



TECHNOLOGY
METALS AUSTRALIA LIMITED

ASX Announcement

7 December 2017

ACN: 612 531 389

T: 08 6489 1600

F: 08 6489 1601

E: investors@tmtlimited.com.au

Suite 9, 330 Churchill Avenue,

Subiaco WA 6008

www.tmtlimited.com.au

Directors

Michael Fry:
Chairman

Ian Prentice:
Executive Director

Sonu Cheema:
Director and Company Secretary

Issued Capital

22,600,001 ("TMT") Fully Paid
Ordinary Shares

12,500,000 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

EXCEPTIONAL RESULTS FROM DIAMOND DRILLING AT GABANINTHA

HIGHLIGHTS

DIAMOND DRILLING HAS CONFIRMED THE EXCELLENT DOWN DIP AND ALONG STRIKE CONTINUITY OF VANADIUM MINERALISATION WITHIN THE MINERAL RESOURCE

BROAD WIDTHS OF MEDIUM TO HIGH GRADE MINERALISATION IDENTIFIED THROUGHOUT THE MINERAL RESOURCE, INCLUDING;

- 51m at 0.78% V₂O₅ from surface, AND
- 57.6m at 0.80% V₂O₅ from 12m

EXCEPTIONAL WIDTHS OF HIGH GRADE MINERALISATION ASSOCIATED WITH THE BASAL MASSIVE MAGNETITE, INCLUDING;

- 27.5m[^] at 1.04% V₂O₅ from 101m, AND
- 15m at 1.21% V₂O₅ from 42m

UPDATE OF THE MINERAL RESOURCE ESTIMATE INCLUDING A PORTION EXPECTED TO BE UPGRADED TO THE INDICATED CATEGORY IS PROGRESSING WELL

DETAILED METALLURGICAL TESTWORK UNDERWAY WITH RESULTS EXPECTED TO BE REPORTED IN TO THE MARCH QUARTER

[^] 0.5M OF WHOLE CORE CONSUMED IN METALLURGICAL TESTWORK (NOT ASSAYED) TREATED AS ABSENT

BACKGROUND

Technology Metals Australia Limited (ASX: **TMT**) ("**Technology Metals**" or the "**Company**") is pleased to announce results of the Diamond Drilling recently completed on the Northern Block ("**Northern Block**") of tenements at its Gabanintha Vanadium Project ("**Project**"). The Diamond Drilling, which consisted of 13 holes for 1,235m, formed part of the infill and extension of the previously announced maiden Inferred Mineral Resource¹ ("**Resource**") on the Northern Block. The Resource, which consists of 62.8Mt at 0.8% V₂O₅ containing an exceptional high grade component of 29.5Mt at 1.1% V₂O₅ places the Project comfortably amongst the highest grade vanadium deposits in the World.

The Diamond Drilling was completed along the strike of the Resource (see Figure 1) with five (5) holes designed to "twin" RC holes from the previous RC drilling program completed by the Company and eight (8) holes designed to infill on RC traverses completed in the current phase of drilling.

This drilling has further enhanced confidence in the strike and down dip continuity of the defined mineralisation at the Project, confirming the width and tenor of the high grade basal massive magnetite zone and the presence of broad zones of medium grade hanging wall disseminated mineralisation directly above the basal massive magnetite zone in the mineralised layered mafic igneous unit.

Executive Director Ian Prentice commented; "The Diamond Drilling has delivered some exceptional widths of high grade vanadium mineralisation confirming the outstanding tenor of the Gabanintha deposit"

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% V₂O₅. Ian Prentice.

The Diamond Drilling component of the resource infill and extension drilling program in the Northern Block, which consisted of 13 HQ holes for 1,235m (GBDD001 to GBDD013), was completed in early September with detailed geological logging and cutting of the core completed in late September. This drilling was designed to provide representative samples within the Resource for detailed metallurgical testwork as well as detailed geological data relating to the mineralised lodes and surrounding host rocks.

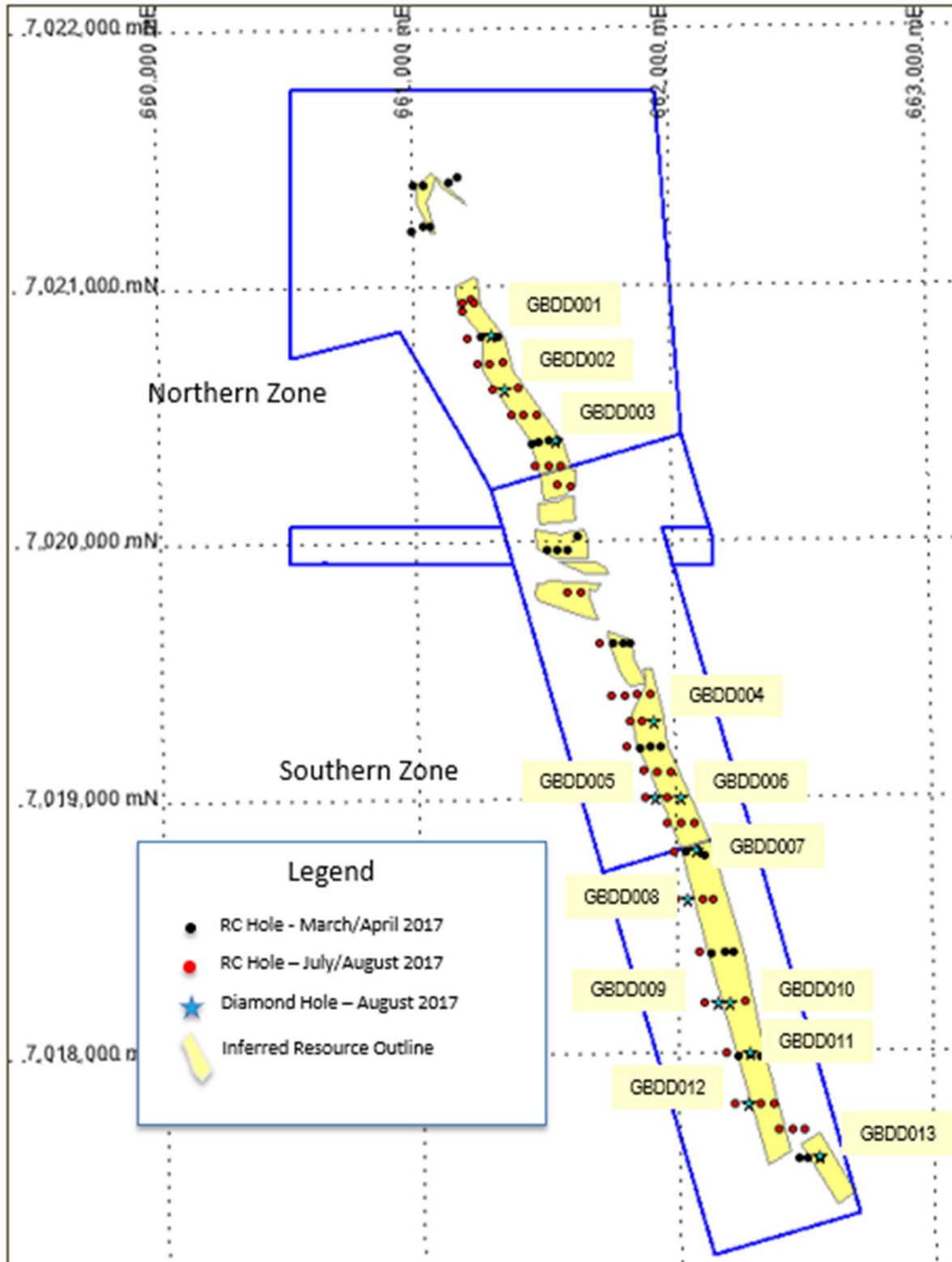


Figure 1: Gabanintha Vanadium Project – Northern Block Drilling Plan

Diamond Drilling was completed along the strike of the Resource, with three (3) holes in the Northern Zone and ten (10) holes in the Southern Zone. The holes were drilled at sixty degrees to the east, with depths ranging from 36m to 149.5m (see Appendix 1 for drill hole collar data). Five of the RC drill holes from the March / April 2017 drilling program completed by the Company were twinned with diamond holes.

The Diamond Drilling component of the program aimed to further enhance confidence in the strike and down dip continuity of the defined mineralisation, focusing on both the hanging wall disseminated zones and the high grade basal massive magnetite zone. Results have now been received for all of the Diamond Drilling completed in this program (see Table 1 and Appendix 2).

This drilling has confirmed the excellent width and tenor of the high grade basal massive magnetite zone, including intersections such as **27.5m* at 1.04% V₂O₅ from 101m** (GBDD002), **15m at 1.21% V₂O₅ from 42m** (GBDD007) and **9m at 1.35% V₂O₅ from 51m** (GBDD013).

The broad zones of hanging wall disseminated mineralisation directly above the high grade basal massive magnetite zone were confirmed by the Diamond Drilling, with intersections such as **51m at 0.78% V₂O₅ from surface**, including 16m at 1.15% V₂O₅ from 34m (GBDD004), **73m at 0.71% V₂O₅ from 4m**, including 14m at 1.21% V₂O₅ from 58m (GBDD011) and **58m at 0.80% V₂O₅ from 12m**, including 9m at 1.35% V₂O₅ from 51m (GBDD013).

Hole ID	From (m)	To (m)	Interval (m)	V ₂ O ₅ %	TiO ₂ %	Fe%	Al ₂ O ₃ %	SiO ₂ %	LOI%
GBDD001	44	66	22	0.91	10.6	41.5	8.1	13.3	0.0
GBDD002	101	129	27.5*	1.04	11.8	47.3	5.4	8.1	-0.9
GBDD003	8	25	17	1.07	12.5	48.0	5.6	6.4	0.8
GBDD004	34	50	16	1.15	13.4	50.4	4.8	4.4	2.2
GBDD005	110	124	13.5*	1.20	13.2	51.9	4.7	4.0	-1.5
GBDD006	17	32	15	1.20	13.6	50.6	4.6	3.9	2.2
GBDD007	42	57	15	1.21	13.7	50.7	4.6	3.3	1.9
GBDD008	123	139	16	1.13	12.8	50.1	5.2	5.7	-1.3
GBDD009	129	143	14	1.15	12.4	48.0	5.6	6.8	-0.8
GBDD010	99	107	8	1.15	12.9	50.4	4.8	5.0	-1.2
GBDD011	58	72	14	1.21	12.1	46.6	5.9	7.8	1.7
GBDD012	112	124	12	1.18	13.3	51.7	4.4	4.1	-1.2
GBDD013	51	60	9	1.35	16.1	42.7	8.1	7.9	3.7

Note: High grade intervals have been nominally defined using a 0.9% V₂O₅ lower cut-off grade, length weighted average grades and including 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.

* - 0.5m of whole core consumed in metallurgical testwork (not assayed) treated as absent.

Table 1: Gabanintha Vanadium Project, Northern Block Diamond Drilling, High Grade Intersections

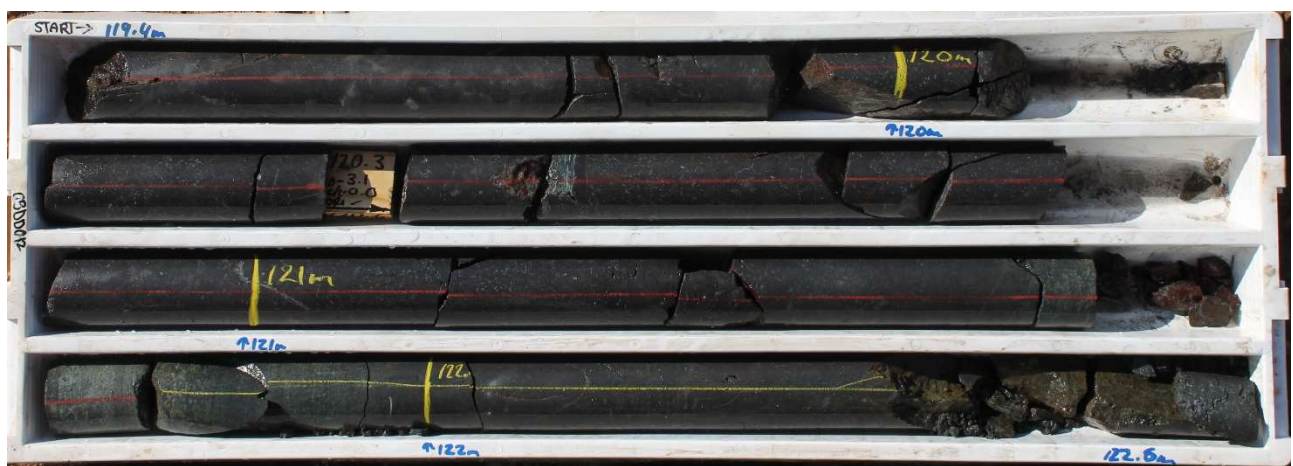


Figure 2: Massive Magnetite Zone – GBDD012 – 119.4m to 122.6m

Logging of the diamond core has identified three distinct mineralised domains within the layered mafic igneous unit; disseminated magnetite hanging wall shoots, a mixed disseminated and banded magnetite (with 5 to 50cm massive cumulate and structural bands) hanging wall shoot and the high grade basal massive magnetite zone. The high grade basal massive magnetite zone is typically coarse grained (up to cm scale) (see Figure 2), whilst the disseminated magnetite hanging wall shoots tend to be finer grained. The mixed disseminated and narrow banded massive magnetite hanging wall shoot consistently overlies, and typically grades in to, the basal massive magnetite zone (see Figure 3).

Five of the diamond holes were designed to “twin” RC holes completed in the March / April RC drilling program; GBDD001 twinned GBRC027, GBDD003 twinned GBRC022, GBDD007 twinned GBRC011, GBDD011 twinned GBRC002 and GBDD013 twinned GBRC005. The diamond holes typically returned similar widths and grades of vanadium mineralisation as the relevant RC holes, albeit that vanadium grades appear to be slightly higher in the diamond holes.

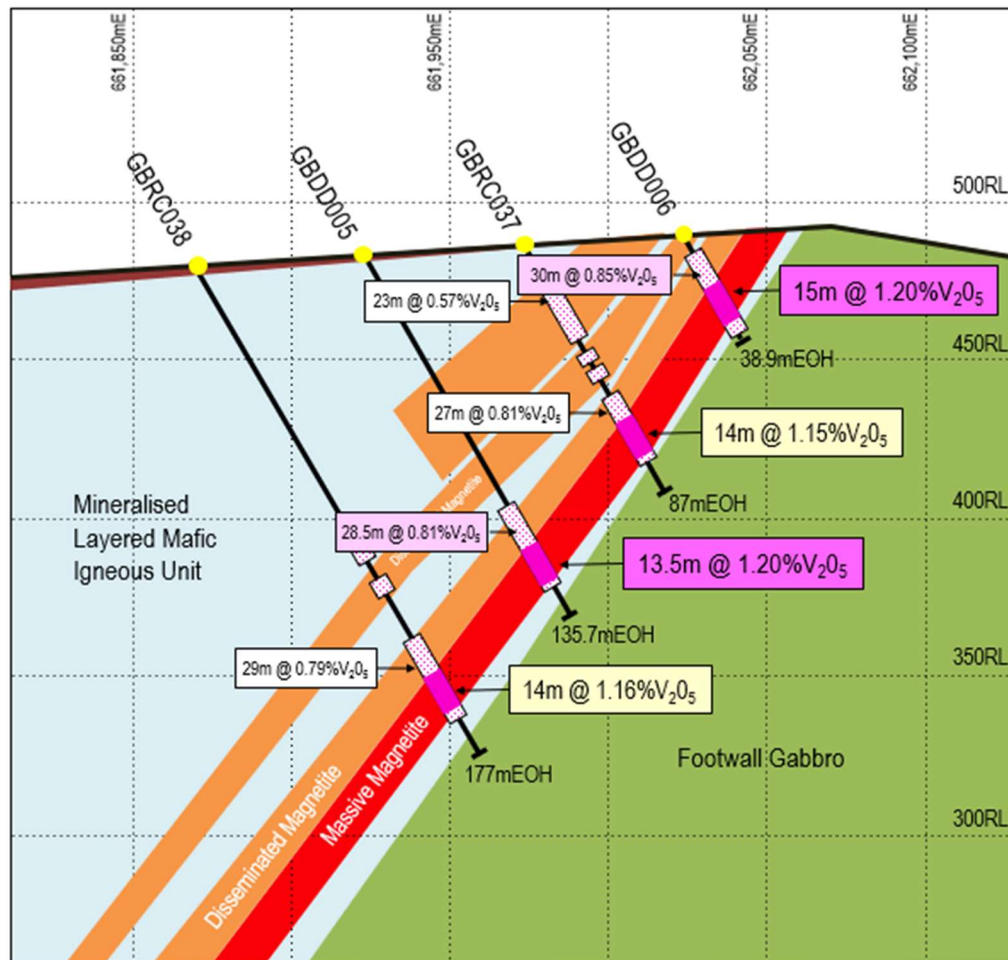


Figure 3: Gabanintha Vanadium Project – Northern Block – Cross Section 7,019,000N

METALLURGICAL TESTWORK

The Company's metallurgical consultants Mineral Engineering Technical Services Pty Ltd ("**METS**") have developed a testwork program for the samples generated from the Diamond Drilling completed on the Northern Block of tenements. The testwork program is designed to build on the data from the preliminary (sighter) round of testwork completed on composite samples from the original RC drilling program and consists of:

- comminution testwork,
- generation of in-situ bulk density data,
- geometallurgical characterisation,
- establishment of grind sensitivity on beneficiation, and
- magnetic separation testwork.

ALS Metallurgy has been engaged to conduct the testwork under the supervision of METS, with comminution testwork and density measurements on six portions of whole core, three of the medium grade disseminated hanging wall zone, from transitional to fresh material, and three of the high grade basal massive magnetite zone, from fresh material, having already been completed.

The density measurements from the portions of whole core range from 4.41t/m³ to 4.54t/m³ for the high grade basal massive magnetite material and 3.02t/m³ to 3.22t/m³ for the medium grade disseminated material. These values compare very well with data recorded in the field from the diamond drill core, by means of the calliper measurement method, when it was geologically logged and are significantly higher than the values used for the estimation of the maiden Inferred Mineral Resource (3.6t/m³ for the high grade basal magnetite zone and 2.4t/m³ for the hanging wall disseminated zone). It needs to be noted that these values included a portion of oxide material which would deliver an overall lower bulk density, so they are not directly comparable with the data recorded from the portions of whole core.

METS, in consultation with the Company's geological team, are selecting a number of representative samples across a range of material types within the Resource based on geological characteristics for the detailed metallurgical testwork, with the aim of testing a mix of medium grade disseminated hanging wall and high grade basal massive magnetite across oxide, transitional and fresh material.

A focus of this testwork program 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 concentrate, largely due to the higher proportion of gangue minerals in this material which may report to the non-magnetic concentrate. This is supported by the higher concentrate grades reported for the Transition zone composite from the original RC drilling samples.

UPDATE OF MINERAL RESOURCE ESTIMATE

CSA Global, the Company's independent geological consultant, is utilising the data from the recently completed drilling program, including geological and assay data as well as results of density measurements from the Diamond Drilling to update the Mineral Resource for the Project. This work is aimed at delivering a global Mineral Resource for the Project.

The initial work has been focussed on the estimation of a maiden Mineral Resource for the Southern Tenement.

Work will then progress to updating the Resource estimate for the Northern Block, which importantly is expected to include a portion reported in the Indicated Resource category based on the confirmed continuity of mineralisation, particularly the high grade basal massive magnetite zone, and the areas of closer spaced drilling (100m line spacing).

This work is ongoing with the Company expecting to be in a position to report the results as they are received over the course of the next few months.

PRE-FEASIBILITY STUDY

The results of the Resource upgrade work and the detailed metallurgical testwork program will form the basis of a pre-feasibility study on the Gabanintha Vanadium Project, which is expected to commence toward the latter part of the December quarter. This study is designed to:

- assess potential processing flowsheet options,
- provide conceptual open pit mine designs / pit optimisations,
- provide indicative capital expenditure estimates, and
- provide indicative operating cost estimates.

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, with reports out of China indicating significant increases in the "spot" market for vanadium pentoxide.

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

Ian Prentice
Executive Director
Technology Metals Australia Limited

- ENDS -

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 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	V ₂ O ₅ %	Fe %	Al ₂ O ₃ %	SiO ₂ %	TiO ₂ %	LOI %	Density t/m ³
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% V ₂ O ₅ lower cut off for the basal massive magnetite zone and using a nominal 0.4% V ₂ O ₅ 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% V ₂ O ₅ . Differences may occur due to rounding.									

Capital Structure	
Tradeable Fully Paid Ordinary Shares	22.6m
Escrowed Fully paid Ordinary Shares ¹	12.5m
Fully Paid Ordinary Shares on Issue	35.1m
Unquoted Options, ^{2,3} (\$0.25 – 31/12/19 expiry)	15.0m
Class B Performance Share ⁴	10.0m

¹ – 12.5 million fully paid ordinary shares will be tradeable from 21 December 2018.

² – 13.7 million unquoted options are subject to restriction until 21 December 2018.

³ – 4.0 million unquoted options (\$0.35 exercise, 31/12/20 expiry) were approved to be issued to PAC Partners at the Company's AGM

⁴ – Convert in to 10 million fully paid ordinary shares on achievement of an indicated resource of 20 Million tonnes at greater than 0.8% V₂O₅ 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.

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

Gabanintha Vanadium Project, Northern Block Diamond Drilling, Collar Table
GDA94, MGA Zone 50

Hole ID	Easting	Northing	RL	Azimuth	Dip	Hole Depth	Comment
GBDD001	661296	7020810	469.1	90	-60	89.7	Twin GBRC027
GBDD002	661355	7020599	471.9	90	-60	132.7	
GBDD003	661551	7020404	476.6	90	-60	36	Twin GBRC022
GBDD004	661910	7019296	498.4	90	-60	51.2	
GBDD005	661920	7019000	483.8	90	-60	135.7	
GBDD006	662019	7019001	488.3	90	-60	38.9	
GBDD007	662083	7018798	497.6	90	-60	66.3	Twin GBRC011
GBDD008	662042	7018600	490.1	90	-60	144.7	
GBDD009	662166	7018203	482.7	90	-60	149.5	
GBDD010	662206	7018202	480.4	90	-60	108.3	
GBDD011	662282	7017992	480.6	90	-60	80	Twin GBRC002
GBDD012	662270	7017800	479.6	90	-60	132.6	
GBDD013	662546	7017591	471.3	90	-60	69.6	Twin GBRC005

APPENDIX 2

Gabanintha Vanadium Project, Northern Block Diamond Drilling, Significant Intersections

Hole ID	From (m)	To (m)	Interval (m)	V ₂ O ₅ %	TiO ₂ %	Fe%	Al ₂ O ₃ %	SiO ₂ %	LOI%
GBDD001	12	16	4	0.59	8.4	33.6	10.1	19.4	7.1
GBDD001	24	67	43	0.70	8.4	34.2	9.0	21.0	1.2
Including:	44	66	22	0.91	10.6	41.5	8.1	13.3	0.0
GBDD002	53	68	15	0.41	5.9	23.3	12.3	32.3	0.6
GBDD002	81	85	4	0.50	7.2	26.3	13.3	28.3	0.4
GBDD002	101	129	27.5*	1.04	11.8	47.3	5.4	8.1	-0.9
GBDD003	4	32	28	0.86	10.0	39.7	7.8	15.3	1.0
Including:	8	25	17	1.07	12.5	48.0	5.6	6.4	0.8
GBDD004	0	51	51	0.78	9.9	31.9	14.4	20.1	7.1
Including:	34	50	16	1.15	13.4	50.4	4.8	4.4	2.2
GBDD005	2	7	5	0.50	9.4	18.9	21.8	28.7	9.7
GBDD005	23	31	8	0.45	6.9	26.7	17.0	26.8	8.6
GBDD005	46	53	7	0.40	5.9	26.4	13.0	30.4	6.9
GBDD005	96	125	28.5*	0.81	9.6	37.2	10.3	17.5	0.4
Including:	110	124	13.5*	1.20	13.2	51.9	4.7	4.0	-1.5
GBDD006	6	36	30	0.85	10.0	38.6	11.3	15.1	5.0
Including:	17	32	15	1.20	13.6	50.6	4.6	3.9	2.2
GBDD007	14	57	43	0.72	8.8	34.3	15.1	18.3	6.4
Including:	42	57	15	1.21	13.7	50.7	4.6	3.3	1.9
GBDD008	0	17	17	0.56	6.8	23.3	19.9	29.9	8.9
GBDD008	115	139	24	0.93	10.8	41.8	8.4	13.3	-0.1
Including:	123	139	16	1.13	12.8	50.1	5.2	5.7	-1.3
GBDD009	4	13	9	0.43	6.5	17.8	24.7	32.8	9.4
GBDD009	18	26	8	0.46	7.0	28.9	15.2	25.6	8.3
GBDD009	63	77	14	0.42	6.0	24.6	14.2	29.3	7.6
GBDD009	109	145	36	0.67	8.2	32.5	20.3	22.5	1.0
Including:	129	143	14	1.15	12.4	48.0	5.6	6.8	-0.8
GBDD010	2	22	20	0.54	7.3	24.5	18.8	26.6	8.9
GBDD010	57	61	4	0.48	6.7	25.2	10.8	30.0	1.9
GBDD010	73	107	34	0.64	7.8	31.5	11.1	23.4	1.4
Including:	99	107	8	1.15	12.9	50.4	4.8	5.0	-1.2
GBDD011	4	77	73	0.71	8.4	27.4	17.8	23.5	7.4
Including:	58	72	14	1.21	12.1	46.6	5.9	7.8	1.7
GBDD012	13	54	41	0.50	7.1	21.6	21.2	28.7	9.8
GBDD012	64	70	6	0.47	5.7	29.3	10.6	26.2	5.9
GBDD012	90	128	37.5*	0.71	8.7	33.5	11.4	22.0	5.4
GBDD012	112	124	12	1.18	13.3	51.7	4.4	4.1	-1.2
GBDD013	12	69.6	57.6	0.80	8.9	22.4	19.6	24.0	10.3
Including:	51	60	9	1.35	16.1	42.7	8.1	7.9	3.7

Note: Significant intervals have been defined using a 0.4% V₂O₅ lower cut-off grade, length weighted average grades and no more than 3m of consecutive lower grade mineralisation.

* - 0.5m of whole core consumed in metallurgical testwork (not assayed)

APPENDIX 3

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	<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 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. 	<ul style="list-style-type: none"> Diamond drilling was used to obtain 1m samples with sub sampling to >0.5m lengths, for example for metallurgical samples. The samples are cut half core except where duplicates were presented to the lab and the primary sample was quarter core (one in every 20 to test the consistency of sample preparation) with samples typically 2 to 6 kg being collected. Individual samples were assayed for every interval, with a representative half core being kept for the majority of intervals drilled. Standards were submitted for analysis for every 20m down hole, testing QC of the XRF analysis. Blank material (sand) was presented to the lab every 50th sample to test the cleanliness of the crushing procedure at the lab. Samples analysed by XRF spectrometry following digestion and Fused Disk preparation.
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"> HQ3 triple tube and HQ2 (below weathering surface) diamond core was drilled and oriented using a reflex ACT III tool and holes were surveyed using a Reflex Gyro.
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"> Sample recovery was assessed based on the measured lengths of presented core, grinding marks and core loss noted in the drillers log with >95% recovery below the base of complete oxidation (which ranges from 5-70m across the mineralised units) and recoveries approaching 100% in all but the faulted intervals in the fresh rock. There does not appear to be any relationship between recovery and grade except that the massive mineralisation approximates 100% recovery as it does not weather easily.
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. 	<ul style="list-style-type: none"> Drill samples were logged in the field, with the total length of holes logged in detail. Drill core was collected in trays, photographed, cut and palletised by hole near site for reference. Basic geotechnical logging was undertaken including

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> The total length and percentage of the relevant intersections logged. 	collecting recovery RQD and fracture orientation data.
Sub-sampling 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 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. 	<ul style="list-style-type: none"> Half core was taken using a V notched slider on a manual diamond core saw, except for one in twenty samples where quarter core was presented to the lab as the primary sample and a duplicate quarter core presented with a different sample number. The core saw cuttings were cleared every 30 samples and between high and low grade samples and when chips were dislodged Samples were collected in calico bags, double bagged in polweave bags and triple bagged in bulk bags to ensure no sample loss. Calico bags were dried then emptied and crushed in jaw crushers then pulverised in ring mills at Intertek Genalysis Samples were fused with a lithium borate flux and cast in to disks for analysis by XRF. Diamond twin drilling has been completed for 5 holes from the previous RC program with the RC under reporting grade only marginally suggesting the sample size has been appropriate to the material being sampled. Any loss of fines in previous RC drilling is not contributing to a systematic 'upgrading' of V2O5 or TiO2 Standards were submitted for analysis for every 20m down hole, validating QC of the XRF analysis Blank material (sand) was presented to the lab every 50th sample to test the cleanliness of the crushing procedure at the lab.
Quality of assay data and laboratory tests	<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"> Pulverised samples from every interval (overwhelmingly one metre samples) were fused with a lithium borate flux and cast in to disks and analysed by XRF spectrometry – method FB1/XRF77. Field duplicates, appropriate CRM materials including crushed standards derived from previous RC drilling and blanks were used as previously stated above (this table). 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. Blanks have not shown signs of target element enrichment.

Criteria	JORC Code explanation	Commentary
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 correlate with mineralised zones as defined from geological logging. All sampling was completed by an independent geologist Mr John McDougall BSc. (Hons). MAIG The estimation of significant intersections has been verified by an alternate company personnel. There were no adjustments to assay data. Where the half metre core for metallurgical testwork was removed the intersection was reported excluding this interval.
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"> The grid system used for collar positions was MGA94 – Zone 50. Planned hole collar positions were located using hand held GPS. Collars were later located by DGPS. The coordinates correlate well so DGPS hole position data has being verified. RL's are also derived from the DGPS and were collected to +/- 0.15m. The accuracy has been rounded for presentation. Down hole surveys were completed using an Axis Gyro every 30m down hole and at the collar and end of hole.
Data spacing and distribution	<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 Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	<ul style="list-style-type: none"> The drill data is infill of nominal 100m and 200m RC drilling line spacing with holes located every 50m along the drill lines, 13 holes were drilled with 5 twins of previous RC drilling and a broad spread of locations to measure representative density data. 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 is applied to the resource numbers.
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 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	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Samples were collected in calico, polyweave and bulk bags, sealed securely and transported by Company personnel until handover to a commercial transport company, which

Criteria	JORC Code explanation	Commentary
		delivered the samples by road transport to the laboratory.
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"> A representative from the independent geological consultants, CSA Global, visited the site during the drilling program and found drilling and sampling procedures and practices to be acceptable. No other 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> 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 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	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> Massive vanadiferous titanomagnetite within a layered mafic igneous unit, both in outcrop and extending down dip in parallel layers with a dip of ~60-65 degrees steepening in the northern zone to >70 degrees
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: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar 	<ul style="list-style-type: none"> 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, 31st August 2017, 14th September 2017 and 18th October 2017.

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> 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. 	
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"> Significant intervals (as shown in Appendix 2) have been defined nominally using a 0.4% V₂O₅ lower cut-off grade, length weighted average grades and no more than 3m of consecutive lower grade mineralisation. High grade intervals (as shown in Table 1) have been defined nominally using a 0.9% V₂O₅ 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. No metal equivalent units are used as the metals are unlikely to have identical recoveries on any metallurgical flow sheet
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"> Down hole lengths of mineralisation are reported. Down hole widths are approximately 0.85 x true widths but may be as low as 0.75x true width in holes GBDD001, 002 and 003.
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"> 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 3). A table of all intersections for the reported drilling has been included (see Appendix 2).
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"> Results for all mineralised intervals have been included, including both low and high grades. Potentially mineralised domains of 0.25-0.4% V₂O₅ have not been included due to the numerous and wide zones adjacent to the higher cut-off mineralisation.
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 	<ul style="list-style-type: none"> 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

Criteria	JORC Code explanation	Commentary
	and rock characteristics; potential deleterious or contaminating substances.	<ul style="list-style-type: none"> Down hole density had been collected as secondary information to the Vernier Caliper and Archimedean measurements on about half the RC and diamond drill holes
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). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	<ul style="list-style-type: none"> Further drilling is not currently planned until further metallurgical test work is completed and the new global Mineral Resource including a portion expected to be classified in the Indicated category at the current drill spacing has been completed.