



TECHNOLOGY
METALS AUSTRALIA LIMITED

ASX Announcement

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Directors

Michael Fry:
Chairman

Ian Prentice:
Managing Director

Sonu Cheema:
Director and Company Secretary

Issued Capital

67,554,167 ("TMT") Fully Paid Ordinary Shares

20,000,000 Fully Paid Ordinary Shares classified as restricted securities

14,888,750 – Quoted Options ("TMTO") exercisable at \$0.40 on or before 24 May 2020

20,598,334 – Unquoted Options – various exercise prices and dates

ASX Code: TMT, TMTO

FRA Code: TN6



PILOT PLANT SCALE KILN TESTWORK CONFIRMS HIGH VANADIUM RECOVERY

HIGHLIGHTS

- PILOT PLANT SCALE SALT ROAST / KILN TESTWORK COMPLETED ON BULK SAMPLE FROM NORTH PIT REGION.
- TESTWORK CONDUCTED BY KILN EXPERT FLSMIDTH IN THE USA TO CONFIRM OPTIMAL OPERATING PARAMETERS AND SCALABILITY.
- PERIOD OF CONTINUOUS FEED CONFIRMED VERY HIGH VANADIUM SOLUBILITY / RECOVERY OF 84.9% TO 90.7%.
- PHYSICAL OPERATING DATA BEING USED BY FLSMIDTH TO COMPLETE ENGINEERING DESIGN AND COST ESTIMATES FOR THE ROASTING SECTION OF THE PROCESS CIRCUIT.
- ADDITIONAL HIGH PURITY FINAL V₂O₅ (99.36%) PRODUCT GENERATED FROM SIGHTER TESTWORK SENT TO POTENTIAL END-USERS / OFFTAKE PARTNERS.
- DEFINITIVE FEASIBILITY STUDY TO INCORPORATE APPROPRIATE KILN ENGINEERING DESIGN AND OPERATING PARAMETERS GUIDED BY THIS TESTWORK.

BACKGROUND

Technology Metals Australia Limited (ASX: TMT) ("Technology Metals" or the "Company") is pleased to announce results of the pilot plant scale roasting testwork of the bulk sample collected from within the North Pit region of the Gabanintha Vanadium Project ("Project" or "GVP").

The testwork, conducted by roasting kiln suppliers FLSmidth Inc ("FLSmidth") in Pennsylvania USA, was successful in confirming the very high vanadium solubility / recovery rates indicated from previous laboratory and sighter scale testwork. Rates ranged from 84.9% to 90.7% during continuous feed, confirming the 85% solubility / recovery to be used in the Definitive Feasibility Study ("DFS").

FLSmidth is now undertaking engineering design and cost estimates for the roasting section of the process circuit. Delivery of the DFS, which remains on track for mid-2019, will ultimately be determined by the time to verify and incorporate this information in to the overall DFS model.

Managing Director Ian Prentice commented; "The very important pilot scale testwork, a key component of the delivery of a high quality Definitive Feasibility Study, has confirmed the very high recovery rates for the roasting section of the process circuit. Delivery of the kiln design and operating parameters from kiln experts FLSmidth is the next vital step to be completed".

BULK SAMPLE PILOT PLANT SCALE TESTWORK

The bulk sample for the pilot plant scale testwork was collected from within the North Pit region of the Gabanintha Vanadium Project ("GVP" or "Project") in September / October 2018 using large diameter drilling (21 PQ diamond drill holes for 1,444m). A total of 14.2 tonnes of sample was collected from this program; consisting of a blend of transitional massive magnetite mineralisation, fresh massive magnetite mineralisation, transitional hanging wall banded mineralisation, fresh hanging wall banded mineralisation and fresh footwall banded mineralisation. The pilot plant scale testwork using this bulk sample was designed to confirm optimal operating parameters and scalability of laboratory testwork results and provide data for vendor definition of design parameters and cost estimates for the "roasting" section of the processing circuit.

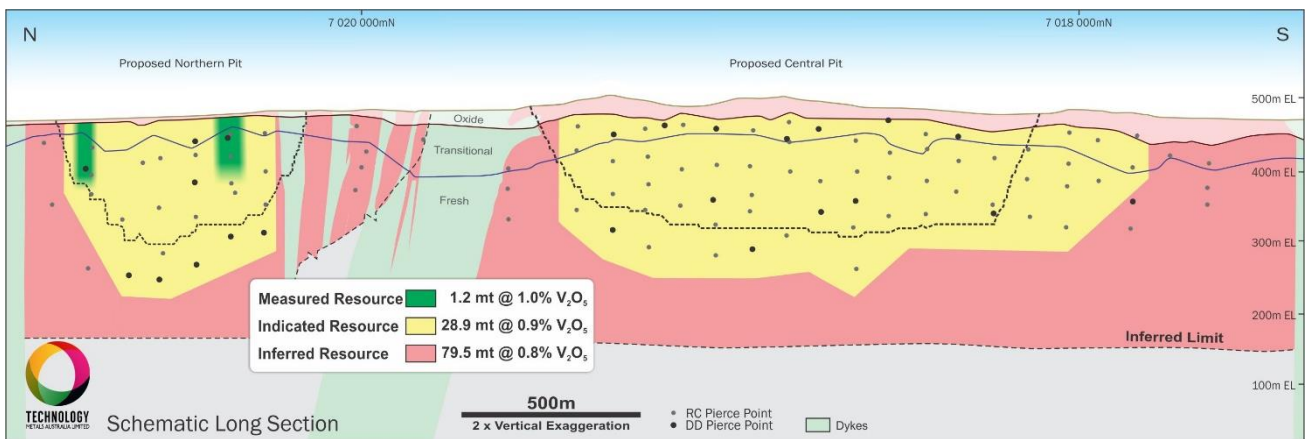


Figure 1: Schematic Long Section – Northern Block – Bulk Sample Collected from North Pit Region
(Note very shallow base of complete oxidation (BOCO) and top of fresh (TOFR) in North Pit).

Initial "sighter" testwork was completed earlier in the year using a representative 300kg sub-sample of the bulk sample. This sub-sample was processed through sighter scale crushing, milling (grinding) and magnetic beneficiation (triple pass Low Intensity Magnetic Separation ("LIMS")) to generate a magnetic concentrate. A 156kg magnetic concentrate sample was then subject to batch salt roast / kiln testwork at a range of parameters to confirm optimal operating conditions. The resultant calcine product has now been processed through the refinery stage of the processing circuit to deliver further final vanadium pentoxide product.

This sighter testwork has confirmed the very high purity of final vanadium pentoxide product that can be produced from the GVP, delivering a 99.36% V₂O₅ product purity. Samples of this material have been sent to potential end-users / offtake partners for independent verification.

The majority of the balance of the bulk sample, approximately 11.5 tonnes, has now been processed through a pilot plant scale crushing, milling (grinding) and magnetic beneficiation (LIMS) process to generate magnetic concentrates for subsequent salt roast / kiln pilot plant testing. Approximately 7.5 tonnes of magnetic concentrate averaging 1.36% V₂O₅, 1.2% SiO₂ and 3.15% Al₂O₃ was then shipped to roasting kiln suppliers FLSmidth Inc ("FLSmidth") in Pennsylvania, USA, for pilot plant scale salt roast / kiln testwork to confirm the "scaled up" operating parameters and reagent consumption to optimise vanadium recovery into a soluble form.

The pilot plant scale testwork conducted by kiln experts FLSmidth consisted of a series of smaller scale batch rotary kiln tests in late April 2019 to confirm operating parameters and reagent inputs prior to commencement of the pilot scale rotary kiln phase of the testwork. The pilot scale rotary kiln testwork was completed between 6th and 15th May 2019, slightly later than originally planned due to a number of minor delays largely relating to logistics of sample transportation.



Figure 2: Drums of Magnetic Concentrate

The pilot rotary kiln utilised in the testwork at FLSmidth' Bethlehem test facility was 9.8m long by 0.9m in diameter (see Figure 3) with a refractory liner fixed to the inside of the cylinder. Magnetic concentrate, blended with a salt mix, was fed into the "uphill" end of the rotary kiln. The pilot scale rotary kiln testwork experienced some initial problems with regard to materials handling and management of temperature control, however these problems were resolved and / or managed resulting in the delivery of a continuous feed of the magnetic concentrate / salt mix enabling measurement of key factors such as vanadium solubility / recovery and estimated residence times.



Figure 3: Pilot Rotary Kiln (9.8m long by 0.9m diameter) at FLSmidth Test Facility

The salt roasting process is designed to convert the vanadium contained within the magnetic concentrate into the water soluble form of sodium metavanadate, enabling water leaching to produce a vanadium rich liquor. Samples of the product derived from the pilot scale rotary kiln testwork were collected regularly throughout the continuous testwork program.

Analysis of these samples by an independent Australian laboratory indicate vanadium solubility / recovery rates of between 84.9% and 90.7%, with an average of 88.6%. Based on this data, a vanadium solubility / recovery rate of 85% has been confirmed for use in the Definitive Feasibility Study ("DFS"), which is in line with the Pre-Feasibility Study ("PFS") estimates. Confirmation of the 85% vanadium solubility / recovery rates is a very important step in determining the scalability of the chemical performance of the salt roasting process portion of the processing circuit.

The data generated from the pilot scale rotary kiln testwork is now being used by kiln experts FLSmidth to complete engineering design and cost estimate studies for the "roasting" section of the processing circuit. This information will then be incorporated in to the DFS process circuit design and cost estimates.

This pilot plant scale testwork is considered a very important component of the DFS by reducing the scalability risk of the process flow sheet and will support ongoing discussions with potential off take partners and financiers.

DEFINITIVE-FEASIBILITY STUDY UPDATE

Mining studies incorporating the updated Gabanintha Project Mineral Resource Estimate, the findings from the geotechnical studies and mine scheduling based on detailed geometallurgical data are nearing completion as a key input to the DFS. The additional data from the diamond drilling completed as part of the resource infill and extension program has enabled steeper overall pit slope angles with the incorporation of suitable wall support mechanisms. This work will lead to the delivery of an updated Mineral Reserve estimate to be included in the DFS.

Drilling to further define the potential initial process water source is underway to support water supply data being incorporated in to the DFS. This work is expected to provide additional information on the quantity and quality of the initial process water source.

Detailed process plant engineering and cost estimation for the DFS is nearing completion, with the engineering design and cost estimate studies for the "roasting" section of the processing circuit being completed by FLSmidth, one of the final packages to be incorporated. The delivery and verification of these packages in to the overall DFS model will be key determinants of the timeline to complete the DFS. These final packages will also be key inputs for the revised capital and operating cost estimates to a DFS level of accuracy.

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.

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

Ian Prentice
Managing 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 40 km 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 consists of seven granted tenements (and two Mining Lease applications). 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 Barrambie 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 results in an overall higher grade for the Gabanintha Vanadium Project.

Data from the Company's 2017 and 2018 drilling programs including 111 RC holes and 53 HQ and PQ diamond holes at the Northern Block and 23 RC holes (for 2,232 m) at the Southern Tenement) has been used by independent geological consultants CSA Global to generate a global Inferred and Indicated Mineral Resource estimate, reported in accordance with the JORC Code 2012 edition, for the Project. The Resource estimate confirms the position of the Gabanintha Vanadium Project as one of the highest grade vanadium projects in the world.

Table 7: Global Mineral Resource estimate for the Gabanintha Vanadium Project as at 27 March 2019

Material Type	Classification	Tonnage (Mt)	V ₂ O ₅ %	Fe%	Al ₂ O ₃ %	SiO ₂ %	TiO ₂ %	LOI %	P%	S%
Massive Magnetite	Measured (North)	1.2	1.0	44.7	6.2	10.4	11.4	0.0	0.009	0.2
	Indicated (North)	18.5	1.1	49.1	5.2	5.8	12.9	-0.1	0.007	0.2
	Inferred (North)	41.0	1.1	47.7	5.6	7.1	12.6	0.3	0.008	0.2
	Inferred (South)	10.4	1.1	49.1	4.9	5.9	12.6	-0.4	0.004	0.3
	Total Inferred	51.5	1.1	48.0	5.5	6.9	12.6	0.1	0.007	0.2
	Massive Global	71.2	1.1	48.2	5.4	6.7	12.7	0.1	0.007	0.2
Disseminated / Banded Magnetite	Indicated (North)	10.3	0.6	28.6	13.1	25.5	7.5	3.0	0.030	0.2
	Inferred (North)	38.5	0.5	27.1	12.7	27.4	6.9	3.3	0.027	0.2
	Inferred (South)	11.1	0.6	30.2	11.9	23.4	7.7	2.4	0.012	0.4
	Total Inferred	49.6	0.6	27.8	12.5	26.5	7.1	3.1	0.024	0.2
	Diss / Band Global	59.9	0.6	27.9	12.6	26.4	7.2	3.1	0.025	0.2
Combined	Global Combined	131	0.9	39.0	8.7	15.7	10.1	1.4	0.015	0.2

Data from the Global Mineral Resource and the recently completed PFS on the Gabanintha Vanadium Project were used by independent consultants CSA Global to generate a maiden Probable Ore Reserve estimate based on the Indicated Mineral Resource of 21.6 Mt at 0.9% V₂O₅ located within the Northern Block of tenements at Gabanintha.

Table 8: Ore Reserve Estimate as at 31 May 2018

Reserve Category	Tonnes (Mt)	Grade V ₂ O ₅ %	Contained V ₂ O ₅ Tonnes (Mt)
Proven	-	-	-
Probable	16.7	0.96	0.16
Total	16.7	0.96	0.16

- Includes allowance for mining recovery (95%) and mining dilution (10% at 0.0 %V₂O₅)
- Rounding errors may occur

Capital Structure	
Tradeable Fully Paid Ordinary Shares	67.554m
Escrowed Fully paid Ordinary Shares ¹	20.00m
Fully Paid Ordinary Shares on Issue	87.554m
Unquoted Options (\$0.25 – 31/12/19 expiry)	14.59m
Unquoted Options (\$0.35 – 12/01/21 expiry)	2.75m
Quoted Options (\$0.40 – 24/05/20 expiry)	14.889m
Unquoted Options (\$0.40 – 24/05/20 expiry)	3.258m

¹ – 20 million fully paid ordinary shares subject to voluntary escrow until 30 June 2019.

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 it has a reasonable basis for its forward-looking statements; 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 is based on information compiled by Mr Grant Louw. Mr Louw is a Principal Consultant with CSA Global and a Member of the Australian Institute of Geoscientists. Mr Louw has sufficient experience relevant to the styles of mineralisation and types of deposits which are covered in this report 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' ("**JORC Code**"). Mr Louw 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 that relates to Ore Reserves is based on information compiled by Mr Daniel Grosso and reviewed by Mr Karl van Olden, both employees of CSA Global Pty Ltd. Mr van Olden takes overall responsibility for the Report as Competent Person. Mr van Olden is a Fellow of The Australasian Institute of Mining and Metallurgy and has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking, to qualify as Competent Person in terms of the JORC (2012 Edition). The Competent Person, Karl van Olden has reviewed the Ore Reserve statement and given permission for the publication of this information in the form and context within 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' ("**JORC Code**"). 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 (2012) Table 1.

Section 1 Sampling Techniques and Data

Criteria	Commentary
Sampling techniques	<ul style="list-style-type: none"> Reverse circulation drilling was sampled on a 1m basis. Each metre drilled was cone split off the rig cyclone, with two 2-3kg sub-samples collected for each metre. One primary sub-sample was selected for assay from each metre. Secondary sub-samples were submitted for analysis for every 20th sample, thereby duplicating the primary sub-sample. Reverse circulation drill holes were analysed for magnetic susceptibility by either a KT-9 or KT-10 magnetic susceptibility meter on a 1m basis. Diamond Drilling was undertaken on PQ and HQ size using triple tube drilling in the oxidised rock and conventional double tube in fresh rock to ensure maximum recovery and representivity. Except where geotechnical samples were taken, core was sampled on a 1m or 0.5m basis. Core was cut using diamond blade core saw into quarter (PQ and HQ) or 1/6th slices (PQ in kiln sample only). Duplicate samples were taken from the remaining 3/4 or 5/6th core original samples by a second cut representing equal mass to the original. Samples were taken from the same side of the orientation line throughout each hole. For un-oriented core, samples were selected from a consistent side of the core. Core was measured on a 20cm basis by a KT-10 Plus magnetic susceptibility meter. All Samples are analysed by XRF spectrometry following digestion and Fused Disk preparation. Blanks and Certified Reference Materials (CRM) were inserted at a rate of 1:50 and 1:20 samples, respectively. CRMs were produced from mineralized material sourced from TMT's Gabanintha deposit and certified by a commercial CRM vendor. Where possible, diamond drill holes and selected reverse circulation drill holes were probed via downhole Televiwer probe and selected drill holes probed with down hole magnetic susceptibility sonde. QEM Scan was used to confirm that vanadium is hosted within titanomagnetite minerals within the host gabbro.
Drilling techniques	<ul style="list-style-type: none"> Reverse circulation drilling completed with 143mm face-sampling hammer PQ2/3 sized drill core was selected for metallurgical reasons and HQ2 core was selected for diamond tails and Geotechnical holes.
Drill sample recovery	<ul style="list-style-type: none"> 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. Poor sample recovery or quality (wet, etc) was recorded in logging sheets. Weights of primary and secondary sub-samples were compared to check variability. There does not appear to be any relationship between recovery and grade in the "massive" mineralisation.

Criteria	Commentary
	<ul style="list-style-type: none"> Recovery was maximised in diamond drilling by using triple tube in weathered rock. Core recovery was assessed by measuring expected and recovered core and losses were logged where noted. Core recovery exceeded 98%.
Logging	<ul style="list-style-type: none"> All chips and core have been qualitatively geologically logged to a minimum interval length and precision sufficient for calculation of a mineral resource. All core holes have been logged by an independent geotechnical consultant. Drill chips for every metre were collected in trays and photographed. All diamond core has been photographed to a high resolution for electronic storage prior to sampling. Where possible, diamond drill holes and selected reverse circulation drill holes were probed via downhole Televiwer probe and selected drill holes probed with down hole magnetic susceptibility sonde. Geotechnical logging was undertaken on all diamond holes within proposed pit boundaries. Geotechnical studies are underway to optimise wall angles on proposed pits
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> Core was sampled on ¼ basis except metallurgical holes which were sampled by 1/6th slices. Some sections of whole core were selected for geotechnical or metallurgical sampling and are noted as such. Reverse circulation sampling was cone split off the rig to approximate 4-5% of the bulk sample mass (2-3kg). This is considered appropriate to the material being sampled. Duplicate sampling was undertaken at a rate of 1 per 20 samples to monitor recoveries and repeatability of all sampling. RC was sampled by duplicates taken from secondary sub-samples cone split from the rig cyclone. Core was duplicate sampled by assaying a second ¼ (HQ and PQ) or 1/6th of the core (only PQ holes used for metallurgical kiln testing properties). Samples presented to the laboratory were split to <2kg and pulverised to 95% passing 75 microns. 30g of pulverised material was split and presented for assay. Davis Tube Recovery (DTR) tests were completed on selected 4m composites of mineralised intervals defined by assay data
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> 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. In addition LOI was completed by Gravimetric analysis. This is considered to approximate a total analysis method. Davis Tube Recovery (DTR) was performed via compositing pulverised sample rejects, by a commercial laboratory. 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. Batches of samples are periodically sent for check assay by an umpire laboratory.

Criteria	Commentary
Verification of sampling and assaying	<ul style="list-style-type: none"> • Logging was completed onto paper and transcribed or digitally captured in the field • All logging and sampling information has been captured into a commercially supplied database. • Assay data was supplied in electronic format • Data has been subjected to QAQC cross-checks and verification by company personnel prior to acceptance into the database. • Significant intersections were correlated with mineralised zones as defined from geological logging. • All significant intersections were verified by an independent geologist as well as the Competent Person. • The estimation of significant intersections has been verified by alternate company personnel. • There were no adjustments to assay data. • 2 RC holes have been twinned by diamond holes.
Location of data points	<ul style="list-style-type: none"> • The grid system used for collar positions is MGA94 – Zone 50. • A 2017 50cm resolution digital elevation model and high-resolution aerial photogrammetric survey was used for topographic survey control • Planned hole collar positions were located in the field using hand held GPS. • Final hole collar positions were surveyed using differential RTK GPS with an accuracy of $\pm 5\text{cm}$ horizontally and $\pm 10\text{cm}$ vertically. • Down hole deflections were measured using an Axis CHAMP north-seeking gyroscope every 30m down hole and near the collar. • Downhole magnetic susceptibility and Televiever data was captured on a $< 1\text{cm}$ accuracy down hole
Data spacing and distribution	<ul style="list-style-type: none"> • 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 is used in primary assay except for DTR recovery testing
Orientation of data in relation to geological structure	<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 $\pm 10^\circ$, the apparent thickness is estimated 0.85 X the true thickness, drill deviations were not noticeably higher through the mineralised zone. 21 vertical PQ diamond holes associated with metallurgical kiln property sampling approximate 2.5x true widths

Criteria	Commentary
Sample security	<ul style="list-style-type: none"> RC 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. Drill core samples were transported to the commercial laboratory as whole core by registered consignment and tray numbers confirmed by personnel in the laboratory core yard. All core from the current program was labelled with non degrading metal tags.
Audits or reviews	<ul style="list-style-type: none"> A representative from the independent geological consultants, CSA Global, visited the site during the infill and extensional drilling program and reported drilling and sampling procedures and practices to be acceptable. Apart from umpire assay and use of experienced field geologists (all >20yrs experience) to supervise sampling, no written audits have been completed to date. Data Validation is done by a supervising geologist, database geologist and a Resource consultant all independent and contracted to the company.

Section 2 Reporting of Exploration Results

Criteria	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> The areas drilled are located on current Prospecting Licences 51/2942, 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"> 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"> The Gabanintha vanadium deposit is of a layered igneous intrusive type, hosted within a gabbro intrusion assigned to the Archaean Meeline Suite.
Drill hole Information	<ul style="list-style-type: none"> Not relevant. Exploration results are not being reported. Mineral Resources are being disclosed (see Section 3). All relevant material from previous 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, 18th October 2017, 7th December 2017, 5 October 2018, 8 November 2018, 20 December 2018 and 30 January 2019.

Criteria	Commentary
Data aggregation methods	<ul style="list-style-type: none"> Not relevant. Exploration results are not being reported. Mineral Resources are being disclosed (See Section 3).
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> Not relevant. Exploration results are not being reported. Mineral Resources are being disclosed (See Section 3).
Diagrams	<ul style="list-style-type: none"> Appropriate diagrams contained in the report to which this Table 1 applies.
Balanced reporting	<ul style="list-style-type: none"> Not relevant. Exploration results are not being reported. Mineral Resources are being disclosed (See Section 3).
Other substantive exploration data	<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 Oxidation state has been modelled based on geological logging and geometallurgical characterisation Bulk density estimates have been completed on diamond core samples of fresh, transitional and oxidised material based on 654 measurements from 45 of 47 holes Bulk density measurements are a mixture of caliper and immersion methods. Metallurgical test work and bulk sampling results indicate amenability of magnetite concentrates to conventional roast leach processing (See ASX Release 12th December 2018 – Outstanding Gabanintha Metallurgical Results) Low values of deleterious elements (As, Mo, Cr) are associated with mineralisation Groundwater quality is suitable for use in mine planning and processing
Further work	<ul style="list-style-type: none"> Samples from diamond drilling have been collected to enable further metallurgical testing of the different grades and types of mineralisation encountered in the drilling, including bulk samples for vendor kiln property testwork. Diamond drilling has also been used to gather geotechnical data relevant to open pit mine design parameters. A program of drilling is due to start shortly in the adjacent exploration licence focused on water exploration.