

ASX Announcement

28 April 2021

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Directors

Michael Fry: Chairman

Ian Prentice:

Managing Director

Sonu Cheema:

Director and Company Secretary

Issued Capital

150,141,390 ("TMT") Fully Paid Ordinary Shares

6,349,834 Unquoted Options exercisable at \$0.25 on or before 15 June 2022

12,350,000 Unquoted Director and Employee Options at various exercise prices and expiry dates

2,650,000 Performance Rights

ASX Code: TMT FRA Code: TN6





QUARTERLY ACTIVITIES REPORT & APPENDIX 5B

FOR THE QUARTER ENDING 31 MARCH 2021

The Board of Technology Metals Australia Limited (ASX: **TMT**) ("**Technology Metals**" or the "**Company**") is pleased to provide an update on activities for the quarter ending 31 March 2021.

HIGHLIGHTS

- Large scale testwork on Yarrabubba samples confirms high purity iron ore product of 64.3% Fe (MASFR1) and 62.6% Fe (MASFR2) at 125 micron grind size with very low levels of deleterious elements.
- Vanadium credit of 1.65% V₂O₅ and 1.56% V₂O₅ in MASFR1 and MASFR2 respectively.
- O Simple indicative Yarrabubba flowsheet defined to deliver high purity iron ore product at final grind size of 75 to 90 micron. Earlier sighter testwork at a 75 micron grind size delivered a weighted average grade of 62.8% Fe at a 49.6% mass recovery.
- Testwork on larger scale non-magnetic tails has delivered an indicative specification for the titanium by-product (YIP1) containing 46 to 47% TiO₂, with generally low deleterious elements.
- Industry consultants TZMI estimate YIP1 will achieve US\$140 US\$180/tonne FOB (real 2020) in the medium term.
- Technical collaboration with Sinosteel / MECC progressing towards delivery of final Yarrabubba flowsheet design.
- Offtake and project development partner engagement progressed, with an MOU executed with Japanese VRFB group LE System and the MOU with Big Pawer expanded and extended.
- Gabanintha Environmental Review Document submitted to the EPA in March 2021.
- As at the end of March 2021 the Company had cash of \$7.25 million. As at 27 April 2021 the Top 20 shareholders held 47.85% of the fully paid ordinary shares.

Chairman, Michael Fry commented: "Yarrabubba is rapidly advancing towards development with testwork confirming an exciting mix of high quality, high value products that are highly sought as economies continue to emerge from the economic impacts of the COVID-19 pandemic. The high purity, high grade Yarrabubba iron ore product is attracting significant customer interest underpinning the development of this lower entry cost project that is complementary to, and expected to reduce funding and implementation risk for, the World class, low cost, long life Gabanintha Vanadium Project. The Company remains very focused on its staged project delivery strategy aimed at maximising shareholder returns and is very much looking forward to the progress on this over the course of 2021".

During the March 2021 Quarter the Company advanced work on the Yarrabubba Iron-Vanadium Project ("Yarrabubba") demonstrating the potential to produce a premium high grade iron ore product (with vanadium credits) and a titanium by-product. Yarrabubba is a significant stand-alone development project, which also provides an opportunity to implement a staged, cost effective development of the Company's Projects. Activities during the quarter at Yarrabubba included:

- metallurgical testwork to confirm the premium quality iron ore (+vanadium) product,
- definition of a simple indicative crushing, milling and beneficiation ("CMB") flowsheet,
- definition and market validation of a titanium by-product,
- completion of the diamond drilling program, and
- evaluation of logistics scenarios for transport of Yarrabubba products to market.

The compilation of environmental data for the preparation of the Environmental Review Document ("ERD") for the high grade, low cost, large scale, long life Gabanintha Vanadium Project ("GVP") was completed during the quarter, with a final draft of the ERD submitted to the EPA in early March 2021.

Engagement with Sinosteel Australia ("Sinosteel") progressed during the quarter, with the technical teams from both Companies working together to assess the Yarrabubba metallurgical testwork and agree on the simple indicative CMB flowsheet. The Company has continued its engagement with potential project development partners, entering into an MOU with leading Japanese VRFB R&D company LE System Co., Ltd ("LES") and extending / expanding the MOU with Big Pawer ("Big Pawer").

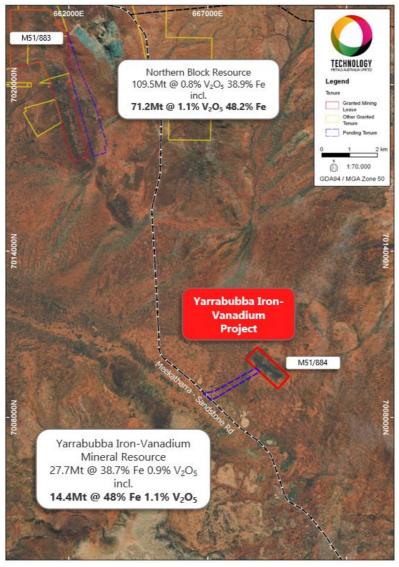


Figure 1: Mineral Resource Estimates for Gabanintha Vanadium and Yarrabubba Iron-Vanadium Projects

YARRABUBBA IRON-VANADIUM PROJECT

The Yarrabubba Iron-Vanadium Project, located on granted Mining Lease M51/884 about 14km south east of the GVP (see Figure 1), hosts an Indicated and Inferred Mineral Resource estimate ("**MRE**") of 27.7Mt at 38.7% Fe and 0.9% V₂O₅ including a high grade massive mineralisation zone of 14.4Mt at 48.1% Fe and 1.1% V₂O₅ (ASX Announcement 1 July 2020). The Indicated Mineral Resource component of 9.6Mt at 45.3% Fe and 1.0% V₂O₅ consists of only fresh mineralisation which commences from only 10 to 15m below surface (see Figure 2). Predominantly transitional material and minor oxide above these depths is classified as Inferred due to limited metallurgical data from these shallow zones.

CSA Global prepared a Maiden Probable Ore Reserve estimate for M51/884 of 9.4Mt at 45.3% Fe and $0.97\%~V_2O_5$, which consists of only fresh mineralisation and includes a large proportion of the high grade massive magnetite unit (ASX Announcement 16 September 2020). The presence of higher yielding fresh ore close to surface has very positive implications for both capital and operating costs.

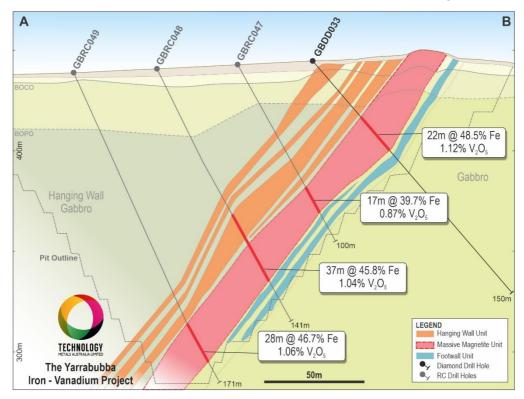


Figure 2: Cross Section Highlighting Broad Massive Magnetite Zone and Shallow Oxidation

Initial sighter metallurgical testwork, consisting of Low Intensity Magnetic Separation ("LIMS") on seven (7) representative composite samples, delivered outstanding high grade, high purity iron (+vanadium) concentrate results across all of the mineralised units. A weighted average grade of 62.8% Fe, 1.66% V₂O₅, 7.83% TiO₂, 0.62% SiO₂ and 0.96% Al₂O₃ with an overall mass recovery of 49.6% was recorded at a 75 micron grind size (ASX Announcement 11 November 2020).

The work completed also confirmed the very high recoveries of iron and vanadium into a magnetic concentrate for the massive fresh and the hanging wall unit 1 and unit 2 composites, with iron and vanadium recoveries ranging from 80.6 to 93.7% and 90.0 to 96.6% respectively for the massive fresh composites and 70.4 to 81.2% and 76.9 to 89.2% respectively for the hanging wall composites. The more disseminated units, hanging wall unit 3 and footwall fresh, reported moderate recoveries of iron and vanadium into a magnetic concentrate, ranging from 52.7 to 64.4% and 70.3 to 84.3% respectively. The more oxidised transitional composite reported iron and vanadium recoveries ranging from 23.4 to 42.8% and 28.4 to 47.0% respectively.

During the quarter a round of laboratory scale LIMS testwork was completed on larger sample masses of the fresh massive magnetite composites (see Figure 2 for location and distribution of the Massive Magnetite Unit); 300kg of MASFR1 and 90kg of MASFR2. This testwork was designed to confirm the outcomes of the sighter testwork under both three stage (500 micron, 125 micron and 32 micron) and two stage (125 micron and 32 micron) grind scenarios and generate sufficient volume of non-magnetic tailings to investigate a potential titanium separation circuit.

The testwork involved grinding the composite to the requisite size ("Primary Grind") prior to passing the sample through triple pass LIMS at 1200 Gauss. The magnetic component from the Primary Grind was then dried, homogenised and milled down to the next grind size ("Secondary Grind"), with the sample again passed through triple pass LIMS at 1200 Gauss. For the three stage grind the magnetic component from the Secondary Grind was dried, homogenised and milled down to the final 32 micron grind size. The non-magnetic components from each cycle (grind size) were collected for further investigation of the titanium separation from the non-magnetic tailings.

Results of the magnetic separation phase of the testwork program have strongly confirmed the outcomes of the sighter testwork, delivering up to 67.1% Fe and 1.74% V₂O₅ at a 32 micron grind size for MASFR1 and 64.1% Fe and 1.61% V₂O₅ at a 32 micron grind size for MASFR2 at very high mass recoveries of approximately 60 to 66% (ASX Announcement 3 February 2021). The magnetic concentrate grades are typically slightly higher from the larger scale testwork relative to the sighter testwork, with greater rejection of impurities. This work also demonstrated very high recoveries of both iron and vanadium into a magnetic concentrate for the massive fresh composites, with iron recoveries ranging from 76 to 90% and vanadium recoveries ranging from 85.0 to 93%.

Importantly at a coarser grind size of 125 micron, this testwork delivered a product containing up to 64.3% Fe and 1.65% V_2O_5 for MASFR1 and up to 62.6% Fe and 1.56% V_2O_5 for MASFR2 at mass recoveries of 65.4% and 71.3% respectively. This larger scale LIMS testwork has again confirmed the very high rejection of deleterious elements from the Massive Magnetite ore, with contained values of less than 0.3% SiO₂ at the 125 micron grind size and less than 1.6% Al₂O₃ at the 125 micron grind size.

Compilation and review of the data from this testwork program, completed in consultation with Sinosteel Australia Pty Ltd ("Sinosteel") and Sinosteel Equipment & Engineering Co., Ltd ("MECC"), has identified the opportunity to operate the Yarrabubba crushing, milling and beneficiation ("CMB") circuit at an intermediate grind size to generate a high grade, high purity iron (+vanadium) concentrate whilst maintaining a high level of rejection of titanium to the non-magnetic tail component.

Design concept work is progressing on the basis of a target final iron ore (+vanadium) grind size of 75 to 90 microns, utilising a simple indicative CMB flowsheet consisting of primary crushing feeding a SAG mill, with the magnetic product then fed into a ball mill for final grinding to the target 75 to 90 micron grind size. Non magnetic tailings will be removed at each stage of grinding for gravity separation to produce a titanium product. More details of the indicative CMB flowsheet will be provided as work progresses.

The key geometallurgical characteristics of the Yarrabubba ore of high in-situ iron grades, very high mass recoveries and a shallow oxidation profile differentiate this project from the majority of magnetite deposits and enable the application of the simple (low risk) indicative CMB flowsheet to deliver a very high quality final iron (+vanadium) product.

TITANIUM SEPARATION TESTWORK

The original program of sighter metallurgical testwork identified clear potential to discriminate between vanadiferous iron (V+Fe) phases and titanium (TiO_2) containing phases across the range of grind sizes, resulting in TiO_2 rejection to the non-magnetic tails stream.

Non-magnetic tails from the larger scale LIMS testwork program on the MASFR1 and MASFR2 composites were collected from each cycle (grind size) for gravity separation testwork to further investigate and optimise the potential to generate a titanium by-product. The following composite samples were generated for this testwork:

- Composite 1 a blend of MASFR1 and MASFR2 tails at a P80 500-micron grind,
- Composite 2 a blend of MASFR1 and MASFR2 tails at a P80 125-micron grind.

Each of the non-magnetic tails streams were screened at 38 microns to remove the ultra fine material prior to compositing and initial gravity separation. The gravity separation testwork was conducted via "tabling" of the concentrates. Composite 1 and Composite 2 were passed over a rougher table prior to the rougher concentrate being passed over a cleaner table (see Figure 3). The gravity concentrates from the cleaner table contain around 44.5% TiO₂ at mass recoveries ranging from 34% to 48% (ASX Announcement 13 April 2021).



Figure 3: Gravity Separation Table – Dark, heavy material concentrated to left containing titanium feed

The cleaner table concentrates from Composite 1 and Composite 2 were upgraded by being passed through Wet High Intensity Magnetic Separation ("WHIMS") at a range of Gauss settings between 2,000G and 10,000G for sighter testwork. Based on the sighter testwork it was decided to undertake a double pass WHIMS at 8,000G as the final cleaner testwork for Composite 2, the blend of MASFR1 and MASFR2 tails at a P80 125-micron grind.

From this work an indicative specification has been defined for the Yarrabubba titanium by-product (YIP1) containing 46 to 47% TiO_2 , very low levels of Fe_2O_3 , Nb_2O_3 , P_2O_5 and U+Th but elevated Cr_2O_3 and V_2O_5 (see Table 1). The testwork has determined that YIP1 can be produced using standard processing, consisting of gravity separation supplemented with magnetic separation.

Composition	Units	Indicative Product Specification
TiO ₂	%	46.0 - 47.0
FeO	%	> 45
Fe ₂ O ₃	%	< 3
FeO:Fe ₂ O ₃		15
Al ₂ O ₃	%	1.1 - 1.7
CaO	%	0.05 - 0.10
Cr ₂ O ₃	%	0.08 - 0.14
MgO	%	1.7 - 2.3
MnO	%	0.7 - 1.1
Nb ₂ O ₅	ppm	< 5
P ₂ O ₅	%	< 0.01
SiO ₂	%	0.3 - 0.5
V ₂ O ₅	%	0.40 - 0.55
U+Th	ppm	< 1

Table 1: Indicative Yarrabubba Ilmenite Product (YIP1) Specifications

TZMI, a global, independent consulting and publishing company with extensive experience in the mineral sands, titanium dioxide and coatings industries, was engaged to undertake a product quality review of the YIP1 titanium by-product, including benchmarking to current commercially available titanium products, and advise on target markets as well as achievable pricing.

Based on the indicative specifications detailed above, TZMI determined that the YIP1 ilmenite product has a titanium content typical of hard rock ilmenite deposits and falls within the typical range of commercial sulfate ilmenite for sulfate pigment manufacture. It indicated that the Fe_2O_3 , P_2O_5 , SiO_2 and U+Th contents are generally well below comparable products and would be considered favourably by some customers, particularly the very low Fe_2O_3 . TZMI noted the elevated Cr_2O_3 and V_2O_5 content, which somewhat offset the low levels of other impurities, indicating that YIP1 would be suitable as a blending feedstock for sulfate pigment manufacture, complementing ilmenite feedstock with elevated Fe_2O_3 .

TZMI indicates that most sulfate pigment producers use a blend of feedstocks, providing an opportunity for YIP1 to be an attractive blend feedstock due its low levels of generally common deleterious elements. TZMI believes that the saleability of the YIP1 product at indicative volumes of 150,000 to 250,000tpa would be comfortably absorbed into the market, with global consumption of sulfate ilmenite into the sulfate pigment market in 2020 estimated at 3.6 million TiO₂ units (or approximately 7.5 million tonnes). On the basis of the indicative product quality TZMI estimates that YIP1 will achieve a price of US\$140 to US\$180/tonne FOB (real 2020 dollars) in the medium term.

Testwork is continuing to optimise the Yarrabubba titanium by-product and refine the flowsheet for the titanium separation circuit, including investigation of flotation to remove base metals (cobalt, copper and nickel) from the non magnetic tails stream. Sighter flotation testwork has been completed on a range of Composite 2 cleaner table gravity concentrates, indicating the potential to remove between 57.5 and 97.7% of the sulphur from these concentrates without significant TiO₂ loss (0.2 to 0.8%). Further work is required to assess the opportunity to apply this step in the titanium separation circuit.

The assessment of the YIP1 ilmenite product completed by TZMI indicates that China would be the preferential market for the product given its large scale of sulfate pigment production, with sulfate ilmenite demand for sulfate pigment end-use estimated at 2.9 million TiO₂ units in 2020. Target customers are the large pigment producers located along the Chinese eastern seaboard who currently use a blend of domestic Chinese ilmenite and imported ilmenite feedstock. The YIP1 ilmenite product is considered an ideal blend feedstock for some of these pigment producers.

Representative samples of the Yarrabubba titanium by-product will be provided to a range of prospective customers when available to facilitate the commencement of discussions regarding product offtake.

DIAMOND DRILLING

A diamond drilling program, designed to generate a bulk sample for large pilot scale testwork, collect additional geotechnical data to support open pit design / ore reserve estimation work and to infill the Yarrabubba Mineral Resource Estimate, was completed in late January 2021. The program consisted of 23 holes for 2,794m of mixed PQ and HQ sized diamond core (see Figure 4).

All diamond drill core was transported to Perth for cutting, sampling and assaying prior to the generation of life of mine representative bulk samples for pilot scale testwork. Core processing has been delayed due to staffing and work backlog issues at the laboratory, with the first set of assay results now expected in mid to late May 2021. Full assay data is expected later in the current quarter.

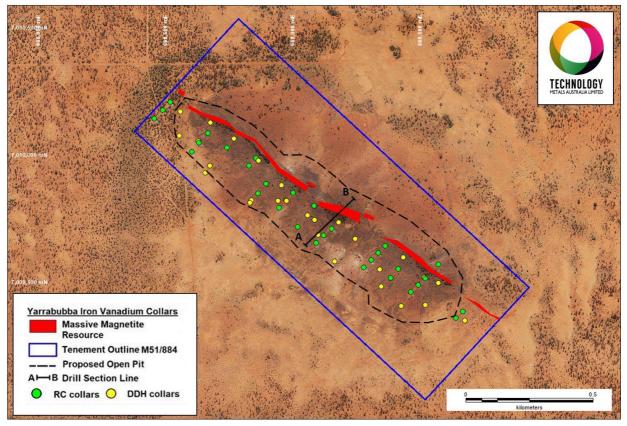


Figure 4: Yarrabubba Iron-Vanadium Project - Collar Locations, Surface Expression of Mineralisation

ONGOING WORK IN SUPPORT OF YARRABUBBA DEVELOPMENT

The key activities underway or planned for the current and subsequent quarters include:

- Resource infill and extension RC drilling designed to convert Inferred resources to indicated category and expand the overall resource;
 - the RC drill rig scheduled to commence this program in mid April 2021 has been delayed by approximately 1 month;
- RC drilling data to be combined with data from the diamond drilling program and lead to a resource / reserve update;
- Finalisation of the definition of the optimal CMB flowsheet to enable commencement of engineering design work;
- Definition of the titanium separation circuit;
- Pilot scale testwork to confirm CMB flowsheet, generate samples for customer engagement and enable refinement of engineering / process design; and
- RC drilling to assist in defining dewatering parameters for the open pit development; and
- Environmental studies and report preparation to support environmental submissions specific to Yarrabubba to enable the progression of Mining Approvals.

GABANINTHA VANADIUM PROJECT

The Company referred the GVP to the WA Environmental Protection Authority ("**EPA**") in November 2018, with the EPA determining that the GVP will undergo a formal environmental impact assessment with no public comment period and provided an Environmental Scoping Document ("**ESD**") identifying the key environmental factors to be addressed in the Environmental Review Document ("**ERD**").

The compilation of all data in support of the ERD was completed during the quarter, with a final draft of the ERD submitted to the EPA in early March 2021. Feedback from the EPA and other decision-making authorities is expected in the current quarter. The Company will then address any matters raised prior to submission of the final assessable version of the ERD.

MARKET ENGAGEMENT

Technology Metals continues to progress engagement with a broad range of counterparties in regards to product offtake, project development and funding, and technical collaboration. The Yarrabubba Project provides two product streams – the high grade, high purity iron (+vanadium) concentrate and the titanium by-product – broadening Technology Metals' market engagement opportunities which already includes the high purity vanadium pentoxide product from the highly competitive lowest quartile cash operating costs GVP.

With regard to the Company's product offtake strategy it continues to target diversity of geography and end-user as and when impacts of the COVID-19 pandemic have allowed. Discussions have focused on potential offtake partners in China, Japan, South Korea, India and Europe, delivering outcomes ranging from an executed binding offtake agreement, memorandums of understanding / letters of intent through to high levels of due diligence across the range of proposed products.

During the quarter the Company executed a non-binding MOU with LE System Co., Ltd ("LES") a leading Japanese VRFB R&D company with strong relationships with the Japanese Government. The MOU covers the opportunity to jointly produce electrolyte for the VRFB market in Western Australia using LES' proprietary processing technology, based on intellectual capital accumulated over a decade or more, and the high purity vanadium from GVP. This opportunity has scope to establish a significant downstream value add industry designed to target what TMT sees as the rapidly emerging stationary storage battery market opportunities in Australia, further enhancing the significant economic and social benefits for the Mid-West region of Western Australia, the State and the Nation that the development of Gabanintha is expected to generate over a long period of time.

The MOU also covers the assessment of LES' technology to extract vanadium (and other valuable metals) from GVP waste streams, both supporting the Company's key objectives of sustainability and environmental responsibility and potentially further reducing the GVP's lowest quartile cash operating costs. In addition, the parties will look to develop a vanadium supply plan (offtake) to assist LES in meeting its forecast demand for electrolyte production to support its participation in the global VRFB market.

Engagement with Sinosteel continued to progress during the quarter. Technical collaboration between the Company's technical team and Sinosteel Equipment & Engineering Co., Ltd ("MECC") has advanced significantly as detailed above. This direct engagement during the testwork phase has facilitated an enhanced understanding of the unique characteristics of the Yarrabubba orebody that enable the delivery of a premium iron ore product as well as the titanium by-product as well providing direct insight into the operational solutions being used in the Chinese industry.

Input from Sinosteel and MECC has also advanced the Company's market engagement around the specifications and marketing requirements of the premium Yarrabubba High Grade Iron-Vanadium product, which is expected to lead to advancing discussions around product offtake. There is clear recognition of the premium quality of the Yarrabubba High Grade Iron-Vanadium product when compared to the products generated from similar styles of orebodies in China.

The Company has maintained productive dialogue with all of its existing counterparties with which it has offtake agreements; CNMNC, Fengyuan and Big Pawer with a focus on continuing to develop these relationships as the project development progresses. Whilst the COVID-19 pandemic invoked international travel restrictions have provided some challenges to this dialogue all parties have shown a commitment to the continued development of these relationships. Site visits and in-person meetings with all of these groups will progress as soon as travel restrictions allow.

The strength of the Companies relationship with its counterparties was reinforced with the extension and expanded engagement of the MOU with Big Pawer that was delivered during the quarter. The MOU, which explores the opportunity to bring together Big Pawer's world leading proprietary VRFB technology and TMT's very high purity vanadium product, has been extended until 31 December 2021. It has also been expanded to provide the Company with an opportunity to participate in the joint development of electrolyte production facilities with Big Pawer, further strengthening the opportunity to establish a significant downstream value add industry in Western Australia. This marks another significant step in TMT's vision of becoming a key participant in the stationary storage battery market through the potential development and support of a VRFB manufacturing base to target the rapidly emerging stationary storage battery market opportunities in Australia.

The Company continues to engage with a range of groups with a shared long term view of the vanadium industry, a recognition of the high purity GVP vanadium product and highly competitive lowest quartile cash operating costs of the GVP as well as the staged development strategy that will see the delivery of the premium Yarrabubba High Grade Iron-Vanadium and titanium products as a lower cost pathway to delivery of this Tier 1 world class project.

PROJECT DEVELOPMENT PARTNER ENGAGEMENT

Technology Metals is continuing to work closely with the Northern Australia Infrastructure Facility ("NAIF"), the Western Australian Government's Lead Agency team and other Government agencies as it progresses the development of its projects. Yarrabubba to be a producer of high grade, high purity iron ore (with vanadium credits) and a titanium by-product, as the first stage leading to Gabanintha to be a producer of vanadium, a critical mineral with a vital role to play in the efficient and effective deployment of renewable energy.

Engagement with NAIF is now focused on developing a funding strategy for the Yarrabubba Iron-Vanadium Project, which is the subject of the current feasibility study. The Company has been in consultation with NAIF as the Yarrabubba strategy developed and continues to provide updates as the project progresses. It is expected that the level of engagement will increase in the near term as more details become available on the scope and timing of the project and its associated infrastructure.

The Western Australian Governments Japan based representatives of the Department of Jobs, Tourism, Science and Innovation supported and facilitated the development of the relationship with LES and the negotiation of the resulting MOU. The representatives of the Western Australian Government continue to support the evolution of this relationship as the parties work towards a mutually beneficial commercial outcome, with expected positive outcomes for both Japan and Australia. The Japan based representatives continue to work with the Company and our Corporate Advisors on a number of fronts in the Japanese market.

The emergence of Yarrabubba is a major breakthrough for the Company, delivering potential for a low risk, lower entry cost project that is complementary to, and expected to reduce funding and implementation risk for, Gabanintha. As such Yarrabubba is being viewed favourably by prospective Project financiers and strategic partners and forms a very important component in the Company's overall funding strategy.

The development of the Company's projects will have a long and meaningful impact on the economic and social development of the Mid-West and broader region, as well as at the State and National level. Ongoing engagement with these Government agencies and other stakeholders is an important part of the Companies development strategy.

TENEMENTS

All tenure required for the infrastructure at Gabanintha to support the development of the Yarrabubba Iron-Vanadium Project is in place, including Mining Lease M51/883 (granted for an initial 21 years from 28 August 2020) Miscellaneous Licences for the bore field and camp and General Purpose Leases for mining infrastructure (see Table 2 and Figure 5).

Mining Lease M51/884, which covers the Yarrabubba Iron-Vanadium Project, was granted on 28 August 2020 for an initial 21 years. The Company applied for a Miscellaneous Licence, L51/113, for the haulage corridor connecting the Yarrabubba Mining Lease with the Meekatharra – Sandstone Road, to replace the earlier application, L51/108, which was subject to an objection. The new application was designed to address the objections raised, after consultation with the objecting party, however the new application has now had an objection lodged. The Company is working through processes and procedures required to resolve the objection, including standard regulatory processes, however there is a risk that the grant of Miscellaneous Licence L51/113 may be delayed sufficiently to impact on the proposed timing of the mining approvals required for the Yarrabubba Iron-Vanadium Project.

Table 2: Tenement Status as at 31 March 2021

LOCATION	TENEMENT	INTEREST ACQUIRED OR DISPOSED OF DURING THE QUARTER	ECONOMIC INTEREST
Gabanintha Project (WA)	E51/1818	Nil	100%
Gabanintha Project (WA)	G51/29	Nil	100%
Gabanintha Project (WA)	G51/30	Nil	100%
Gabanintha Project (WA)	L51/101	Nil	100%
Gabanintha Project (WA)	L51/102	Nil	100%
Gabanintha Project (WA)	M51/883	Nil	100%
Gabanintha Project (WA)	P51/2930	Nil	100%
Gabanintha Project (WA)	P51/3140	Granted	100%
Yarrabubba Project (WA)	L51/113	Nil - Application	100%
Yarrabubba Project (WA)	M51/884	Nil	100%

CORPORATE

As at 27 April 2021 the Top 20 shareholders held 47.85% of the fully paid ordinary shares in the Company. The Company had cash of \$7.25 million as at 31 March 2021.

During the quarter the Managing Director, Ian Prentice, participated in a number of in-person and virtual investor and corporate presentations, including delivering a presentation titled "Developing the World's Next Primary Vanadium Mine" as part of the Australian Energy & Minerals Investor Conference in Brisbane on 17th to 18th March 2021, the AMEC Investor Briefing in Perth on 30 March 2021 and the StockPal's Mines Unearthed Webinar on 31st March 2021.

Project specific announcements lodged on the ASX during the March 2021 quarter were:

- Yarrabubba and Gabanintha Project Update, 22 January 2021;
- Premium High-Grade Iron-Vanadium Product Confirmed, 3 February 2021;
- Project Director Appointed to Drive Yarrabubba DFS Expanded Engagement with Leading VRFB Company, 8 February 2021;
- MOU Signed with Japanese VRFB Electrolyte Company, 15 March 2021; and
- Australian Energy & Minerals Investor Conference, 17 March 2021.

Subsequent to the end of the quarter 3.5 million unquoted Class C performance options were issued to the Directors of the Company following receipt of shareholder approval at a General Meeting held on 16 April 2021. The Class C performance options, which have a \$0.50 exercise price and expire on 1 January 2024, vest on the Company making a final investment decision for the (FID) for the Yarrabubba Project prior to 30 October 2023.

In accordance with Section 6.1 disclosure in the Appendix 5B, payments of monthly and accrued Director fees of \$88k during the March quarter.

In accordance with Section 6.2 disclosures in the Appendix 5B, the Company engages Cicero Group Pty Ltd for accounting, administrative, registered office, directorship and company secretarial services. Mr Sonu Cheema is a Director of Cicero Group Pty Ltd (\$11,000 per month exclusive of GST).

Outflows of \$321k from operating activities during the March quarter (refer Item 1.2 (a), (d) and (e) of the Appendix 5B) predominantly comprised of expensed exploration costs, corporate & legal fees, marketing & IR, KMP remuneration, staff salaries, insurance and travel expenses. Pursuant to section 2.1 (d), the capitalised exploration expenditure of \$2,072k incurred by the Company relates to Yarrabubba

Project metallurgical testwork, drilling, field expenses, legal, GVP environmental consultants, technical consultants, geological consultants and tenement administration & reporting.

Table 3: TMT Top 20 Holders report as at 27 April 2021

Position	Holder Name	Holding	% IC
1	BNP PARIBAS NOMS PTY LTD	14,280,792	9.51%
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2	GREAT SOUTHERN FLOUR MILLS PTY LTD	14,000,000	9.32%
3	COLIN DAVID ILES	5,993,485	3.99%
4	STATION NOMINEES PTY LTD	5,000,000	3.33%
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5	ATASA HOLDINGS PTY LTD	4,840,715	3.22%
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6	RETZOS EXECUTIVE PTY LTD	4,421,396	2.94%
	<retzos a="" c="" executive="" fund="" s=""></retzos>		
7	HSBC CUSTODY NOMINEES (AUSTRALIA) LIMITED	2,596,839	1.73%
8	BNP PARIBAS NOMINEES PTY LTD	2,040,004	1.36%
	<ib au="" drp="" noms="" retailclient=""></ib>		
9	BUXIAO YU	2,000,000	1.33%
10	MR RICHARD THOMAS HAYWARD DALY &	1,925,513	1.28%
	MRS SARAH KAY DALY		
	<daly a="" c="" f="" family="" s="" tom=""></daly>		
11	MR DAVID JAMES HARRINGTON	1,713,333	1.14%
12	MR JACOB EDWARDS &	1,702,671	1.13%
	MRS CATHY EDWARDS		
13	RETZOS FAMILY PTY LTD	1,651,322	1.10%
	<retzos a="" c="" family="" fund="" s=""></retzos>		
14	CITICORP NOMINEES PTY LIMITED	1,647,342	1.10%
15	SHAYDEN NOMINEES PTY LTD	1,564,866	1.04%
16	MR CON CARYDIAS	1,400,000	0.93%
17	PASIAS HOLDINGS PTY LTD	1,325,811	0.88%
18	RONAY INVESTMENTS PTY LTD	1,307,974	0.87%
19	BNP PARIBAS NOMINEES PTY LTD SIX SIS LTD	1,296,470	0.86%
	<drp a="" c=""></drp>		
20	MR PAUL VENDA DIVIN	1,139,642	0.76%
	TOTALS	71,848,175	47.85%
	Total Issued Capital	150,141,390	100.00%

ABOUT VANADIUM

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

An emerging and likely very significant use for vanadium is the rapidly developing energy storage (battery) sector with the expanding use and increasing penetration of the vanadium redox 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. VRFB's provide an efficient storage and re-supply solution for renewable energy – being able to time-shift large amounts of previously generated energy for later use – ideally suited to micro-grid to large scale energy storage solutions (grid stabilisation). Some of the unique advantages of VRFB's are:

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

Global economic growth and increased intensity of use of vanadium in steel in developing countries will drive near term growth in vanadium demand, with mid term growth supported by the emergence of VRFB's as a preferred large scale energy storage solution.

This announcement has been authorised by the Board of Technology Metals Australia Limited.

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

Ian Prentice

Managing Director Technology Metals Australia Limited

About Technology Metals Australia Limited

Technology Metals Australia Limited (ASX: TMT) was incorporated on 20 May 2016 for the primary purpose of identifying exploration projects in Australia and overseas with the aim of discovering commercially significant mineral deposits. The Company's primary exploration focus has been on the Gabanintha Vanadium Project located 40 km south east of Meekatharra in the mid-west region of Western Australia with the aim to develop this project to potentially supply high-quality V_2O_5 flake product to both the steel market and the emerging vanadium redox battery (VRFB) market.

The Project consists of nine granted tenements and one application divided between the Gabanintha Vanadium Project (8 tenements) and the Yarrabubba Project (2 tenements). Vanadium mineralisation is hosted by a north west – south east trending layered mafic igneous unit with a distinct magnetic signature. A key differentiation between Gabanintha and a number of other vanadium deposits is the consistent presence of the high-grade massive vanadium – titanium – magnetite basal unit, which results in an overall higher grade for the Gabanintha Vanadium Project.

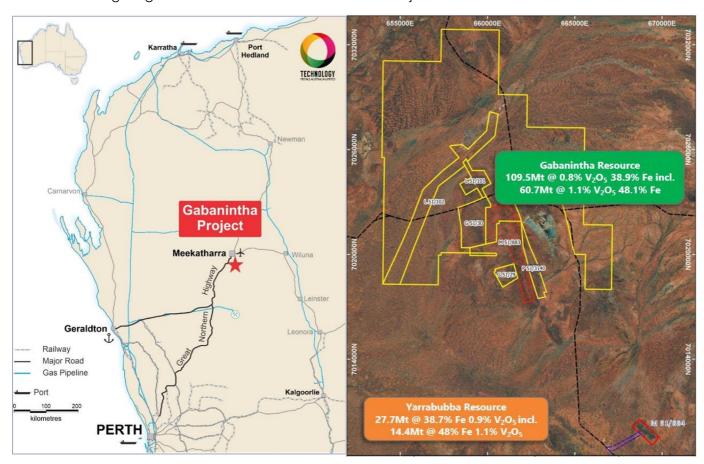


Figure 5: GVP and Yarrabubba Location and Tenure

Data from the Company's 2017 and 2018 drilling programs, including 111 RC holes and 53 HQ and PQ diamond holes at the Gabanintha Project and 31 RC holes and 4 PQ sized diamond holes completed in late 2018 at the Yarrabubba Project, has been used by independent geological consultants CSA Global to generate a global Inferred and Indicated Mineral Resource estimate, reported in accordance with the JORC Code 2012 edition, for the combined Projects. The Resource estimate confirms the position of the Gabanintha Vanadium Project as one of the highest grade vanadium projects in the world

Global Mineral Resource estimate for the Gabanintha Vanadium Project as at 29 June 2020

Material Type	Classification	Mt	V ₂ O ₅ %	Fe%	Al ₂ O ₃ %	SiO ₂ %	TiO₂%	LOI%	P%	S %
	Measured (North)	1.2	1	44.7	6.2	10.4	11.4	0	0.009	0.2
	Indicated (North)	18.5	1.1	49.1	5.2	5.8	12.9	-0.1	0.007	0.2
	Indicated (South)	7.3	1.1	49.2	5.1	5.8	12.6	-0.6	0.004	0.3
Massive	Total Indicated	25.8	1.1	49.1	5.1	5.8	12.8	-0.3	0.007	0.2
Magnetite	Inferred (North)	41	1.1	47.7	5.6	7.1	12.6	0.3	0.008	0.2
	Inferred (South)	7.1	1.1	46.9	5.6	7.4	12.1	0.5	0.005	0.3
	Total Inferred	48.1	1.1	47.6	5.6	7.2	12.5	0.3	0.008	0.2
	Massive Global	75.1	1.1	48.1	5.5	6.8	12.6	0.1	0.007	0.2
	Indicated (North)	10.3	0.6	28.6	13.1	25.5	7.5	3	0.03	0.2
	Indicated (South)	2.3	0.7	33.1	9.5	20.6	8.5	2.3	0.014	0.3
Disseminated /	Total Indicated	12.6	0.6	29.5	12.5	24.6	7.7	2.8	0.027	0.2
Banded	Inferred (North)	38.5	0.5	27.1	12.7	27.4	6.9	3.3	0.027	0.2
Magnetite	Inferred (South)	11	0.6	27.7	13	25.9	7	2.7	0.015	0.3
	Total Inferred	49.5	0.5	27.2	12.8	27.1	6.9	3.2	0.024	0.2
	Diss / Band Global	62.1	0.6	27.7	12.7	26.6	7.1	3.1	0.025	0.2
Combined	Global Combined	137.2	0.9	38.9	8.7	15.7	10.1	1.5	0.015	0.2

*Note: The Mineral Resources were estimated within constraining wireframe solids using a nominal 0.9% $V_2O_5\%$ lower cut-off grade for the massive magnetite zones and using a nominal 0.4% $V_2O_5\%$ lower cut-off grade for the banded and disseminated mineralisation zones. The Mineral Resources are quoted from all classified blocks within these wireframe solids above a lower cut-off grade of 0.4% $V_2O_5\%$. Differences may occur due to rounding.

Data from the global Mineral Resource estimate and the 2019 DFS on the GVP were used by independent consultants CSA Global to generate a Proven and Probable Ore Reserve estimate based on the Measured and Indicated Mineral Resource of 39.6 Mt at $0.9\% \ V_2O_5$ located within the Northern Block of tenements and the Southern Tenement at Gabanintha.

Ore Reserve Estimate as at 15 September 2020

Reserve Category	Tonnes (Mt)	Grade V₂O₅%	Contained V ₂ O ₅ Tonnes (Mt)
Proven	1.1	0.96	0.01
Probable	37.9	0.90	0.34
Total	39.0	0.90	0.26

- Note: Includes allowance for mining recovery (98% for massive magnetite ore and 95% for banded and disseminated ore) and mining dilution applied as a 1 metre dilution skin; resulting in a North Pit dilution for massive magnetite ore of 13% at 0.45% V₂O₅, and North Pit dilution for banded and disseminated ore of 29% at 0.0% V₂O₅; a Central Pit dilution for massive magnetite ore of 10% at 0.46% V₂O₅, and Central Pit dilution for banded and disseminated ore of 20% at 0.0% V₂O₅; a Southern Pit dilution for massive magnetite ore of 12% at 0.49% V₂O₅, and Southern Pit dilution for banded and disseminated ore of 15% at 0.21% V₂O₅)
- Rounding errors may occur

Capital Structure	
Fully Paid Ordinary Shares on Issue	150.1m
Unquoted Options (\$0.20 – 10/05/23 expiry) 1	8.00m
Unquoted Options (\$0.50 – 01/01/24 expiry) ²	4.35m
Unquoted Options (\$0.25 – 15/06/22 expiry)	6.350m
Class B Performance Rights ³	1.325m
Class C Performance Rights ⁴	1.325m

- l. Director and employee options 3.875m vested on grant of the mining licences, 4.125 million vest on Gabanintha FID
- Employee options 3.925 million vest and subject to the Company making a final investment decision (FID) for the Yarrabubba Project prior to 30
 October 2023 and 0.425 million vest subject to the Company achieving first commercial production from the Yarrabubba Project prior to 30
 October 2023
- Each Class B Performance Right is a right to receive one fully paid ordinary share in TMT, subject to the terms of the employee incentive scheme
 and subject to the Company making a final investment decision (FID) for the Yarrabubba Project prior to 30 October 2023.
- Each Class C Performance Right is a right to receive one fully paid ordinary share in TMT, subject to the terms of the employee incentive scheme
 and subject to the Company achieving first commercial production from the Yarrabubba Project prior to 30 October 2023.

Forward-Looking Statements

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

Competent Persons Statement

The information in this report that relates to Exploration Results are based on information compiled by Mr 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 Aaron Meakin. Mr Aaron Meakin is a Principal Consultant of CSA Global Pty Ltd and is a Member and Chartered Professional of the Australasian Institute of Mining and Metallurgy. Mr Aaron Meakin 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 Aaron Meakin consent 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 Daniel Grosso an employee of CSA Global Pty Ltd. Mr Grosso takes overall responsibility for the Report as Competent Person. Mr Grosso 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, Daniel Grosso 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 Yarrabubba project is based on and fairly represents, information and supporting documentation compiled by Mr Brett Morgan of METS Engineering Group Pty Ltd. 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 5B

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

Technology Metals Australia Limited				
ABN	Quarter ended ("current quarter")			
64 612 531 389	31 March 2021			

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (9 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation	(195)	(195)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(116)	(265)
	(e) administration and corporate costs	(178)	(484)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	8	13
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	561
1.8	Other (ATO Payments / Receivables)	160	313
1.9	Net cash from / (used in) operating activities	(321)	(57)

2.	Ca	sh flows from investing activities		
2.1	Pa	yments to acquire or for:		
	(a)	entities	-	-
	(b)	tenements	-	-
	(c)	property, plant and equipment	-	(11)
	(d)	exploration & evaluation	(2,072)	(4,441)
	(e)	investments	-	-
	(f)	other non-current assets	-	-

ASX Listing Rules Appendix 5B (17/07/20)

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (9 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	Net cash from / (used in) investing activities	(2,072)	(4,452)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	8,807
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	175	175
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	(397)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	Net cash from / (used in) financing activities	175	8,585

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	9,475	3,181
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(321)	(57)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(2,072)	(4,452)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	175	8,585

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (9 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	7,257	7,257

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	7,257	9,475
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	7,257	9,475

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	88
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-
	if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must includenation for, such payments.	e a description of, and an

7.	Financing facilities Note: the term "facility' includes all forms of financing arrangements available to the entity. Add notes as necessary for an understanding of the sources of finance available to the entity.	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	Total financing facilities	-	-
7.5	Unused financing facilities available at qu	arter end	-
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		
	-		

8.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (item 1.9)	(321)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(2,072)
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(2,393)
8.4	Cash and cash equivalents at quarter end (item 4.6)	7,257
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	7,257
8.7	Estimated quarters of funding available (item 8.6 divided by item 8.3)	3.03

Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.

8.8 If item 8.7 is less than 2 quarters, please provide answers to the following questions:

8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

An	sv	ve.	r·	N	Α

8.8.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

Answer: N	NΑ

8.8.3	Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?
Answe	r: NA
Note: wh	pere item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.

Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date:	28/4/21
Authorised by:	By the Board(Name of body or officer authorising release – see note 4)

Notes

- 1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
- If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
- Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
- 4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
- 5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.