

# MTMP Global Mineral Resource Upgrade

## Delivers 26% Increase to Measured and Indicated Resource

### HIGHLIGHTS

MTMP Measured and Indicated Mineral Resource Estimate grows to 63.2Mt at 0.9% V<sub>2</sub>O<sub>5</sub> within Global Mineral Resource Estimate of 153.7Mt at 0.8% V<sub>2</sub>O<sub>5</sub>

Maiden Yarrabubba Measured Mineral Resource Estimate of 5.9Mt at 1.0% V<sub>2</sub>O<sub>5</sub> and 11.2% TiO<sub>2</sub>.

Global Measured Mineral Resource Estimate grows 10 fold to 12.1Mt at 1.0% V<sub>2</sub>O<sub>5</sub> – expected to support significant growth in Proven Ore Reserve

Measured and Indicated Mineral Resource Estimate for the MTMP excludes oxide mineralisation

Upgrade of Global Mineral Resource Estimate to underpin an updated MTMP Proven and Probable Ore Reserve estimate for inclusion in the Bankable Financial Model

7 November 2022

Advanced vanadium developer, Technology Metals Australia Limited (ASX: **TMT**) (**Technology Metals**, or the **Company**) is pleased to announce an updated Global Mineral Resource Estimate (**MRE**) for the Murchison Technology Metals Project (**MTMP**). Technology Metals is progressing the development of the MTMP in Western Australia to produce high purity vanadium pentoxide (V<sub>2</sub>O<sub>5</sub>) and a high value ilmenite by-product.

The updated Global MRE of 153.7Mt at 0.8% V<sub>2</sub>O<sub>5</sub>, a 5% increase on the previous Global MRE, includes a maiden highest confidence Measured MRE for Yarrabubba of 5.9Mt at 1.0% V<sub>2</sub>O<sub>5</sub> and 11.2% TiO<sub>2</sub> within a Global Measured and Indicated component of 63.2Mt at 0.9% V<sub>2</sub>O<sub>5</sub>, a 26% increase on the previous MRE. The Global Measured MRE of 12.1Mt at 1.0% V<sub>2</sub>O<sub>5</sub> is expected to support significant growth in the higher confidence Proven Ore Reserve component for the MTMP.

Yarrabubba is expected to be the initial ore source for the MTMP, delivering higher vanadium in concentrate grades (1.61% V<sub>2</sub>O<sub>5</sub>), excellent recoveries and the highly sought-after ilmenite by-product from Yarrabubba, providing significant benefits for the economics of the Project and materially lowering the development risk. Conversion of a portion of the shallow transitional material at Yarrabubba to the higher confidence Indicated category is expected to deliver positive impacts for the Ore Reserve estimate and project economics.

### TMT's Managing Director, Ian Prentice, commented:

*"We are very pleased with this outstanding result, with the field work completed in the first half of the year delivering a significant 26% increase to the all-important Measured and Indicated Resource estimate for the MTMP, which bodes well for a material upgrade to the Proven and Probable Ore Reserve estimate for the Project."*

*"An enhanced Ore Reserve position, inclusive of the elevation of some of the important shallow material at Yarrabubba, is expected to provide significant benefits for the economics of the MTMP, which is expected to be viewed very favourably by prospective project financiers and key stakeholders."*

*"The Implementation Phase of the Project is progressing well, albeit facing timing pressures in line with the broader resourcing challenges facing our industry, with our team maintaining a clear focus on delivering a positive outcome for the timely development of the MTMP and the supply of high purity vanadium pentoxide to play an important role in the global transition towards net zero carbon emissions."*

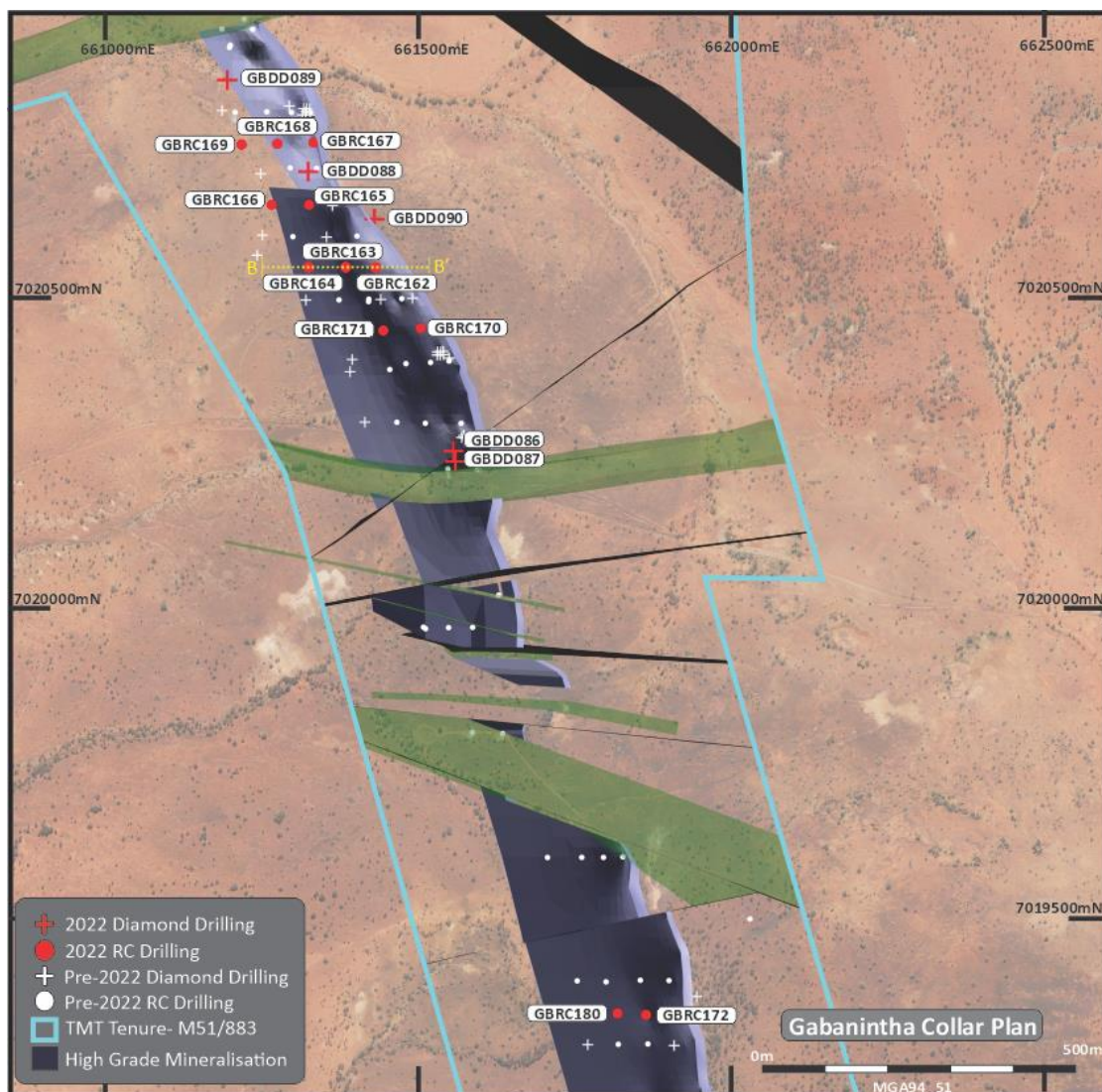


The drilling was targeted within the open pit shells as defined during the Study, with the expectation that the improved resource category status will ultimately enable the generation of an updated Global Proven and Probable Ore Reserve estimate for the MTMP, with the expectation of growing the Proven component of the Ore Reserve estimate.

More particularly the focus of this work was on the expected first five years of potential production based on sighter schedules generated from the recent Ore Reserve estimation work, with the expectation that these higher confidence resource categories will further lower the development risk on the MTMP.

Fresh ore at Yarrabubba commences from 15 to 20m below surface, with predominantly transitional material and minor oxide above these depths. The shallow infill drilling completed in the first half of 2022 has enabled the conversion of a portion of the transitional material at Yarrabubba from the Inferred category to the higher confidence Indicated category, which is expected to deliver positive impacts for the Ore Reserve estimate for this near surface material.

In April 2022, the Company announced that roast-leach testwork on Yarrabubba ore produced outstanding results, with high vanadium recoveries of up to 96% delivered from batch kiln roast–leach testwork. This work confirmed that ore from Yarrabubba is highly amenable to processing through the original Gabanintha vanadium flowsheet, with the addition of a simple gravity circuit required to recover ilmenite from the non-magnetic process tailings stream.



**Figure 2: Drill Hole Location Plan – Northern Gabanintha (B-B' cross section relates to Figure 5)**

The Company's independent resource consultant, CSA Global Pty Ltd ("CSA Global"), an ERM Group company, has now completed the work streams to incorporate the data from this year's drilling programs into an updated Global MRE for the MTMP.

The Mineral Resource estimation work has delivered an upgraded Global Measured, Indicated and Inferred MRE for the MTMP of 153.7Mt at 0.8% V<sub>2</sub>O<sub>5</sub> (see Table 1 below), from the previously reported MRE of 146.2Mt at 0.8% V<sub>2</sub>O<sub>5</sub>. Gabanintha hosts an updated Measured, Indicated and Inferred MRE of 115.9Mt at 0.8% V<sub>2</sub>O<sub>5</sub>, with Yarrabubba hosting an updated Measured, Indicated and Inferred MRE of 37.9Mt at 0.8% V<sub>2</sub>O<sub>5</sub> (see Figure 3 below).

Importantly the updated Global MRE includes a Measured MRE component of 12.1Mt at 1.0% V<sub>2</sub>O<sub>5</sub>, up from the previous 1.2Mt at 1.0% V<sub>2</sub>O<sub>5</sub>, within a combined Measured and Indicated MRE of 63.2Mt at 0.9% V<sub>2</sub>O<sub>5</sub>, a tonnage increase of 26% from the previously reported MRE of 50.2Mt at 0.9% V<sub>2</sub>O<sub>5</sub>.

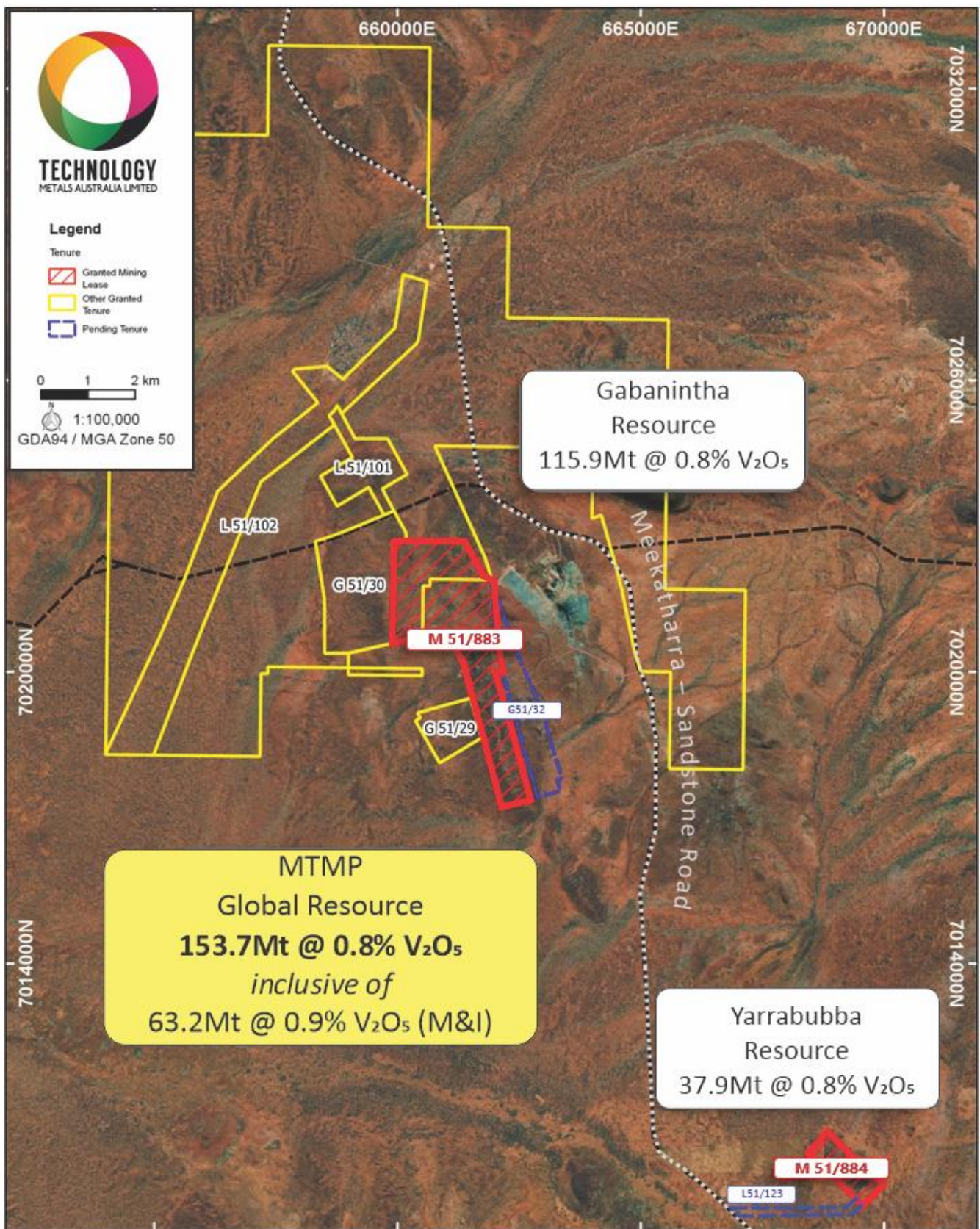
Oxide material at both Yarrabubba and Gabanintha remain classified as Inferred due to limited metallurgical data from these shallow zones and expected low mass recoveries to a magnetite concentrate.

**Table 1:** Global Resource for the Murchison Technology Metals Project by ore type and Classification

Classification	Material	Mt	V <sub>2</sub> O <sub>5</sub> %	Fe %	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %	TiO <sub>2</sub> %	LOI %	P %	S %
Measured (Yarrabubba)	Massive	4.4	1.1	48.1	5.5	7.3	12.4	-0.4	0.01	0.3
	Disseminated	1.5	0.6	30.0	10.8	23.4	7.7	2.5	0.01	0.2
Measured (Gabanintha)	Massive	5.1	1.1	46.9	5.7	8.4	12.1	-0.2	0.01	0.3
	Disseminated	1.1	0.8	36.4	7.9	19.6	9.0	0.5	0.01	0.2
<b>Measured</b>	<b>Massive + disseminated</b>	<b>12.1</b>	<b>1.0</b>	<b>44.3</b>	<b>6.5</b>	<b>10.9</b>	<b>11.4</b>	<b>0.1</b>	<b>0.01</b>	<b>0.2</b>
Indicated (Yarrabubba)	Massive	8.0	1.1	48.1	5.4	7.1	12.5	0.0	0.01	0.3
	Disseminated	6.9	0.6	28.4	12.5	25.2	7.2	2.6	0.02	0.3
Indicated (Gabanintha)	Massive	19.5	1.1	48.9	5.2	6.2	12.8	-0.1	0.01	0.2
	Disseminated	16.7	0.6	27.3	13.3	26.7	7.0	3.0	0.03	0.2
<b>Indicated</b>	<b>Massive + disseminated</b>	<b>51.2</b>	<b>0.9</b>	<b>39.0</b>	<b>8.9</b>	<b>15.6</b>	<b>10.1</b>	<b>1.3</b>	<b>0.02</b>	<b>0.2</b>
<b>Measured plus Indicated</b>	<b>Massive + disseminated</b>	<b>63.2</b>	<b>0.9</b>	<b>40.0</b>	<b>8.4</b>	<b>14.7</b>	<b>10.4</b>	<b>1.1</b>	<b>0.02</b>	<b>0.2</b>
Inferred (Yarrabubba)	Massive	5.7	1.1	47.4	5.6	7.8	12.3	0.1	0.01	0.3
	Disseminated	11.4	0.6	27.9	12.6	25.8	7.2	2.0	0.02	0.4
Inferred (Gabanintha)	Massive	36.5	1.1	46.7	6.0	8.3	12.3	0.4	0.01	0.2
	Disseminated	36.9	0.5	26.6	12.9	27.6	6.9	3.4	0.03	0.3
<b>Inferred</b>	<b>Massive + disseminated</b>	<b>90.5</b>	<b>0.8</b>	<b>36.2</b>	<b>9.6</b>	<b>18.3</b>	<b>9.5</b>	<b>1.8</b>	<b>0.02</b>	<b>0.2</b>
<b>TOTAL</b>	<b>Massive + disseminated</b>	<b>153.7</b>	<b>0.8</b>	<b>37.7</b>	<b>9.1</b>	<b>16.8</b>	<b>9.8</b>	<b>1.5</b>	<b>0.02</b>	<b>0.2</b>

**\*Notes:**

- Mineral Resources are reported in accordance with the JORC Code (2012 Edition).
- Mineral Resources were estimated within constraining wireframe solids using a nominal 0.9% V<sub>2</sub>O<sub>5</sub> lower cut-off grade for the massive magnetite zones and using a nominal 0.4% V<sub>2</sub>O<sub>5</sub> lower cut-off grade for the banded and disseminated mineralisation zones.
- Mineral Resources are quoted from all classified blocks within the wireframe solids above a lower cut-off grade of 0.4% V<sub>2</sub>O<sub>5</sub>.
- Differences may occur due to rounding. Yarrabubba Measured and Indicated Mineral Resources are reported above an open pit optimised pit shell. Inferred Mineral Resources are reported to a lower RL limit of 250 mRL. Gabanintha Measured and Indicated Mineral Resources are reported above a lower RL limit of 240 to 280 mRL that approximates the Ore Reserve pit shells. Inferred Mineral Resources are reported to a lower RL limit of 170 mRL.



**Figure 3:** Global Mineral Resource for Murchison Technology Metals Project

The upgraded Global MTMP MRE combined with the additional data on the geotechnical parameters of the proposed open pit walls at both Gabanintha and Yarrabubba will be used by Oreology to update the Project's open pit mine designs, enabling the completion of mine schedule optimisation work and ultimately generating an updated Global Proven and Probable Ore Reserve estimate for the MTMP. The significant growth in the Measured MRE component for the Project is expected to contribute to a larger Proven component of the Ore Reserve estimate which is expected to enhance the economics of the early years of the operation.

An updated the Global Proven and Probable Ore Reserve estimate will be used to inform the Bankable Financial Model for the Implementation of the MTMP, with an expected increased proportion of Proven Ore Reserve and the anticipated enhanced economics from higher grade feed and ilmenite by-product from Yarrabubba expected to be viewed favourably by prospective project financiers and key stakeholders.

### MTMP Implementation Phase Update

The Company is progressing the commercial competitive tender process for the MTMP processing plant and all non-process infrastructure to progress the Implementation Phase, with the aim of targeting a Development Decision which will enable the placing of orders for long lead plant and equipment. This engagement with contractors for major work packages, including the FEED being completed by FLSmidth, will establish commercial pricing and support completion of the MTMP Bankable Financial Model.

Along with this commercial tender process, the Company will be using the mine production schedules generated from an updated Proven and Probable Ore Reserve estimate to underpin the Bankable Financial Model. As such the delivery of the Ore Reserve estimate will be a key determining factor in the timing of the targeted Development Decision.

Progression of the environmental approvals process is also a significant factor in the MTMP Implementation Phase, with the Company maintaining its collaborative approach with the WA Environmental Protection Authority (EPA) as it prepares a further update to the Environmental Review Document (ERD), consistent with the Company's environmental, social and governance (ESG) philosophy.

The Company's ESG approach provides a holistic action plan to guide the development and long-term operation of the MTMP to ensure the sustained success of the Project and the engagement with, and support of, all stakeholders. This engagement includes working with the Traditional Owners on environmental and heritage matters and ensuring that the Project provides long-term benefits to the community through employment, contracting and training opportunities.

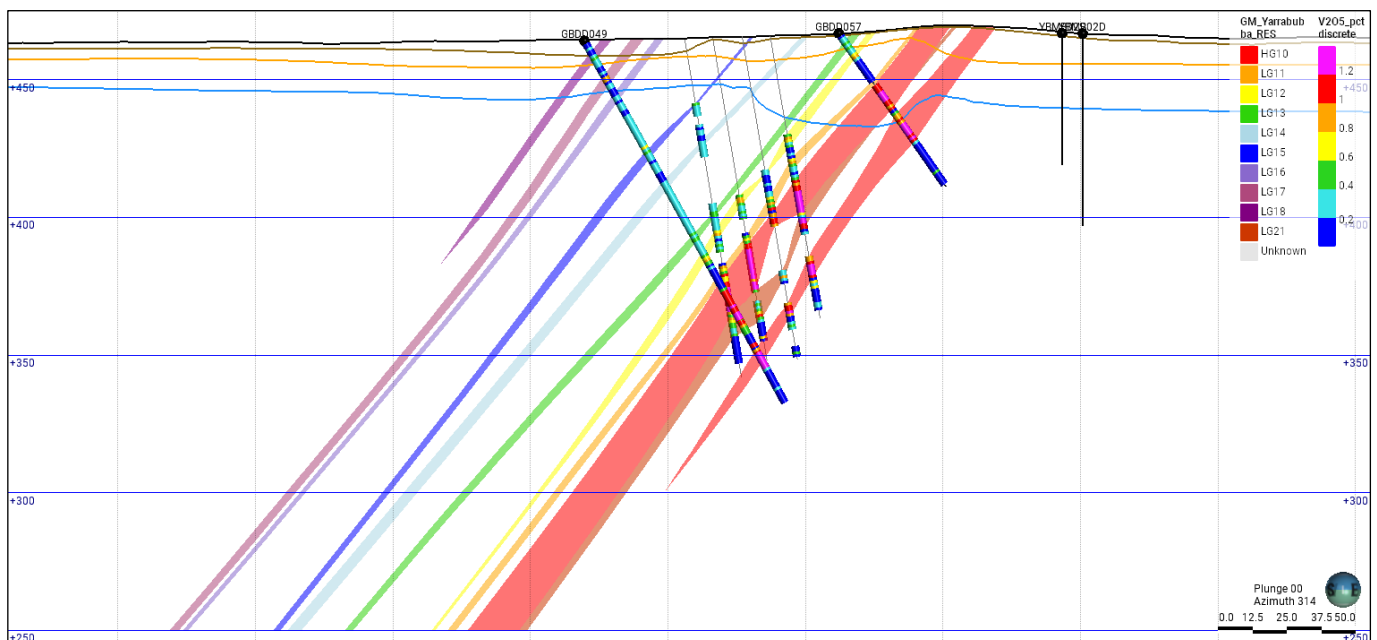
## Mineral Resource Estimate Technical Summary:

### Geology and Geological Interpretation

The deposits are located in the north Murchison granite-greenstone terrain of the Archean Yilgarn Craton, and are hosted within the mafic, ultramafic, extrusive and volcanoclastic rocks of the Gabanintha formation. The mineralisation is hosted in a differentiated gabbro closely associated with a series of massive to disseminated V-Ti-Fe bands ranging in size from a few metres up to 15m true thickness with structurally thickened intersections. The mineralised units are offset and disrupted by later dolerites, faults and quartz porphyries. Mineralisation has been modelled based on surface mapping, magnetic modelling, and drilling data and strike extents are limited by the tenement boundary in the south and north (see Figures 1 and 2). Mineralisation was modelled outside the tenement boundary in the west but constrained within the boundary for reporting of the mineral resource.

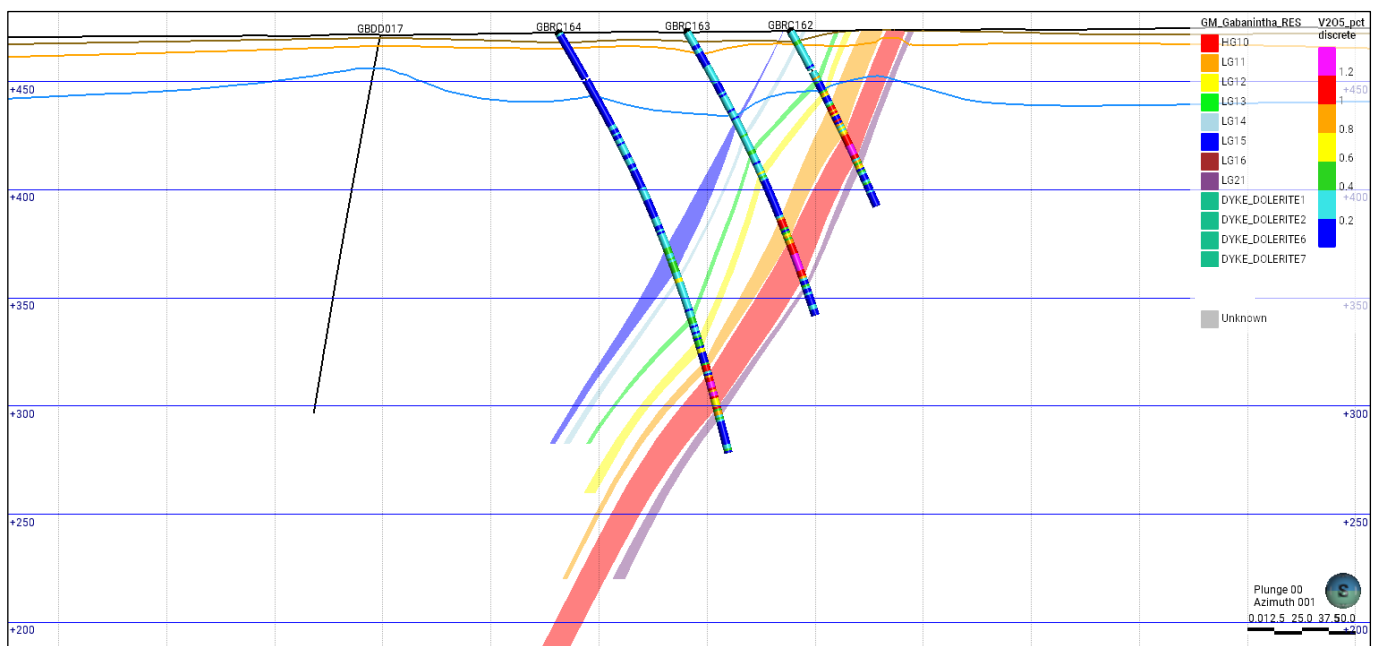
Mineralisation interpretations for the massive magnetite layer have been modelled based on the drill hole lithological logging and on a nominal lower cut-off grade of 0.9%  $V_2O_5$ . In the hangingwall and footwall of the massive magnetite, mineralised zones containing disseminated and/or banded vanadium bearing magnetite mineralisation (disseminated mineralisation), are modelled based on the lithological logging and on a nominal 0.4%  $V_2O_5$  lower cut-off grade. A minimum downhole continuity length of 3 m was used to select the disseminated/banded intervals. The minimum downhole continuity length was reduced to 1 m in some instances in the hanging wall units to ensure continuity of wireframes.

At Yarrabubba a total of 10 faults have been interpreted to be younger than, and hence limit, offset or displace the mineralised zones into seven fault blocks. A depleted surface colluvium layer is interpreted to blanket the mineralisation except where the massive magnetite unit outcrops. The massive magnetite unit strikes approximately  $125^\circ$  to  $305^\circ$ , dipping on average approximately  $55^\circ$  to  $215^\circ$ , with a modelled strike extent of approximately 1.6 km. The massive magnetite unit has a true thickness varying between approximately 5 m up to 25 m, with an average of approximately 11 m. The banded or disseminated magnetite mineralisation is interpreted to consist of up to nine (9) separate lenses, eight in the hanging wall above the massive magnetite and one in the foot wall. The cumulative true thickness of these mineralisation lenses is approximately between 15 and 30 m. The base of complete oxidation (BOCO) and top of fresh rock (TOFR) weathering zone boundary surfaces, representing the interpreted boundaries between the fully oxidised, transitional and fresh rock weathering states, have been defined based on the lithological and geochemical data.



**Figure 4:** Schematic drill section A-A' at Yarrabubba with typical Massive Magnetite and hangingwall unit profile. The Massive Magnetite is duplicated on this section due to offset across a high-angle fault.

Similarly, at Gabanintha a total of 18 faults have been interpreted to be younger than, and hence limit, offset or displace the mineralised zones into sixteen fault blocks. A depleted surface colluvium layer is interpreted to blanket the mineralisation except where the massive magnetite unit outcrops. The massive magnetite unit strikes approximately 160° to 340°, dipping on average approximately 60° to 250°, with a modelled strike extent of approximately 4.6 km. The massive magnetite unit has a true thickness varying between approximately 7 m up to 25 m, with an average of approximately 11 m. The banded or disseminated magnetite mineralisation is interpreted to consist of up to six separate lenses, five in the hanging wall above the massive magnetite and one in the foot wall. The cumulative true thickness of these mineralisation lenses is approximately between 15 and 45 m. The base of complete oxidation (BOCO) and top of fresh rock (TOFR) weathering zone boundary surfaces, representing the interpreted boundaries between the fully oxidised, transitional and fresh rock weathering states, have been defined based on the lithological and geochemical data.



**Figure 5:** Schematic drill section B-B' at Gabanintha with typical Massive Magnetite and hangingwall unit profile.

### Sampling and Sub-sampling

Diamond drilling was generally sampled at 1 m intervals, except where geotechnical samples were taken, with some sub-sampling to 0.5 m. Submitted samples are diamond rock saw cut half core for the weathered material zones and quarter core for the fresh rock zones. One in 20 samples were submitted as quarter core duplicates. Geotechnical samples were re-inserted into the assay stream as whole crushed core.

1 m samples from RC drilling using a face sampling hammer are cone split off the rig cyclone into calico bags, with sample weights between 2 and 3 kg collected. Duplicate samples were collected for every metre sample. One duplicate was submitted for analysis for every 20 m down hole.

### Drilling Techniques

RC drilling was completed on the Project in four phases, during July 2017, September 2018, June 2021, and February/March 2022 with a 143 mm face-sampling hammer. Documentation is available that describes data collection procedures for the RC drilling programme.

Diamond drilling on the project was completed in September 2018, December 2020/January 2021, and January/February 2022 using PQ2/3 sized drill core. The large core diameter was selected for increasing the available mass for current and future metallurgical programs. Diamond core was oriented using a reflex ACT III tool and holes were surveyed using an Axis system north seeking Gyro.

## Sampling Analysis Method

Intertek Genalysis laboratory in Perth pulverised the samples and fused them with a lithium borate flux to cast into disks for analysis of a 21-element suite by x-ray fluorescence (XRF) spectrometry (Method code FB1/XRF77). Loss on ignition (LOI) was determined by Thermal Gravimetric Analyser at 1000°C (Method code /TGA).

## Classification Criteria

The Mineral Resource estimates have 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, Section 2 and Section 3 of JORC Table 1 – Appendix 3.

The Mineral Resources estimated for the Project are classified as Measured, Indicated and Inferred. 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, density data spacing and quality, variography and estimation statistics, and assumptions of continuity and drillhole spacing.

### Yarrabubba

The Mineral Resource is classified as a Measured Mineral Resource for those volumes where in the Competent Person's opinion there is detailed and reliable, geological and sampling evidence, which are sufficient to confirm geological and mineralisation continuity. The portions of the Mineral Resource classified as Measured are restricted to fresh material in the massive magnetite and adjacent hangingwall 1 unit where the drill spacings are less than 50 to 100 m along strike (NW) and 10 to 50 m across strike (SW). The geological continuity is confirmed by surface mapping, and geophysical TMI modelling.

The Mineral Resource is classified as an Indicated Mineral Resource for those volumes where in the Competent Person's opinion there is adequately detailed and reliable, geological and sampling evidence, which are sufficient to assume geological and mineralisation continuity. The portions of the Mineral Resource classified as Indicated are restricted to the transitional and fresh zones in the massive magnetite and adjacent hangingwall 1 and 2, and footwall 1 disseminated magnetite units where the drill spacings are nominally 100 m along strike (NW) and 50 m across strike (SW). The continuity of the massive magnetite unit is confirmed by geophysical (TMI) modelling and correlation with drill data and the surface mapping. The hangingwall 1 and 2 layers are generally geologically contiguous and have proven to be metallurgically amenable and parts of the upper footwall (footwall 1) are also often recoverable. The hangingwall 1 and 2 also tend to have the coarser grain size of the hanging wall units allowing them to reach higher levels of classification than inferred.

The Mineral Resource is classified as an Inferred Mineral Resource where the model volumes are, in the Competent Person's opinion, considered to have more limited geological and sampling evidence, which are sufficient to imply but not verify geological and mineralisation continuity. Inferred Mineral Resources are reported for all massive magnetite oxide material, and volumes of transitional and fresh massive magnetite and hangingwall and footwall disseminated units not classified as Indicated. This is generally for the extrapolated zones of these units down dip and along strike, or where there appears to be greater structural complexity, and in the areas where possible structural influences on the geological and grade continuity are not well understood at this stage. The lower confidence areas of the deposit have drill hole spacings ranging from up to 250 m along strike (NW) and 100 to 120 m down dip from closest drill hole.

### Gabanimtha

The Mineral Resource is classified as a Measured Mineral Resource for those volumes where in the Competent Person's opinion there is detailed and reliable, geological and sampling evidence, which are sufficient to confirm geological and mineralisation continuity. The portions of the Mineral Resource classified as Measured are restricted to transitional and fresh material in the massive magnetite and adjacent hangingwall 1 unit where the drill spacings are less than 50 to 100 m along strike (northing) and 50 m across strike (easting). The geological continuity is confirmed by surface mapping, and geophysical TMI modelling.

The Mineral Resource is classified as an Indicated Mineral Resource for those volumes where in the Competent Person's opinion there is adequately detailed and reliable, geological and sampling evidence, which are sufficient to assume geological and mineralisation continuity. The portions of the Mineral Resource classified as Indicated are restricted to the transitional and fresh zones in the massive magnetite and adjacent hangingwall 1 and 2, and footwall 1 disseminated magnetite units where the drill spacings are nominally 100 m along strike (northing) and 50 m across strike (easting). The continuity of the massive magnetite unit is confirmed by geophysical (TMI) modelling and correlation with drill data and the surface mapping. The hangingwall 1 and 2 layers are generally geologically contiguous and have proven to be metallurgically amenable and parts of the upper footwall (footwall 1) are also often recoverable. The hangingwall 1 and 2 also tend to have the coarser grain size of the hanging wall units allowing them to reach higher levels of classification than inferred.

The Mineral Resource is classified as an Inferred Mineral Resource where the model volumes are, in the Competent Person's opinion, considered to have more limited geological and sampling evidence, which are sufficient to imply but not verify geological and mineralisation continuity. Inferred Mineral Resources are reported for all massive magnetite oxide material, and volumes of transitional and fresh massive magnetite and the hangingwall and footwall disseminated units not classified as Indicated. This is generally for the extrapolated zones of these units down dip and along strike, or where there appears to be greater structural complexity, and in the areas where possible structural influences on the geological and grade continuity are not well understood at this stage. The lower confidence areas of the deposit have drill hole spacings ranging from up to 500 m along strike (northing) and 100 to 200 m down dip from the closest drill hole.

Both Mineral Resource estimates appropriately reflects the view of the Competent Person.

### Estimation Methodology

Statistical analysis was completed using Snowden Supervisor software. Based on the preliminary statistical analysis the drill samples were composited to 1 m. Detailed statistical analysis was then completed using the 1 m composite samples, including assessment of the coefficient of variation (COV), histograms and probability plots for all estimated elements. This was completed for the data from massive magnetite mineralisation, and each disseminated magnetite mineralisation domain for each weathering state separately, to understand the distribution of grades, and assess the requirement for top cuts for each estimation domain. Some weathering state domains were combined due to a lack of data to inform a robust estimate, with the oxide and transitional zones of the massive magnetite combined due to a lack of oxide data. Top cutting was deemed necessary where the COV was high ( $>1.0$ ) and where individual high-grade samples were deemed to potentially result in biased block estimate results. Further statistical statical analyses using log probability plots was then completed, and a visual inspection in Surpac for any potential clustering of very high-grade sample data was then carried out prior to selecting a top-cut value. This analysis showed that grade capping top cuts should be applied to prevent estimation bias due to outlier grade values for sulphur and phosphorous in some domains.

Variography was completed for elements  $V_2O_5$ , Fe,  $TiO_2$ ,  $SiO_2$ ,  $Al_2O_3$ , S, P,  $Cr_2O_3$ , Ni, Cu, Co, LOI using Supervisor software. Kriging neighbourhood analysis was then undertaken to assess the effect of changing key kriging neighbourhood parameters on block grade estimates. Kriging efficiency and slope of regression were determined for a range of block sizes, minimum/maximum samples, search dimensions and discretisation grids. Search ellipse parameters were selected based on the results. A three-pass search ellipse strategy was adopted whereby search ellipses were progressively increased if search criteria could not select sufficient data for the block estimate.

For Yarrabubba the grade estimation was completed at the parent cell scale of 20 mE x 10 mN x 5 mRL in Surpac software using the ordinary kriging method. The block model was sub-celled to 2.5 mE x 2.5 mN x 2.5 mRL to improve the volume fitting of the mineralisation wireframes.

Similarly, for Gabanintha the grade estimation was completed at the parent cell scale of 10 mE x 25 mN x 5 mRL in Surpac software using the ordinary kriging method. The block model was sub-celled to 2.5 mE x 2.5 mN x 2.5 mRL to improve the volume fitting of the mineralisation wireframes.

### Cut-off Grade

The Mineral Resource is reported above a lower cut-off grade of 0.4%  $V_2O_5$ . The adopted cut-off grade is considered reasonable for Mineral Resources which are likely to be extracted by open pit methods.

## Metallurgical Work Programs

Metallurgical amenability for Gabanintha has been demonstrated and built on from previous announcements (29th March 2019, 19th June 2019, 21st August 2019, 16th September 2020 and 5th August 2022).

The Definitive Feasibility Study (DFS) work (21st August 2019) demonstrated the production of a magnetic concentrate, the roasting and leaching of said concentrate to produce a leach liquor stream suitable for the associated downstream hydrometallurgical and pyrometallurgical steps to produce  $V_2O_5$  flake with positive economics.

Metallurgical amenability for Yarrabubba has been demonstrated and built on from previous announcements (30th April 2020, 1st July 2020, 13th April 2021, 10th November 2021, 21st April 2022 and 5th August 2022).

Metallurgical testing on the Yarrabubba deposit has demonstrated that a P80 of 150  $\mu m$  is appropriate and optimal for the recovery of both ilmenite and vanadium from the ore. A preliminary orebody blend composite was milled to P80 150  $\mu m$  has achieved high recoveries of vanadium in the roast-leach process to generate leach liquors that were suitable for associated downstream hydrometallurgical and pyrometallurgical steps to produce  $V_2O_5$  flake.

The non-magnetics from this sample have been demonstrated to be able to produce an ilmenite concentrate with the final bulk concentrate grading at 48.0%  $TiO_2$ .

Ongoing metallurgical testing is being conducted on Yarrabubba samples with variability testing nearing completion. These test show that all mineralisation units proposed to be treated (Hangingwall 1, Hangingwall 2, Massive and Footwall 1) are amenable to LIMS at P80 150  $\mu m$  and are capable of producing an ilmenite product from the non-magnetics. Vanadium recovery results for the roast-leach of the concentrates produced by this work are pending.

Pilot beneficiation of a Yarrabubba composite has been completed, a total of approximately 8 tonnes of wide diameter drill core were crushed, milled to P80 150  $\mu m$  and separated by wet LIMS. Samples of the magnetic concentrate have been dispatched to FLSmidth for confirmatory batch kiln testing, to validate salt dosage and vanadium recovery.

The non-magnetics are being processed through the flowsheet steps at a pilot scale, to generate additional design data for the ilmenite circuit and associated cleaning steps.

## Mining Parameters

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 yet been made. The Mineral Resource is supported by an Integration Study completed in August 2022, confirming the economic viability of open pit mining at Yarrabubba and Gabanintha.

## Bulk Density

Multiple campaigns of Archimedes specific gravity (SG) determinations have been completed, on diamond core ranging from HQ to PQ size. The SG measurements ( $SG = \text{Weight in Air} / (\text{Weight in Air} - \text{Weight in Water})$ ) were completed on unsealed whole core as porosity was assumed to be negligible. The measurements are assumed to be a dry mass basis. Samples were selected from the different mineralised lenses and bedrock types, and different oxidation states.

Additional density measurements were collected using Downhole Compensated Density (gamma gamma method with two collimated detectors short and long distances from source, with a centralising arm to hold the tool against the wall of the hole, with measurements that account for hole rugosity, fluids in hole and porosity). Readings were taken every 10 cm downhole across 21 DD holes at Yarrabubba and 6 RC holes. At Gabanintha one diamond hole, and 11 RC holes. The Downhole Compensated Density logs are calibrated (compensated) to account for rock porosity (voids) and fluids down hole.

Bulk density data was estimated into the block models in Surpac using Ordinary Kriging, for the high-grade massive magnetite, low grade hangingwall lenses, and footwall lens. The estimate utilised hard boundaries between the oxide, transitional and fresh domains and was completed in two passes that filled most of the blocks in the better drilled parts of the deposit. Unfilled blocks were assigned de-clustered mean densities for each domain by oxidation state as shown in JORC table 1 (appendix 3).

## AUTHORISED FOR RELEASE ON THE ASX BY THE COMPANY'S BOARD OF DIRECTORS

For further information:

**Ian Prentice**

Managing Director

[investors@tmtlimited.com.au](mailto:investors@tmtlimited.com.au)

+61 8 6489 1600

Media and Broker Contact:

**Andrew Rowell**

White Noise Communications

[andrew@whitenoisecomms.com](mailto:andrew@whitenoisecomms.com)

+61 400 466 226

## 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.

## About Technology Metals Australia

Technology Metals Australia Limited (ASX:TMT) is an ASX-listed company focused on the exploration and development of its flagship, 100 per cent owned Murchison Technology Metals Project (**MTMP**) located 50km southeast of Meekatharra in the mid-west region of Western Australia. The MTMP is one of the highest-grade vanadium projects in the world and will have lowest quartile operating costs once developed.

The Company has finalised an Integration Study for the MTMP, bringing in high-grade ore from the satellite Yarrabubba deposit into the central processing hub at Gabanintha. The Integration Study completion has facilitated the progression of the Implementation Phase of the MTMP.

## 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.

A very significant emerging use for vanadium is the rapidly developing energy storage (battery) sector with the expanding use and increasing penetration of the vanadium redox flow batteries (VRFB's). VRFB'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).

### Competent Person's Statement

The information in this report that relates to Exploration Results are based on information compiled by Mr John McDougall. Mr McDougall is the Company's Exploration Manager and a member of the Australian Institute of Geoscientists. Mr McDougall 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 McDougall 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 Matthew Clark. Mr Clark is a Senior Resource Geologist of CSA Global Pty Ltd and is a Member of the Australasian Institute of Mining and Metallurgy. Mr Clark 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 Competent Person as defined in the 2012 Edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Mr Clark consents to the disclosure of the information in this announcement in the form and context in which it appears.

The information that relates to Ore Reserves is based on information compiled by Mr Ross Cheyne of Oreology who takes overall responsibility for the Report as Competent Person. Mr Cheyne 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, Ross Cheyne 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 Murchison Technology Metals project is based on and fairly represents, information and supporting documentation compiled by Mr Brett Morgan, a full-time employee of Technology Metals Australia. Mr Morgan is a Member 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, Brett Morgan 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: COLLAR TABLE

Hole ID	Hole Type	Depth (m)	Dip	Azimuth	Easting	Northing	RL (m)	Lease ID
GBDD060	DDH	108.2	-79.9	42.3	669207	7009690	466	M51/884
GBDD061	DDH	117.6	-80.1	39.6	669200	7009682	466	M51/884
GBDD062	DDH	122.2	-80.4	41.1	669193	7009674	466	M51/884
GBDD063	DDH	98.2	-80.1	41.4	669215	7009698	466	M51/884
GBDD064	DDH	87.7	-80.2	40.5	669395	7009601	467	M51/884
GBDD065	DDH	87.6	-80.7	43.7	669388	7009593	467	M51/884
GBDD066	DDH	95.1	-79.7	40.1	669380	7009585	467	M51/884
GBDD067	DDH	116	-80.0	39.0	669375	7009578	467	M51/884
GBDD068	DDH	104.09	-80.3	42.2	669555	7009474	466	M51/884
GBDD069	DDH	119.2	-80.4	40.8	669547	7009468	466	M51/884
GBDD070	DDH	119.1	-80.4	40.1	669538	7009461	465	M51/884
GBDD071	DDH	125.1	-80.6	39.6	669532	7009453	465	M51/884
GBDD072	DDH	65.2	-80.3	41.4	669483	7009557	470	M51/884
GBDD073	DDH	75.7	-80.1	41.2	669469	7009538	468	M51/884
GBDD074	DDH	86.2	-80.3	34.1	669463	7009531	467	M51/884
GBDD075	DDH	107.2	-79.7	39.5	669457	7009522	467	M51/884
GBDD076	DDH	113.1	-80.2	42.1	669450	7009512	467	M51/884
GBDD077	DDH	53.06	-80.0	40.0	669327	7009678	466	M51/884
GBDD078	DDH	84.7	-80.6	41.8	669314	7009662	466	M51/884
GBDD079	DDH	84.7	-80.0	40.0	669307	7009655	466	M51/884
GBDD080	DDH	92.2	-68.4	40.5	669301	7009648	466	M51/884
GBDD081	DDH - Geotech	175	-70.2	132.9	668997	7009724	465	M51/884
GBDD082	DDH - Geotech	175.9	-70.3	162.9	669235	7009497	464	M51/884
GBDD083	DDH - Geotech	145.5	-79.6	163.1	669523	7009340	464	M51/884
GBDD084	DDH - Geotech	138.4	-63.6	63.2	669609	7009430	464	M51/884
GBDD085	DDH - Geotech	175	-74.9	45.1	669391	7009605	467	M51/884
GBDD086	DDH - Geotech	99.3	-60.3	118.9	661558	7020254	477	M51/883
GBDD087	DDH - Geotech	20.3	-65.2	177.9	661561	7020237	478	M51/883
GBDD088	DDH - Geotech	219.1	-51.3	134.7	661326	7020704	471	M51/883
GBDD089	DDH - Geotech	160.52	-70.7	130.8	661196	7020852	468	M51/883
GBDD090	DDH - Geotech	133.7	-60.8	41.9	661432	7020628	472	M51/883
GBRC162	RC	90	-60.5	89.2	661434	7020550	473	M51/883
GBRC163	RC	144	-59.7	89.5	661386	7020550	473	M51/883
GBRC164	RC	210	-59.5	90.4	661327	7020550	472	M51/883
GBRC165	RC	172	-59.0	90.9	661327	7020651	471	M51/883
GBRC166	RC	252	-58.7	92.2	661267	7020651	471	M51/883
GBRC167	RC	66	-58.9	87.5	661334	7020751	471	M51/883
GBRC168	RC	168	-59.0	89.9	661276	7020749	470	M51/883
GBRC169	RC	232	-59.8	90.4	661219	7020748	470	M51/883
GBRC170	RC	81	-59.7	88.9	661506	7020452	475	M51/883
GBRC171	RC	130	-58.7	88.2	661446	7020448	474	M51/883

GBRC172	RC	102	-60.4	96.7	661865	7019346	493	M51/883
GBRC173	RC	66	-61.4	40.7	668628	7010108	464	M51/884
GBRC174	RC	90	-59.7	42.9	668702	7010043	464	M51/884
GBRC175	RC	48	-59.4	44.9	668737	7010083	466	M51/884
GBRC176	RC	54	-59.9	47.9	668831	7010027	468	M51/884
GBRC177	RC	72	-59.9	46.4	668823	7010020	467	M51/884
GBRC178	RC	126	-60.9	45.8	668777	7009978	465	M51/884
GBRC179	RC	90	-60.6	44.9	668931	7009852	466	M51/884
GBRC180	RC	150	-60.5	95.5	661820	7019348	488	M51/883

## APPENDIX 2: SIGNIFICANT INTERCEPT TABLE

YARRABUBBA DIAMOND CORE ASSAYS								
Hole_ID	Description	Interval (m)	V2O5_pct	TiO2_pct	Fe_pct	SiO2_pct	Al2O3_pct	LOI_pct
GBDD060	10m @ 0.86% V2O5 10.2% TiO2 From 67 to 77m	10	0.86	10.2	39.4	15.1	7.2	1.2
GBDD060	11m @ 0.70% V2O5 8.2% TiO2 From 78 to 89m	11	0.70	8.3	33.2	20.2	10.1	2.1
GBDD060	14m @ 1.16% V2O5 13.2% TiO2 From 89 to 103m	14	1.16	13.2	51.1	3.8	4.8	-1.1
GBDD061	9m @ 0.74% V2O5 9.0% TiO2 From 76 to 85m	9	0.74	9.0	34.7	19.3	8.8	1.7
GBDD061	7m @ 0.77% V2O5 9.2% TiO2 From 92 to 99m	7	0.77	9.2	34.6	19.1	8.3	1.9
GBDD061	16m @ 1.17% V2O5 13.1% TiO2 From 99 to 115m	16	1.17	13.1	50.2	4.6	4.8	-0.6
GBDD062	12m @ 1.13% V2O5 12.6% TiO2 From 106 to 118m	12	1.13	12.6	48.5	5.8	4.8	0.0
GBDD063	4m @ 0.72% V2O5 8.9% TiO2 From 38 to 42m	4	0.72	8.9	32.2	20.7	13.3	1.3
GBDD063	4m @ 0.94% V2O5 11.2% TiO2 From 51 to 55m	4	0.94	11.2	41.5	13.2	7.1	0.9
GBDD063	21m @ 1.08% V2O5 12.5% TiO2 From 66 to 87m incl.	21	1.08	12.5	47.5	7.5	5.5	-0.4
GBDD063	15m @ 1.17% V2O5 13.4% TiO2 From 72 to 87m	15	1.17	13.4	50.9	4.2	4.6	-1.0
GBDD064	11m @ 0.99% V2O5 11.4% TiO2 From 55 to 66m incl.	11	0.99	11.4	44.4	10.0	6.4	0.9
GBDD064	8m @ 1.06% V2O5 12.4% TiO2 From 55 to 63m	8	1.06	12.4	47.4	6.9	5.9	0.0
GBDD065	13m @ 0.95% V2O5 10.9% TiO2 From 63 to 76m incl.	13	0.95	10.9	41.9	12.1	7.3	0.3
GBDD065	11m @ 1.01% V2O5 11.5% TiO2 From 63 to 74m	11	1.01	11.5	44.2	10.0	6.9	-0.4
GBDD066	15m @ 0.97% V2O5 11.0% TiO2 From 72 to 87m incl.	15	0.97	11.0	42.8	11.5	7.2	1.0
GBDD066	11m @ 1.07% V2O5 12.2% TiO2 From 72 to 83m	11	1.07	12.2	46.8	9.0	5.8	-0.7
GBDD067	15m @ 1.08% V2O5 12.2% TiO2 From 84 to 99m	15	1.08	12.2	47.4	7.1	5.6	-0.2
GBDD068	12m @ 1.19% V2O5 13.6% TiO2 From 53 to 65m	12	1.19	13.6	52.1	3.0	4.4	-1.4
GBDD068	4m @ 1.18% V2O5 12.8% TiO2 From 67 to 71m	4	1.18	12.8	50.8	5.0	4.3	-1.2
GBDD068	8m @ 1.16% V2O5 13.3% TiO2 From 81 to 89m	8	1.16	13.3	51.0	4.0	4.6	-1.1
GBDD069	11m @ 0.80% V2O5 9.6% TiO2 From 59 to 70m incl.	11	0.80	9.6	36.7	17.8	8.3	0.4
GBDD069	5m @ 0.99% V2O5 11.6% TiO2 From 65 to 70m	5	0.99	11.6	43.8	11.3	6.0	-0.4
GBDD069	5m @ 1.05% V2O5 12.1% TiO2 From 98 to 103m	5	1.05	12.1	46.2	8.4	5.1	0.0
GBDD070	17m @ 1.22% V2O5 13.6% TiO2 From 76 to 93m	17	1.22	13.6	52.6	3.1	4.4	-1.8
GBDD071	6m @ 0.77% V2O5 9.0% TiO2 From 84 to 90m	6	0.77	9.0	35.5	16.0	9.1	3.1
GBDD071	12m @ 1.20% V2O5 13.4% TiO2 From 90 to 102m	12	1.20	13.4	51.7	3.3	4.7	-1.3

GBDD072	3m @ 0.81% V2O5 10.0% TiO2 From 16 to 19m	3	0.81	10.1	35.7	17.5	10.8	2.7
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GBDD072	10m @ 1.06% V2O5 12.1% TiO2 From 28 to 38m	10	1.06	12.1	47.5	7.3	6.0	0.3
GBDD073	13m @ 1.14% V2O5 12.7% TiO2 From 54 to 67m	13	1.14	12.7	48.8	6.2	5.2	-0.8
GBDD074	3m @ 0.71% V2O5 8.8% TiO2 From 58 to 61m	3	0.71	8.8	32.6	20.6	13.1	0.7
GBDD074	11m @ 1.10% V2O5 12.5% TiO2 From 69 to 77m	11	1.10	12.5	48.4	6.0	5.4	-0.6
GBDD075	11m @ 0.88% V2O5 9.8% TiO2 From 80 to 91m	11	0.88	9.8	39.1	15.0	7.8	0.6
GBDD076	11m @ 1.10% V2O5 12.5% TiO2 From 90 to 101m	11	1.10	12.5	47.9	6.6	5.7	-0.5
GBDD077	5m @ 1.02% V2O5 11.6% TiO2 From 21 to 26m	5	1.02	11.6	42.2	12.0	6.2	2.8
GBDD079	7m @ 0.79% V2O5 9.1% TiO2 From 56 to 63m	7	0.79	9.1	36.2	16.9	10.4	3.2
GBDD080	3m @ 0.75% V2O5 9.4% TiO2 From 59 to 62m	3	0.75	9.4	34.5	19.1	12.0	0.5
GBDD080	6m @ 0.90% V2O5 10.5% TiO2 From 64 to 72m	6	0.90	10.5	38.6	15.5	8.0	2.8
GBDD084	7m @ 0.69% V2O5 8.1% TiO2 From 58 to 65m	7	0.69	8.1	32.9	21.9	11.2	2.6

#### YARRABUBBA REVERSE CIRCULATION DRILLING ASSAYS

Hole_ID	Description	Interval (m)	V2O5_pct	TiO2_pct	Fe_pct	SiO2_pct	Al2O3_pct	LOI_pct
GBRC173	3m @ 1.06% V2O5 12.3% TiO2 From 24 to 27m	3	1.06	12.3	44.8	9.0	6.0	2.3
GBRC173	19m @ 1.17% V2O5 12.9% TiO2 From 36 to 55m	19	1.17	12.9	50.1	4.9	4.7	-0.4
GBRC174	4m @ 0.65% V2O5 8.2% TiO2 From 39 to 43m	4	0.65	8.2	30.1	22.4	14.2	1.9
GBRC174	24m @ 0.81% V2O5 9.2% TiO2 From 54 to 78m incl.	24	0.81	9.2	37.0	17.3	7.8	1.5
GBRC174	9m @ 1.18% V2O5 13.0% TiO2 From 63 to 72m	9	1.18	13.0	50.7	4.1	4.6	-1.1
GBRC175	16m @ 0.71% V2O5 8.4% TiO2 From 3 to 19m	16	0.71	8.4	33.3	20.0	9.6	4.9
GBRC175	11m @ 1.13% V2O5 12.5% TiO2 From 21 to 32m	11	1.13	12.5	48.5	5.2	5.3	0.8
GBRC176	3m @ 0.80% V2O5 9.8% TiO2 From 0 to 3m	3	0.80	9.8	35.5	19.0	8.2	4.8
GBRC176	20m @ 0.77% V2O5 8.6% TiO2 From 7 to 27m incl.	20	0.77	8.6	35.3	18.0	9.5	4.5
GBRC176	8m @ 1.16% V2O5 12.8% TiO2 From 14 to 22m	8	1.16	12.8	49.4	4.5	4.8	1.9
GBRC177	10m @ 1.05% V2O5 11.5% TiO2 From 24 to 34m	10	1.05	11.5	46.0	8.4	5.8	0.8
GBRC178	11m @ 0.75% V2O5 8.7% TiO2 From 67 to 78m	11	0.75	8.7	34.7	18.6	9.0	2.4
GBRC179	20m @ 0.91% V2O5 10.6% TiO2 From 58 to 78m incl.	20	0.91	10.6	40.7	13.8	7.9	0.1
GBRC179	10m @ 1.18% V2O5 13.4% TiO2 From 66 to 76m	10	1.18	13.4	51.0	4.2	4.8	-1.4

GABANINTHA "NORTH PIT" GEOTECH DIAMOND CORE ASSAYS - Note GBDD088 and 089 approximate 1.6x true thickness

Hole_ID	Description	Interval (m)	V2O5_pct	TiO2_pct	Fe_pct	SiO2_pct	Al2O3_pct	LOI_pct
GBDD086	8m @ 0.81% V2O5 From 37 to 45m	8	0.81	9.7	38.3	17.0	7.4	0.4
GBDD086	11m @ 1.06% V2O5 From 47 to 58m	11	1.06	12.0	47.2	8.1	5.8	-0.9
GBDD088	17m @ 0.61% V2O5 From 111 to 128m	17	0.61	8.6	31.2	26.5	12.5	1.0
GBDD088	11m @ 0.91% V2O5 From 138 to 149m	11	0.91	10.7	42.3	12.8	6.1	-0.6
GBDD088	24m @ 1.18% V2O5 From 154.5 to 178.5m	24	1.18	13.3	52.3	5.0	5.3	-1.2
GBDD088	14m @ 0.70% V2O5 From 180 to 194m	14	0.70	7.8	34.6	21.8	7.0	0.2
GBDD089	13m @ 0.72% V2O5 From 111 to 124m	13	0.72	9.6	35.9	20.1	8.4	0.2
GBDD089	9m @ 0.93% V2O5 From 140 to 149m	9	0.93	11.2	41.6	12.6	7.9	0.0
<b>GABANINTHA "NORTH PIT" REVERSE CIRCULATION DRILLING ASSAYS</b>								
Hole_ID	Description	Interval (m)	V2O5_pct	TiO2_pct	Fe_pct	SiO2_pct	Al2O3_pct	LOI_pct
GBRC162	35m @ 0.83% V2O5 From 38 to 73m incl.	35	0.83	9.5	39.0	16.5	7.2	0.5
GBRC162	13m @ 1.15% V2O5 From 53 to 66m	13	1.15	13.2	50.9	4.3	4.7	-1.1
GBRC163	30m @ 1.00% V2O5 From 97 to 127m incl.	30	1.00	11.5	45.2	10.1	5.9	-0.6
GBRC163	19m @ 1.14% V2O5 From 107 to 126m	19	1.14	12.8	50.0	4.9	4.8	-1.0
GBRC164	27m @ 0.88% V2O5 From 167 to 194m incl.	27	0.88	10.1	40.7	14.8	6.9	0.0
GBRC164	11m @ 1.13% V2O5 From 173 to 184m	11	1.13	12.9	50.1	4.6	5.0	0.0
GBRC165	13m @ 0.67% V2O5 From 110 to 123m	13	0.67	8.6	34.3	21.5	8.1	0.3
GBRC165	13m @ 0.95% V2O5 From 128 to 141m	13	0.95	11.2	43.9	11.6	6.0	-0.6
GBRC165	19m @ 0.95% V2O5 From 146 to 165m	19	0.95	10.6	43.2	12.3	6.5	-0.5
GBRC166	17m @ 0.65% V2O5 From 194 to 211m	17	0.65	8.0	32.4	25.7	8.2	0.0
GBRC166	15m @ 1.03% V2O5 From 215 to 230m	15	1.03	11.9	45.5	9.8	6.7	-0.7
GBRC167	31m @ 0.82% V2O5 From 1 to 32m incl.	31	0.82	9.7	38.9	16.0	8.2	3.1
GBRC167	20m @ 0.92% V2O5 From 5 to 25m	20	0.92	10.8	42.7	11.9	7.2	3.1
GBRC168	16m @ 0.73% V2O5 From 108 to 124m	16	0.73	8.9	36.1	19.7	7.5	0.9
GBRC168	7m @ 1.00% V2O5 From 139 to 146m	7	1.00	11.3	45.2	10.9	6.1	6.9
GBRC168	7m @ 0.81% V2O5 From 153 to 160m	7	0.81	9.4	37.3	13.9	7.7	5.7
GBRC169	5m @ 0.66% V2O5 From 214 to 219m	5	0.66	9.1	33.2	21.5	10.5	1.1
GBRC169	7m @ 0.74% V2O5 From 221 to 228m	7	0.74	9.4	35.8	26.8	11.2	0.9
GBRC170	5m @ 0.74% V2O5 From 0 to 5m	5	0.74	9.5	35.3	19.7	8.2	3.9

GBRC170	9m @ 0.70% V205 From 12 to 21m	9	0.70	8.6	34.1	20.3	7.7	2.5
GBRC170	8m @ 0.76% V205 From 32 to 40m	8	0.76	8.9	35.7	20.6	9.6	0.1
GBRC171	34m @ 0.94% V205 From 74 to 108m incl.	34	0.94	10.9	43.1	12.3	6.1	-0.2
GBRC171	10m @ 1.20% V205 From 93 to 103m	10	1.20	13.7	52.7	2.7	4.2	-1.4
<b>GABANINTHA "CENTRAL PIT" REVERSE CIRCULATION DRILLING ASSAYS</b>								
Hole_ID	Description	Interval (m)	V205_pct	TiO2_pct	Fe_pct	SiO2_pct	Al2O3_pct	LOI_pct
GBRC172	29m @ 0.82% V205 From 55 to 84m incl.	29	0.82	9.8	37.8	17.3	9.7	1.7
GBRC172	14m @ 1.13% V205 From 69 to 83m	14	1.13	12.9	49.7	5.8	5.1	-0.4
GBRC180	17m @ 1.08% V205 From 103 to 120m	17	1.08	12.3	48.3	7.3	5.2	-1.0

### Appendix 3: - JORC (2012) Table 1.

#### JORC Table 1 Section 1 – Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<p><i>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.</i></p> <p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p> <p><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></p> <p><i>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.</i></p>	<ul style="list-style-type: none"> <li>• Diamond drilling was undertaken on PQ size using triple tube drilling in the oxidised rock and conventional double tube in fresh rock to ensure maximum recovery and representivity.</li> <li>• One primary sample was selected for assay from each metre, with every 20th sample having a duplicate quarter core. •</li> <li>• Except where geotechnical samples were taken, core was sampled on a 1 m or 0.5 m basis. Geotechnical samples were reinserted into the assay stream as whole crushed core.</li> <li>• Sampling was completed using a diamond saw with half core being sampled to the base of partial oxidation (max 18m) and quarter core being the primary sample for fresh rock except in metallurgically sampled PQ holes where 1/6th core was used.</li> <li>• All drill core was oriented with Reflex Act III core orientation device and sampling offset to downhole marks with 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.</li> <li>• Core was measured on a 20 cm basis by a KT-9 or KT-10 magnetic susceptibility meter.</li> <li>• Reverse circulation (RC) drilling was sampled on a 1 m basis. Each metre drilled was cone split off the rig cyclone, with two 2– 3 kg subsamples collected for each metre.</li> <li>• One primary subsample was selected for assay from each metre. •</li> <li>• Secondary subsamples were submitted for analysis for every 20th sample, thereby duplicating the primary subsample.</li> <li>• RC drillholes were analysed for magnetic susceptibility by either a KT-9 or KT-10 magnetic susceptibility meter on a 1 m basis. •</li> <li>• All Samples are analysed by x-ray fluorescence (XRF) spectrometry following digestion and Fused Disk preparation.</li> <li>• Blanks and certified reference materials (CRMs) were inserted at a rate of 1:50 and 1:20 samples, respectively. CRMs were produced from mineralised material sourced from the Technology Metals Australia Limited (Technology Metals) Gabanintha deposit and certified by a commercial CRM vendor.</li> </ul>
<b>Drilling techniques</b>	<p><i>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).</i></p>	<ul style="list-style-type: none"> <li>• Reverse circulation drilling completed with 143mm face-sampling hammer.</li> <li>• PQ2/3 sized drill core was selected for metallurgical reasons and HQ2 core was selected for Geotechnical holes. All drill core was oriented with Reflex Act III core orientation device and sampling offset to downhole marks.</li> </ul>

<b>Drill sample recovery</b>	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p> <p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p> <p><i>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.</i></p>	<ul style="list-style-type: none"> <li>Reverse circulation drilling 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.</li> <li>Poor sample recovery or quality (wet, etc) was recorded in logging sheets.</li> <li>Weights of primary and secondary sub-samples were compared to check variability.</li> <li>There does not appear to be any relationship between recovery and grade in the “massive” mineralisation.</li> <li>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%.</li> </ul>
<b>Logging</b>	<p><i>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.</i></p> <p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></p> <p><i>The total length and percentage of the relevant intersections logged.</i></p>	<ul style="list-style-type: none"> <li>Logging was completed onto paper and transcribed or digitally captured in the field.</li> <li>All chips and core have been qualitatively geologically logged to a minimum interval length and precision sufficient for calculation of a mineral resource.</li> <li>All core holes have been logged by an independent geotechnical consultant.</li> <li>All diamond core and chip trays have been photographed to a high resolution for electronic storage, for diamond holes this occurred prior to sampling.</li> <li>Where possible, diamond drillholes and selected RC drillholes were probed via downhole Televiwer probe and selected drillholes probed with downhole magnetic susceptibility sonde.</li> <li>Geotechnical logging was undertaken on all diamond holes. Geotechnical studies are underway to optimise wall angles on proposed pits.</li> </ul>
<b>Subsampling techniques and sample preparation</b>	<p><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></p> <p><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></p> <p><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p> <p><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></p> <p><i>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.</i></p> <p><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></p>	<ul style="list-style-type: none"> <li>Core was sampled on ¼ or ⅓ basis by diamond saw. Some sections of whole core were selected for geotechnical or metallurgical sampling and are noted as such in the database.</li> <li>Remaining drill core is stored on site and at the commercial laboratory with intervals and hole identifiers.</li> <li>Duplicate sampling was undertaken at a rate of 1 per 20 samples to monitor repeatability of all sampling.</li> <li>Core was duplicate sampled by assaying a second ¼ in the fresh zone or a 1/2 core leaving no sample in the oxide zone.</li> <li>Samples presented to the laboratory were split to &lt;2kg and pulverised to 95% passing 75 microns. 30g of pulverized material was split and presented for assay.</li> <li>Davis Tube Recovery (DTR) tests were completed on selected 2m composites of mineralised intervals defined by assay data and coded to geological unit and weathering code for Gabanintha. The weight recoveries are interpolated for all units.</li> <li>DTR's for Yarrabubba were continuously samples on a 4m downhole basis below the base of complete oxidation, originally 376 composites were run at 75 micron for Fe optimised recovery and then 371 of these were run at 150 micron for maximum ilmenite recovery with kiln property handling suitable for the Gabanintha plant for V<sub>2</sub>O<sub>5</sub> recovery.</li> </ul>

		<ul style="list-style-type: none"> <li>As all of the variables being tested occur as moderate to high percentage values and generally have low variances, the chosen samples sizes are deemed appropriate.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<p><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></p> <p><i>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.</i></p> <p><i>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.</i></p>	<ul style="list-style-type: none"> <li>All samples for the Yarrabubba and Gabanintha projects were assayed for the full iron ore suite by XRF (22 elements) method FB1/XRF77. In addition, loss on ignition (LOI) was completed by gravimetric analysis. This is considered to approximate a total analysis method.</li> <li>CRMs, field duplicates (1:20 ratio), laboratory check samples, and blanks (1:50 ratio) are considered to be suitable quality control procedures. The certified company laboratory standards (CRMs) have varied grade ranges of 0.33%, 0.79%, and 1.233% V<sub>2</sub>O<sub>5</sub> to test the assay accuracy at low, medium, and high-grade ranges. The CRMs are also certified for other relevant major element and oxide values, including Fe, TiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, SiO<sub>2</sub>, Ni, Cu, Co (amongst others).</li> <li>Quality control procedures demonstrate acceptable levels of accuracy and precision have been achieved. CRMs inserted to the sample stream at the laboratory generally showed good precision, falling within 1.4% of the expected mean values. Field duplicate samples generally performed well. Batches of samples are periodically sent for check assay by an umpire laboratory.</li> <li>DTR was performed via compositing coarse and selected pulverised sample rejects, by a commercial laboratory. All comparisons of DTR are done on P80 250 micron target sizing for Gabanintha and a 150 micron target sizing for Yarrabubba and laser sizing was done as a check.</li> </ul>
<b>Verification of sampling and assaying</b>	<p><i>The verification of significant intersections by either independent or alternative company personnel.</i></p> <p><i>The use of twinned holes.</i></p> <p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></p> <p><i>Discuss any adjustment to assay data.</i></p>	<ul style="list-style-type: none"> <li>Significant intersections were correlated with mineralised zones as defined from geological logging.</li> <li>All significant intersections were verified by an independent geologist as well as the Competent Person for Reporting of Exploration Results.</li> <li>The estimation of significant intersections has been verified by alternate company personnel.</li> <li>There were no adjustments to assay data.</li> <li>At Yarrabubba, four RC holes have been twinned by diamond holes. At Gabanintha, five RC have been twinned by diamond holes. The results show excellent reproducibility in both geology and assayed grade for each pair.</li> <li>All drilling was logged into a Microsoft Excel template in the field.</li> <li>All logging, sampling and assay files are stored in a SQL Server database using DataShed (industry standard drill hole database management software).</li> <li>Assay data was supplied in electronic format.</li> <li>Data has been subjected to quality assurance/quality control (QAQC) cross-checks and verification by company personnel prior to acceptance into the database.</li> <li>No adjustments or calibrations were made to any assay data, apart from resetting below detection limit values to half detection values.</li> </ul>

<b>Location of data points</b>	<p><i>Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></p> <p><i>Specification of the grid system used.</i></p> <p><i>Quality and adequacy of topographic control.</i></p>	<ul style="list-style-type: none"> <li>• The grid system used for collar positions is MGA94 – Zone 50.</li> <li>• A 50 cm resolution digital elevation model (DEM) and high-resolution aerial photogrammetric survey was used for topographic survey control. The DEM surface was generated from a point data cloud collected during a fixed wing aerial geophysical survey in 2017.</li> <li>• Planned hole collar positions were located in the field using handheld global positioning system (GPS).</li> <li>• Final hole collar positions were surveyed using differential RTK GPS with an accuracy of <math>\pm 5</math> cm horizontally and <math>\pm 10</math> cm vertically.</li> <li>• Downhole deflections were measured using an Axis CHAMP north-seeking gyroscope every 30 m downhole and near the collar.</li> <li>• Downhole magnetic susceptibility and Televue data was captured on a &lt;1cm accuracy downhole.</li> </ul>
<b>Data spacing and distribution</b>	<p><i>Data spacing for reporting of Exploration Results.</i></p> <p><i>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.</i></p> <p><i>Whether sample compositing has been applied.</i></p>	<ul style="list-style-type: none"> <li>• The drill data is on nominal 100 m line spacing with holes located approximately every 40 to 50 m along the drill lines.</li> <li>• Infill drilling has occurred in places down to 50 m line spacing, with holes located from 10 to 50 m spacing along the drill lines.</li> <li>• Detailed airborne magnetic modelling supports strike and down dip continuity assumptions of the massive magnetite zone which is known to host high-grade mineralisation.</li> <li>• This continuity has been additionally supported by drilling data and structural interpretation where offset is noted in surface mapping.</li> <li>• The data spacing and distribution is considered appropriate for use in estimating a Mineral Resource.</li> <li>• No sample compositing is used in the primary assay samples except for DTR testing.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<p><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></p> <p><i>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.</i></p>	<ul style="list-style-type: none"> <li>• The Yarrabubba grid rotation is approximately 40° magnetic to the west, with drillholes dipping approximately 60° to the northeast to intersect mineralisation striking approximately 130°.</li> <li>• The Gabanintha grid is oriented east-west, with drill holes dipping approximately 60° to the east to intersect the mineralisation striking approximately 160°.</li> <li>• The drilling has been completed at an orientation that would have been unlikely to have introduced a sampling bias. Broadly the drill holes are drilled orthogonal to the measured strike <math>\pm 10^\circ</math>, the apparent thickness is 1.25 X the true thickness. Drill deviations were not noticeably higher through the mineralised zone. The variations in azimuth and relative widths are described in the relationship of mineralisation widths and intercept lengths section of this table and significant variations for specific geotechnical holes are described in the heading of Appendix 2 where very low angle intersections are otherwise potentially misleading with relation to material mineralisation width.</li> </ul>
<b>Sample security</b>	<p><i>The measures taken to ensure sample security.</i></p>	<ul style="list-style-type: none"> <li>• RC samples were collected in poly-weave bags, sealed securely and transported by Technology Metals personnel until handover to a commercial transport company, which delivered the samples by road transport to the laboratory.</li> </ul>

		<ul style="list-style-type: none"> <li>• Drill core samples for geotechnical rock property testing were transported to the commercial laboratory as whole core by registered consignment and sequential sample numbers were assigned and sample bags presented to the geotechnical lab for submission as discrete crushed samples to the commercial assay laboratory.</li> <li>• Drill core samples were sent as batches of whole drillholes after being diamond blade sawn, they were collected in calico bags and grouped in poly-weave bags, sealed securely in labelled bulk bags and transported by Technology Metals personnel until handover to a commercial transport company, which delivered the samples by road transport to the laboratory. All remaining core from the current program was labelled with non-degrading metal tags.</li> <li>• For RC holes transport was completed within one week and sample reconciliation and crushing at the lab occurred within 14 days of receipt. The diamond drilling commercial transport was tracked and after a holding period at the laboratory the samples were reconciled against the sample list on the submissions provided after the 2022 sampling program.</li> </ul>
<b>Audits or reviews</b>	<i>The results of any audits or reviews of sampling techniques and data.</i>	<ul style="list-style-type: none"> <li>• A representative from the independent geological consultants, CSA Global Pty Ltd (CSA Global), visited the site during the drilling programs in 2017, 2018, and 2021 and reported drilling and sampling procedures and practices to be acceptable.</li> <li>• Apart from umpire assay and use of experienced field geologists (all &gt;20 years' 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 Technology Metals.</li> </ul>

## JORC Table 1 Section 2 – Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<p><i>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.</i></p> <p><i>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.</i></p>	<ul style="list-style-type: none"> <li>• The areas drilled are located on current Mining Leases M51/883 (Yarrabubba) and M51/884 (Gabanintha).</li> <li>• The tenements for the global Mineral Resource estimate are granted and held by The KOP Ventures Pty Ltd, a wholly owned subsidiary of Technology Metals Australia Limited.</li> </ul>

<b>Exploration done by other parties</b>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	<ul style="list-style-type: none"> <li>RC 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 Licence 51/2164) and GRC9815 to GRC9817 (on Prospecting Licence 51/2183).</li> <li>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.</li> <li>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.</li> </ul>
<b>Geology</b>	<i>Deposit type, geological setting and style of mineralisation.</i>	<ul style="list-style-type: none"> <li>The Gabanintha vanadium deposit is of a layered igneous intrusive type, hosted within a gabbro intrusion assigned to the Archaean Meeline Suite.</li> <li>Mineralisation is in the form of vanadiferous magnetite in massive and disseminated bands</li> </ul>
<b>Drillhole information</b>	<p><i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:</i></p> <ul style="list-style-type: none"> <li><i>easting and northing of the drillhole collar</i></li> <li><i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar</i></li> <li><i>dip and azimuth of the hole</i></li> <li><i>down hole length and interception depth</i></li> <li><i>hole length.</i></li> </ul> <p><i>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.</i></p>	<ul style="list-style-type: none"> <li>Exploration Results are summarized in Appendix and Appendix 2 with complete tabulation of the required collar, survey and depth information.</li> <li>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, 31 August 2017, 14 September 2017, 18th October 2017, 7th December 2017, 5 October 2018, 8 November 2018, 20 December 2018 and 30 January 2019, 30 April 2020, 1 July 2020, 16 September 2021.</li> </ul>
<b>Data aggregation methods</b>	<i>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.</i>	<ul style="list-style-type: none"> <li>Exploration Results are reported as length weighted averages. Sample intervals are regularly selected at 1m and only where sharp cutoff were identified in drill core were 0.5m samples collected.</li> <li>A nominal 0.4% V<sub>2</sub>O<sub>5</sub> cutoff grade has been applied, but an internal dilution of no more than 2m at less than this grade has been accepted where an average grade of 0.7% is present over a broader interval. It is believed selectivity for units below 2m is difficult with the open pit mining methods proposed for the exploitation of the deposit and that 2m internal dilution is permissible to determine significant intercepts of mineralisation.</li> </ul>

	<p>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.</p> <p>The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	
<b>Relationship between mineralisation widths and intercept lengths</b>	<p>These relationships are particularly important in the reporting of Exploration Results.</p> <p>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</p> <p>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').</p>	<ul style="list-style-type: none"> <li>• The down hole lengths reported for Yarrabubba diamond holes (-80° dip) are approximately 130% of the true width the dipping mineralised units.</li> <li>• The down hole lengths reported for Yarrabubba RC holes (-60° dip) are approximately 120% of the true width of the dipping mineralised units.</li> <li>• The down hole lengths reported for Gabanintha diamond holes (-60° dip) are approximately 120% of the true width the dipping mineralised units and as indicated in the heading of Appendix 2 for Geotech holes these approximate 160% of the true width of the dipping mineralised units.</li> <li>• The down hole lengths reported for Gabanintha RC holes (-60° dip) are approximately 120% of the true width of the dipping mineralised units.</li> </ul>
<b>Diagrams</b>	<p>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 drillhole collar locations and appropriate sectional views.</p>	<ul style="list-style-type: none"> <li>• Refer to figures in the body of the text and Appendix 2 for significant intercepts.</li> </ul>
<b>Balanced reporting</b>	<p>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.</p>	<ul style="list-style-type: none"> <li>• Due to the infill nature of the drilling program, number of drillholes and the advanced nature of the project only the significant intercepts are reported (see Appendix 2) for the 2022 H1 drilling campaign. The significant intervals are broadly those intercepts &gt;3m of &gt;0.65% V<sub>2</sub>O<sub>5</sub>, the Vanadium content is the primary economic determinant of ore zones, however TiO<sub>2</sub> is also reported for Yarrabubba drillholes where Ilmenite can be recovered.</li> </ul>

<b>Other substantive exploration data</b>	<p><i>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.</i></p>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Oxidation state has been modelled based on geological logging and geometallurgical characterisation including LOI data which was routinely assayed as part of the XRF method.</li> <li>• Bulk density measurements using a mixture of caliper and immersion methods have been completed on diamond core samples of fresh, transitional and oxidised material from the Southern tenement. These have been supplemented by, and compared to 654 measurements taken from the Northern tenement core. A reasonable number of samples have been measured by both methods to ensure there is no significant bias when using data obtained by either of the two methods to estimate the various material type densities.</li> <li>• Downhole Compensated Density logs (gamma gamma method) collected from selected diamond and RC drillholes at Yarrabubba and Gabanintha in 2022.</li> <li>• Metallurgical test work and bulk sampling results indicate amenability of both Gabanintha and Yarrabubba magnetite concentrates to conventional roast leach processing for V<sub>2</sub>O<sub>5</sub> extraction (Refer ASX releases: 4th April 2018, 31st May 2018, 19th June 2019 and 21st April 2022) and DTR has been found to be a suitable proxy for Low Intensity Magnetic Separation.</li> <li>• A grind liberation program has been completed on representative composites from Yarrabubba mineralisation indicating that a grind of P80 150 µm produces an ilmenite byproduct that is recoverable from the non-magnetic processing stream, and this does not detrimentally impact the vanadium circuit performance.</li> <li>• Low values of deleterious elements (As, Mo , Cr) are associated with mineralisation.</li> <li>• Groundwater quality for potential water supply is suitable for use in mine planning and processing, with elevated salinity at Yarrabubba in connection with the large channelised sheetwash catchment in adjacent tenements.</li> <li>• Geotechnical studies have confirmed the deposit is suitable for open pit mining</li> </ul>
<b>Further work</b>	<p><i>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.</i></p>	<p>Diamond drilling has been used to gather further geotechnical data relevant to open pit mine design parameters and will be used in pit design and Reserve reassessment.</p> <p>Technology Metals will complete any infill drilling required for grade control or to satisfy financiers, however the extent of strike is limited by faulting and tenure and no further exploration is required in this regard. The deposits have been drilled to an appropriate depth for open pit assessments and no deeper drilling is currently planned.</p>

## JORC 2012 Table 1 Section 3 – Estimation and Reporting of Mineral Resources

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

Criteria	JORC Code explanation	Commentary
<b>Database integrity</b>	<i>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.</i>	<ul style="list-style-type: none"> <li>All drilling was logged into a Microsoft Excel template. All logging, sampling and assay files are stored in a SQL Server database using DataShed (industry standard drill hole database management software).</li> <li>User access to the database is regulated by specific user permissions. Only the Database Administrator can overwrite data.</li> <li>All data has passed a validation process; any discrepancies have been checked by senior Technology Metals personnel before being updated in the database.</li> <li>Data used in the Mineral Resource estimate is sourced from a Microsoft Access database export. CSA Global imported the Microsoft Access database file into Surpac and Leapfrog Geo for validation and modelling.</li> <li>Validation of the data import include checks for overlapping intervals, missing survey data, missing assay data, missing lithological data, and missing collars. QAQC data and reports have been checked by the database administrator, and the Competent Person.</li> <li>No significant validation errors were detected.</li> </ul>
<b>Site visits</b>	<i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertake, indicate why this is the case.</i>	<ul style="list-style-type: none"> <li>A two-day site visit was completed by a CSA Global staff member in August 2017 while drilling was in progress. The site visit confirmed that industry best practice procedures are in place and being followed, with drilling, sampling and logging practice being observed. Drill collar locations have been captured by hand-held GPS confirming their stated survey locations. Mineralisation outcrop extents were followed, with measurements taken confirming the interpreted strike and dip.</li> <li>A two-day site visit was completed by a CSA Global staff member in October 2018 while drilling was in progress. The site visit confirmed that industry best practice procedures are in place and being followed, with drilling, sampling, density measurement and logging practice being observed. Drill collar locations have been captured by hand-held GPS confirming their stated survey locations.</li> <li>A site visit was undertaken by Consulting Geologist Matthew Clark of CSA Global in July 2021 to verify collar locations and review the outcropping portion of the magnetite mineralisation. The geology, sampling, sample preparation and transport, data collection and storage procedures were discussed with the Technology Metals Exploration Manager. Matthew Clark visited Intertek Laboratory in August 2021 to review the sample preparation and assay methods.</li> </ul>
<b>Geological interpretation</b>	<i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i>	<ul style="list-style-type: none"> <li>The oxidized portion of the high-grade massive magnetite/martite mineralisation outcrops for over 4 km at Gabanintha and approximately 1.2 km at Yarrabubba. 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 massive magnetite/martite zone appears to be relatively consistent through the interpreted strike</li> </ul>

	<p><i>Nature of the data used and of any assumptions made.</i></p> <p><i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></p> <p><i>The use of geology in guiding and controlling the Mineral Resource estimate.</i></p> <p><i>The factors affecting continuity both in grade and geology.</i></p>	<p>length of the deposits. Cross-cutting faults, interpreted from the drill hole and magnetic data and surface mapping, have been modelled for both Gabanintha and Yarrabubba deposits. These features displace the mineralisation as shown in the diagrams in the body of this report</p> <ul style="list-style-type: none"> <li>• Drill sample logging and analysis demonstrates consistent zones of more disseminated magnetite mineralisation, containing centimeter to decimeter scale magnetite bands, existing in the hanging wall and foot wall of the massive unit along strike and on section. Drill hole logging at Gabanintha has shown some narrow quartz porphyry units, and pegmatites at Yarrabubba have also been modelled as dilution, cutting through the mineralisation on some sections.</li> <li>• 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. A partially mineralised cover sequence is interpreted as depleting the top few metres of the models interpreted based on lithological logging of the drilling.</li> <li>• No assumptions are made regarding the input data.</li> <li>• The extents of the modelled mineralisation zones are constrained by the available drill and geophysical data, with strike extent limited by tenement boundaries. Alternative interpretations are not expected to have a significant influence on the global Mineral Resource estimate.</li> <li>• Geological observation has underpinned the resource estimation and geological model. The continuity of the geology and mineralisation can be identified and traced between drill holes by visual, geophysical and geochemical characteristics. The high-grade mineralisation domain has a clear and sharp boundary and has been tightly constrained by the interpreted wireframe shapes. The low-grade mineralisation is also constrained within wireframes, which are defined and guided by visual (from core) and grade boundaries from assay results. The resource estimate is constrained by these wireframes.</li> <li>• In parts of the modelled area, 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, density and geological continuity is reflected in the Mineral Resource classification.</li> </ul>
<b>Dimensions</b>	<p><i>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.</i></p>	<p><u>Yarrabubba</u></p> <ul style="list-style-type: none"> <li>• At Yarrabubba on M51/883 the modelled mineralisation strikes approximately 125° to 305°, dipping on average about 55° towards 215°, with a modelled strike extent of approximately 1.6 km.</li> <li>• The stratiform massive magnetite unit has a true thickness varying between 5 m and 25 m. The interpreted disseminated mineralisation lenses appear to be better developed in the centre and northern half of the modelled area, with cumulative true thickness of the order of 25 m from up to nine lenses, reducing to roughly 7 m from two lenses in the south of the deposit.</li> </ul>

		<ul style="list-style-type: none"> <li>• The stratiform massive magnetite outcrops and has been mapped along the strike extent of 1.2 km and has been extended to a maximum of approximately 200 m below topographic surface or nominally 70 m down dip of the deepest drill hole intersections. The strike extent is extended to the intersections with the tenement boundary based on the surface mapping and geophysical data extents. In the north this is roughly 30 m along strike and in the south roughly 125 m along strike from the relevant drilling sections. The southernmost lens of the modelled massive magnetite mineralisation has been limited to roughly 160 m below topographic surface, due to increased geological uncertainty.</li> <li>• The immediate hanging wall disseminated mineralisation zone above the massive magnetite is modelled to a nominal maximum of 175 m below topographic surface. The remaining hanging wall lenses are successively modelled to nominal maximums below topographic surface of 165 m and 155 m respectively, and the foot wall lens to 165 m. Given the continuity defined over the drilled extents (fence line spacings of 50 to 100 m) and being additionally informed by the magnetics (TMI), these extrapolation extents are considered reasonable.</li> </ul> <p><u>Gabanintha</u></p> <ul style="list-style-type: none"> <li>• At Gabanintha the modelled mineralisation strikes approximately 160° to 340°, dipping on average about 60° towards 250°, with a modelled strike extent of approximately 4.6 km.</li> <li>• The stratiform massive magnetite unit has a true thickness varying between 7 m and 25 m. The interpreted disseminated mineralisation lenses appear to be better developed in the southern half of the modelled area, with cumulative true thickness of the order of 45 m in the south from up to six lenses, reducing to roughly 25 m in the northern third from four to five lenses and approximately 8 m from one lens in the extreme north of the deposit.</li> <li>• The massive magnetite outcrops and has been mapped along the strike extent over 4 km and has been extended to a maximum of approximately 320 m below topographic surface or nominally 120 m down dip of the deepest drill hole intersections. The strike extent is extended a nominal 200 m, 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 50 m past drilling based on the surface mapping extents of the outcropping mineralisation. The northern most lens of the modelled massive magnetite mineralisation has the down dip extent limited to a nominal 40 m down dip of drill section data, or 150 m below topographic surface, due to the greater geological uncertainty.</li> <li>• The immediate hanging wall disseminated mineralisation zone above the massive magnetite is considered to be the most consistent of the disseminated magnetite zones and is modelled nominally 80 m down dip of the deepest drill intersections or nominally 260 m below topographic surface. The lenses further up in the hanging wall are not as clearly constrained and understood, mostly due to lower drill coverage at depth, and therefore the down dip extent is successively reduced upwards in the sequence as can be seen in the representative cross section in the body of this report. Given the continuity defined over the drilled extents (fence line spacings of 50 to 100 m) and being additionally informed by the magnetics (TMI), these extrapolation extents are considered reasonable.</li> </ul>
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<p><b>Estimation and modelling techniques</b></p>	<p><i>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.</i></p> <p><i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></p> <p><i>The assumptions made regarding recovery of by-products.</i></p> <p><i>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</i></p> <p><i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></p> <p><i>Any assumptions behind modelling of selective mining units.</i></p> <p><i>Any assumptions about correlation between variables</i></p> <p><i>Description of how the geological interpretation was used to control the resource estimates.</i></p> <p><i>Discussion of basis for using or not using grade cutting or capping.</i></p> <p><i>The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.</i></p>	<ul style="list-style-type: none"> <li>Geological wireframe interpretations used in the Resource were constructed using Leapfrog Geo software. Geological wireframes included weathering, lithological, faults, and mineralisation. In the hanging wall and footwall of the massive magnetite zone, the mineralised units are defined at a nominal 0.4% V<sub>2</sub>O<sub>5</sub> lower cut-off grade and a nominal minimum 3 m downhole continuity.</li> <li>Prior to analysis, variables with detection limit assays were assigned a positive value equal to half the detection limit of the relevant grade variable.</li> <li>All drillhole samples were flagged according to mineralised domain and oxidation domain. Samples were composited to 1m intervals based on an assessment of the raw drillhole sample interval lengths.</li> <li>Statistical and geostatistical analysis was carried out using Snowden's Supervisor software. Variography was completed for grouped mineralisation domains within structural domains based on population statistics and domain orientation.</li> <li>Block modelling and grade estimation was carried out using Surpac™ software. Quantitative Kriging Neighbourhood Analysis (QKNA) was undertaken in Supervisor software to assess the effect of changing key kriging neighbourhood parameters on block grade and density estimates. Kriging Efficiency (KE) and Slope of Regression (SOR) were determined for a range of block sizes, minimum and maximum samples, search dimensions and discretisation grids.</li> </ul> <p><u>Yarrabubba</u></p> <ul style="list-style-type: none"> <li>The Yarrabubba estimation included 58 individual mineralisation wireframes, representing eight low-grade hangingwall disseminated mineralisation lenses, massive magnetite/martite, and six low-grade footwall disseminated mineralisation lenses. The mineralisation is offset by faults into seven fault blocks. The mineralisation lenses were grouped together using a numeric zone code as the massive magnetite lenses, or for the disseminated mineralisation lenses they were grouped together based on stratigraphic position in the hanging wall or footwall relative to the massive magnetite. These lens groupings are then further split based on the weathering surface interpretations into oxide, transition and fresh materials.</li> <li>The preliminary statistical analysis completed on the massive magnetite/martite and stratigraphically relative grouped disseminated magnetite domains showed that for the combined mineralisation / weathering state domain groupings there were not sufficient samples to complete a robust grade estimation. These weathering state domains were combined to provide sufficient data to inform a robust estimate. The oxide and transitional zones of the massive magnetite and disseminated magnetite mineralisation zones were combined together. This has resulted in 9 separate estimation domains being defined, with hard boundaries being used between the defined combined weathering and mineralisation estimation domains. The majority of the variables estimated have coefficients of variation of significantly less than 1.0.</li> <li>A detailed statistical analysis was completed for each of the defined mineralisation / weathering state estimation domains. This analysis showed that for some grade variables occasional outlier grades existed and, in the CP's opinion, these required balancing cuts to prevent estimation bias associated with outlier values. For the massive magnetite top cuts were applied to Sulphur and Phosphorus. For the disseminated magnetite domains, Phosphorus and Sulfur required top cutting in various domains.</li> </ul>
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		<ul style="list-style-type: none"> <li>• The Gabanintha estimation included 73 individual mineralisation wireframes, representing five low-grade hangingwall disseminated mineralisation lenses, massive magnetite/martite, and one low-grade footwall disseminated mineralisation lens. The mineralisation is offset by faults into 16 fault blocks. The mineralisation lenses were grouped together using a numeric zone code as the massive magnetite lenses, or for the disseminated mineralisation lenses they were grouped together based on stratigraphic position in the hanging wall or footwall relative to the massive magnetite. These lens groupings are then further split based on the weathering surface interpretations into oxide, transition and fresh materials.</li> <li>• The preliminary statistical analysis completed on the massive magnetite/martite and stratigraphically relative grouped disseminated magnetite domains showed that for the combined mineralisation / weathering state domain groupings there were not sufficient samples to complete a robust grade estimation. These weathering state domains were combined to provide sufficient data to inform a robust estimate. The oxide and transitional zones of the massive magnetite and disseminated magnetite mineralisation zones were combined together. This has resulted in 3 separate estimation domains being defined, with hard boundaries being used between the defined combined weathering and mineralisation estimation domains. The majority of the variables estimated have coefficients of variation of significantly less than 1.0.</li> <li>• A detailed statistical analysis was completed for each of the defined mineralisation / weathering state estimation domains. This analysis showed that for some grade variables occasional outlier grades existed and, in the CP's opinion, these required balancing cuts to prevent estimation bias associated with outlier values. For the massive magnetite top cuts were applied to S and P. For the disseminated magnetite domains, P and S required top cutting in various domains.</li> <li>• QKNA was used in conjunction with the modelled variogram ranges and consideration of the drill coverage to inform the search parameters. Search ellipse extents for the massive magnetite/martite are set to 500 m along strike, 250 m down dip and 100 m across dip, ensuring 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 pass and increased 10-fold for the third search pass to ensure all block were estimated. For the massive magnetite, a maximum of 6 samples per hole, with a minimum of 16 and a maximum of 30 samples are allowed for a block estimate in the first search pass, reducing to a minimum of 12 samples and a maximum 24 samples for the second pass, and reducing to a minimum of 8 samples and a maximum 16 samples for the final pass. For the disseminated units a maximum of 6 samples per hole, with a minimum of 10 and a maximum of 24 samples are allowed for a block estimate in the first search pass, reducing to a minimum of 8 samples and a maximum 16 samples for the second pass, and reducing to a minimum of 6 samples and a maximum 12 samples for the final pass</li> <li>• By-product recovery has not been considered for this deposit estimate.</li> <li>• Potentially deleterious Cr<sub>2</sub>O<sub>3</sub>, P and S have been estimated.</li> </ul>
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		<ul style="list-style-type: none"> <li>A volume block model with parent block sizes of 10 m (E) by 25 m (N) by 5 m (RL) was constructed using Surpac™ software. The block size is approximately half the drill spacing in the better drilled parts of the deposit. Geological wireframes were coded into the block model using a minimum sub cell down to 2.5 m (N) by 2.5 m (E) by 2.5 m (RL) to improve block volume fitting to the wireframes. Grade estimation was completed using OK for the Mineral Resource estimate. Surpac™ software was used to estimate grades for V<sub>2</sub>O<sub>5</sub>, TiO<sub>2</sub>, Fe, SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, Cr<sub>2</sub>O<sub>3</sub>, Co, Cu, Ni, P, S, and loss on ignition (LOI) using parameters derived from statistical and variography studies. 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, and surficial colluvium zones that have been interpreted based on the geological, geochemical and geophysical data.</li> <li>No assumptions have been made regarding selective mining units at this stage.</li> <li>All elements within a domain used the same sample selection routine for block grade estimation. No co-kriging was performed.</li> <li>Block model validation has been completed by statistical comparison of drill sample grades with the OK and inverse distance weighting to the power of two (IDW) 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 differences in block model grade compared to the drill sample data for V<sub>2</sub>O<sub>5</sub> primarily attributable to volume variance and estimation smoothing effects.</li> <li>With no mining having taken place there is no reconciliation data available to test the model against. The previous Mineral Resource estimate from March 2019 was reviewed as part of the validation process with changes including minor adjustments to mineralisation interpretation based on the infill drilling.</li> </ul>
<b>Moisture</b>	<i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i>	Tonnages have been estimated on a dry, in situ, basis.
<b>Cut-off parameters</b>	<i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i>	The adopted lower cut-off grade for reporting of 0.4% V <sub>2</sub> O <sub>5</sub> is supported by the metallurgical results and conceptual pit optimisation study as being reasonable.

<b>Mining factors or assumptions</b>	<i>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.</i>	<p>It has been assumed that these deposits are 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.</p>
<b>Metallurgical factors or assumptions</b>	<i>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.</i>	<p><u>Gabarintha</u>        Metallurgical amenability for the Gabarintha deposit has been demonstrated by test work contained in previous resource announcements (26th March 2019).</p> <p><u>Yarrabubba</u>        Metallurgical amenability for the Yarrabubba deposit has been demonstrated by test work contained in previous resource announcements (26th March 2019 and 10th November 2021) and additional testing undertaken since then including:</p> <ul style="list-style-type: none"> <li>• Grind Liberation, undertaken on representative composites of the main mineralisation units. This grind liberation work indicated that a P80 of 150 µm was optimal for ilmenite recovery whilst still retaining a relatively coarse grind size for the kiln feed and not detrimentally impacting the performance of this circuit.</li> <li>• DTR program targeting P80 150 µm, the selected grind size for Yarrabubba ore processing • Batch kiln testing by FLSmidth, demonstrating +90% vanadium recovery in the roast-leach process from Yarrabubba concentrates (announcement 21st April 2022).</li> <li>• Ilmenite product confirmation work, confirming an ilmenite product is able to be produced from Yarrabubba ore (announcement 13th April 2021).</li> </ul> <p><u>Yarrabubba bulk testing and ongoing work</u></p> <ul style="list-style-type: none"> <li>• A preliminary orebody blend composite was milled to P80 150 µm has achieved high recoveries of vanadium in the roast-leach process to generate leach liquors that were suitable for associated downstream hydrometallurgical and pyrometallurgical steps to produce V2O5 flake.</li> <li>• The non-magnetics from this sample have been demonstrated to be able to produce an ilmenite concentrate with the final bulk concentrate grading at 48.0% TiO2.</li> <li>• The non-magnetics are being processed through the flowsheet steps at a pilot scale, to generate additional design data for the ilmenite circuit and associated cleaning steps.</li> <li>• The reserve announcement (5th August 2022) demonstrated that the economics of incorporating Yarrabubba ore with an ilmenite by-product into the Murchison Technology Metals Project were favourable.</li> <li>• Variability testing is nearing completion, showing that all mineralisation units proposed to be treated (Hangingwall 1, Hangingwall 2, Massive and Footwall 1) are amenable to LIMS at P80 150 µm and are capable</li> </ul>

		<p>of producing an ilmenite product from the non-magnetics. Vanadium recovery results for the roast-leach of the concentrates produced by this work are pending.</p> <ul style="list-style-type: none"> <li>Pilot beneficiation of a Yarrabubba composite has been completed, a total of approximately 8 tonnes of wide diameter drill core were crushed, milled to P80 150 µm and separated by wet LIMS. Samples of the magnetic concentrate have been dispatched to FLSmidth for confirmatory batch kiln testing, to validate salt dosage and vanadium recovery.</li> </ul>
<b>Environmental factors or assumptions</b>	<p><i>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 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.</i></p>	<p>Work was finalised by Technology Metals regarding waste disposal options for Yarrabubba M51/883 in the Reserve Assessment and Integration Study (5 August 2022) and a previous design for Gabanintha M51/884 was completed for the Definitive Feasibility Study (21 August 2019) and amendments to these features have been reassessed with respect to drainage and haulage interactions during the Integration study. It is modelled for the purposes of the Mineral Resource estimates that disposal will not present a significant barrier to exploitation of the deposit, and that any disposal and potential environmental impacts will be correctly managed as required under the regulatory permitting conditions. Industry best practice for waste landform slope angles and storage of contaminated wastes have been accounted for in the project footprint.</p>
<b>Bulk density</b>	<p><i>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.</i></p> <p><i>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.</i></p> <p><i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></p>	<ul style="list-style-type: none"> <li>Multiple campaigns of Archimedes specific gravity (SG) determinations have been completed, on diamond core ranging from HQ to PQ size, on whole core. The SG measurements (<math>SG = \frac{\text{Weight in Air}}{\text{Weight in Air} - \text{Weight in Water}}</math>) were completed on unsealed core as porosity was assumed to be negligible. The measurements are assumed to be a dry mass basis. Samples were selected from the different mineralised lenses and bedrock types, and different oxidation states.</li> <li>Additional density measurements were collected using Downhole Compensated Density (gamma gamma method with two collimated detectors short and long distances from source, with a centering arm to hold the tool against the wall of the hole, with measurements that account for hole rugosity, fluids in hole and porosity). Readings were taken every 10 cm downhole across 21 DD holes at Yarrabubba and 6 RC holes. At Gabanintha one diamond hole, and 11 RC holes were measured. The Downhole Compensated Density logs are calibrated (compensated) to account for rock porosity (voids) and fluids down hole.</li> <li>The density measurements available for analysis included 98 samples by caliper method, and 267 samples by weight in air, weight in water method across a range of material types from the drill core. A total of 98 samples have been measured using both methods and show a very good correlation between the two measurement methods with a mean density of 3.35 t/m<sup>3</sup> for caliper method versus 3.38 t/m<sup>3</sup> for the weight in air weight in water method.</li> <li>All methods are determinations rather than assumptions, with varying precision and accuracy.</li> </ul>

		<u>Yarrabubba</u>																																					
		Year	Data Type	Sample Count	Company																																		
		2018-2021	Archimedes Method – HQ / PQ core	266	TMT																																		
		2022	Downhole Compensated Density (gamma gamma)	22,428	ABIM Solutions																																		
		<u>Gabarintha</u>																																					
		Year	Data Type	Sample Count	Company																																		
		2018	Archimedes Method – HQ / PQ core	487	TMT																																		
		2022	Downhole Compensated Density (gamma gamma)	14,868	ABIM Solutions																																		
		<u>Yarrabubba</u>																																					
		Bulk density data (SG and Downhole Compensated Density) was estimated into the block models in Surpac using OK, for the high-grade massive magnetite (domain 10), low grade hangingwall lenses (domains 11, 12, 13), and footwall lens (domain 21). The estimate borrowed the variogram and search parameters from the Fe grade variable which is strongly correlated with density. The estimate utilised hard boundaries between the oxide, transitional and fresh domains. and was completed in two passes with a maximum search distance of 300 m and minimum of 10 and maximum of 18 samples for the massive magnetite and 4 and 12 respectively for the disseminated lenses. The second pass increased the search distance 2x and reduced the maximum samples to 16 for the massive magnetite, and 10 for the disseminated lens. The two passes filled most of the blocks in the better drilled parts of the deposit. Unfilled blocks were assigned declustered mean densities for each domain by oxidation state as shown in the table below.																																					
		<table><tr><th>Domain</th><th>Oxidation State</th><th>Assigned Density</th></tr><tr><td>10 (High Grade)</td><td>Oxide</td><td>3.80</td></tr><tr><td>10 (High Grade)</td><td>Transitional</td><td>3.86</td></tr><tr><td>10 (High Grade)</td><td>Fresh</td><td>4.11</td></tr><tr><td>11 (Low Grade)</td><td>Oxide</td><td>3.3</td></tr><tr><td>11 (Low Grade)</td><td>Transitional</td><td>3.6</td></tr><tr><td>11 (Low Grade)</td><td>Fresh</td><td>3.7</td></tr><tr><td>12 (Low Grade)</td><td>Oxide</td><td>3.25</td></tr><tr><td>12 (Low Grade)</td><td>Transitional</td><td>3.3</td></tr><tr><td>12 (Low Grade)</td><td>Fresh</td><td>3.66</td></tr><tr><td>13-18 (Low Grade)</td><td>Oxide</td><td>2.8</td></tr><tr><td>13-18 (Low Grade)</td><td>Transitional</td><td>3.1</td></tr></table>				Domain	Oxidation State	Assigned Density	10 (High Grade)	Oxide	3.80	10 (High Grade)	Transitional	3.86	10 (High Grade)	Fresh	4.11	11 (Low Grade)	Oxide	3.3	11 (Low Grade)	Transitional	3.6	11 (Low Grade)	Fresh	3.7	12 (Low Grade)	Oxide	3.25	12 (Low Grade)	Transitional	3.3	12 (Low Grade)	Fresh	3.66	13-18 (Low Grade)	Oxide	2.8	13-18 (Low Grade)
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13-18 (Low Grade)	Fresh	3.6
21 (Low Grade)	Oxide	2.8
21 (Low Grade)	Transitional	3.1
21 (Low Grade)	Fresh	3.47
22-26 (Low Grade)	Oxide	2.8
22-26 (Low Grade)	Transitional	3.1
22-26 (Low Grade_	Fresh	3.6
Waste (Gabbro)	Oxide	2.3
Waste (Gabbro)	Transitional	3.04
Waste (Gabbro)	Fresh	3.27
Waste (Transported Cover)	Oxide	1.92

#### Gabanintha

Bulk density data (SG and Downhole Compensated Density) was estimated into the block models in Surpac using OK, for the high-grade massive magnetite (domain 10), low grade hangingwall lenses (domains 11, 12, 13, 14, 15), and footwall lens (domain 21). The estimate borrowed the variogram and search parameters from the Fe grade variable which is strongly correlated with density. The estimate utilised hard boundaries between the oxide, transitional and fresh domains. and was completed in two passes with a maximum search distance of 300 m and minimum of 10 and maximum of 18 samples for the massive magnetite and 4 and 12 respectively for the disseminated lenses. The second pass increased the search distance 2x and reduced the maximum samples to 16 for the massive magnetite, and 10 for the disseminated lens. The two passes filled most of the blocks in the better drilled parts of the deposit. Unfilled blocks were assigned declustered mean densities for each domain by oxidation state as shown in the table below.

Domain	Oxidation State	Assigned Density
10 (High Grade)	Oxide	3.83
10 (High Grade)	Transitional	3.81
10 (High Grade)	Fresh	4.1
11 (Low Grade)	Oxide	2.7
11 (Low Grade)	Transitional	3.4
11 (Low Grade)	Fresh	3.7
12 (Low Grade)	Oxide	2.7
12 (Low Grade)	Transitional	3.31
12 (Low Grade)	Fresh	3.7
13-15 (Low Grade)	Oxide	2.45
13-15 (Low Grade)	Transitional	3.31

			13-15 (Low Grade)	Fresh	3.69	
			21 (Low Grade)	Oxide	2.45	
			21 (Low Grade)	Transitional	3.31	
			21 (Low Grade)	Fresh	3.65	
			Waste (Gabbro)	Oxide	2.26	
			Waste (Gabbro)	Transitional	2.86	
			Waste (Gabbro)	Fresh	3.25	
			Waste (Transported Cover)	Oxide	1.92	
Classification	<p><i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></p> <p><i>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).</i></p> <p><i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></p>	<p>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, density data spacing and quality, variography and estimation statistics, and assumptions of continuity and drillhole spacing.</p> <p>The current classification is considered valid for the global resource and applicable for the nominated cut-off grade.</p> <p>The Mineral Resources estimates have 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, Section 2 and Section 3 of this table.</p> <p><u>Yarrabubba</u></p> <ul style="list-style-type: none"><li>• The Mineral Resource is classified as a Measured Mineral Resource for those volumes where in the Competent Person's opinion there is detailed and reliable, geological and sampling evidence, which are sufficient to confirm geological and mineralisation continuity.</li><li>• The portions of the Mineral Resource classified as Measured are restricted to fresh material in the massive magnetite and adjacent hangingwall 1 unit where the drill spacings are less than 50 to 100 m along strike (NW) and 10 to 50 m across strike (SW). The geological continuity is confirmed by surface mapping, and geophysical TMI modelling.</li><li>• The Mineral Resource is classified as an Indicated Mineral Resource for those volumes where in the Competent Person's opinion there is adequately detailed and reliable, geological and sampling evidence, which are sufficient to assume geological and mineralisation continuity.</li><li>• The portions of the Mineral Resource classified as Indicated are restricted to the transitional and fresh zones in the massive magnetite and adjacent hangingwall 1 and 2, and footwall 1 disseminated magnetite units where the drill spacings are nominally 100 m along strike (NW) and 50 m across strike (SW). The continuity of the massive magnetite unit is confirmed by geophysical (TMI) modelling and correlation with drill data and the surface mapping.</li><li>• The Mineral Resource is classified as an Inferred Mineral Resource where the model volumes are, in the Competent Person's opinion, considered to have more limited geological and sampling evidence, which are sufficient to imply but not verify geological and mineralisation continuity.</li></ul>				

		<ul style="list-style-type: none"> <li>Inferred Mineral Resources are reported for all massive magnetite oxide material, and volumes of the transitional and fresh massive magnetite and the hangingwall and footwall disseminated units not classified as Indicated. This is generally for the extrapolated zones of these units down dip and along strike, or where there appears to be greater structural complexity, and in the areas where possible structural influences on the geological and grade continuity are not well understood at this stage. The lower confidence areas of the deposit have drill hole spacings ranging from up to 250 m along strike (NW) and 100 m to 120 m down dip from closest drill hole.</li> </ul> <p><u>Gabanintha</u></p> <ul style="list-style-type: none"> <li>The Mineral Resource is classified as a Measured Mineral Resource for those volumes where in the Competent Person's opinion there is detailed and reliable, geological and sampling evidence, which are sufficient to confirm geological and mineralisation continuity.</li> <li>The portions of the Mineral Resource classified as Measured are restricted to transitional and fresh material in the massive magnetite and adjacent hangingwall 1 unit where the drill spacings are less than 50 to 100 m along strike (northing) and 50 m across strike (easting). The geological continuity is confirmed by surface mapping, and geophysical TMI modelling.</li> <li>The Mineral Resource is classified as an Indicated Mineral Resource for those volumes where in the Competent Person's opinion there is adequately detailed and reliable, geological and sampling evidence, which are sufficient to assume geological and mineralisation continuity.</li> <li>The portions of the Mineral Resource classified as Indicated are restricted to the transitional and fresh zones in the massive magnetite and adjacent hangingwall 1 and 2, and footwall 1 disseminated magnetite units where the drill spacings are nominally 100 m along strike (northing) and 50 m across strike (easting). The continuity of the massive magnetite unit is confirmed by geophysical (TMI) modelling and correlation with drill data and the surface mapping.</li> <li>The Mineral Resource is classified as an Inferred Mineral Resource where the model volumes are, in the Competent Person's opinion, considered to have more limited geological and sampling evidence, which are sufficient to imply but not verify geological and mineralisation continuity.</li> <li>Inferred Mineral Resources are reported for all massive magnetite oxide material, and volumes of the transitional and fresh massive magnetite and the hangingwall and footwall disseminated units not classified as Indicated. This is generally for the extrapolated zones of these units down dip and along strike, or where there appears to be greater structural complexity, and in the areas where possible structural influences on the geological and grade continuity are not well understood at this stage. The lower confidence areas of the deposit have drill hole spacings ranging from up to 500 m along strike (northing) and 100 m to 200 m down dip from the closest drill hole.</li> </ul> <p>Both Mineral Resource estimates appropriately reflects the view of the Competent Person.</p>
<b>Audits or reviews</b>	<i>The results of any audits or reviews of Mineral Resource estimates.</i>	<ul style="list-style-type: none"> <li>Internal audits and peer review were completed by CSA Global which verified and considered the technical inputs, methodology, parameters and results of the estimate.</li> <li>No external audits have been undertaken.</li> </ul>

<p><b>Discussion of relative accuracy/ confidence</b></p>	<p><i>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.</i></p> <p><i>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.</i></p> <p><i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></p>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• No quantitative approach has been conducted to determine the relative accuracy of the resource estimate.</li> <li>• The Mineral Resource statement relates to global estimates of in situ tonnes and grade.</li> <li>• No mining has taken place at this deposit to allow reconciliation with production data.</li> </ul>
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