in outcrop.
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.* • *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.*	• See attached Appendix 1 and Appendix 2. • All relevant material from previous RC drilling has been reported to the ASX on the following dates: 9th March 2017, 4th April 2017, 19th April 2017 and 28th April 2017
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.* • *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.*	• Significant intervals (as shown in Appendix 1) have been defined nominally using a 0.4% V_2O_5 lower cut-off grade, length weighted average grades and no more than 3m of consecutive lower grade mineralisation. • High grade grade intervals (as shown in Table 1) have been defined nominally using a 0.9% V_2O_5 lower cut-off grade, length weighted average grades and no more than 2m of consecutive lower / medium grade mineralisation. Where applicable lower cut off grades have been used in broadly mineralised high grade intersections to ensure continuity.
Relationship between mineralisation widths and intercept lengths	• *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').*	• Down hole lengths of mineralisation are reported. • See the cross section shown at Figure 2 for an approximation of true widths.
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.*	• A map showing tenement and drill hole locations has been included (see Figure 1). • A cross section showing the relationship between mineralisation and geology has been included (see Figure 2).

Criteria	JORC Code explanation	Commentary
		• A table of all intersections for the reported drilling has been included (see Appendix 1).
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• Results for all mineralised intervals have been included, including both low and high grades.
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.*	• Geophysical data in the form of aero magnetic data assists the geological interpretation of the main high magnetite unit and highlights offsets due to faults and or dykes. Historic drilling data is not used due to uncertainty in location and orientation
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).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Further drilling is being completed on the deposit, including infill drilling to increase confidence in the geometry of mineralisation zones and to provide greater sample support. • Samples from diamond drilling are planned to be collected to enable preliminary metallurgical testing of the different grades and types of mineralisation encountered in the drilling.

1.3 Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• Drilling data is stored in a DataShed database system which an industry best practise relational geological database. Data that has been entered to this data base is cross checked by independent geological contracting staff to ensure accuracy. CSA Global has been provided with a number of pdf format assay certificates from the laboratory and completed its own checks, finding that all checked assay data was correctly captured in the relevant database table. • Data used in the Mineral Resource estimate is sourced from a database export. Relevant tables from the data base are exported to MS Excel format and converted to csv format for import into Datamine Studio RM software. • Validation of the data import include checks for overlapping intervals, missing survey data, missing assay data, missing lithological data, and missing collars.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• No site visit has been completed by CSA Global personnel, as this was not considered necessary at this relatively early project stage. The drilling and sampling program has been completed for TMT by an independent geologist, Mr John McDougall. CSA Global has viewed photographic evidence provided by Mr McDougall of the drilling in

Criteria	JORC Code explanation	Commentary
		progress, as well a drill spoil piles and discussed the project in detail with him. The deposit is an along strike continuation of the neighbouring Australian Vanadium Limited (AVL) Gabanintha V-Ti-magnetite deposit that is well documented in the public domain, and a project that CSA Global has had prior involvement in (AVL, ASX 7 February 2011). The MRE results reported to the ASX (AVL, ASX 10 November 2015) by AVL, and the work completed by CSA Global for Technology Metals show geological and mineralisation zone interpretations having similar spatial relationships and the Mineral Resource estimate tenor being similar. The geophysical evidence in the form of total magnetic intensity (TMI) maps provided to CSA Global provide further evidence of the strike continuity of the Gabanintha deposit.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• Based on surface geological and structural mapping, drill hole logging and sample analysis data and geophysical TMI data, the geology and mineral distribution of the basal massive V-Ti-magnetite zone appears to be consistent through the interpreted strike length of the deposit. • Cross cutting faults and dykes, interpreted from the drill hole and magnetic data and surface mapping have been modelled. These features displace the mineralisation as shown in the diagrams in the body of this report. Drill hole logging has shown some narrow quartz porphyry units which have been modelled, cutting through the mineralisation on some sections. In the hanging wall of the basal massive magnetite zone, the mineralised units are defined at a nominal 0.4% V2O5 lower cut-off grade. The geological and grade continuity of these zones is not as well understood as the basal massive magnetite unit, however drill sample analysis demonstrates consistent zones of more disseminated mineralisation existing in the hanging wall above the basal unit along strike and on section. Weathering surfaces for the base of complete oxidation (BOCO) and top of fresh rock (TOFR) have been generated based on a combination of drill hole logging, magnetic susceptibility readings and sample analysis results. • Surface mapping, drill hole intercept logging, sample analysis results and TMI data have formed the basis of the geological and mineralisation interpretations. Assumptions have been made on the depth and strike extent of the mineralisation based on the drilling and geophysical data, as documented further on in this table. Based on the currently available information contained in the drilling data, surface mapping and the geophysical data, the assumption has been made that the hanging wall disseminated mineralisation lenses that are in the same stratigraphic position relative to the basal magnetite are related and are grouped together as the same zones for estimation purposes.

Criteria	JORC Code explanation	Commentary
		• The extents of the modelled mineralisation zones are constrained by the available drill and geophysical data. Alternative interpretations are not expected to have a significant influence on the global Mineral Resource estimate. • The continuity of the geology and mineralisation can be identified and traced between drill holes by visual, geophysical and geochemical characteristics. Additional data is required to more accurately model the effect of any potential structural or other influences on the modelled mineralised units, Confidence in the grade and geological continuity is reflected in the Mineral Resource classification.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• The modelled mineralisation strikes approximately 160° to 340°, dipping on average about 55° towards 250°, with a modelled strike extent of approximately 4.3km. The mineralisation is interpreted to be folded back on itself at the northern end. • The stratiform basal massive magnetite unit has a true thickness varying between 10m and 25m. The interpreted hanging wall disseminated mineralisation lenses appear to be better developed in the southern half of the modelled area, with cumulative true thickness of the order of 45m in the south from up to five lenses, reducing to roughly 25m in the centre from three lenses and about 8m from one lens in the north of the deposit. • The basal magnetite outcrops and has been mapped along the strike extent and has been extended to a maximum of approximately 170m below topographic surface. The strike extent is extended a nominal 200m, or half the nominal drill section spacing, past the last drilling section in the south to the intersection with the tenement boundary based on the surface mapping and geophysical data extents. • In the north, the mineralisation is terminated nominally 100m past drilling based on the surface mapping extents of the outcropping mineralisation. In the folded area in the north down dip extent is limited to a maximum 50m down dip of drill section data, or 120m below topographic surface, due to the greater geological uncertainty. The immediate hanging wall disseminated mineralisation zone above the basal massive magnetite is interpretation to similar extents as the basal magnetite. The lenses further up in the hanging wall are not as clearly constrained and understood and therefore the down dip extent is nominally half that of the basal magnetite, or between 70 to 100m below topographic surface. • Given the continuity defined over the drilled extents (fenceline spacings of 400m), and being additionally informed by the magnetics (TMI), these extrapolation extents are considered reasonable.

Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	• The Mineral Resource estimate was completed in Datamine Studio RM software using the Inverse Distance Weighting to the power of two (IDW) estimation method. This method was selected in preference to ordinary kriging (OK) as modelled variograms were not considered reliable, due in part to relative paucity of data at the current stage of advancement of the project. • Estimations were completed for V2O5, Fe and contaminant elements, TiO2, Al2O3, SiO2, P and S, and loss on ignition at 1000°C (LOI). Due to the mineralised zones being cut by and / or offset by faults and dykes the mineralisation interpretation consists of 12 basal magnetite and 22 hanging wall lenses. These are grouped together using a numeric zone code as the basal magnetite lenses, or for the disseminated mineralisation lenses they are grouped together based on stratigraphic position in the hanging wall above the basal magnetite. These lens groupings are then further split based on the weathering surface interpretations into oxide, transition and fresh materials. This has resulted in 12 separate estimation domains being defined with hard boundaries being used between estimation domains. Due to insufficient sample data points, the basal magnetite oxide material was combined with transitional to form one estimation domain. Similarly, for some hanging wall mineralisation domains where there was insufficient data, weathering state domains have been combined for estimation purposes. • Statistical analysis was completed on the basal magnetite weathering domains separately, and for the hanging wall disseminated domains combined based on the weathering state. This analysis showed that while co-efficient of variation was generally low (below 0.5) for all grade variables, some outlier grades existed and in the CP's our opinion required balancing cuts to prevent estimation bias associated with outlier values. Bottom cuts were required for Fe, V2O5 and LOI and a top cut for SiO2 in the basal magnetite oxide / transitional domain Bottom cuts were required for Fe, and V2O5, and top cuts for SiO2, Al2O3 and LOI in the basal magnetite fresh zone. For the hanging wall zones in the oxide material bottom cuts were deemed necessary for Fe and LOI, with top cuts for SiO2, TiO2 and LOI. In the transitional zone a top cut was applied to TiO2. Drill spacing is nominally 40m on sections spaced 400m apart. • Maximum extrapolation away from data points is to 200m in the south and up to 100m down dip. Search ellipse extents are set to 700m along strike, 100m down dip and 50m across dip, to ensure that the majority of the block estimates find sufficient data to be completed in the first search volume. The search volume was doubled for the second search

Criteria	JORC Code explanation	Commentary
		pass and increased 20-fold for the third search pass to ensure all block were estimated. • A maximum of 8 samples per hole, with a minimum of 15 and a maximum of 40 samples are allowed for a block estimate in the first search pass, reducing to a maximum 30 samples for the second pass, and further reducing to a minimum of 5 and maximum 20 samples for the final pass. • This is the first Mineral Resource estimate for this deposit (a Maiden Mineral Resource Estimate). Despite the known deficiencies in generating reliable variograms, for the purposes of generating a check estimate, nonetheless an OK estimate was run, and produced comparable results with an 0.2% difference in global V2O5 grade • No assumptions have been made regarding by-product recovery at this early project stage. • Potentially deleterious P and S have been estimated. • A volume block model with parent block sizes of 100 m (N) by 10 m (E) by 10 (RL) was constructed using Datamine Studio Software. Minimum sub cells down to 5 m (N) by 1 m (E) by 1m (RL) were allowed for domain volume resolution. Drill spacing is nominally 40m across strike on west to east sections spaced 400 m apart north to south. • No assumptions have been made regarding selective mining units at this early stage of the project. • A strong positive correlation exists between Fe and V2O5 and TiO2 and a strong negative correlation between Fe and Al2O3, SiO2 and LOI. • The separate interpreted mineralisation zones domained based on the geological, geochemical and geophysical data, and further domained by weathering state have been separately estimated using hard boundaries between domains. The model is depleted by fault zones, intrusive dykes, cross cutting quartz porphyries and surficial colluvium zones that have been interpreted based on the geological, geochemical and geophysical data. • Block model validation has been completed by statistical comparison of drill sample grades with the IDW and OK check estimate results for each estimation zone. Visual validation of grade trends along the drill sections was completed and trend plots comparing drill sample grades and model grades for northings, eastings and elevation were completed. These checks show reasonable comparison between estimated block grades and drill sample grades with an increase in block model grade compared to the drill sample data for V2O5 of <1% in the basal magnetite, and a decrease of <2% for block grades compared to drill sample data in the disseminated mineralisation. • With no mining having taken place there is no reconciliation data

Criteria	JORC Code explanation	Commentary
		available to test the model against.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnages have been estimated on a dry, in situ basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The adopted lower interpretation cut-off grade of 0.9% V2O5 for the basal mineralisation and 0.4% V2O5 for the hanging wall interpretation, and a reporting cut-off of 0.4% V2O5 for the model as a whole is considered to be a reasonable threshold to inform reasonable chances of eventual economic extraction, the resulting average V2O55 model grades are comparable with the adjacent deposit (AVL) for which more advanced technical works in consideration of preliminary metallurgical and recovery works have been completed (AVL ASX Announcement 07 December 2015). • Consideration of the interpreted mineralisation zone as a continuation to that of the adjacent project, for which a current Mineral Resource has been publicly reported and for which some metallurgical study work has been completed on material considered similar, is considered to represent validity of reasonable justification for potential economic viability. The results from the adjacent project whilst not definitive, would indicate that the interpreted mineralisation zones have reasonable prospects for eventual economic extraction.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• It has been assumed that these deposits will be amenable to open cut mining methods and are economic to exploit to the depths currently modelled using the cut-off grade applied. No assumptions regarding minimum mining widths and dilution have been made.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• Metallurgical amenability has been assumed based on a review of publicly reported metallurgical results from material gathered BY AVL from the adjacent project (AVL, ASX Announcement 07 December 2015) which is considered to be similar in geological and mineralogical character. Whilst no metallurgical test work has been completed on TMT samples by the company, the availability of testwork conclusions from the adjacent project, in the public domain, is considered to provide support for a reasonable assumption of metallurgical amenability.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and*	• No work has been completed by the company regarding waste disposal options. It is assumed that such disposal will not present a significant barrier to exploitation of the deposit and that any disposal and potential environmental impacts would be correctly managed as

Criteria	JORC Code explanation	Commentary
	processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	required under the regulatory permitting conditions.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• No bulk density testing has been completed over the project. Bulk density values have been assumed based on research into publicly available Mineral Resource Estimation disclosure of the neighbouring tenement holder AVL (ASX Announcement 10 November 2015) which is based on sample data considered to be geologically and mineralogically similar. The CP considers that the assumption of bulk density based on data from a neighbouring project, of similar character, to be a reasonable one.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• Classification of the Mineral Resource was carried out taking into account the level of geological understanding of the deposit, quantity, quality and reliability of sampling data and assumptions of continuity based on drill hole spacing. • The Mineral Resource estimate has been classified in accordance with the JORC Code, 2012 Edition using a qualitative approach. All factors that have been considered have been adequately communicated in Section 1 and Section 3 of this Table. • Overall the continuity of mineralisation can be assumed over numerous drill sections, to the level of confidence required to support the Mineral Resource classification. • The Mineral Resource estimate appropriately reflects the view of the Competent Person. • The Mineral Resource is classified as an Inferred Mineral Resource.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• Internal audits and peer review were completed by CSA Global which verified and considered the technical inputs, methodology, parameters and results of the estimate. No external audits have been undertaken.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.*	• The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code. • The Mineral Resource statement relates to global estimates of *in situ* tonnes and grade.

Criteria	JORC Code explanation	Commentary
	• *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	