VHM Limited

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Prospectus

VHM Limited
ACN 601 004 102

This Prospectus has been issued to provide information on the offer of 14,814,815 Shares to be issued at a price of $1.35 per Share to raise $20,000,000 (before costs) (**the Broker Offer**, **the Institutional Offer**, **the Priority Offer**, and **the Public Offer** (together the 'IPO Offer'). The Company will also accept oversubscriptions of an additional $10,000,000 (before costs).

This Prospectus also incorporates the offer of 35,069,753 Shares to be issued on conversion of the Convertible Notes (**Convertible Note Offer**).

It is proposed that the IPO Offer and Convertible Note Offer (together, **Offers**) will close at 5.00pm (AET) on 16 December 2022. The Directors reserve the right to close the Offers earlier or to extend this date without notice. Applications must be received before that time.

This is an important document and requires your immediate attention. It should be read in its entirety. Please consult your professional adviser(s) if you have any questions about this Prospectus.

Investment in the Securities offered pursuant to this Prospectus should be regarded as highly speculative in nature, and investors should be aware that they may lose some or all of their investment. Refer to Section 4 for a summary of the key risks associated with an investment in the Securities.

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Important Information

The Offers

This Prospectus is issued by VHM Limited (ACN 601 004 102) (**Company**) for the purpose of Chapter 6D of the Corporations Act. The IPO Offer and the Convertible Note Offer (together, the **Offer**) contained in this Prospectus is an initial public offering to acquire fully paid ordinary Shares (**Shares**) in the Company.

It is proposed that the Offer will close at 5.00pm (AET) on 16 December 2022. The Directors reserve the right to close the Offer earlier or to extend this date without notice. Applications must be received before that time.

The Offer pursuant to this Prospectus is subject to a number of conditions as outlined in Section 1.4 of this Prospectus.

Prospectus

This Prospectus is dated, and was lodged with ASIC on, 21 November 2022. Neither ASIC nor ASX (or their respective officers) take any responsibility for the contents of this Prospectus or the merits of the investment to which this Prospectus relates. The expiry date of this Prospectus is 5.00pm AET on that date which is 13 months after the date this Prospectus was lodged with ASIC. No Shares will be issued on the basis of this Prospectus after that expiry date.

Application will be made to ASX within seven days of the date of this Prospectus for Official Quotation of the Shares the subject of the Offer.

No person is authorised to give any information or to make any representation in connection with the Offer, other than as is contained in this Prospectus. Any information or representation not contained in this Prospectus should not be relied on as having been made or authorised by the Company or the Directors in connection with the Offer.

It is important that you read this Prospectus in its entirety and seek professional advice where necessary. The Shares the subject of this Prospectus should be considered highly speculative.

Canaccord Genuity (Australia) Limited have acted as Lead Manager to the IPO Offer. To the maximum extent permitted by law, the Lead Manager and each of its affiliates, officers, employees, and advisers expressly disclaim all liabilities in respect of, make no representations regarding, and take no responsibility for, any part of this Prospectus other than references to their name and make no representation or warranty as to the currency, accuracy, reliability, or completeness of this Prospectus.

The Company, the Share Registry and the Lead Manager disclaim all liability, whether in negligence or otherwise, to persons who trade Shares before receiving their holding statement.

Exposure Period

The Corporations Act prohibits the Company from processing Applications in the seven day period after the date of this Prospectus (Exposure Period). The Exposure Period may be extended by ASIC by up to a further seven days. The purpose of the Exposure Period is to enable this Prospectus to be examined by market participants prior to the raising of funds. You should be aware that this examination may result in the identification of deficiencies in this Prospectus. In such circumstances, any Application that has been received may need to be dealt with in accordance with Section 724 of the Corporations Act. Applications under this Prospectus will not be processed by the Company until after the Exposure Period. No preference will be conferred upon Applications received during the Exposure Period.

No Cooling-off Rights

Cooling-off rights do not apply to an investment in Shares issued under this Prospectus. This means that, in most circumstances, you cannot withdraw your Application once it has been accepted.

Conditional Offer

The IPO Offer contained in this Prospectus is conditional on certain events occurring. If these events do not occur, the Offer will not proceed, and investors will be refunded their Application Monies without interest. Please refer to Section 1.4 for further details on the conditions attaching to the Offer.

Electronic Prospectus and Application Forms

During the Exposure Period, an electronic version of this Prospectus (without an Application Form) will be available from **https://www.vhmltd.com.au/prospectus**/ only to persons in Australia. Application Forms will not be made available until after the Exposure Period has expired.

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The Offer constituted by this Prospectus in electronic form is only available to persons receiving an electronic version of this Prospectus and relevant Application Form within Australia.

The Prospectus is not available to persons in other jurisdictions in which it may not be lawful to make such an invitation or offer to apply for Securities. If you access the electronic version of this Prospectus, you should ensure that you download and read the Prospectus in its entirety.

Persons having received a copy of this Prospectus in its electronic form may obtain an additional paper copy of this Prospectus and the relevant Application Form (free of charge) from the Company's registered office during the Offer Period by contacting the Company as detailed in the Corporate Directory.

Applications will only be accepted on the relevant Application Form attached to, or accompanying, this Prospectus or in its paper copy form as downloaded in its entirety from **https://www.vhmltd.com.au/prospectus/**. The Corporations Act prohibits any person from passing on to another person the Application Form unless it is attached to a paper copy of the Prospectus or the complete and unaltered electronic version of this Prospectus.

Prospective investors wishing to subscribe for Shares under the IPO Offer should complete the relevant Application Form. If you do not provide the information required on the Application Form, the Company may not be able to accept or process your Application.

No document or information included on the Company's website is incorporated by reference into this Prospectus.

International Offers Restrictions

This Prospectus does not constitute an offer or invitation in any place in which, or to any person to whom, it would not be lawful to make such an offer or invitation. No action has been taken to register or qualify the Shares or the Offers, or to otherwise permit a public offering of Shares, in any jurisdiction outside Australia. The distribution of this Prospectus (including in electronic form) outside Australia may be restricted by law and persons who come into possession of this Prospectus outside Australia should seek advice on and observe any such restrictions. Any failure to comply with such restrictions may constitute a violation of applicable securities laws.

In particular, this Prospectus may be distributed, and the Shares offered and sold, in Australia and outside Australia only to Institutional Investors in other Permitted Jurisdictions. This Prospectus may only be distributed in the United States to Institutional Investors by a registered US broker-dealer affiliate of the Lead Manager and only if this Prospectus is accompanied by the US Offering Circular. The Shares have not been, and will not be, registered under the US Securities Act of 1933 or the securities laws of any state or other jurisdiction of the United States and may not be offered or sold, directly or indirectly, in the United States unless the Shares are registered under the US Securities Act or are offered and sold in a transaction exempt from, or not subject to, the registration requirements of the US Securities Act and applicable US state securities laws. See Section 1.18 for more detail on offer restrictions that apply to the IPO Offer and sale of Shares in jurisdictions outside Australia.

Speculative Investment

The Securities offered pursuant to this Prospectus should be considered highly speculative. There is no guarantee that the Securities offered pursuant to this Prospectus will make a return on the capital invested, that dividends will be paid on the Securities or that there will be an increase in the value of the Securities in the future.

Prospective investors should carefully consider whether the Securities offered pursuant to this Prospectus are an appropriate investment for them in light of their personal circumstances, including their financial and taxation position. Refer to Section 4 for details relating to the key risks applicable to an investment in the Securities.

Using this Prospectus

Persons wishing to subscribe for Securities offered by this Prospectus should read this Prospectus in its entirety in order to make an informed assessment of the assets and liabilities, financial position and performance, profits and losses, and prospects of the Company and the rights and liabilities attaching to the Securities offered pursuant to this Prospectus. If persons considering subscribing Securities offered pursuant to this Prospectus have any questions, they should consult their stockbroker, solicitor, accountant, or other professional adviser for advice.

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Forward-Looking Statements

This Prospectus contains forward-looking statements which are identified by words such as 'believes', 'estimates', 'expects', 'targets', 'intends', 'may', 'will', 'would', 'could', 'should' and other similar words that involve risks and uncertainties.

These statements are based on an assessment of present economic and operating conditions, and on a number of assumptions regarding future events and actions that, as at the date of this Prospectus, are expected to take place.

Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions, and other important factors, many of which are beyond the control of the Company, the Directors and management of the Company. Key risk factors associated with an investment in the Company are detailed in Section 4. These and other factors could cause actual results to differ materially from those expressed in any forward-looking statements.

The Company has no intention to update or revise forward-looking statements, or to publish prospective financial information in the future, regardless of whether new information, future events or any other factors affect the information contained in this Prospectus, except where required by law.

The Company cannot and does not give assurances that the results, performance, or achievements expressed or implied in the forward-looking statements contained in this Prospectus will actually occur and investors are cautioned not to place undue reliance on these forward-looking statements.

No Forecast Financial Information

After considering ASIC Regulatory Guide 170, the Directors believe that reliable financial forecasts for the Company cannot be prepared, and accordingly, financial forecasts have not been included in this Prospectus.

Production Targets

The production targets referred to in this Prospectus are underpinned solely by the Ore Reserve. The Ore Reserve underpinning the production targets has been prepared by a Competent Person in accordance with the requirements of the JORC Code (2012).

Photographs and Diagrams

Photographs used in this Prospectus which do not have descriptions are for illustration only and should not be interpreted to mean that any person shown endorses this Prospectus or its contents or that the assets shown in them are owned by the Company. Diagrams used in this Prospectus are illustrative only and may not be drawn to scale. Unless otherwise stated, all data contained in charts, graphs and tables is based on information available at the date of this Prospectus.

Miscellaneous

All financial amounts contained in this Prospectus are expressed as Australian currency unless otherwise stated. Conversions may not reconcile due to rounding. All references to '$' are references to Australian dollars.

All references to time in this Prospectus are references to AET, being the time in Sydney, New South Wales, unless otherwise stated.

Defined terms and abbreviations used in this Prospectus are detailed in the glossary in Section 10.

Corporate Directory

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Directors

Donald George Runge	Chairman
Graham Roger Howard	Managing Director
Michael Barry Allen	Executive Director
Gamini Malcolm Colless	Non-Executive Director

Company Secretary

Ian Hobson

Registered and Principal Office

VHM Limited
Suite 8, 110 Hay Street
Subiaco WA 6008
Australia

info@vhmltd.com.au

Website: https://www.vhmltd.com.au

Australian Lawyers

HWL Ebsworth Lawyers
Level 14, 264-278 George Street
Sydney NSW 2000
Australia

Investigating Accountant

RSM Corporate Australia Pty Ltd
Level 13, 60 Castlereagh Street
Sydney NSW 2000

Independent Technical Expert

CSA Global Pty Ltd (ACN 077 165 532)
Level 2, 3 Ord Street
West Perth WA 6005

Share Registry*

Automic Pty Ltd
Level 2/267 St Georges Terrace
Perth WA 6000
Australia

Lead Manager

Canaccord Genuity (Australia) Limited
(ACN 075 071 466)
Level 4, 60 Collins Street
Melbourne VIC 3000
Australia

Co-Manager*

Reach Market Pty Ltd (ACN 145 312 232)
Level 7/440 Collins St
Melbourne VIC 3000

Proposed Stock Exchange Listing

Australian Securities Exchange (**ASX**)*
Proposed ASX Code: VHM

**These entities are included for information purposes only. They have not been involved in the preparation of this Prospectus.*

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Letter from the Chairman



Dear Investor

On behalf of the Board of Directors, I am pleased to offer you the opportunity to become a Shareholder of VHM Limited "Company", the owner of a fast-emerging Tier 1 integrated rare earth and minerals sands project named Goschen.

As the world continues to transition to renewable and environmentally friendly products like electric vehicles, the gap between increasing demand for rare earth and mineral sands and declining supply is anticipated to widen. VHM is seeking to capitalise on these favourable market conditions and establish itself as a world-leading producer and supplier of critical minerals.

VHM was first established in 2014, with the grant of its first exploration licence and has since established a Mineral Resource inventory[1] of 629Mt and Ore Reserves of 198.7Mt. The Company has a substantial rare earth mineral deposit of 413,107 tonnes of total rare earth oxide (TREO), with an accompanying Tier 1 mineral sands resource, located in the premier mineral sands province in North-West Victoria, Australia.

The importance of the Goschen rare earth and mineral sands project, including the downstream processing, has been recognised by the Australian Government through the granting of 'Major Project Status.' This status highlights the significance of the Goschen Project to the nation and the future of critical minerals on an international scale.

The Company has released Proved and Probable Ore Reserves of 198Mt which support a life of mine in excess of 20 years. These underpin the recently completed Goschen Definitive Feasibility Study (Goschen DFS) which provides detailed engineering, technical and environmental information. The Company has completed all major environmental and social impact assessments needed to obtain the environmental effects statement and advance major development approvals for the Goschen Project, significantly de-risking the environmental approval process.

The Company has announced it has signed a Memorandum of Understanding (MOU) with a wholly owned subsidiary of Shenghe Resources Holding Co., Ltd. (Shenghe). The MOU provides for a dual product take or pay offtake of rare earth mineral concentrate (REMC) and zircon/titania heavy mineral concentrate (HMC) planned to be produced at the Goschen Project.

The MOU is an important step in VHM's plans to develop one of the world's largest, high-grade heavy mineral sand and rare earth mineral deposits. It represents the culmination of several months of negotiations which also involved Shenghe testing samples provided by VHM from the Goschen proposed project area.

Shenghe has committed to purchase 6,400tpa of REMC and 100,000tpa of HMC for each calendar year of the three-year agreement term, on a take or pay basis, representing approximately 60% of nominal production rate based on the 5Mtpa Goschen Project. The MOU is legally binding subject only to usual conditions (such as development approvals and project funding) and to finalisation of a comprehensive offtake agreement within four months of signing. (See Section 7.1 for a full description of the conditions).

The Company is now developing front end engineering and design (FEED) for Phase 1 of the project. Phase 1 targets processing of sand hosted deposits at a nominal throughput rate of 5Mtpa recovering concentrates of rare earth minerals, zircon, and titania. The Company is also advancing testwork for a Phase 1A hydrometallurgy circuit to further refine the Goschen rare earth products.

1. *Includes inferred, indicated and measured mineral resources. Not all mining "inventory" has reached the necessary level of confidence to be reported as a Mineral Resource.*

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The Board and Management team are highly experienced and have delivered some of Australia's most successful resource projects. Complementary to staff input, the Company has engaged highly qualified, industry leading consultants to assist where required.

Whilst development plans for the Goschen Project are significantly advanced, as with all projects, a number of actions remain. The key milestones to be completed include:

- Securing final environmental and development approvals (including the conversion of the current retention lease to a mining lease);
- Completion of further detailed engineering and design work;
- Securing additional funding (both debt and equity) to ensure that the Goschen Project development through to production and cash flow is fully funded.

Further information can be found in Sections 2.9 and 2.10 of this Prospectus.

VHM is currently seeking to raise $20 million (before costs) through the issue of approximately 14.8 million Shares. The Company will accept oversubscriptions for up to an additional $10 million (before costs) which would result (in aggregate) in the issue of approximately 22.22 million Shares. The Lead Manager to the IPO Offer is Canaccord Genuity (see Sections 7.11 and 7.13 for further details).

The proceeds of the IPO Offer will be utilised to progress development activities for the Goschen Project and exploration activities for upstream projects, being the Cannie and the Nowie Projects. The intent is to fund the Company through to making the Final Investment Decision with respect to Phase 1 of the Goschen Project. Further funding will then be required to deliver the Goschen Project with the Company to adopt a phased development approach (as further discussed in Section 2.7).

This Prospectus contains detailed information about the Offers and the current and proposed operations of the Company, as well as the risks pertaining to an investment in the Company. Potential investors in the Company should carefully consider those risks (detailed in Section 4).

We are aiming to develop a globally significant integrated Tier 1 rare earth and mineral sands project and we are well positioned to become a market leading rare earth and mineral sands producer.

We look forward to welcoming you as a Shareholder as we embark on our next stage of growth.

Yours faithfully



Donald George Runge
Chairman

Key Offer Details

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Key details of the Offer[1]	Shares (Million)			Options (Million)	Convertible Notes
Existing Securities on issue[1]			139.78	11.4[2]	3,553[3]
Shares offered under the IPO Offer ($20M and oversubscription scenarios of $25M and $30M, each at an Offer Price of $1.35 per Share)	**$20M**	**$25M**	**$30M**	-	-
	14.81	18.52	22.22		
Shares to be issued under the Convertible Note Offer[4]			35.07	-	-
Total Securities on issue on completion of the Offers[5]	189.67	193.37	197.07	11.4	Nil
Fully Diluted	**201.07**	**204.78**	**208.48**	**11.4**	**Nil**
Offer Price					$1.35
Total proceeds of IPO Offer					Minimum Subscription amount $20,000,000 Over-subscriptions of up to $10,000,000
Market capitalisation at Offer Price[6]					$20M IPO Offer: $256,048,885 $25M IPO Offer: $261,048,885 $30M IPO Offer: $266,048,885
Pro forma net cash (as at 30 June 2022)[7]					$20M IPO Offer: $27,654,146 $25M IPO Offer: $32,376,516 $30M IPO Offer: $37,098,886
Implied enterprise value at the Offer Price[8]					$20M IPO Offer: $228,394,739 $25M IPO Offer: $228,672,369 $30M IPO Offer: $228,949,999

Notes:

1. *Refer to Section 1.6 for further details relating to the proposed capital structure of the Company.*
2. *10,405,811 of these Existing Options have a nil exercise price and were issued under the Company's existing Incentive Option Plan. A further 1,000,000 Options were issued to directors Gamini Colless and Don Runge (500,000 each), having an exercise price of $1.00 and expiry date of 31 July 2025 and are subject to vesting conditions on the earlier of: (a) FID; (b) a change of control of the Company; or (c) 31 December 2023. The Company expects that a number of these Options may be exercised prior to Admission, subject to escrow arrangements.*
3. *Refer to Section 7.10 for details of the Convertible Notes.*
4. *Refer to Section 1.2 for details of the Convertible Note Offer.*
5. *Assuming no further Shares are issued and none of the above Options are exercised.*
6. *Calculated as the total number of Shares on issue on completion of the Offers multiplied by the Offer Price.*
7. *Calculated as the pro forma cash and cash equivalents less borrowings at Admission (based on 30 June 2022 actuals).*
8. *Calculated as the market capitalisation at the Offer Price, less pro forma net cash as at Admission (based 30 June 2022 actuals).*

Indicative Timetable

Event	Date
Lodgement of this Prospectus with ASIC	21 November 2022
Opening Date for the Offers	6 December 2022
Closing Date for the Offers (Broker Offer, Institutional Offer, Priority Offer, Public Offer and Convertible Note Offer)	16 December 2022
Issue Date	Week commencing 2 January 2023
Despatch of holding statements	Week commencing 2 January 2023
Expected date for Official Quotation on ASX	Week commencing 9 January 2023

Note:

The dates shown in the table above are indicative only and may vary subject to the Corporations Act, the Listing Rules, and other applicable laws. In particular, the Company reserves the right to vary the Opening Date and the Closing Dates without prior notice, which may have a consequential effect on the other dates. Applicants are therefore encouraged to lodge their Application Form and deposit the Application Monies as soon as possible after the Opening Date if they wish to invest in the Company.

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Investment Overview

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This Section is not intended to provide full information for investors intending to apply for Securities offered pursuant to this Prospectus. This Prospectus should be read and considered in its entirety. The Securities offered pursuant to this Prospectus carry no guarantee in respect of return of capital, return on investment, payment of dividends or the future value of the Securities.

Topic	Summary	More information
Introduction		
Who is the Company and what does it do?	VHM Limited (ACN 601 004 102) (Company) is an Australian rare earth mineral and mineral sands development company with a focus on tenements within the Loddon Mallee Region of Victoria. The Company was incorporated on 31 July 2014 as VHM Exploration Pty Ltd. On 3 May 2018, the Company's status changed to that of a public company and its name changed to VHM Exploration Limited. On 28 November 2018, the Company underwent a further name change and became VHM Limited. From 2014 to 2022 the Company progressively acquired, through pegging, over 6,336km^2 of near-contiguous tenements making it one of Victoria's largest mineral sands claim holders. Its current holding (following the VPM Demerger) is 2,860km^2. The Company undertook its first significant seed capital raising in September 2016 to fund initial historical drill data analysis obtained by previous tenement holders to prepare the 2017 Mineral Resource estimate in EL5520 (which is now RL006806). From 2018 to 2022, a number of wholly owned subsidiaries were incorporated for the purpose of acquiring freehold land on which the Goschen Project is situated. Those land acquisition contracts are binding, but yet to settle (with long dated and flexible settlement arrangements). Since May 2018, the Company has conducted a number of seed capital raisings to fund exploration activity at the Goschen Project and toward progressing an assessment in relation to the Proposed Operation (Phase 1) and consideration of the merits of the Hydromet Circuit (Phase 1A), which would provide further downstream processing opportunities. As at the date of this Prospectus, the Company has now spent approximately $45 million in aggregate on the Goschen Project and contiguous licences.	Section 2.1

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Topic	Summary	More information
What are the Company's projects?	The Company holds several exploration licences and one retention licence within the Loddon Mallee Region of Victoria. The Company's key project is the Goschen Rare Earth Mineral and Mineral Sands Project (Goschen Project) which is located primarily in Retention Licence 6806 (Area 1 and 3). The Company is focused on engineering development, exploration, environmental and metallurgical assessments within this project. These assessments will be used to refine plans for the proposed operations within the Goschen Project area, including the proposed location of mine pits, support infrastructure, processing facilities and site rehabilitation. The Company intends to adopt a phased development approach, with Phase 1 to initially produce zircon/titania heavy mineral concentrate (HMC) and rare earth mineral concentrate (REMC) products. The Company will progress further engineering studies for Phase 1 development. The Company also has future plans for a Hydromet Circuit (Phase 1A), which will offer additional processing of the REMC to a mixed rare earth carbonate (MREC). The IPO Offer will however provide funds to advance testwork on the Hydromet Circuit, partially toward achieving that goal. The Company's ability to deliver the Proposed Operation is subject to a number of hurdles detailed in Section 2.9. The Company also has two early-stage upstream projects, being the Cannie and Nowie Projects (further detailed in Sections 2.15 to 2.16) and has recently completed the VPM Demerger.	Section 2. See also Section 5 and Schedule 1 of the Solicitor's Tenement Report (Annexure C), and the ITAR (Annexure F)
What is the VPM Demerger?	A number of the Company's tenements were prospective for gold. A new wholly owned subsidiary (VP Minerals Limited or 'VPM') was established to take a transfer of these assets under the Demerger Asset Sale Agreement. Following the asset transfer (which received Ministerial approval in July 2022) the Company made an in-specie distribution of all Shares in VPM, to the Company's Shareholders (Demerger Distribution) which completed in August 2022.	Sections 2.2 and 7.2

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Topic	Summary	More information
What is the impact of the VPM Demerger?	The Company's Demerger Assets are now owned by VP Minerals (VPM), with the consideration provided by VPM being VPM Shares issued to the Company. The Demerger Distribution involved those VPM Shares being 'distributed' to the Company's Shareholders (as at the Demerger Record Date of 16 June 2022) resulting in both VPM (and therefore also the Demerger Assets) ceasing to form part of the Group. Further detailed information on the financial and taxation effects on the Company and the pre-IPO Shareholders was included in the meeting materials distributed in connection with the May 2022 EGM, at which VHM Shareholders approved the VPM Demerger. For clarity, any Shares received under the IPO Offer will not carry any eligibility to participate in the Demerger Distribution, given it has already completed. The Company's Noteholders were also granted options over ordinary Shares in VPM to compensate those Noteholders for the effect of the VPM Demerger. The Company continues to support VPM in a financial and technical sense through a loan facility available to VPM to fund working capital (including to fund tenement commitments until such time as VPM conducts its own capital raising) and a services agreement under which the Company provides technical, finance, administrative and support services to VPM on a cost plus 10% basis.	Sections 2.2, 7.2 and 7.3
Is the IPO Offer and Admission conditional on the VPM Demerger having first completed?	No. The VPM Demerger has already completed.	Sections 1.4, 2.2 and 7.3
What is the proposed capital structure of the Company?	Following completion of the Offer under this Prospectus and the issue of securities, the proposed capital structure of the Company will be as set out in Section 1.6.	Section 1.6

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Topic	Summary	More information
What is the proposed use of funds raised under the Offer?	The Company proposes to use the funds raised from the IPO Offer to fund the Company through to the making of a Final Investment Decision (FID) to proceed with the Goschen Project (Phase 1). Refer to Section 2.7(b) for a detailed explanation of the staged development plan, comprising Phases 1, 1A and 2. Specifically, the funds will enable the advancement of the following, up to the point of FID: • Continue study and test work programs in the form of FEED for Phase 1 • Completion of the Minister's recommendation for the Environment Effects Statement (EES) for the Proposed Operation in H2 2023; • Targeting receipt of approval of mine Work Plan and secondary consents for the Proposed Operation in H1 2024; • Continued exploration within the Goschen Project area to expand and further prove up additional Mineral Resources; • Continued exploration of the Cannie and Nowie ore bodies, to generate Indicated Mineral Resource estimates for the purpose of securing Retention Licences; • Offtake agreement for the Goschen Project: finalising the definitive offtake agreement with Shenghe and securing one or more additional offtake partners; • Land and Tenements: Meet obligations to maintain tenements in good standing; • Continued development of the Hydromet Circuit Phase 1A via testwork programs. Further funding will be required to complete further testwork programs and engineering studies needed to advance Phase 1A.	Section 1.7 and Section 2.7(b)
How did the Company spend or commit the Pre-IPO funds?	Funds raised from the Pre-IPO Offer have been committed toward: • Project study development of the Goschen Project (including Hydromet Circuit and MSP), and a FEED study phase; • Further analysis of the Hydromet Circuit to refine costs and operational parameters; • Acquisition of bulk product samples for design testing and marketing purposes; and • Regulatory approvals and permitting. Cash on hand, as at 1 October 2022 was approximately $11.1 million.	Section 1.8

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Topic	Summary	More information
What is the Company's strategy and aims?	Following Admission, the Company aims to finalise development plans for the Proposed Operation with first production from Phase 1 targeted in H1 2025. The Company is also assessing the optional addition of the Hydromet Circuit (Phase 1A), with targeted delivery in 2026. As at the date of this Prospectus, each of the above aims is an aspirational statement. The Company does not yet have reasonable grounds to believe each of the aims can be achieved or achieved within the proposed timeframe. There are still a number of hurdles that must be addressed before these aspirations can be realised, including the final stage of studies to support FID (to be funded by this IPO Offer) and securing additional sufficient finance for delivery of the Goschen Project. Refer to Section 2.9 for a detailed overview of the key hurdles, and to Section 2.10 for details of the further significant funding required. The Company will also continue to explore for rare earth minerals (REM), zircon, titania, and gold within its existing tenements.	Sections 2.1 to 2.4 and Sections 2.7 to 2.10 See also Sections 2.14 to 2.16
Financial position		
What is the Company's financial position?	The Company was registered on 31 July 2014. Given the Company's history as a mineral exploration company, it has not earned any revenue from its activities to date. An Independent Limited Assurance Report is included in Annexure D and financial information about the Company is included at Section 5. The Board is satisfied that upon completion of the IPO Offer, the Company will have adequate working capital to meet its stated objectives (being to fund the Company through to a Final Investment Decision to proceed with the development of the Goschen Project.	Section 5 and ILAR (Annexure D)
Historical statutory statement of profit or loss and other comprehensive income	The table below presents the summarised audited historical statutory statement of profit or loss and other comprehensive income for FY20, FY21 and FY22. Further discussion regarding the summarised historical statutory statement of profit or loss and other comprehensive income are outlined in **Section 5**.	

$'000	FY20 Audited	FY21 Audited	FY22 Audited
Total operating expenses	(6,172)	(5,333)	(6,599)
EBITDA	(6,172)	(5,333)	(6,599)
EBIT	(6,340)	(5,487)	(6,725)
NLBT	(7,250)	(6,590)	(9,150)
NLAT	**(7,250)**	**(6,590)**	**(9,150)**

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Topic	Summary	More information

Historical statutory and pro forma statement of financial position

The table below sets out the summarised audited historical statutory and unaudited pro forma statement of financial position as at 30 June 2022. Details of the pro forma statement of financial position, including the subsequent events and pro forma adjustments are outlined in **Section 5**.

As at 30 June 2022 $'000	VHM Audited	Minimum Pro forma	Oversubscription Pro forma
Current assets	25,305	38,372	47,854
Non current assets	37,955	40,426	40,426
Total assets	**63,260**	**78,798**	**88,280**
Current liabilities	5,427	7,499	7,499
Non current liabilities	40,489	6,416	6,416
Total liabilities	**45,916**	**13,915**	**13,915**
Net assets	**17,344**	**64,883**	**74,365**

Historical statutory statement of cash flows

The table below sets out the summarised audited historical statutory statement of cash flows for FY20, FY21 and FY22. Further discussion regarding the summarised historical statement of cash flows is set out in **Section 5**.

$'000	FY20 Audited	FY21 Audited	FY22 Audited
Net operating cash outflows	(3,711)	(4,343)	(3,989)
Net investing cash outflows	(3,083)	(2,137)	(10,399)
Net financing cash inflows	4,753	17,022	27,879
Net change in cash and cash equivalents held	**(2,041)**	**10,542**	**13,491**
Cash and cash equivalents at the beginning of the financial period	2,374	333	10,875
Cash and cash equivalents at the end of the financial period	**333**	**10,875**	**24,366**

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Topic	Summary	More information
Key strengths and investment highlights		
Phased development approach	The Company will implement a phased approach to the development of its Goschen Project, initially targeting a nameplate processing rate of 5Mtpa through the mining unit plant. Phase 1 is the 'Base Project' consisting of a mining unit plant (MUP), feed preparation plant (FPP), wet concentrator plant (WCP), and rare earth mineral (REM) flotation circuit (all defined to DFS level). The product suite will consist of zircon/titania heavy mineral concentrate (HMC) and REMC products. Phase 1A consists of the inclusion of a Hydromet Circuit downstream of the Phase 1 REM flotation circuit, currently expected to come online approximately 18 months after Phase 1 first production. This further processing will produce a mixed rare earth carbonate product (MREC). The Hydromet Circuit (Phase 1A) was decoupled from the Base Project (Phase 1) given that work in connection with the Hydromet Circuit is at a level of maturity equivalent to an advanced scoping study, rather than DFS level.	Section 2.7
Globally significant Tier 1 rare earth and mineral sands project	• Goschen has a substantial, rare earth deposit of 413,107 tonnes of total rare earth oxides (TREO), with an accompanying Tier 1 mineral sands resource (629Mt Mineral Resource, comprising measured, indicated, and inferred resources). • The current Proved and Probable Ore Reserve is 198.7Mt. The DFS prioritised 98Mt which is sufficient to supports a >20 year life of mine (LOM) Plan. • Scalability of the Goschen Project is underpinned by a significant Mineral Resource inventory with further resource expansion potential.	Sections 2.3, 2.6 and 2.14 See also Section 8, 13 and 14 of the ITAR (Annexure F)
Advanced plant design and unique commodity mix	• Unique and diverse rare earth and mineral sands product mix. • Composition of mineral in fully liberated sand allows for low cost processing (no crushing or blasting required). • Well understood proven industry standard processing technology. • Testwork programs indicate the rare earth and mineral sands plant will produce high quality, low impurity concentrates. • Current modelling indicates that 67% of proposed revenue expected to be generated from the LOM Plan would be derived from the production of a rare earth mineral concentrate (REMC). Subject to the implementation of the Hydromet Circuit (in Phase 1A) leading to the production of mixed rare earth carbonate (MREC), the contribution to aggregate revenue (based on current modelling) from rare earth based products are anticipated to increase to 80% of total revenue.	Sections 2.3, 2.6, 2.7 and 3 See also Sections 7 and 8 of the ITAR (Annexure F)

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Topic	Summary	More information
Strategic asset in a stable established mining jurisdiction	• Granted "Major Project Status" by the Australian Government given its national significance. This is a key step to securing government funding and approvals support. • Located in a premier mining jurisdiction with existing infrastructure, a skilled workforce and strong local, State and Federal Government support.	Section 2.3 and 2.6
Clear pathway to production	Subject to FID and the project development pathway disclosed in Sections 2.4 and 2.9 (including final approvals, securing an offtake partner and further project funding): • Goschen DFS completed in March 2022; • Requisite FEED studies advancing to complete plans for the Goschen Project to support FID; • FID (Phase 1) on the Goschen Project is expected in H2 2023 and targeted production in H1 2025; • All major environmental and social impact assessments for the approvals process are well advanced.; • Testwork program to enable the continued assessment of the design of the Hydromet Circuit.	Sections 2.4, 2.7, 2.9 and 2.10
First offtake partner secured	• Executed and legally binding offtake MOU signed for the sale of REMC and HMC representing greater than 50% of nameplate production for an initial three year term (subject to usual conditions in relation to project delivery, funding, and final transaction documents).	Section 7.1
Experienced Board and Executive Management team and Consultants	• Experienced Board and Executive Management team previously involved in delivering some of Australia's most successful resource projects. • Supported by Tier 1 consultants engaged to conduct rigorous project studies.	Section 6.1 to 6.4 and Section 7.9

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Topic	Summary	More information
Hurdles to delivering Goschen Project		
What are the key hurdles to delivering the Goschen Project?	There are a number of hurdles to be addressed in order for the Company to deliver Phase 1 of the Goschen Project, the most material of which are: • Obtaining all required environmental and development approvals, including the grant of a mining lease; • Completion of detailed engineering and design for the Proposed Operation and associated infrastructure with outcomes sufficient to support FID; • Securing further funding (both debt and additional equity) to advance the Goschen Project (after FID); and • Securing one or more additional offtake partners, with offtake already committed for greater than 50% of nameplate production. This is a summary only. Further detailed disclosures are outlined in Section 2.4 and 2.9.	Section 2.9
How much additional project funding is required?	Subject to the outcome of FEED and detailed design, the Board anticipates that in addition to the funds raised under the IPO Offer, a further mid-point estimate of $445 million will be required to deliver the Goschen Project. This includes Capex with a mid-point estimate of $360 million, (adjusted for inflation) and an additional $85 million for ancillary costs (including, corporate operating costs, land purchases, pre-production mining operations, and engineering studies for subsequent phases), and indexation/inflation provisions for capital costs. The Capex estimate is predominantly derived from components estimated at DFS level of accuracy (being ±15%). Based on preliminary discussions with a number of potential financiers, it is expected that indicatively, financing is likely to comprise debt financing in the vicinity of $300 million (plus capacity for letters of credit for environmental bonds) and further equity financing of approximately $145 million. This does not include any additional funding for implementation of the Phase 1A Hydromet Circuit which was only partially encapsulated within the Goschen DFS. Preliminary estimates for additional Capex needed to fund Phase 1A is expected to be in the range of $115–$125 million, which will be further assessed following finalisation of pilot plant testwork program and engineering studies for Phase 1A. Investors should review the further detailed disclosure in Section 2.10 for a high-level overview of the anticipated impacts of this further financing.	Section 2.10

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Topic	Summary	More information
Summary of key risks		
Prospective investors should be aware that subscribing for Securities in the Company involves risks. The risk factors outlined in Section 4, and other general risks applicable to all investments in listed securities, may affect the value of the Securities in the future. Accordingly, an investment in the Company should be considered highly speculative. This section summarises the key risks associated with investment in the Company. Investors should refer to Section 4 for a more detailed summary of the risks.		
Limited history	The Company was incorporated in July 2014. It has limited operational and financial history from which to evaluate its business and prospects. No assurance can be given that the Company will achieve commercial viability through the successful exploration on, or mining development of, its projects. Until the Company is able to realise value from its projects, it is likely to incur operational losses.	Section 4.1(a)
Conditionality of IPO Offer	The obligation of the Company to issue the Securities under the IPO Offer is conditional on ASX granting approval for Admission to the Official List. If this condition is not satisfied, the Company will not proceed with the IPO Offer. This would have a material adverse effect on the Company's financial position.	Section 4.1(b)
Future capital requirements	The Company has no operating revenue and is unlikely to generate any operating revenue unless and until the Proposed Operation is successfully developed and Phase 1 production commences. The Company will require ongoing funding to meet its objectives of developing and operating the Proposed Operation and subsequent phases of the Hydromet Circuit (Phase 1A), MSP (Phase 2) and, if it chooses to proceed, the AREM Refinery and to settle on the purchase of land which the Company has contracted to buy. Section 2.10 details the further debt and equity financing which the Company expects it will require to achieve these aims. There can be no certainty that the Company can raise the necessary funds. Any equity financing will be dilutive to Shareholders and may be undertaken at lower prices than the then market price. Debt financing, if available, may involve restrictive covenants which limit the Company's operations and business strategy. Although the Directors believe additional capital can be obtained, no assurances can be made that appropriate capital or funding, if and when needed, will be available on terms favourable to the Company or at all.	Sections 4.1(c) and 2.10

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Topic	Summary	More information
Potential for dilution	The IPO Offer, if successful will result in the Company's Shares increasing from 139,781,273 to 189,665,841 (assuming the Minimum Subscription is raised). This includes the impact of conversion of the Convertible Notes and represents an increase of approximately 35.69%. If existing Shareholders do not participate in the IPO Offer (and even if they do), their holdings may be considerably diluted as compared to their holdings and number of Shares on issue as at the date of this Prospectus. Further, additional equity funding required to deliver the Proposed Operation may also be dilutive.	Section 4.1(d)
Permitting Risk – Proposed Operation	The Company's ability to proceed with the Proposed Operation is dependent upon its ability to secure all necessary approvals, permits and licences. The most material approvals yet to be obtained include securing a mining lease, obtaining all necessary environmental approvals, planning approvals and works licences. Whilst the environmental and social impact assessments are already well advanced, there is a risk that regulators may not consider their requirements to have been met. This could result in additional monitoring, assessments, costs, and delay to the Company's proposed development schedule. There is also a risk of delays caused by community unrest, or due to a recent change in Federal government, or at State level following the Victorian State election scheduled for November 2022. To the extent that required authorisations are not obtained or are delayed, the Company's operational and financial performance may be materially adversely affected.	Section 4.1(e)
Final Investment Decision (FID) pending	The Company is yet to make the Final Investment Decision (FID) to proceed with the Goschen Project. Whilst the Goschen DFS has been completed, several other factors need to be adequately addressed before the economic viability of the Goschen Project can be confirmed. Until these matters are addressed, it would not be prudent for the Board to commit the Company to proceeding with these projects.	Sections 4.1(f), 1.9, 2.7 and 2.9
LOM Plan	The LOM Plan discussed in Section 2.7(c) is currently based on a number of assumptions which still need to be fully evaluated. As the Company moves through its further assessment and preparatory work in relation to the Proposed Operation, there is a risk that key assumptions on which the LOM Plan is based may prove to be untrue or require adjustment. This could result in material changes to expected Capex or Opex, financing costs, commodity prices and other factors, which could significantly change the expected financial outcomes or potentially jeopardise the economic viability of the Goschen Project.	Sections 4.1(g), 2.7(c) and 2.7(d) See also Sections 7 to 13 and 15 of ITAR (Annexure F)

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Topic	Summary	More information
Offtake Risk	The Company has signed a legally binding MOU with Shenghe in respect of over 50% of its nameplate production, for an initial three year term. This commitment is however subject to certain conditions first being met (as described at Section 7.1). There is no guarantee that these conditions will be met. Additionally, the Company is yet to secure offtake arrangements for the balance of its expected production from the Proposed Operation. The Company's ability to generate sufficient revenue or to secure debt financing for the Goschen Project is dependent upon its ability to secure offtake partners for all or most of its production. There can be no certainty the Company can enter into offtake contracts covering all of its production, at prices or on terms which support the economics or funding of the Company's projects.	Section 4.1(i)
Land Acquisition Risk	Certain of the Company's subsidiaries are party to three land acquisition contracts for freehold land which is necessary for development of the Goschen Project and to conduct the proposed mining operations. These subsidiaries currently owe the vendors an aggregate amount of approximately $13 million under these three contracts, payable in monthly instalments over five years in the case of one contract and ten years in the case of the other two contracts. A fourth land acquisition agreement is expected to be concluded for additional freehold land within the project area in he next 4 - 6 weeks, with total consideration of approximately $2.7 million, payable in instalments within six months of signing. The ability to continue to meet those payments is dependent upon the Company's ability to raise further capital, including under the IPO Offer. If the subsidiaries are unable to make these payments, there is a risk the contracts will be terminated, and the subsidiaries will not acquire the land. There is also a risk that any counterparty could default in the performance of their obligations. Either of these outcomes could result in a potential delay to project development and may deny the Company access to the Ore Reserves located on those properties. The land acquisition contracts have however been structured such that they are legally binding on the vendors (and now unconditional), with long dated settlements. This provides the Company with the flexibility to determine the timing of acquisition relative to operational needs. The Company does not intend to settle on these contracts until required for construction or mining operations.	Sections 4.1(j) and 7.5

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Topic	Summary	More information
Native title risk	There may be areas of the Company's tenements over which legitimate common law native title rights exist. The grant of mining authorisations (such as a mining licence in respect of the land covered by a retention licence) typically constitutes a 'future act' (being something done on land / waters, or the authorisation of such activities, which would be inconsistent with native title). A 'future act' can be lawfully undertaken if it is validated pursuant to certain statutory procedures. If statutory procedures are not followed, that future act is invalid to the extent of inconsistency with native title, and compensation may be payable for actions that impair the exercise of native title rights. Native title risk also arises in relation to tenements which are yet to be granted to the Company. This includes any future mining licences sought in respect of the land covered by RL006806 or any of the other tenements. This risk can be managed by following appropriate 'future act' validation procedures, such as the 'right to negotiate' process or entry into an Indigenous Land Use Agreement (ILUA) with registered native title holders or claimants. Project scheduling must therefore consider any need to comply with 'future act' procedures. The Company's tenements currently overlap a native title claim, native title determination and two ILUAs to varying degrees, outlined in the Solicitor's Tenement Report. It is possible the terms and conditions of any such ILUAs may be unfavourable for, or restrictive against, the Company.	Section 4.1(k) and Section 6 of the Solicitor's Tenement Report (Annexure C)
Land access risk	The Tenements overlap with land that is the subject of other rights, including: • Parcels of private land; • Crown Land which is restricted under the Victorian Mining Act; and • Crown land that falls within the Box-Ironbark region of the state of Victoria. Any delays or costs relating to conflicting third-party rights, obtaining necessary consents, or compensation obligations may adversely affect the Company's ability to carry out exploration or mining activities within the affected areas.	Section 4.1(l) See also Section 8 of the Solicitor's Tenement Report (Annexure C)
Mineral Resources and Ore Reserves estimates	The Company's present Mineral Resource and Ore Reserve estimates are compliant with the JORC Code 2012 and are expressions of judgement based on knowledge, experience, and industry practice. Having said this, the various statements have been prepared by differing competent persons, at differing times using differing commodity price decks. Estimates which were valid when initially calculated may alter significantly when new information or techniques become available or when updated commodity price decks are used. In addition, by their very nature, Mineral Resource and Ore Reserve estimates are imprecise and depend to some extent on interpretation which may prove to be inaccurate.	Section 4.1(n) See also Sections 6, 13 and 15 of the ITAR (Annexure F)

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Topic	Summary	More information
Hydromet Circuit (Phase 1A)	In May 2022, the Company commenced early process and testwork definition for the Hydromet Circuit, to establish a basis for the further engineering study. The Hydromet Circuit will further refine the rare earth mineral concentrate (REMC) produced at the Goschen Project, into in a mixed rare earth carbonate (MREC) product. This Hydromet Circuit is proposed to be included within the Phase 1A processing of the Goschen Project. . Further testwork and engineering work is required to be undertaken to finalise the plans and inform final assessment of the Hydromet Circuit, for which further funding will be required in addition to the IPO Offer proceeds.	Section 4.1(o)
Results of studies	Subject to the results of exploration and testing programs to be undertaken, the Company may progressively undertake a number of studies relating to its projects. These studies include the Goschen FEED studies (for Phase 1 required to reach FID) and (subject to further funds being raised) engineering studies on the Hydromet Circuit (for Phase 1A). Any studies will be completed within parameters designed to determine the economic feasibility of a project within certain limits. There can be no guarantee any of the studies will confirm the economic viability of the projects. Even if a study confirms the economic viability of a project, there can be no guarantee the Company can raise the development funding or the project will be successfully brought into production as assumed or within the estimated parameters in the Goschen DFS (e.g. operational costs and commodity prices) once production commences.	Section 4.1(p) See also Section 7 and 8 of the ITAR (Annexure F)
Price rises	All costing and pricing used by the Company to estimate Capex, Opex and future funding required to deliver the Proposed Operation are best estimates based on Goschen DFS data as of March 2022, and revised pricing for current energy prices where appropriate. There can be no certainty that costs, and prices will not increase (including due to inflation in the ordinary course) between now and the Company making contractual commitments for each of the relevant Goschen Project inputs.	Section 4.1(q)
New Miner and Execution Risk	Whilst key members of the Board and executive team have extensive industry experience in developing and operating mines, the Company has not previously operated a mine. The development and delivery of substantial projects such as the Goschen Project will consume a large amount of management time and attention and will require the Company to scale up its workforce over time. It also carries significant risks, including potential delays or costs in implementing necessary changes, and difficulties in establishing new operations.	Section 4.1(r)

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Topic	Summary	More information
Operation and Cost Risk	If the Company can successfully develop and deliver the Proposed Operation, it will be subject to a number of additional risks associated with running mining and processing operations. The Company's future success would be dependent upon a continuation of production generating operating surpluses to service debt financing and provide necessary working capital, including funding its other planned expenditure and exploration programs. Whether it can do so will largely depend upon the efficient and successful operation and exploitation of the resources and associated business activities and management of commercial factors. The mining and exploration activities of the Company may be affected by a number of factors, relating to: • geological conditions; • failure to achieve predicted grades and/or resources in future project mining and processing of ore; • operational and technical difficulties encountered in mining and processing; • environmental matters; • insufficient or unreliable infrastructure; • force majeure events; • weather patterns; • equipment failures; • continued availability of technical equipment, plant, and appropriately skilled and experienced technicians; • industrial matters; and • adverse changes in government policy or legislation; and access to the required level of funding and unforeseen cost changes beyond the control of the Company. This can negatively impact the Company's activities, thereby affecting its future profitability and the value of its securities. There is a risk that unforeseen geological and geotechnical difficulties could affect production and/or require additional operating or capital expenditure to rectify problems and thereby have an adverse effect on the Company's financial and operational performance. Further, until completion of all FEED for Phase 1, and securing proposals for an EPC contract and other required infrastructure, the Company's final Capex and Opex estimates will be subject to adjustment.	Section 4.1(s) See also Sections 7 to 13 and 15 of the ITAR (Annexure F)

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Topic	Summary	More information
Access to services	Given the current high levels of activity in the resources industry, it may be difficult for the Company to procure access to the necessary services to undertake exploration and related activities at its key projects. These services include access to drill rigs and drilling operators via the relevant contractors, geologists, and timely access to assay labs and results therefrom.	Section 4.1(t)
Access to personnel and personnel housing	Australia's labour market is currently experiencing a number of constraints which may make it difficult to procure sufficient personnel to operate the Goschen Project. Accommodation opportunities in the towns closest to the project area (Kerang and Swan Hill) are also constrained. If adequate accommodation (or transport to site) cannot be sourced, the Company may need to update its development plans to include the construction of an on-site accommodation camp which would have a corresponding impact on both Capex and Opex.	Section 4.1(u) See also Section 9.1.4 of the ITAR (Annexure F)
R&D claims	As an explorer, the Company has previously claimed material amounts of tax offsets relating to its research and development activities. These claims have been self-assessed based on advice from specialist advisory firms but are subject to comprehensive criteria and may be subject to future audit and adjustment or claw-back.	Section 4.1(aa)
Title risk	Interests in all tenements in Victoria are governed by State legislation and are evidenced by the granting of licenses or leases. Each license or lease is for a specific term and carries with it annual expenditure and reporting commitments, as well as other conditions requiring compliance. Consequently, the Company could be exposed to additional costs, have its ability to explore or mine the Tenements reduced or lose title to or its interest in the Tenements if license conditions are not met or if insufficient funds are available to meet expenditure commitments.	Section 4.2(a) See also the Solicitor's Tenement Report (Annexure C)

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Topic	Summary	More information
Aboriginal heritage risk	There are Aboriginal heritage objects and/or places within the area of the Company's tenements which are either registered or have been lodged for registration. There is a risk additional Aboriginal objects or places may exist on the land the subject of the tenements, and it is an offence to disturb or damage such objects or places without a cultural heritage permit or approved cultural heritage management plan. The existence of such objects may preclude or limit mining activities in certain areas of the tenements or cause delays in the progression of the development of a mine.	Section 4.2(b) and Section 6 of the Solicitor's Tenement Report (Annexure C)
Exploration and development risks	Mineral exploration and development are a high-risk undertaking. There can be no assurance that exploration of the projects (or any other exploration properties that may be acquired in the future) will result in the discovery of an economic resource. The exploration and development activities of the Company may be adversely affected by a range of factors including geological conditions, unanticipated technical and operational difficulties, seasonal weather patterns, contracting risk from third parties providing essential services and changing government laws and regulations.	Section 4.2(c)
Metallurgy	Metal and/or mineral recoveries are dependent upon the metallurgical process required to liberate economic minerals and produce a saleable product and by nature contain elements of significant risk such as: • identifying a metallurgical process through test work to produce a saleable metal and/or concentrate; • developing an economic process route to produce a metal and/or concentrate; and • changes in mineralogy in the ore deposit which can result in inconsistent metal recovery, affecting the economic viability of the Goschen Project.	Section 4.2(d) See also Sections 8 and 15 of the ITAR (Annexure F)
Mineral Resource estimate risks	The Company has already defined a resource at its Goschen Project. It intends to undertake further exploration activities at Goschen and to develop the ore bodies at its Cannie and Nowie Projects. However, no assurances can be given that the exploration will result in the determination of any additional resources. Even if such resources are expanded or identified, no assurance can be provided that this can be economically extracted.	Section 4.2(e) See also Section 6, 13 and 15 of the ITAR (Annexure F)

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Topic	Summary	More information
Minerals and currency price volatility	The Company's ability to proceed with the development of its projects, and benefit from any future mining operations will depend on market factors, some of which may be beyond its control. The Company's potential earnings will be largely derived from the sale of REM and heavy mineral sands (HMS). The prices for HMS and REM are negotiated prices and so any substantial decline in the prices of these commodities, or increase in transport or distribution costs, may have a material adverse effect on the Company and the value of its Shares. Commodity prices fluctuate and are affected by factors beyond the control of the Company. These factors include: • current and expected future supply and demand; • forward selling by producers; • production cost levels in major mineral producing centres; and • macroeconomic conditions such as inflation and interest rates.	Section 4.2(g)
Exchange rate risk	The international prices of most commodities are denominated in United States dollars while the Company's cost base will be in Australian dollars. Consequently, changes in the Australian dollar exchange rate will impact on the earnings of the Company.	Section 4.2(h)
Environmental risk	The operations and proposed activities of the Company are subject to State and Federal laws and regulations concerning the environment. As with most exploration projects and mining operations, the Company's activities are expected to impact the environment, particularly if advanced exploration or field development proceeds. The Company's tenements are subject to conditions, including environmental matters. Such conditions are based on standard terms setting out the minimum operating requirements which the licence holder must comply with. It is the Company's intention to conduct its activities in compliance with all environmental laws, and the conditions of its environmental approvals. The disposal of process tailings, operational waste and mine water discharge are under constant legislative scrutiny and regulation. There is a risk that environmental laws and regulations become more onerous making the Company's operations more expensive. Approvals are required for land clearing and for ground disturbing activities. However, the Company may be unsuccessful in obtaining an approval, or may obtain an approval on unacceptable conditions or even with an approval, the Company may be the subject of accidents or unforeseen circumstances which could subject the Company to extensive liability.	Section 4.2(j) and Section 5 and Schedules 1 to 3 of the Solicitor's Tenement Report (Annexure C)

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Topic	Summary	More information
Climate change risks	Mining of mineral resources is relatively energy intensive and is dependent on the consumption of fossil fuels. As a mining development company, the Company is exposed to both transition risks and physical risks associated with climate change. The climate change risks particularly relevant to the Company include: • transitioning to a lower-carbon economy may entail extensive policy, legal, technology and market changes. Increased regulation and government policy designed to mitigate climate change may adversely affect the Company's cost of operations and affect the financial performance of the Company; • physical risks resulting from climate change can be acute or chronic. Acute physical risks refer to those which are event-driven, including increased severity of extreme weather events, such as cyclones or floods. Chronic physical risks refer to longer term shifts in climate patterns (for example, sustained higher temperatures) which may cause sea level rises or chronic heat waves. The transition and physical risks associated with climate change (including also regulatory responses to such issues and associated costs) may significantly affect the Company's operating and financial performance; and • hydrology – current planning is for all mining to be dry mining to occur above the water table. Changes in climate can affect rainfall and the water table, which could affect mining methods and impact costs.	Section 4.2(m) See also Section 7 of ITAR (Annexure F)
Infectious diseases: COVID-19	The outbreak of the coronavirus disease (COVID-19) is continuing to affect global economic markets. The global economic outlook is facing uncertainty due to the pandemic, which has had and may continue to have a significant impact on capital markets. The Company's Share price may be adversely affected by the economic uncertainty caused by COVID-19. Further measures to limit the transmission of the virus implemented by governments around the world (such as travel bans and quarantining) may adversely impact the Company's operations and may interrupt/prevent the Company carrying out its contractual obligations or cause disruptions to supply chains.	Section 4.3(h)

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Topic	Summary	More information
General risks	The Company is subject to various general risks, including the following: (a) economic risk; (b) market conditions risk; (c) technology failure; (d) force majeure risk; (e) unforeseen expenditure risk; and (f) changes to law.	Section 4.3
Directors, Related Party Interest and Substantial Holders		
Who are the Directors?	The Board of the Company is comprised of: (a) Donald George Runge – Chairman; (b) Graham Roger Howard – Managing Director; (c) Michael Barry Allen – Executive Director; and (d) Gamini Malcom Colless – Non-Executive Director.	"Corporate Directory" and Section 6.1
What benefits are being paid to the Directors?	Donald Runge has entered into a non-executive letter of appointment services agreement with the Company. He will receive $130,000 per annum (including statutory superannuation) for services provided to the Company as Non-Executive Chairman. Graham Howard has entered into an executive services agreement with the Company. He is engaged as a Managing Director of the Company and entitled to receive $525,000 per annum (including statutory superannuation). Michael Allen has entered into an executive director letter of appointment with the Company. He will receive $375,000 per annum (including statutory superannuation) for services provided to the Company as an Executive Director. Gamini Colless has entered into a non-executive director letter of appointment with the Company. He will receive $90,000 per annum (including statutory superannuation) for services provided to the Company as Non-Executive Director.	Section 6.6 and Sections 7.14 to 7.16

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<table>
<tr><th>Topic</th><th>Summary</th><th>More information</th></tr>
<tr><td>What interests do Directors have in the securities of the Company?</td><td>The Directors and their related entities hold the following interests in Securities in the Company as at the date of this Prospectus and will have the following interests in Securities on Admission:
<table>
<tr><th>Director</th><th>Shares</th><th>Options</th><th>Convertible Notes</th></tr>
<tr><td>Donald Runge</td><td>4,498,287</td><td>500,000</td><td>Nil</td></tr>
<tr><td>Graham Howard</td><td>4,515,515</td><td>2,156,230</td><td>Nil</td></tr>
<tr><td>Michael Allen</td><td>736,000</td><td>1,519,102</td><td>Nil</td></tr>
<tr><td>Gamini Colless</td><td>918,831</td><td>500,000</td><td>Nil</td></tr>
</table>
As at the date of this Prospectus, none of the Directors currently intend to participate in the IPO Offer.
See Section 6.6 for further details of the Directors' Security holdings.</td><td>Section 6.5</td></tr>
<tr><td>What important contracts with related parties is the Company a party to?</td><td>The Company has entered into the following related party transactions on arms' length terms:
letters of appointment with each of its Directors on standard terms (refer to Section 7.12 for details);
deeds of indemnity, insurance, and access with each of its Directors on standard terms (refer to Section 7.16 for details).
The Company has no other related party transactions.</td><td>Section 6.8</td></tr>
<tr><td>Who will be the substantial holders of the Company?</td><td>Shareholders (and their associates) holding an interest in 5% or more of the Shares on issue as at the date of this Prospectus are outlined in the table below.
<table>
<tr><th>Name</th><th>Shares</th><th>%</th></tr>
<tr><td>Ellison (WA) Pty Ltd (Ellison)</td><td>14,392,724</td><td>10.30</td></tr>
</table>
Ellison also holds Convertible Notes. When converted, and assuming that Ellison does not subscribe for any additional Shares under the IPO Offer his interest will be as set out below (based on the Minimum Subscription amount being raised). The Company is not presently aware of any other party who will hold 5% or more of the Shares on Admission, however, will update the market in due course.
<table>
<tr><th>Name</th><th>Shares</th><th>%</th></tr>
<tr><td>Ellison[1]</td><td>18,007,539</td><td>9.49</td></tr>
</table>
1. Should Ellison choose to participate in the IPO Offer to the extent necessary to prevent dilution, this amount will increase to 19,529,239 (10.30%).</td><td>Section 8.5</td></tr>
</table>

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Topic	Summary	More information
What fees are payable to the Lead Manager?	The Company will pay the Lead Manager (or its nominees) a management fee of 5.0% of the gross amount raised under the IPO Offer (Gross Proceeds). The Company estimates total fees net of GST (cash) payable to the Lead Manager are likely to be approximately $1,000,000 if the Minimum Subscription is raised and up to $1,500,000 if the full oversubscription amount of $10 million is raised. Any fees payable to the Co-Manager are payable by the Lead Manager, and not by the Company.	Sections 1.10, 7.11, 7.13 and 8.9
What are the interests of the Lead Manager in the Securities of the Company?	The Lead Manager (and its respective associates) do not have a relevant interest in any Securities as at the date of this Prospectus. The Lead Manager is not entitled to receive any securities in respect of the Offer as compensation for its services. Based on the information available to the Company as at the date of the Prospectus regarding the intentions of the Lead Manager and its associates in relation to the Offer and assuming neither the Lead Manager nor its associates take up Shares under the Offer, the Lead Manager and its associates will not hold a relevant interest in any Securities at Admission.	Sections 1.4, 1.10(b) and 8.2
What is the Offer?		
What is the IPO Offer?	The IPO Offer is for an initial public offering of up to 14,814,815 Shares to be issued at a price of $1.35 per Share to raise $20,000,000 (before costs). The IPO Offer will be comprised of the Broker Offer, the Institutional Offer, the Priority Offer and the Public Offer.	Section 1.1
Is the Offer underwritten?	No	Section 1.20
What is the Offer Price?	$1.35 per Share.	Section 1.1(a)
Is there a cooling off period?	No. Cooling-off rights do not apply to an investment in Shares pursuant to this IPO Offer. This means that, in most circumstances, you cannot withdraw your application once it has been accepted.	See “Important Information” Section at page ii

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Topic	Summary	More information
What is the Convertible Note Offer?	The Company presently has a number of Convertible Notes on issue, including the 2021 Notes and the 2022 Notes (having the terms further described in Section 7.10). Upon receipt of the Conditional Admission Letter from ASX, the Company has the right to convert each of the Convertible Notes into Shares upon Admission, with conversion to occur at discounts of between 20% and 25% to the Offer Price (being $1.35 per Share respectively). Accordingly, the Company expects to issue a further 35,069,753 Shares upon conversion of the Convertible Notes. If the Company's Admission occurs after 31 December 2022, the number of Shares issued on the conversion of the Convertible Notes will increase to 37,551,587 Shares (with the 2022 Notes and a majority of the 2021 Notes instead converting at a 30% discount to the Offer Price). The Convertible Note Offer is being made under this Prospectus to remove the need for an additional disclosure document to be issued upon the sale or transfer of any Shares that are issued under the Convertible Note Offer. The Convertible Note Offer is made to each holder of the Convertible Notes.	Section 1.2
Will the Shares be quoted?	The Company will apply to the ASX for admission to the Official List and quotation of Shares on the ASX (expected to be under the code "VHM") within seven days of the date of this Prospectus. No other securities will be quoted at Admission.	"Corporate Directory" and Section 1.14
What is the purpose of the Offer?	The purpose of the Offer is to: (a) raise $20 million (before costs) pursuant to the IPO Offer; (b) assist the Company to meet the requirements of ASX and satisfy Chapters 1 and 2 of the Listing Rules, as part of the Company's application for admission to the Official List; and (c) position the Company to achieve the objectives detailed in Section 2, specifically to fund the Company through to making the Final Investment Decision to proceed with the Goschen Project.	Section 1.7
What are the conditions of the Offer?	The Offer under this Prospectus is conditional upon the Company raising at least $20 million (before costs) (Minimum Subscription) under the IPO Offer and ASX providing a list of conditions which, once satisfied, will result in ASX admitting the Company to the Official List. If these conditions are not satisfied, then the Offer will not proceed, and the Company will repay all Application Monies received under the IPO Offer in accordance with the Corporations Act.	Section 1.4

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Topic	Summary	More information
Who can participate in the Priority Offer?	The Priority Offer consists of an allocation of no more than 1,481,481 Shares to raise $2 million (before costs). It is open to selected retail investors in Australia and Institutional Investors in the Permitted Jurisdictions (as set out in and subject to the restrictions listed in Section 1.18) who have received an invitation to participate in the Priority Offer.	Section 1.1(b)(ii) and 1.18
Who can participate in the Broker Offer?	The Broker Offer is the offer of Shares under this Prospectus to Australian retail clients of participating brokers that have a registered address in Australia. You may only participate if you have received an invitation from a participating broker to acquire Shares under this Prospectus.	Section 1.1(b)(i)
Who can participate in the Institutional Offer?	Only Institutional Investors in the Permitted Jurisdictions may participate.	Section 1.1(b)(iii)
Who can participate in the Public Offer?	Members of the general public, provided they are residents of Australia with registered addresses in Australia.	Section 1.1(b)(iv)
Are there any escrow arrangements?	Yes, there are compulsory escrow arrangements under the ASX Listing Rules. While the ASX has not yet confirmed the final escrow position applicable, if the amount of $20,000,000 is raised and the Company's is granted Admission to the Official List, the Company expects approximately: 47.92 million Shares and 4.7 million Options (being all Options to be held by Directors) to be subject to 24 months escrow post listing; and 8.35 million Shares and 2.32 million ZEPOs to be subject to 12 months escrow from their date of issue. Restricted shares are therefore expected to comprise approximately 29.7% of the issued share capital on Admission on an undiluted basis, and approximately 28%[2] on a fully diluted basis (assuming all Options (including escrowed Options) are issued and exercised and that no other Shares are issued). Additionally, as at the date of this Prospectus, 24.94 million Shares will be subject to voluntary escrow for six months post listing, and 31.18 million Shares will be subject to voluntary escrow for 12 months post listing.	Section 1.19
What is the Offer period?	An indicative timetable for the Offer is outlined on page viii of this Prospectus. The proposed Opening Date is 6 December 2022 and proposed Closing Date is expected to be 16 December 2022.	"Indicative Timetable" Section at page x

2. *Noting that this figure has been determined on the basis that 4,675,332 Director Options on issue will be subject to escrow for a period of 24 months from the date of Quotation and 2,317,475 ZEPOs on issue will be subject to escrow for a period of 12 months from their date of issue, and accordingly resulting Shares would not be freely tradeable upon exercise by the relevant holders.*

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Topic	Summary	More information
Additional information		
Will the Company be adequately funded after completion of the IPO Offer?	The Board believes the funds raised from the IPO Offer will provide the Company with sufficient working capital to fund the Company through to making its Final Investment Decision (FID), regarding whether to proceed with the Goschen Project. FID is currently scheduled to take place in H2 2023. In the event the Company makes a positive FID to develop the Goschen Project, the funds raised from the IPO Offer will not be sufficient to enable the Company to deliver the Project. The Company estimates further funding in the vicinity of $445 million is likely to be required for Phase 1 only, with preliminary estimates of additional funding in the range of $115-$125 million required for Phase 1A. Further details regarding the proposed debt/equity mix and likely impact on the Company and Shareholders is outlined in Section 2.10.	Sections 1.7, 1.9 and 2.10
What rights and liabilities attach to the Securities on issue?	All Shares issued under the IPO Offer will rank equally in all respects with existing Shares on issue. The rights and liabilities attaching to the Shares are described in Section 8.1. The terms and conditions of the Options are primarily outlined in Section 8.2, with additional terms applicable to the Company's existing Incentive Option Plan being in Section 8.3.	Sections 8.1, 8.2 and 8.3
Who is eligible to participate in the IPO Offer?	The Offer is open to all investors with a registered address in Australia, and to certain Institutional Investors in the Permitted Jurisdictions (as outlined in and subject to the restrictions listed in Section 1.18).	Section 1.18

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Topic	Summary	More information
How do I apply for Shares under the IPO Offer?	**Broker Offer Applicants** Broker Offer Applicants may apply for Shares by completing a valid Broker Offer Application Form attached to or accompanying this Prospectus and following the instructions of their broker who invited them to participate in the Broker Offer. **Priority Offer Applicants** Applicants under the Priority Offer must submit a Priority Offer Application Form accompanying this Prospectus on or before the Closing Date or must apply on-line in accordance with the instructions provided in their Priority Offer invitation made under this Prospectus. **Institutional Offer Applicants** The Lead Manager will separately advise Institutional Investors of the application procedure under the Institutional Offer. **Public Offer** Applicants under the Public Offer must submit a Public Offer Application Form accompanying this Prospectus on or before the Closing Date. Any Applications received under the Broker Offer, Priority Offer or the Institutional Offer are irrevocable and may not be varied or withdrawn except as required by law or at the sole discretion of the Company.	Section 1.12
What is the minimum Application size?	The minimum Application size under the Broker Offer and Priority Offer is $2,000 worth of Shares in aggregate.	Section 1.12

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Topic	Summary	More information
What is the allocation policy?	The Lead Manager in consultation with the Company will allocate Shares under the IPO Offer at their sole discretion with a view to ensuring an appropriate and optimal Shareholder base for the Company going forward (subject to any regulatory requirements). In making allocations, consideration will be given to the interest from existing Shareholders, strategic mining industry investors and the introduction of new investors. Specifically, the allocation of Shares between the Broker Offer, Institutional Offer and Priority Offer will be determined by the Lead Manager in consultation with the Company having regard to the allocation policy outlined in Section 1.16. For the Broker Offer, the Lead Manager and the participating brokers to the offer will determine how brokers allocate Shares among their clients. Shares to be allocated to brokers for allocation to their Australian resident clients will be issued or transferred to the applicants nominated by those brokers (subject to the right of the Company and the Lead Manager to reject, aggregate or scale back applications). It will be a matter for each broker as to how they allocate Shares among their retail clients, and they (and not the Company or the Lead Manager) will be responsible for ensuring that retail clients who have received an allocation from them, receive the relevant Shares. Institutional Offer allocations will be determined by the Lead Manager in consultation with the Company. For the Priority Offer, the Company in agreement with the Lead Manager, will determine the allocation of Shares among Applicants, provided those allocations (in aggregate) do not exceed 1,481,481 Shares. There is no assurance that any Applicant will be allocated any Shares, or the number of Shares for which it has applied. The Company and the Lead Manager reserve the right to reject any Application or to issue a lesser number of Shares than those applied for. Where the number of Shares issued is less than the number applied for, surplus Application Monies will be refunded (without interest) as soon as reasonably practicable after the relevant Closing Date. Subject to the satisfaction of the conditions to the Offer outlined in Section 1.4, Shares under the IPO Offer are expected to be allotted on the Issue Date. It is the responsibility of Applicants to determine their allocation prior to trading in the Shares issued under the IPO Offer. Applicants who sell Securities before they receive their holding statements do so at their own risk.	Section 1.16

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Topic	Summary	More information
When will I receive confirmation that my Application has been successful?	It is expected that holding statements will be sent to successful Applicants on or about the week commencing 2 January 2023.	"Indicative Timetable" Section at page x
What is the Company's dividend policy?	The Company does not expect to pay dividends in the near future as its focus will primarily be on exploration of the Projects and future acquisitions.	Section 5.7
How can I find out more about the Prospectus or the Offers?	Questions relating to the Offer and the completion of an Application Form can be directed to the Company Secretary by email at **ian.hobson@vhmltd.com.au**	Section 1.28

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1. Details of Offer

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1.1 The Offer

(a) General

This Prospectus invites investors to apply for 14,814,815 Shares to be issued at a price of $1.35 per Share to raise $20 million (before costs) (**IPO Offer**).

The Company will also accept oversubscriptions for an additional $10,000,000 (before costs) as further described at Section 1.5.

The IPO Offer is comprised of the Broker Offer, the Institutional Offer, the Priority Offer and the Public Offer. The Shares to be issued pursuant to the IPO Offer are of the same class and will rank equally with the existing Shares on issue. The rights and liabilities attaching to the Shares are further described in Section 8.1.

Applications for Shares under the IPO Offer must be made in accordance with the relevant instructions in Section 1.12, and specifically Section 1.12(b) for the Broker Offer, Section 1.12(c) for the Institutional Offer, Section 1.12(d) for the Priority Offer and Section 1.12(e) for the Public Offer. Applications must be received by the Company on or before the Closing Date.

(b) Structure of the IPO Offer

The IPO Offer comprises:

(i) the Broker Offer – which is open to Australian resident retail clients of participating brokers that have a registered address in Australia and who receive an invitation from a broker to acquire Shares under this Prospectus and are not in the United States;

(ii) the Priority Offer – which consists of an allocation of no more than 2,614,379 Shares to raise $4.5 million (before costs), and is open to selected retail investors in Australia and Institutional Investors in the Permitted Jurisdictions (as set out in and subject to the restrictions listed in Section 1.18 below) who have received an invitation to participate in the Priority Offer; and

(iii) the Institutional Offer – which consists of an offer to Institutional Investors in the Permitted Jurisdictions (as set out in and subject to the restrictions listed in Section 1.18 below), made under this Prospectus; and

(iv) the Public Offer – which is open to the general public provided they are resident in Australia with registered addresses in Australia.

The allocation of Shares between the Institutional Offer, Broker Offer, Priority Offer and the Public Offer was determined by agreement between the Lead Manager and the Company. For further information regarding the allocation of Shares, see Section 1.16.

(c) Purpose of the IPO Offer

The purpose of this Prospectus is to:

(i) raise $20 million pursuant to the IPO Offer (before associated costs);

(ii) provide working capital, including to fund ongoing land acquisition payments and maintain its tenement package in good standing;

(iii) assist the Company to meet the requirements of ASX and satisfy Chapters 1 and 2 of the Listing Rules, as part of the Company's application for Admission; and

(iv) position the Company to help it achieve the aspirational aims and immediate objectives detailed in Section 2.4, specifically to fund the Company through to making the Final Investment Decision to proceed with the Phase 1 of the Goschen Project.

1.2 Convertible Note Offer

The Company presently has a total of 3,553 Convertible Notes on issue (comprising the 2021 Notes and the 2022 Notes) with an aggregate face value of $35,530,000. The full terms of the Convertible Notes are summarised in Section 7.10.

Upon receipt of the Conditional Admission Letter from ASX, the Company has the right to convert each of the Convertible Notes into Shares, with conversion of the unrolled 2021 Notes to occur at a 20% discount to the Offer Price (being $1.08 per Share) and conversion of the rolled 2021 Notes and 2022 Notes to occur at a 25% discount to the Offer Price (being $1.0125 per Share) (provided that the conversion notice is given by 31 December 2022). If receipt of the Conditional Admission Letter is delayed, the discount may increase to up to 30%.

Accordingly, the Company expects that it will issue a further 35,069,753 Shares upon conversion of the Convertible Notes.

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If a conversion notice cannot be given until after 31 December 2022 the number of Shares that may be issued on the conversion of the Convertible Notes (with the 2022 Notes, then being converted at a 30% discount to the Offer Price) increases to 37,551,587 Shares.

Shares issued pursuant to the Convertible Note Offer will be of the same class and ranking equally with the existing Shares on issue.

The Convertible Note Offer is being made under this Prospectus pursuant to Section 708A (11) of the Corporations Act to remove the need for an additional disclosure document to be issued upon the sale or transfer of any resulting Shares that are issued under the Convertible Note Offer. The Convertible Note Offer is made to each holder of the Convertible Notes.

An Application Form in relation to the Convertible Note Offer will be issued to each holder of Convertible Notes together with a copy of this Prospectus.

1.3 Lead Manager and Co-Manager

The Company has entered into a mandate with Canaccord who has agreed to act as sole Lead Manager to the IPO Offers on standard commercial terms. Refer to Section 7.11 for further information regarding the Offer Management Agreement entered into with the Lead Manager. Reach Markets Pty Ltd (Reach) have been appointed by Canaccord as Co-Manager on the terms described at Section 7.11.

1.4 Conditional Offer and Minimum Subscription

The minimum subscription under the IPO Offer is $20 million (before costs) (Minimum Subscription), being 14,814,815 Shares.

None of the Securities offered under this Prospectus will be issued if Applications are not received for the Minimum Subscription. Should Applications for the Minimum Subscription not be received within four months from the date of this Prospectus, the Company will either repay the Application Monies (without interest) to Applicants or issue a supplementary prospectus or replacement prospectus and allow Applicants one month to withdraw their Applications and have their Application Monies refunded to them (without interest).

The Offer under this Prospectus is conditional upon the following events occurring:

(a) the Company raising the Minimum Subscription of $20 million under the IPO Offer (before costs);

(b) to the extent (if any) required by ASX or the Listing Rules, each person entering into a Restriction Agreement imposing restrictions on securities as mandated by the Listing Rules; and

(c) ASX providing the Company with a list of conditions which, once satisfied, will result in ASX admitting the Company to the Official List.

If these conditions are not satisfied, then the Offer will not proceed, and the Company will repay all Application Monies received under the IPO Offer in accordance with the Corporations Act.

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1.5 Oversubscriptions

The Company will accept oversubscriptions for an additional $10,000,000 (before costs). This would result in additional Shares being issued as follows:

Aggregate Raise	Total new Shares	Total Shares post-IPO
$25,000,000 (before costs), including oversubscriptions of $5,000,000	18,518,519	193,369,545
$30,000,000 (before costs), including oversubscriptions of $10,000,000	22,222,222	197,073,248

1.6 Capital Structure on Admission

On the basis that the Company completes the Offer on the terms in this Prospectus, the Company's capital structure will be as follows (assuming the Minimum Subscription of $20 million is raised):

Securities	Shares	% (fully diluted)	Options
Existing securities	139,781,273	69.52	11,045,811[1]
IPO Offer securities (at $1.35 per Share)	14,814,815	7.37	
Convertible Note Offer securities[2]	35,069,753	17.45	-
Total[3]	**189,665,841**	**100**	**11,045,811**
Fully diluted	**201,071,652**	**-**	**-**

Columns may not add due to rounding

Notes:

1. *10,405,811 of these Existing Options have a nil exercise price and were issued under the Company's existing Incentive Option Plan. A further 500,000 Options were each issued to directors Don Runge and Gamini Colless, having an exercise price of $1.00 and expiry date of 31 July 2025 and are subject to vesting conditions on the earlier of: (a) FID; (b) a change of control of the Company; or (c) 31 December 2023. The Company expects that a number of these may be exercised prior to Admission, subject to escrow arrangements.*
2. *Refer to Section 1.2 for details of the Convertible Note Offer. Assumes that the Conditional Admission Letter is received from ASX in time for conversion notices to be issued by 31 December 2022.*
3. *Assuming no further Shares are issued and none of the above Options are exercised.*

The Company's free float at the time of Admission will be not less than 20%.

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1.7 Proposed Use of Funds

It is anticipated that the following funds will be available to the Company:

Source of funds	Funds available (A$)
Cash on hand as at 1 October 2022[1]	11,100,000
Proceeds from IPO Offer	20,000,000
Total funds available at Admission	31,100,000

The following table shows the intended use of funds in the 12 month period following Admission for the Minimum Subscription amount of $20 million, and oversubscription scenarios of $25 million and $30 million:

Source and uses of funds	A$20M	%	A$25M	%	A$30M	%
Cash on hand at 1 October 2022	11,100,000		11,100,000		11,100,000	
IPO proceeds	20,000,000		25,000,000		30,000,000	
Total	**31,100,000**		**36,100,000**		**41,100,000**	
Goschen Project[1]						
– Metallurgical and hydromet circuit testwork[2]	1,400,000	5	3,600,000	10	4,700,000	11
– Front end engineering and design[3]	1,800,000	6	3,500,000	10	5,700,000	14
– Approvals	7,700,000	25	7,700,000	21	7,700,000	19
Land acquisition and community[4]	11,300,000	36	11,300,000	31	11,300,000	27
Exploration & appraisal[5]						
– Cannie Project[6]	800,000	3	1,600,000	4	2,300,000	6
– Nowie Project[7]	300,000	1	300,000	1	1,100,000	3
– Licence fees / other exploration	800,000	3	800,000	2	800,000	2
Corporate (net General & Administrative)[8]	2,200,000	7	2,200,000	6	2,200,000	5
Interest costs and costs of offer[9]	3,800,000	12	4,100,000	11	4,300,000	10
Working capital and liquidity buffer[10]	1,000,000	3	1,000,000	3	1,000,000	2
Total	**31,100,000**	**100%**	**36,100,000**	**100%**	**41,100,000**	**100%**

Notes:

1. *See Section 2.6 to 2.7 for further detail on the Goschen Project and Proposed Operation.*
2. *Expenditure increases under the $25M scenario as the Company will undertake a full pilot testwork program for the Hydromet Circuit. Under the $30M scenario and in addition to the full pilot testwork program the Company will conduct further testwork on characterisation and variability verification.*
3. *Expenditure increases under the $25M scenario as the Company will undertake further process plant studies. Under the $30M scenario and in addition to the process plant studies the Company will conduct further Non Process Infrastructure studies.*
4. *Land acquisition payments represent the consideration payable by the Company under the Land Acquisition Agreements described in Section 7.5.*
5. *See Sections 2.14 to 2.16 for further details in relation to the proposed exploration activities.*
6. *Expenditure increases under the $25M and $30M scenario as the Company will undertake a greater drill program in the Cannie area.*
7. *Expenditure increases under the $30M scenario as the Company will undertake drilling activities in the Nowie area.*
8. *See also Section 6.7 for details of the Director's remuneration which forms part of this.*
9. *Comprises Costs of the Offer (see Section 8.9) and interest payable on the Convertible Notes up to date of conversion.*
10. *Working capital includes the general costs associated with the management and operation of the business including administration expenses, rent and other associated costs. Working capital also includes surplus funds. The Company has access to additional liquidity of $4 million under a debt facility secured via the Company's anticipated cash reimbursement by way of a R&D tax offset scheme.*
11. *A breakdown of the Offer costs is included in Section 8.9.*

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1.8 Use of Pre-IPO Offer Funds

In the period to 30 June 2022, the Company raised net proceeds of $29.9 million from the issue of convertible notes. These proceeds, together with the cash on hand at 1 January 2022, have been, and are to be, applied to core activities to advance the Goschen Project development decision, exploration, and appraisal activities in accordance with licence work commitments, costs of IPO and convertible note interest payments.

The core Goschen Project activities in the relevant period include:

(a) Completion of the Goschen Project DFS (March 2022);

(b) Front end engineering and design (FEED) (ongoing);

(c) Further analysis in respect of the Hydromet Circuit to refine costs and operational parameters (ongoing);

(d) Acquisition of bulk product samples for design testing and marketing purposes; and

(e) Regulatory approvals and permitting (ongoing).

Cash on hand at 1 October 2022 was $11.1 million.

1.9 Funding Through to Final Investment Decision

The Board believes that the funds raised from the IPO Offer will provide the Company with sufficient working capital to achieve its immediate stated objectives, being to fund the Company through to its Final Investment Decision (presently scheduled H2 2023) and otherwise to carry out the further exploration and development activities provided for in the budgets presented in Section 1.7.

The Final Investment Decision will result in the Company's commitment, which will be conditional upon receipt of all requisite approvals and confirmation of access to sufficient funds, to incur the expenditure and enter into contractual arrangements necessary to develop the Goschen Project and commence Phase 1. Refer to further detailed information in Section 2.

The use of funds table in Section 1.7 above are a statement of current intentions as at the date of this Prospectus. Investors should note that, as with any budget, the allocation of funds set out in the above table may change depending on a number of factors, including the hurdles set out in Section 2.9. These hurdles (amongst other things) include material project development milestones including key approvals in connection with the Proposed Operation and securing full funding for the Goschen Project.

Further significant project funding (debt and equity) will however be required to deliver the Phase 1 Goschen Project post FID currently estimated to be approximately $445 million for the Goschen Project (as further discussed in Section 2.10). This does not include any additional funding required to deliver the Phase 1A Hydromet Circuit or the optional AREM Refinery.

Preliminary estimates for the Phase 1A Hydromet Circuit are in the range of $115-$125 million. This range will be reviewed following finalisation of pilot plant testwork and engineering studies for the Hydromet Circuit (which are not fully funded by the IPO Offer).

Market conditions, the development of new opportunities and/or any number of other factors (including the risk factors outlined in Section 4), and actual expenditure levels, may also differ significantly from the above estimates.

The Company's immediate focus will be on advancing approvals, engineering and other work preparatory to making an FID to develop the Proposed Operation and commencing Phase 1 activities and activities sufficient to meet its minimum expenditure requirements in respect of it its existing tenements. The Company, as with most entities transitioning from explorer to producer, will pursue and assess other new business opportunities in the resource sector over time which complement its business.

Based on the intended use of funds detailed above, the amounts raised pursuant to the IPO Offer will provide the Company sufficient funding for approximately 12 months of operation. As the Company has no operating revenue, the Company will require further financing in the future, including to reach FID. See Section 4.1(c) for further details about the risks associated with the Company's future capital requirements.

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1.10 Interests of the Lead Manager in the Offer

Canaccord (also referred to in this Prospectus as the "Lead Manager") has been appointed as lead manager to the IPO Offer. Canaccord is party to the Lead Manager Mandate that is summarised in Section 7.11 and to the Offer Management Agreement summarised in Section 7.13.

(a) Fees payable to Lead Manager

The Company has or will pay to Canaccord a management fee of 5.0% of the gross amount raised under the IPO Offer (Gross Proceeds).

An incentive fee of 0.5% of Gross Proceeds may also be paid, at the Company's sole discretion.

A withdrawal fee is also payable in certain circumstances. Refer to Section 7.11 for further terms of the Lead Manager Mandate.

(b) Interests of Lead Manager in Securities

As at the date of this Prospectus, the Lead Manager and its associates do not hold a relevant interest in any of the Company's existing Securities.

The Lead Manager is not entitled to receive any securities in respect of the Offer as compensation for its services.

Based on the information available to the Company as at the date of the Prospectus regarding the intentions of the Lead Manager and its associates in relation to the Offer and assuming neither the Lead Manager nor its associates take up Shares under the Offer, the Lead Manager and its associates will not hold a relevant interest in any Securities at Admission.

(c) Participation in previous placements by Lead Manager

The Lead Manager has not participated in any placement of Securities by the Company in the 2 years preceding lodgement of this Prospectus, other than as disclosed in respect of the Pre-IPO Offer.

1.11 Forecasts

The Directors have considered the matters detailed in ASIC Regulatory Guide 170 and believe that they do not have a reasonable basis to forecast future earnings on the basis that the operations of the Company are inherently uncertain. Accordingly, any forecast or projection information would contain such a broad range of potential outcomes and possibilities that it is not possible to prepare a reliable best estimate forecast or projection.

The Directors consequently believe that, given these inherent uncertainties, it is not possible to include reliable forecasts in this Prospectus.

Refer to Sections 2 for further information in respect to the Company's proposed activities.

1.12 Applications

(a) General

Applications for Shares under the IPO Offer can be made using the relevant Application Form accompanying this Prospectus or otherwise provided by the Company. The Application Form must be completed in accordance with the instructions set out on the form.

Applications under the Broker Offer, the Priority Offer and the Public Offer must be for a minimum of 1,482 Shares ($2,000) and then in increments of 371 Shares ($500).

The IPO Offer may be closed at an earlier date and time at the discretion of the Directors, without prior notice. Applicants are therefore encouraged to submit their Application Forms as early as possible. However, the Company reserves the right to extend the Offers or accept late Applications.

No brokerage, stamp duty or other costs are payable by Applicants.

All Application Monies will be paid into a trust account.

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An original, completed, and lodged Application Form together with payment for the Application Monies (for applications under the Broker Offer, the Institutional Offer, the Priority Offer and the Public Offer), constitutes a binding and irrevocable offer to subscribe for the number of Securities specified in the Application Form. The Application Form does not need to be signed to be valid. If the Application Form is not completed correctly or if the accompanying payment is for the wrong amount, it may be treated by the Company as valid. The Directors' decision as to whether to treat such an Application as valid and how to construe amend or complete the Application Form is final.

If your cheque, BPAY® or EFT (Electronic Funds Transfer) payment for the Application Money is different to the amount specified in your Application Form then the Company may accept your Application for the amount of Application Money provided.

This Prospectus does not constitute an offer in any place outside Australia where, or to any person to whom, it would not be lawful to make such offer. No action has been taken to register or qualify the Shares or the IPO Offer, or to otherwise permit a public offer of the Shares, in any jurisdiction outside Australia.

The return of a completed Application Form with the requisite Application Monies (if applicable) will be taken by the Company to constitute a representation and warranty by the Applicant that all relevant approvals have been obtained and that the Applicant:

(i) agrees to be bound by the terms of the relevant Offer;

(ii) agrees to be bound by the terms of the Constitution;

(iii) declares that all details and statements in the Application Form are complete and accurate;

(iv) declares that, if they are an individual, they are over 18 years of age and have full legal capacity and power to perform all its rights and obligations under the Application Form;

(v) declares that the Applicant was given access to this Prospectus (or any supplementary or replacement prospectus), together with an Application Form. (The Corporations Act prohibits any person from passing an Application Form to another person unless it is included in, or accompanied by, a hard copy of this Prospectus or the complete and unaltered electronic version of this Prospectus);

(vi) authorises the Company and its respective officers or agents, to do anything on their behalf necessary for the Shares to be issued to them, including to act on instructions of the Company's Share Registry upon using the contact details set out in the Application Form;

(vii) acknowledges that the information contained in, or accompanying, the Prospectus is not investment or financial product advice or a recommendation that Shares are suitable for them given their investment objectives, financial situation, or particular needs;

(viii) understands that the offer and sale of the Shares has not been, and will not be, registered under the US Securities Act or the securities laws of any state or other jurisdiction of the United States and may not be offered or sold in the United States except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the US Securities Act and applicable US state securities laws;

(ix) is resident or domiciled in Australia or, if outside Australia, is an Institutional Investor in other Permitted Jurisdictions;

(x) is located in Australia at the time of the application and is not acting for the account or benefit of any person in the United States or any other foreign person, excluding Applicants who are Institutional Investors; and

(xi) has not sent and will not send the Prospectus or any other material relating to the IPO Offer to any person in the United States or elsewhere outside Australia.

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(b) Broker Offer

The Broker Offer is open to investors who are Australian retail clients of participating brokers that have a registered address in Australia and received an invitation from a broker to acquire Shares under this Prospectus. If you are an investor applying under the Broker Offer, you should complete the application procedure advised to you by your broker. Please contact your broker for further instructions.

Subject to the allocation policy in Section 1.16 below, an Application may be accepted by the Company in respect of the full amount, or any lower amount than that specified in the Application Form, without further notice to the Applicant.

Acceptance of an Application will give rise to a binding contract.

(c) Institutional Offer

The Institutional Offer is open to certain Institutional Investors in the Permitted Jurisdictions (in accordance with the restrictions set out Section 1.18 below) to apply for Shares under this Prospectus. Application procedures for Institutional Investors have been, or will be, advised to the relevant Institutional Investor by the Lead Manager.

(d) Applications under the Priority Offer

If you have received a personalised invitation to apply for Shares under the Priority Offer and you wish to apply for all or some of those Shares, you should follow the instructions on your personalised invitation for how to apply under the Priority Offer.

You may apply for an amount up to and including the amount indicated on your invitation. Applications under the Priority Offer must be for a minimum of $2,000 worth of Shares and in multiples of $500 worth of Shares thereafter.

To make a valid application under the Priority Offer, you must use the Priority Offer Application Form. Early lodgement of your application is recommended as the Offer may be closed early at the Directors' discretion.

(e) Public Offer

The Public Offer is open to the general public, provided you are a resident of Australia.

To make a valid application under the Public Offer you must use the Public Offer Application Form accompanying this Prospectus or otherwise provided by the Company. The Application Form must be completed in accordance with the instructions set out on the form. Applications under the Priority Offer must be for a minimum of $2,000 worth of Shares and in multiples of $500 worth of Shares thereafter.

(f) Convertible Note Offer

Only the holders of the Convertible Notes may accept the Convertible Note Offer. Personalised Application Forms will be sent to each noteholder together with a copy of this Prospectus. No monies are payable in respect of the Convertible Note Offer.

1.13 CHESS and Issuer Sponsorship

The Company will apply to participate in the Clearing House Electronic Sub-Register System (CHESS). All trading on the ASX will be settled through CHESS. ASX Settlement, a wholly owned subsidiary of the ASX, operates CHESS in accordance with the Listing Rules and the ASX Settlement Operating Rules. On behalf of the Company, the Share Registry will operate an electronic issuer sponsored sub-register and an electronic CHESS sub-register. The two sub-registers together make up the Company's principal register of securities.

Under CHESS, the Company will not issue certificates to Shareholders. Rather, holding statements (similar to bank statements) will be sent to Shareholders as soon as practicable after allotment. Holding statements will be sent either by CHESS (for Shareholders who elect to hold Shares on the CHESS sub-register) or by the Company's Share Registry (for Shareholders who elect to hold their Shares on the issuer sponsored sub-register). The statements will set out the number of existing Shares (where applicable) and the number of new Shares allotted under this Prospectus and provide details of a Shareholder's holder identification number (for Shareholders who elect to hold Shares on the CHESS sub-register) or Shareholder reference number (for Shareholders who elect to hold their Shares on the issuer sponsored sub-register). Updated holding statements will also be sent to each Shareholder at the end of each month in which there is a transaction on their holding, as required by the Listing Rules.

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1.14 ASX Listing and Official Quotation

Within seven days after the date of this Prospectus, the Company will apply to ASX for admission to the Official List and for the Shares, including those offered by this Prospectus, to be granted Official Quotation (apart from any Shares that may be designated by ASX as restricted securities).

If ASX does not grant permission for Official Quotation within three months after the date of this Prospectus (or within such longer period as may be permitted by ASIC) none of the Securities offered by this Prospectus will be allotted and issued. If no allotment and issue is made, all Application Monies will be refunded to Applicants (without interest) as soon as practicable.

ASX takes no responsibility for the contents of this Prospectus. The fact that ASX may grant Official Quotation is not to be taken in any way as an indication of the merits of the Company or the Securities offered pursuant to this Prospectus.

1.15 Application Monies to be Held in Trust

Application Monies will be held in trust for Applicants until the allotment of the Shares under the IPO Offer. Any interest that accrues will be retained by the Company.

1.16 Allocation and Issue of Shares

The Lead Manager, in conjunction with the Company, will allocate Shares at their sole discretion with a view to ensuring an appropriate Shareholder base for the Company going forward.

Specifically, the allocation of Shares between the Broker Offer, Institutional Offer, Priority Offer and the Public Offer will be determined by the Lead Manager, in consultation with the Company having regard to the allocation policies outlined below.

For the Broker Offer, the Lead Manager and the brokers to the offer will determine how brokers allocate Shares among their clients. Shares to be allocated to brokers for allocation to their Australian resident clients will be issued or transferred to the applicants nominated by those brokers (subject to the right of the Company and the Lead Manager to reject, aggregate or scale back applications). It will be a matter for each broker as to how they allocate Shares among their retail clients, and they (and not the Company or the Lead Manager) will be responsible for ensuring that retail clients who have received an allocation from them, receive the relevant Shares.

Institutional Offer allocations will be determined by the Lead Manager in consultation with the Company.

For the Priority Offer, the Company in agreement with the Lead Manager, will determine the allocation of Shares among Applicants, provided those allocations (in aggregate) do not exceed 1,481,481 Shares. Priority Offer Applicants may be eligible to receive a guaranteed allocation up to and including the amount indicated on their Priority Offer invitation or such lesser amount for which they applied. Beyond this, the allocations under the Priority Offer will be at the absolute discretion of the Company in agreement with the Lead Manager.

The Company and the Lead Manager reserve the right in their absolute discretion not to issue any Shares to Applicants under the Priority Offer and may reject any Application or allocate a lesser number of Shares than those applied for at their absolute discretion.

There is no assurance that any Applicant will be allocated any Shares under the IPO Offer, or the number of Shares for which it has applied. The Company and the Lead Manager reserve the right to reject any Application or to issue a lesser number of Shares than those applied for under the IPO Offer. Where the number of Shares issued is less than the number applied for, surplus Application Monies will be refunded (without interest) as soon as reasonably practicable after the Closing Date.

Subject to the matters in Section 1.14, Shares under the IPO Offer are expected to be allotted on the Issue Date. It is the responsibility of Applicants to determine their allocation prior to trading in the Shares issued under the IPO Offer. Applicants who sell Shares before they receive their holding statements do so at their own risk.

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1.17 Risks

Prospective investors should be aware that an investment in the Company should be considered highly speculative and involves a number of risks inherent in the various business segments of the Company. Section 4 details the key risk factors which prospective investors should be aware of. It is recommended that prospective investors consider these risks carefully before deciding whether to invest in the Company.

This Prospectus should be read in its entirety as it provides information for prospective investors to decide whether to invest in the Company. If you have any questions about the desirability of, or procedure for, investing in the Company please contact your stockbroker, accountant, or other independent adviser.

1.18 Overseas Applicants and Foreign Offer Restrictions

This Prospectus does not constitute an offer of Shares of the Company in any jurisdiction in which it would be unlawful. In particular, this Prospectus may not be distributed to any person, and the Shares may not be offered or sold, in any country outside Australia except to the extent permitted below.

The distribution of this Prospectus outside Australia may be restricted by law and persons who come into possession of this Prospectus should observe any such restrictions, including those in the following section. Any failure to comply with such restrictions could constitute a violation of applicable securities laws. In particular, this Prospectus may only be distributed in the United States to Institutional Investors by a registered US broker-dealer affiliate of the Lead Manager and only if this Prospectus is accompanied by the US Offering Circular.

Bermuda

No offer or invitation to subscribe for Shares may be made to the public in Bermuda or in any manner that would constitute engaging in business in or from within Bermuda. In addition, no invitation is being made to persons resident in Bermuda for exchange control purposes to subscribe for Shares.

Cayman Islands

No offer or invitation to subscribe for Shares may be made to the public in the Cayman Islands or from within the Cayman Islands.

Canada (British Columbia, Ontario, and Quebec provinces)

This Prospectus constitutes an offering of Shares only in the Provinces of British Columbia, Ontario, and Quebec (the "Provinces"), only to persons to whom Shares may be lawfully distributed in the Provinces, and only by persons permitted to sell such securities. This Prospectus is not a prospectus, an advertisement, or a public offering of securities in the Provinces. This Prospectus may only be distributed in the Provinces to persons who are "accredited investors" within the meaning of National Instrument 45-106 – Prospectus Exemptions, of the Canadian Securities Administrators.

No securities commission or authority in the Provinces has reviewed or in any way passed upon this Prospectus, the merits of the Shares or the offering of the Shares and any representation to the contrary is an offence.

No prospectus has been, or will be, filed in the Provinces with respect to the offering of Shares or the resale of such securities. Any person in the Provinces lawfully participating in the offer will not receive the information, legal rights or protections that would be afforded had a prospectus been filed and receipted by the securities regulator in the applicable Province. Furthermore, any resale of the Shares in the Provinces must be made in accordance with applicable Canadian securities laws. While such resale restrictions generally do not apply to a first trade in a security of a foreign, non-Canadian reporting issuer that is made through an exchange or market outside Canada, Canadian purchasers should seek legal advice prior to any resale of the Shares.

The Company as well as its directors and officers may be located outside Canada and, as a result, it may not be possible for purchasers to effect service of process within Canada upon the Company or its directors or officers. All or a substantial portion of the assets of the Company and such persons may be located outside Canada and, as a result, it may not be possible to satisfy a judgment against the Company or such persons in Canada or to enforce a judgment obtained in Canadian courts against the Company or such persons outside Canada.

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Any financial information contained in this Prospectus has been prepared in accordance with Australian Accounting Standards and also comply with International Financial Reporting Standards and interpretations issued by the International Accounting Standards Board. Unless stated otherwise, all dollar amounts contained in this Prospectus are in Australian dollars.

Statutory rights of action for damages and rescission. Securities legislation in certain Provinces may provide a purchaser with remedies for rescission or damages if an offering memorandum contains a misrepresentation, provided the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's Province. A purchaser may refer to any applicable provision of the securities legislation of the purchaser's Province for particulars of these rights or consult with a legal adviser.

Certain Canadian income tax considerations. Prospective purchasers of the Shares should consult their own tax adviser with respect to any taxes payable in connection with the acquisition, holding or disposition of the Shares as there are Canadian tax implications for investors in the Provinces.

Language of documents in Canada. Upon receipt of this Prospectus, each investor in Canada hereby confirms that it has expressly requested that all documents evidencing or relating in any way to the sale of the Shares (including for greater certainty any purchase confirmation or any notice) be drawn up in the English language only. *Par la réception de ce document, chaque investisseur canadien confirme par les présentes qu'il a expressément exigé que tous les documents faisant foi ou se rapportant de quelque manière que ce soit à la vente des valeurs mobilières décrites aux présentes (incluant, pour plus de certitude, toute confirmation d'achat ou tout avis) soient rédigés en anglais seulement.*

European Union

This Prospectus has not been, and will not be, registered with or approved by any securities regulator in the European Union. Accordingly, this Prospectus may not be made available, nor may the Shares be offered for sale, in the European Union except in circumstances that do not require a prospectus under Article 1(4) of Regulation (EU) 2017/1129 of the European Parliament and the Council of the European Union (the "Prospectus Regulation").

In accordance with Article 1(4) (a) of the Prospectus Regulation, an offer of Shares in the European Union is limited to persons who are "qualified investors" (as defined in Article 2(e) of the Prospectus Regulation).

Hong Kong

WARNING: This Prospectus has not been, and will not be, registered as a prospectus under the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32) of Hong Kong, nor has it been authorised by the Securities and Futures Commission in Hong Kong pursuant to the Securities and Futures Ordinance (Cap. 571) of the Laws of Hong Kong (the "SFO"). Accordingly, this Prospectus may not be distributed, and the Shares may not be offered or sold, in Hong Kong other than to "professional investors" (as defined in the SFO and any rules made under that ordinance).

No advertisement, invitation or document relating to the Shares has been or will be issued, or has been or will be in the possession of any person for the purpose of issue, in Hong Kong or elsewhere that is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to Shares that are or are intended to be disposed of only to persons outside Hong Kong or only to professional investors. No person allotted Shares may sell, or offer to sell, such securities in circumstances that amount to an offer to the public in Hong Kong within six months following the date of issue of such securities.

The contents of this Prospectus have not been reviewed by any Hong Kong regulatory authority. You are advised to exercise caution in relation to the offer. If you are in doubt about any contents of this Prospectus, you should obtain independent professional advice.

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Japan

The Shares have not been, and will not be, registered under Article 4, paragraph 1 of the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948), as amended (the "FIEL") pursuant to an exemption from the registration requirements applicable to a private placement of securities to Qualified Institutional Investors (as defined in and in accordance with Article 2, paragraph 3 of the FIEL and the regulations promulgated thereunder). Accordingly, the Shares may not be offered or sold, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan other than Qualified Institutional Investors.

Any Qualified Institutional Investor who acquires Shares may not resell them to any person in Japan that is not a Qualified Institutional Investor, and acquisition by any such person of Shares is conditional upon the execution of an agreement to that effect.

New Zealand

This Prospectus has not been registered, filed with, or approved by any New Zealand regulatory authority under the Financial Markets Conduct Act 2013 (the "FMC Act").

The Shares are not being offered or sold in New Zealand (or allotted with a view to being offered for sale in New Zealand) other than to a person who:

- is an investment business within the meaning of clause 37 of Schedule 1 of the FMC Act;
- meets the investment activity criteria specified in clause 38 of Schedule 1 of the FMC Act;
- is large within the meaning of clause 39 of Schedule 1 of the FMC Act;
- is a government agency within the meaning of clause 40 of Schedule 1 of the FMC Act; or
- is an eligible investor within the meaning of clause 41 of Schedule 1 of the FMC Act.

Norway

This Prospectus has not been approved by, or registered with, any Norwegian securities regulator under the Norwegian Securities Trading Act of 29 June 2007 no. 75. Accordingly, this Prospectus shall not be deemed to constitute an offer to the public in Norway within the meaning of the Norwegian Securities Trading Act. The Shares may not be offered or sold, directly or indirectly, in Norway except to "professional clients" (as defined in the Norwegian Securities Trading Act).

Singapore

This document and any other materials relating to the Shares have not been, and will not be, lodged or registered as a Prospectus in Singapore with the Monetary Authority of Singapore. Accordingly, this Prospectus and any other document or materials in connection with the offer or sale, or invitation for subscription or purchase, of Shares, may not be issued, circulated or distributed, nor may the Shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore except pursuant to and in accordance with exemptions in Subdivision (4) Division 1, Part 13 of the Securities and Futures Act 2001 of Singapore (the "SFA") or another exemption under the SFA.

This Prospectus has been given to you on the basis that you are an "institutional investor" or an "accredited investor" (as such terms are defined in the SFA). If you are not such an investor, please return this Prospectus immediately. You may not forward or circulate this Prospectus to any other person in Singapore.

Any offer is not made to you with a view to the Shares being subsequently offered for sale to any other party. There are on-sale restrictions in Singapore that may be applicable to investors who acquire Shares. As such, investors are advised to acquaint themselves with the SFA provisions relating to resale restrictions in Singapore and comply accordingly.

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Switzerland

The Shares may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange or on any other stock exchange or regulated trading facility in Switzerland. Neither this Prospectus nor any other offering or marketing material relating to the Shares constitutes a prospectus or a similar notice, as such terms are understood under art. 35 of the Swiss Financial Services Act or the listing rules of any stock exchange or regulated trading facility in Switzerland.

No offering or marketing material relating to the Shares has been, nor will be, filed with or approved by any Swiss regulatory authority or authorised review body. In particular, this Prospectus will not be filed with, and the offer of Shares will not be supervised by, the Swiss Financial Market Supervisory Authority (FINMA).

Neither this Prospectus nor any other offering or marketing material relating to the Shares may be publicly distributed or otherwise made publicly available in Switzerland. The Shares will only be offered to investors who qualify as "professional clients" (as defined in the Swiss Financial Services Act). This Prospectus is personal to the recipient and not for general circulation in Switzerland.

United Kingdom

Neither this Prospectus nor any other document relating to the offer has been delivered for approval to the Financial Conduct Authority in the United Kingdom and no prospectus (within the meaning of Section 85 of the Financial Services and Markets Act 2000, as amended ("FSMA")) has been published or is intended to be published in respect of the Shares.

The Shares may not be offered or sold in the United Kingdom by means of this document or any other Prospectus, except in circumstances that do not require the publication of a prospectus under Section 86(1) of the FSMA. This Prospectus is issued on a confidential basis in the United Kingdom to "qualified investors" within the meaning of Article 2(e) of the UK Prospectus Regulation. This Prospectus may not be distributed or reproduced, in whole or in part, nor may its contents be disclosed by recipients, to any other person in the United Kingdom.

Any invitation or inducement to engage in investment activity (within the meaning of Section 21 of the FSMA) received in connection with the issue or sale of the Shares has only been communicated or caused to be communicated and will only be communicated or caused to be communicated in the United Kingdom in circumstances in which Section 21(1) of the FSMA does not apply to the Company.

In the United Kingdom, this Prospectus is being distributed only to, and is directed at, persons (i) who have professional experience in matters relating to investments falling within Article 19(5) (investment professionals) of the Financial Services and Markets Act 2000 (Financial Promotions) Order 2005 ("FPO"), (ii) who fall within the categories of persons referred to in Article 49(2)(a) to (d) (high net worth companies, unincorporated associations, etc.) of the FPO or (iii) to whom it may otherwise be lawfully communicated (together "relevant persons"). The investment to which this Prospectus relates is available only to relevant persons. Any person who is not a relevant person should not act or rely on this Prospectus.

United States

This Prospectus does not constitute an offer to sell, or a solicitation of an offer to buy, securities in the United States. The Shares have not been, and will not be, registered under the US Securities Act of 1933 or the securities laws of any state or other jurisdiction of the United States. Accordingly, the Shares may not be offered or sold in the United States except in transactions exempt from, or not subject to, the registration requirements of the US Securities Act and applicable US state securities laws.

The Shares will only be offered and sold in the United States under the US Offering Circular to:

> "institutional accredited investors" within the meaning of Rule 501(a)(1), (2), (3), (7), (8), (9) and (12) under the US Securities Act; and
>
> dealers or other professional fiduciaries organized or incorporated in the United States that are acting for a discretionary or similar account (other than an estate or trust) held for the benefit or account of persons that are not US persons and for which they exercise investment discretion, within the meaning of Rule 902(k)(2)(i) of Regulation S under the US Securities Act.

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1.19 Escrow Arrangements

ASX will classify certain existing Securities on issue in the Company (as opposed to those to be issued under this Prospectus) as being subject to the restricted securities provisions of the Listing Rules. Restricted Securities would be required to be held in escrow for up to 24 months and would not be able to be sold, mortgaged, pledged, assigned, or transferred for that period without the prior approval of ASX.

Prior to the Company's Shares being admitted to quotation on the ASX, the Company will enter into escrow deeds with the recipients of any restricted securities in accordance with Chapter 9 of the Listing Rules, and the Company will announce to ASX full details (quantity and duration) of any Securities required to be held in escrow.

During the period in which these Securities are prohibited from being transferred, trading in Shares may be less liquid which may impact on the ability of a Shareholder to dispose of their Shares in a timely manner.

While the ASX has not yet confirmed the final escrow position applicable, if the amount of $20,000,000 is raised and the Company's is granted Admission to the Official List, the Company anticipates that:

(a) 47.92 million Shares (after application of the cash relief formula) will be subject to ASX imposed escrow for 24 months following the date of Official Quotation;

(b) 8.35 million Shares (after application of the cash relief formula) will be subject to ASX imposed escrow for 12 months following their date of issue (which will be the "Issue Date" shown in the Indicative Timetable at page x;

(c) 4.7 million Options, being all Options to be held by Directors, will be subject to ASX imposed escrow for 24 months following the date of Official Quotation.

(d) 2.32 million Options (all being ZEPOs) will be subject to ASX imposed escrow for 12 months following the date of their issue.

ASX restricted shares are therefore expected to comprise approximately 29.7% of the issued share capital on Admission on an undiluted basis, and approximately 28%[3] on a fully diluted basis (assuming all Options are issued and exercised (including escrowed Options) and that no other Shares are issued).

Additionally, as at the date of this Prospectus, 24.93 million Shares will be subject to voluntary escrow for six months post listing, and 31.17 million Shares will be subject to voluntary escrow for 12 months post listing.

The number of securities that are subject to ASX imposed escrow are at ASX's discretion in accordance with the Listing Rules and underlying policy. The above is a good faith estimate.

The Company will announce to the ASX full details (quantity and duration) of the securities required to be held in ASX imposed escrow prior to the Shares commencing trading on ASX.

1.20 No Underwriting

The IPO Offer is not underwritten.

1.21 Lead Manager

Canaccord has been appointed as Lead Manager to the Offer on the terms and conditions summarised in Section 7.11 of this Prospectus.

1.22 Brokerage, Commission and Stamp Duty

No brokerage, commission or stamp duty is payable by Applicants on the acquisition of Shares pursuant to the IPO Offer.

1.23 Withdrawal

The Directors may at any time decide to withdraw this Prospectus and the Offer in which case the Company will return all Application Monies (without interest) within 28 days of giving notice of their withdrawal.

3. *Noting that this figure has been determined on the basis 4,675,332 Director Options on issue will be subject to escrow for a period of 24 months from the date of Quotation and 2,317,475 ZEPOs on issue will be subject to escrow for a period of 12 months from their date of issue, and accordingly resulting Shares would not be freely tradeable upon exercise by the relevant holders.*

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1.24 Privacy Disclosure

Persons who apply for Securities pursuant to this Prospectus are asked to provide personal information to the Company, either directly or through the Share Registry. The Company and the Share Registry collect, hold, and use that personal information to assess Applications for Shares, to provide facilities and services to security holders, and to carry out various administrative functions. Access to the information collected may be provided to the Company's agents and service providers and to ASX, ASIC and other regulatory bodies on the basis that they deal with such information in accordance with the relevant privacy laws. If you do not provide the information required on the relevant Application Form, the Company may not be able to accept or process your Application.

An Applicant has a right to gain access to the information that the Company holds about that person subject to certain exemptions under law. A fee may be charged for access. Access requests must be made in writing to the Company's registered office.

1.25 Anti-Money Laundering/Counter Terrorism Finance Act

The Company or Lead Manager may be required under the *Anti-Money Laundering/Counter Terrorism Finance Act 2006* (Cth) or any other law to obtain identification information from Applicants. The Company reserves the right to reject any Application from an Applicant who fails to provide identification information upon request.

1.26 Taxation

It is the responsibility of all persons to satisfy themselves of the particular taxation treatment that applies to them in relation to the Offers, by consulting their own professional tax advisers. Neither the Company nor any of its Directors or officers accepts any liability or responsibility in respect of the taxation consequences of the matters referred to above.

1.27 Paper Copies of Prospectus

The Company will provide paper copies of this Prospectus (including any supplementary or replacement document) and the Application Form to investors upon request and free of charge. Requests for a paper copy should be directed to the Company Secretary on **ian.hobson@vhmltd.com.au** or +61 407 421 185.

1.28 Enquiries

This Prospectus provides information for potential investors in the Company and should be read in its entirety. If, after reading this Prospectus, you have any questions about any aspect of an investment in the Company, please contact your stockbroker, accountant, or independent financial adviser.

Questions relating to the Offer and the completion of an Application Form can be directed to the Company Secretary on **ian.hobson@vhmltd.com.au** or +61 407 421 185.

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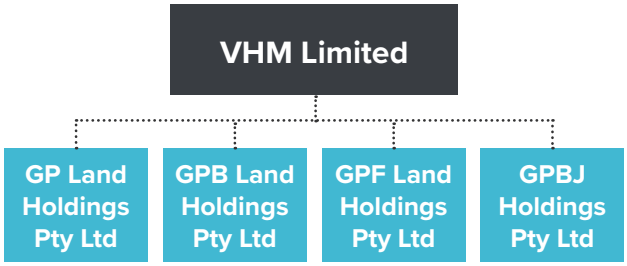


2. Company and Projects Overview

2.1 Company Overview

The Company was incorporated on 31 July 2014 as an Australian private company limited by Shares and was originally named "VHM Exploration Pty Ltd". On 3 May 2018, the Company's status changed to a public company and its name changed to VHM Exploration Limited. On 28 November 2018, the Company underwent a further name change and became VHM Limited.

The Company is based in, and has a registered office in Perth, Western Australia, and following the recent VPM Demerger, now has four wholly owned Australian subsidiaries, depicted as follows:



The Company is the registered holder of all of the Group's tenements, whereas each of GP Land Holdings Pty Ltd, GPB Land Holdings Pty Ltd, GPF Land Holdings Pty Ltd and GPBJ Holdings Pty Ltd were incorporated to acquire (and are parties to contracts to acquire) land underpinning the Goschen Project (as further detailed in Section 7.5). VP Minerals Limited was incorporated in November 2021 as a wholly owned subsidiary of the Company. It was demerged in August 2022, following a transfer of certain of the Company's exploration licences (as part of the VPM Demerger) which are considered prospective for gold and base metals, (discussed further in Section 2.2).

The Company is in the development phase having completed a Pre-Feasibility Study and the Goschen DFS. It continues to advance regulatory approvals (permitting and licensing) and is commencing front-end engineering and design (FEED) works. The Goschen DFS was completed in March 2022 with significant contribution by Mineral Technologies (Downer Group). The Company is also engaged in exploration activities across its vast tenement package, exploring for REM including neodymium, praseodymium, dysprosium and terbium oxides and heavy mineral sands (HMS) bearing zirconium and titanium elements.

While the Company has a number of projects (discussed throughout this Section), its flagship project is the Goschen Project, and its key focus is the development of this project to deliver the Proposed Operation, currently targeted for commencement of production in 2025.

During calendar years 2020-2021, the Company's focus has been on expanding the Mineral Resources and defining a maiden Ore Reserve at its Goschen Project, progressively moving through to completion of the Goschen DFS in March 2022 while advancing permitting approvals. At the end of August 2022, all required major environmental and social impact studies are well advanced with respect to the Goschen Project.

2.2 Recent and Planned Corporate Events

Past capital raisings

The Company has conducted a number of capital raisings since its registration in 2014, including the following capital raisings:

(a) In the period September 2016 to December 2017 – $5.2 million raising (by way of Share issue);

(b) In 2018 – $9.6 million raising (by way of Share issue);

(c) In 2019 – $6.5 million raising (by way of Share issue);

(d) In May 2020 – $3.1 million raising (via the issue of convertible notes which have now converted into Shares);

(e) In July 2020 – $5.6 million raising (by way of Share issue);

(f) In March-April 2021 – $16 million raising ($12.3 million by way of Share issue and $3.75 million by way of the issue of Convertible Notes having the terms of which are outlined in Section 7.10 (the 2021 Notes);

(g) In March-May 2022 – $31.84 million raising (by way of the Pre-IPO Offer further described below).

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Of the funds raised, the Company has expended approximately $45 million directly on the Goschen Project and contiguous licences, progressing approvals, instalment payments toward the acquisition of land in the project area and taking further preparatory steps toward assessing the viability of the Proposed Operation within the Goschen Project area.

Pre-IPO Offer

In April 2022, the Company concluded a pre-IPO raising of $31.84 million (Pre-IPO Offer) by way of the issue of further Convertible Notes, having the terms set out in Section 7.10 (the 2022 Notes).

Each of the 2021 Notes and the 2022 Notes can be converted into Shares at a discount of between 20% – 30% to the Offer Price, upon the Company receiving the Conditional Admission Letter from ASX, on terms acceptable to the Company. A small number of the unrolled[4] 2021 Notes will convert at a 20% discount to the Offer Price (being $1.08), with a majority of the 2021 Notes and the 2022 Notes to convert at a 25% discount to the Offer Price (being $1.0125), provided the Conditional Admission Letter is received enabling a conversion notice to be given by 31 December 2022.

The funds raised from the 2021 Notes and the 2022 Notes were or will be utilised by the Company as follows:

- Goschen Project – Advancing of permitting, FEED, and progression of detailed engineering for the Proposed Operation;
- Hydromet Circuit – Metallurgy test work;
- Product Sample – Bulk sampling drill program for metallurgical test work and work preparatory to securing all necessary offtake arrangements for the Goschen Project;
- Land and Tenements – Meeting obligations to maintain the Company's tenements in good standing, including exploration drill programs and instalment payments toward acquiring additional land underlying the footprint of the Proposed Operation (with these acquisitions yet to settle); and
- Corporate – Advancing the VPM Demerger, costs associated with the Offer, working capital and contingency.

VPM Demerger

The Company recently completed the process of demerging certain of its exploration licences and exploration licence applications prospective for gold. This was facilitated by transferring these assets under the Demerger Asset Sale Agreement (see Section 7.2), to a recently incorporated wholly owned subsidiary of the Company (VP Minerals or VPM), and the subsequent in-specie distribution of the consideration Shares issued by VPM to the Company.

All necessary approvals were obtained to complete the VPM Demerger, including shareholder approval at the May EGM and Ministerial approval for the tenement transfers (received in July 2022).

The rationale for the VPM Demerger was to enable the Company to focus on its key projects (including the Goschen Project) and provide an alternative avenue for the further development and value-realisation of the gold projects.

VPM is now wholly owned by pre-IPO Company Shareholders (registered at the relevant record date of 16 June 2022) and no longer forms part of the VHM Group. Accordingly, any Shares acquired pursuant to the IPO Offer will not be impacted.

The impacts of the VPM Demerger (including tax effects) were outlined in the meeting materials distributed to Shareholders ahead of the May EGM.

The Company continues to support VPM in a financial and technical sense through a loan facility available to VPM to fund working capital (including to fund tenement commitments until such time as VPM conducts its own capital raising) and a services agreement under which the Company provides technical, finance, administrative and support services to VPM on a cost plus 10% basis. These support agreements are summarised in Section 7.3.

4. A majority of the holders of 2021 Notes elected to roll their notes over into the 2022 Notes.

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2.3 Key Strengths and Investment Highlights

Subject to each of the hurdles disclosed in Section 2.9 being achieved, development of the Goschen Project has been partially de-risked, and has the following investment highlights:

Globally significant Tier 1 rare earth and mineral sands project

- The Goschen Project has a substantial rare earth deposit of 413,107 tonnes of TREO, making this a globally significant rare earth mineral inventory (629Mt) Mineral Resource, comprising measured, indicated, and inferred resources. VHM will seek to mine and process these deposits to produce and market a range of products; in particular, neodymium, praseodymium, dysprosium, and terbium.
- Significant Proved and Probable Ore Reserve of 198.7Mt, sufficient to support a >20-year plus LOM Plan with further expansion potential.

Refer to Section 2.6(f) for data on the Proved and Probable Ore Reserve which underpins the LOM Plan, and to Section 2.6(e) for a further breakdown of the Mineral Resource categories.

Advanced plant design and unique commodity mix

- The Goschen DFS and testwork undertaken to date indicates that the initial Capex estimate for Phase 1 of the Goschen Project has a current midpoint estimate of $360 million. This is primarily derived from packages estimated at a DFS level of accuracy (within ±15%).
- The Goschen Project's initial 10-year average annual operating costs* are currently expected to be approximately $120 million.
- In addition to the Capex* expected for Phase 1, a further amount of approximately $85 million is estimated to be incurred on ancillaries, corporate costs, land purchases, pre-production mining operations, process plant pre-production costs and exploration licence expenditure. The planned Phase 1 processing will result in high quality, low impurity products while utilising a proven, well understood processing technology.
- The currently anticipated Life of Mine Plan (LOM Plan) and associated economic model, indicates that approximately 67% of proposed revenue generated is expected to be derived from the production of a REMC. Subject to the timing of implementation of the Hydromet Circuit (Phase 1A), approximately 80% of proposed revenue would be expected to be derived from the production and sale of MREC (to be produced from the Hydromet Circuit).

Strategic asset in a stable established mining jurisdiction

- The Goschen Project is located in a premier mining jurisdiction with existing infrastructure, a skilled workforce and strong local, state and federal government support.
- In April 2021 the Goschen Project was granted "Major Project Status" by the Australian Government given its national significance. This is a key step in securing government funding and approvals support.
- The Goschen Project will produce "critical minerals" (rare earth minerals, zircon, and titanium minerals). VHM's top six REM are listed in the 2022 USA critical mineral list and are important to the green energy transition.
- VHM will produce critical mineral products which are essential for the automotive industry to transition from internal combustion engine (ICE) vehicles to battery electric vehicles (BEV) and plug-in hybrid electric vehicles (PHEV). This transition to BEV and PHEV supports strict new regulatory standards and international aspirational targets for creating carbon neutral industries by 2030.

** Operating costs and Capex will be further refined in the lead up to FID. Refer to the ITAR in Annexure F for further analysis.*

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Clear pathway of development activities

The Company intends to pursue a fast-track process leading to a Final Investment Decision (FID) for Phase 1 development to commence in H2 2023, subject to receipt of Ministerial approvals. This is demonstrated by the following activities:

- The completed Goschen DFS undertaken to date confirms the Project's viability to deliver high-grade and low impurity REMC and zircon and titania products, providing a competitive product suite for a global market. The DFS validates a technically robust project producing at a rate of 9,000-11,000 tonnes per annum (tpa) of REMC and 184,000tpa of zircon-titania products within one year of commencement of operations.
- Based on a highly compelling Goschen DFS, the Company appointed Mineral Technologies (Downer Group) in April 2022 to immediately progress to FEED studies. This will refine key design aspects of the project.

All major environmental and social impact assessments for the approvals process are well advanced. Potential impacts are well understood, and material risks have been addressed or minimised to the extent practicable.

Experienced Board, Executive Team, and Consultants

The Company has an experienced Board and Executive Management team which has previously been involved in delivering some of Australia's most successful resource projects. The Management team has been supported by Tier 1 consultants engaged to conduct rigorous project studies.

2.4 The Company's Aspirations and Growth Strategy

The Company aims to be a producer of highly sought-after neodymium (Nd), praseodymium (Pr), dysprosium (Dy) terbium (Tb), zircon (Zr) and titanium (Ti) concentrates which are used to drive the emerging renewables industries. The Company's goal is to be an integral player in the development of new critical mineral supply chains between Australia and international markets, including the USA.

Specifically, the Company aims to:

- Develop the Goschen Project into the Proposed Operation with first production (Phase 1) targeted in H1 2025 (see Section 2.7 below);
- Complete the Hydromet Circuit (Phase 1A) for further downstream refinement of rare earth mineral concentrate (REMC);
- Continue to develop the Goschen Project to increase the existing Proved and Probable Ore Reserve (currently 198.7Mt), noting that total Mineral Inventory of 629Mt (including a significant Inferred Resource) has been defined; and
- Be a large-scale, stable, low-cost and high-margin, supplier of concentrates of rare earth minerals, zircon, and titanium into international supply chains.

As at the date of this Prospectus, each of the above aims is an aspirational statement and the Company does not yet have reasonable grounds to believe that each of the aims can be achieved or achieved within the proposed timeframe.

The hurdles to achieve the Company's aims are further discussed in Section 2.9 below.

Over the 12 month period following the successful completion of the IPO Offer, the Company plans to use the funds raised as outlined in Section 1.7, which is expected to fund the Company through to the point of making its Final Investment Decision.

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2.5 The Company's Tenements

Table 2.1: Tenement Table

License Number	Location	Registered Holder	Project	Status	Area (km²)	Grant date	Expiry Date
RL6806	North West Victoria	VHM Ltd	Goschen	Current	311	10/01/2020	09/01/2027
EL 6419	North West Victoria	VHM Ltd	Cannie	Current	443	18/05/2018	17/05/2023
EL 6664	North West Victoria	VHM Ltd	Cannie	Current	618	18/06/2018	17/06/2023
EL 6666	North West Victoria	VHM Ltd	Nowie	Current	447	18/06/2018	17/06/2023
EL 6769	North West Victoria	VHM Ltd	Exploration	Current	1,041	27/08/2018	26/08/2023
Total Km²					**2,860**		
Tenements pending transfer to VPM[1]							
EL 7827	*North West Victoria*	VHM Ltd	Exploration	Current	335	15/08/2022	14/08/2027
EL 7807	*North West Victoria*	VHM Ltd	Exploration	Current	421	15/08/2022	14/08/2027
EL 7810	*North West Victoria*	VHM Ltd	Exploration	Current	424	15/09/2022	14/09/2027
EL 7803	*North West Victoria*	VHM Ltd	Exploration	Current	609	11/10/2022	10/10/2027
Total Km²					**1,789**		

Notes

1. These tenements are to be transferred to VP Minerals 12 months after grant date pursuant to the Demerger Asset Sale Agreement.

Each of ELs 6895, 6923, 6926, 6915 (not shown above) were recently transferred to VPM as part of the VPM Demerger, which following the recent VPM Demerger, no longer forms part of the Group (see Sections 2.2 and 7.2).

Refer to Section 5 and Schedule 1 of the Solicitor's Tenement Report at Annexure C for further information relating to the Company's tenements.

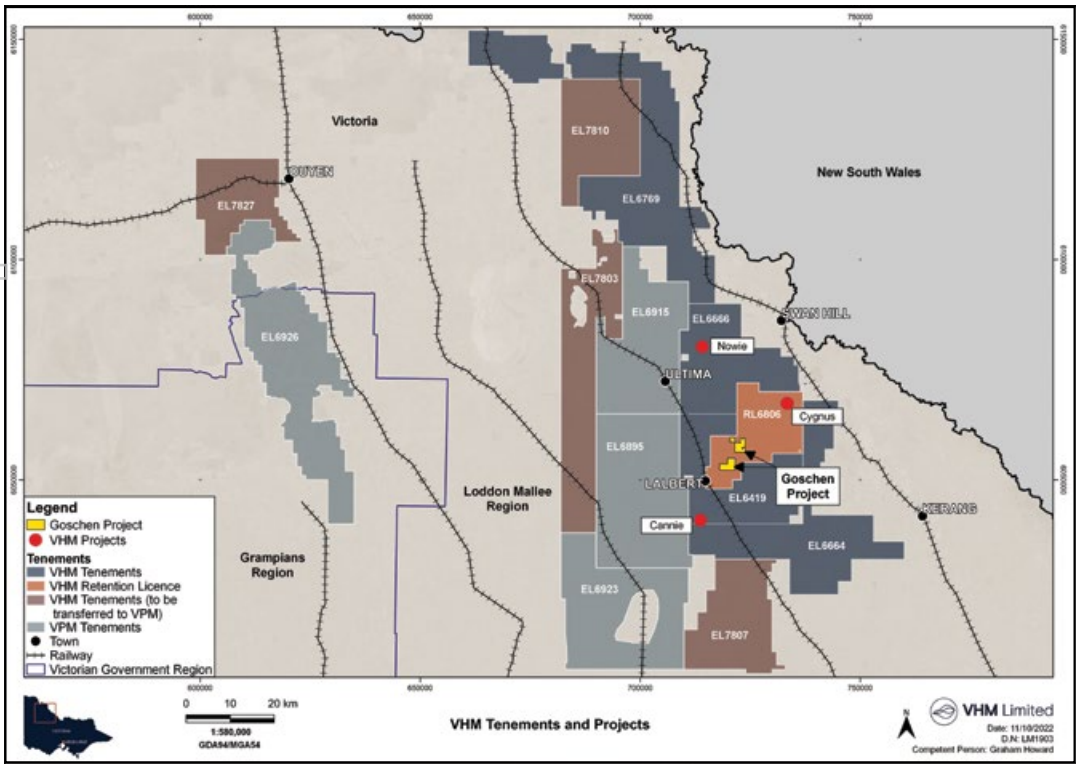


Figure 2.1: VHM Tenement Map

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2.6 Goschen Project

(a) Project overview and Goschen DFS

The Goschen Project is located in north-west Victoria, approximately 35km southwest of Swan Hill and 280km north west of Melbourne. VHM is one of Victoria's largest tenement holders with 2,860km^2 of near-contiguous tenements. All tenements within the Goschen Project were pegged by the Company.

VHM has conducted several exploration and resource development drilling and sampling programmes across the project area, primarily focusing on Area 1, Area 2, Area 3, and Area 4 (Figure 2.4). The Company lodged an application and was granted retention licence (RL) 6806 in 2020 over what was previously EL5520.

In March 2022, the Company finalised the Goschen DFS to examine the feasibility of the proposed mining operation and establishment of processing facilities on the proposed mining lease area.

The Goschen DFS has defined an execution strategy for the development of the Goschen Project to deliver a fully commissioned mining and treatment operation that achieves a nameplate production rate based on a feed rate to the process plant of 5 million tonnes per annum (Mtpa) to produce and market a range of products to national and international consumers.

VHM is aiming to develop the Goschen Project with a defined Proved and Probable Ore Reserve, currently sufficient to support >20 year LOM Plan supported by the Goschen DFS, with additional exploration upside, and industry-standard technology for mining and processing.

The Goschen DFS includes financial analysis of the Goschen Project encompassing mining operations and Phase 1 processing, parts of Phase 1A processing which includes a Hydromet Circuit, and all of Phase 2 processing. None of the prospective financial information from the Goschen DFS is included in the Prospectus.

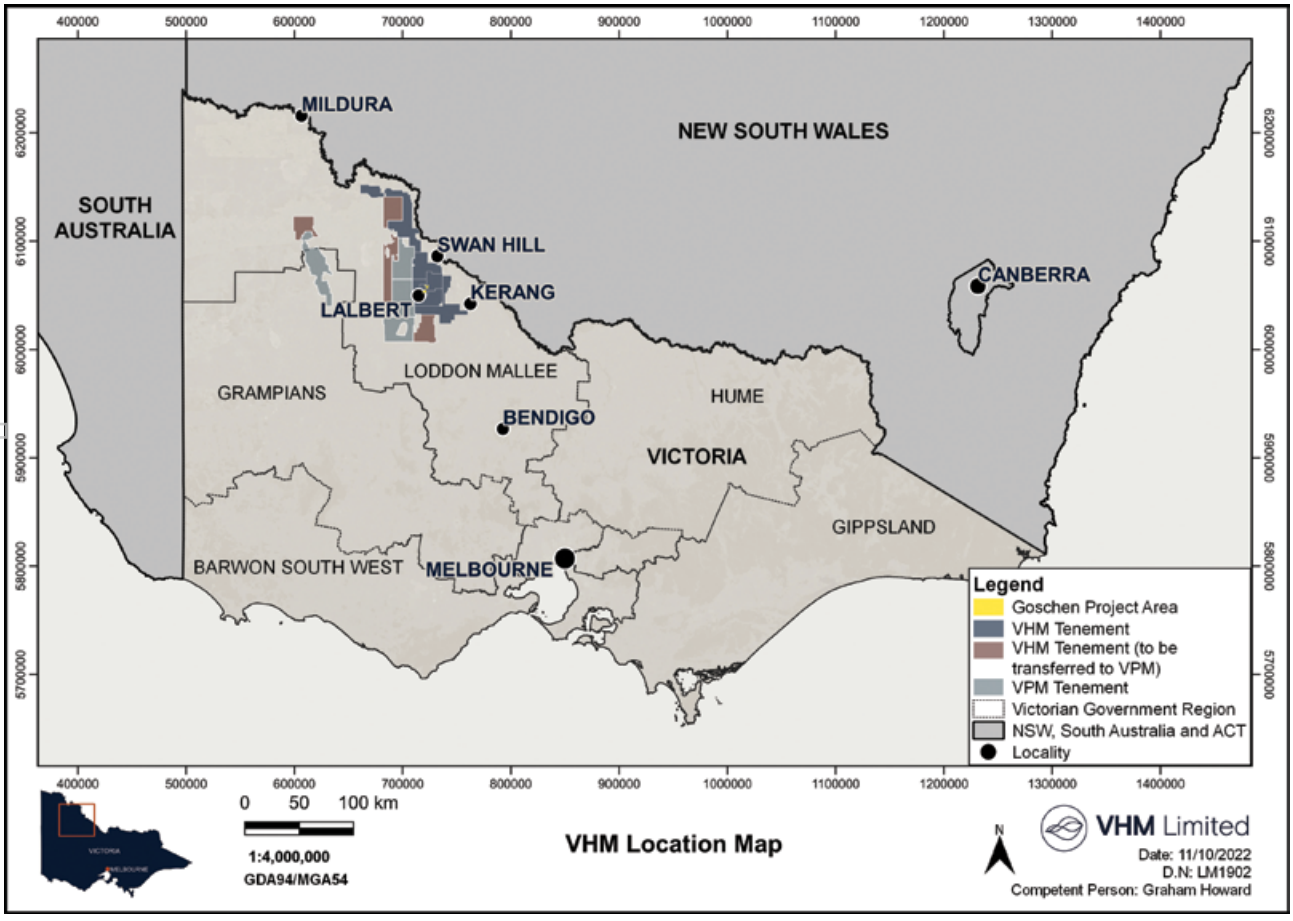


Figure 2.2: Goschen Project location

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See Section 7 and Section 8 of the Independent Technical Assessment Report (ITAR) in Annexure F for further details regarding proposed mining and metallurgy and processing. For an overview, see also the discussion of the Goschen DFS and project implementation and delivery in the Executive Summary of the ITAR.

The Company will implement a phased approach to the mine development of its Goschen Project which is further described in Section 2.7(b). All components of Phase 1 (resulting in the production REMC and zircon/titania heavy mineral concentrate (HMC) were defined during the Goschen DFS and demonstrate the base case for the Goschen Project.

Required approvals including EES, Work Plan and secondary consents for the Proposed Operation are targeted to be complete by H1 2024. The Company will also undertake exploration activities in Cannie and Nowie in accordance to tenement management licence terms and progression towards converting exploration licences to retention licences.

The Company intends to reach Final Investment Decision (FID) in H2 2023 for Phase 1.

(b) Historical exploration

Historical exploration work was completed by previous minerals companies with CRA Exploration conducting the most work on the Goschen sheet-style deposit. Others focused largely on defining coarse-grained HMS strandline deposits in the region. None of the previous historic exploration programs considered the rare earth mineral potential in the area, and no historical Mineral Resource estimates were defined.

In 2014, the Company applied for tenure for EL5520 (the prerequisite tenure for RL6806) within an area of north west Victoria that was vacant. Initial activity focussed on compilation of historic data and the development of the maiden resource model based on historic data in 2017.

(c) Location and infrastructure

The Goschen Project is located within retention licence (RL) 6806 in north west Victoria, approximately 280km north west of Melbourne, 35km south west of Swan Hill and 1km east of Lalbert (Figure 2.2). The retention licence was approved in January 2020, by the Victorian Department of Jobs, Precincts and Regions replacing EL5520. The different project areas (Area 1 (East and West), Area 2 West, Area 3 Extended and Area 4) are captured in Figures 2.3 and 2.4.

The Goschen Project area can be accessed via the Murray Valley Highway and from there via the Sea Lake–Swan Hill Road or the Donald–Swan Hill Road, both of which lead to the town of Swan Hill. Heading south along the Murray Valley Highway is the town of Kerang. The majority of the Goschen Project footprint is located within the Gannawarra Shire with a small portion located in the rural city of Swan Hill.

(d) Geology and geological interpretation

The upper sequences of the large sedimentary Murray Basin include the Loxton Sand – formed due to deposition during the break-up of Gondwana in the Cretaceous Period. A large granitoid body, referred to as the Lake Boga Granite (LBG), is located under tenement RL6806. The Company identified the LBG through mapping surface exposures and geophysical interpretation of the data. A series of placer deposits which contain rare earth oxides (monazite and xenotime) and zircon and titanium rich heavy mineral sands (HMS) accumulation occur above and on the flanks of the LBG.

The Goschen Project area straddles the Avoca Fault and is dominated by a ridge formed by an uplift on the eastern side of the Cannie Fault, a small splay fault used as an approximate boundary that splits Area 1 East and Area 1 West and bisects the mineralisation at Area 3.

In 2017, the Company produced an Inferred Mineral Resource estimate (Goschen North) based on 21,719.4m of historic drilling, and identified five areas of interest within the Goschen deposit (Areas 1 through to 5). Subsequent drilling and resource definition work undertaken by the Company focused on Area 1, Area 2 West, Area 3, and Area 4 to further improve resource classification from Inferred to Indicated and Measured (refer to Figure 2.4 and Table 1 of Annexure A).

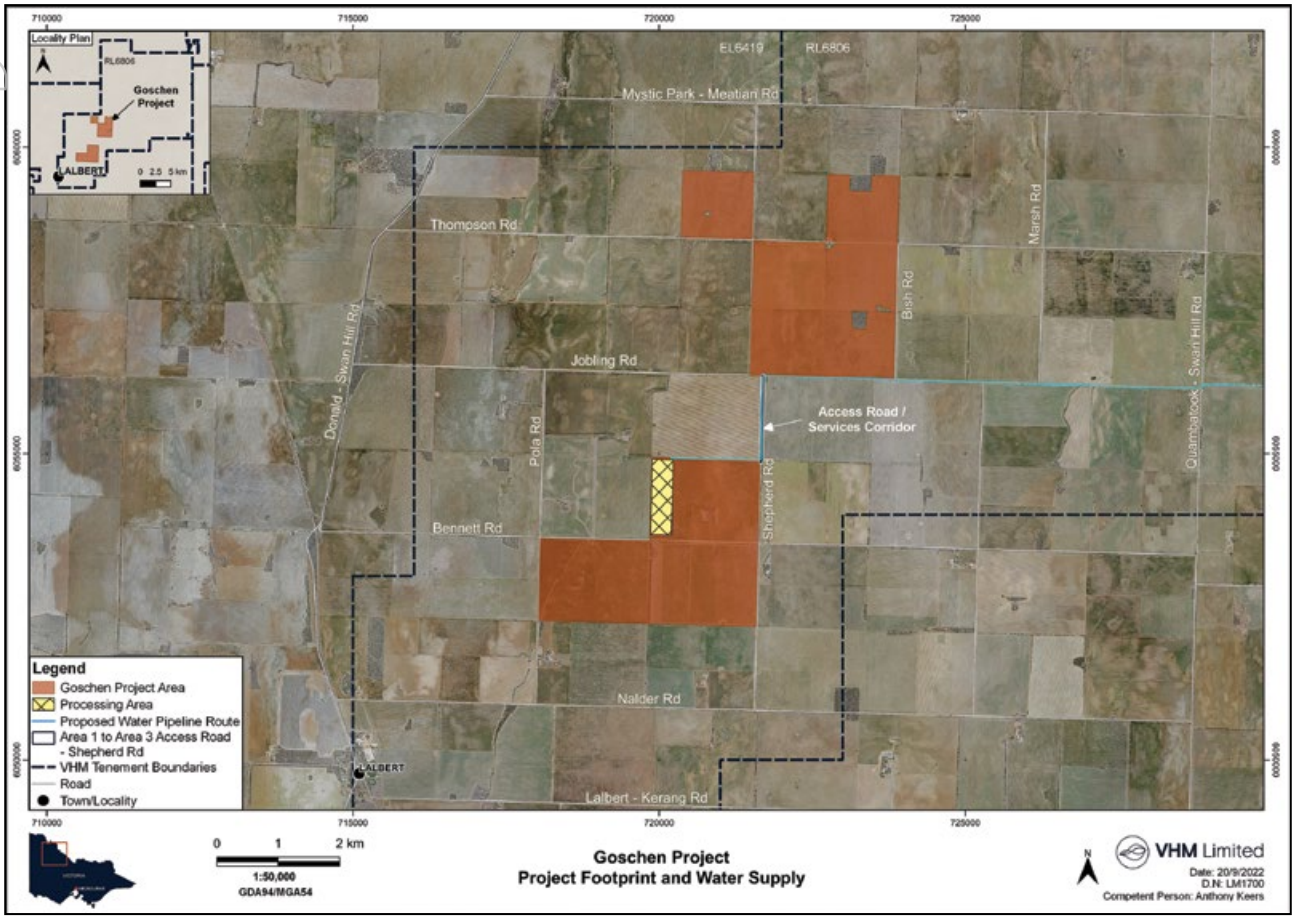


Figure 2.3: Goschen Project footprint and access

This resource definition work confirmed Area 1 and Area 3 as the most prospective, with the least impact on the local community. These areas became the focus for development of Ore Reserve work. Area 1 and Area 3 now form the basis of the Goschen Project which the Company is seeking environmental approval to develop.

The Goschen deposit at Area 1 and Area 3 are typically composed of very fine to fine sands enriched in zircon, rutile, ilmenite, leucoxene, and REM such as monazite and xenotime.

Monazite and xenotime are rare earth oxide ores. Following airborne and ground surveys, sample drilling and gamma logging created composite samples which were subsequently assayed for their mineral assemblage for use in the geological grade model.

The Company will continue to undertake resource definition programs on the retention licence due to its expenditure commitment requirements.

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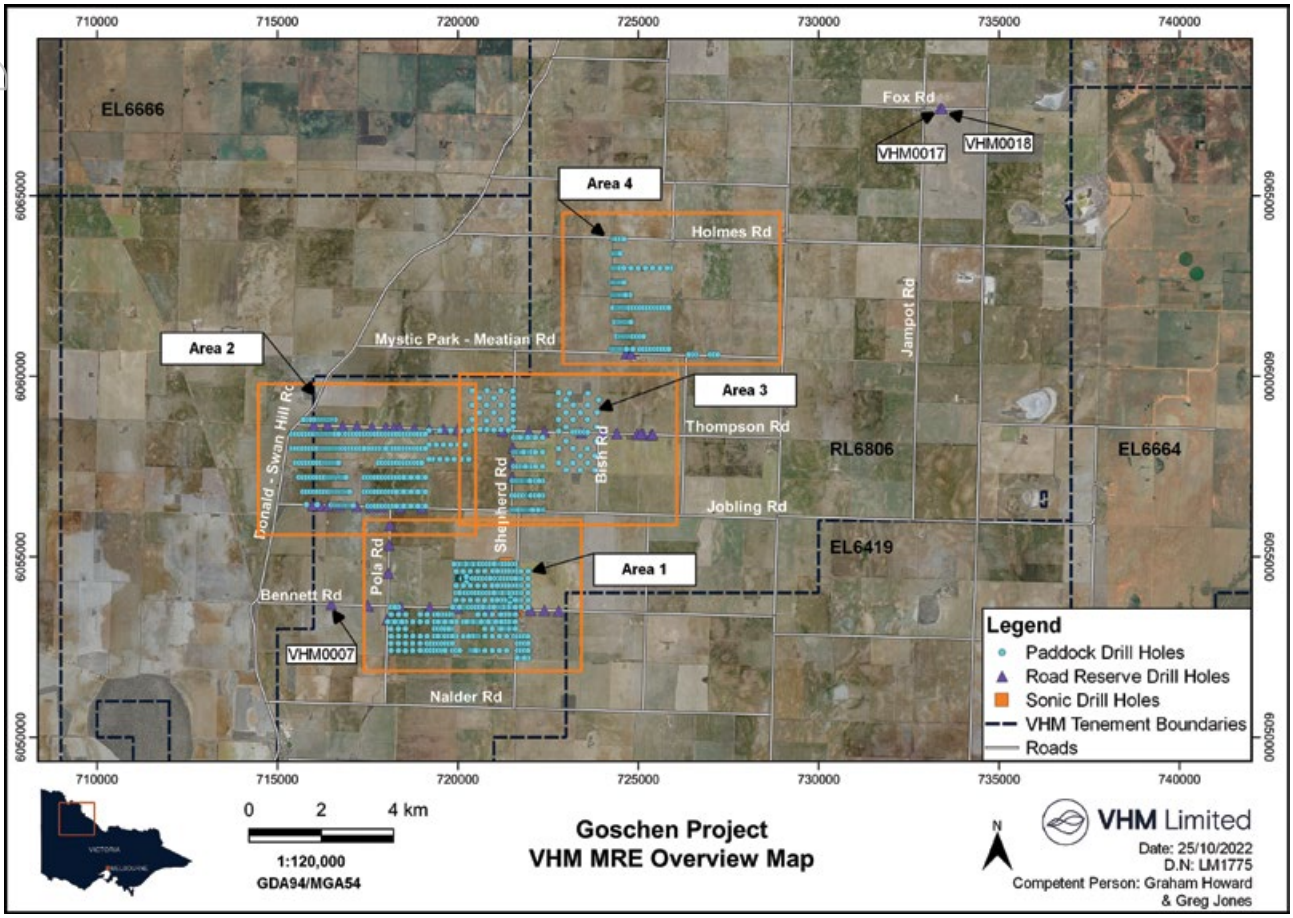


Figure 2.4: Mineral Resource estimate areas

Area 1

The Goschen Area 1 deposit comprises a total Mineral Resource of 93Mt at 3.44% total heavy mineral (THM), 17% slimes and 3% oversize, containing 3.2Mt of THM with an assemblage of 27.7% zircon, 11.2% rutile, 9.1% leucoxene, 24.9% ilmenite, 0.8% xenotime, 4.5% monazite and 2.94% TREO.

The breakdown of the Joint Ore Reserves Committee (JORC) categories is:

- a Measured Mineral Resource of 30.7Mt at 5.72% THM, 15% slimes and 5% oversize, containing 1.8Mt of THM with an assemblage of 29.9% zircon, 10.8% rutile, 9.0% leucoxene, 24.7% ilmenite, 0.8% xenotime, 4.3% monazite and 2.72% TREO; and
- an Indicated Mineral Resource of 62Mt at 2.31% THM, 18% slimes and 2% oversize, containing 1.4Mt of THM with an assemblage of 26.6% zircon, 11.5% rutile, 9.2% leucoxene, 25.0% ilmenite, 0.9% xenotime, 4.6% monazite and 3.04% TREO.

Area 3

The Goschen Area 3 deposit comprises a total Mineral Resource of 492Mt at 2.76% THM, 18% slimes and 3% oversize, containing 13.6Mt of THM with an assemblage of 18.2% zircon, 8.9% rutile, 7.7% leucoxene, 23.9% ilmenite, 0.6% xenotime, 3% monazite and 2.14% TREO.

The breakdown of the JORC categories is:

- an Indicated Mineral Resource of 204Mt at 3.4% THM, 19% slimes and 3% oversize, containing 6.9Mt of THM with an assemblage of 19.2% zircon, 9.0% rutile, 8.0% leucoxene, 25.0% ilmenite, 0.6% xenotime, 3.2% monazite and 2.19% TREO; and
- an Inferred Mineral Resource of 288Mt at 2.3% THM, 18% slimes and 3% oversize, containing 6.7Mt of THM with an assemblage of 17.2% zircon, 8.7% rutile, 7.5% leucoxene, 22.7% ilmenite, 0.5% xenotime, 2.9% monazite and 2.10% TREO.

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(e) Mineral Resource Estimate

The Company's Mineral Resources total 629Mt (inclusive of Ore Reserves) as at 30 June 2021 (see Table 1 in Annexure A). The Mineral Resources are reported and classified in accordance with the JORC Code (2012).

The accompanying JORC Tables are included at Appendix A of the ITAR at Annexure F.

(f) Ore Reserve

The Company's Proved and Probable Ore Reserves total 198.7Mt as at 31 March 2022 (see Table 2 in Annexure A). The Goschen Project Proved and Probable Ore Reserves, a subset of the global Company Ore Reserves, total 98.8Mt as at 31 March 2022 (see Table 3 in Annexure A). The Ore Reserves are reported and classified in accordance with the JORC Code (2012).

The accompanying JORC Tables are included at Appendix A of the ITAR at Annexure F.

(g) Land access arrangements

The Goschen Project's footprint extends over a number of private landholdings. To undertake ground disturbing activities on private land, consent must be granted by the landowner.

VHM group companies have entered into three land acquisition agreements (with a fourth expected in the next 4 - 6 weeks 2022) with a number of regional landowners, to purchase the freehold title to all, or the majority of, freehold land within the operational footprint of the Goschen Project. No further land is required or intended for the Goschen Project as the mine footprint will be 100% secured under land purchase agreements.

The three existing land acquisition contracts create legally binding commitments for the vendors to sell the subject land but have long dated settlement dates with flexibility for the Company to control timing of settlement up to agreed end dates (being January 2026 or December 2030). The Company does not intend to complete any of these land acquisition contracts until the land is needed; and for community engagement purposes, would prefer agricultural use of the land continue under the current owners until such time as acquisition of the land is required for mining purposes.

The Company also has land access agreements for exploration activities with numerous landowners as necessary to cover its current and immediately planned activities.

Information on these land access and acquisition agreements is disclosed in Sections 7.4 to 7.6.

The foregoing arrangements satisfy regulatory requirements with respect to entering into access agreements with affected landowners and address operational requirements during the construction and operational phases of the Goschen Project.

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2.7 Proposed Operation

(a) Overview

As at the date of this Prospectus, the Company has defined a significant combined Proved and Probable Ore Reserve at the Goschen Project of 198Mt. From the 198Mt identified as combined Ore Reserve for Area 1 and Area 3, the Goschen DFS has identified and prioritised 98Mt on currently accessible and available land holdings for mining and processing.

When processed at the facilities with throughput of 5Mtpa, this volume provides the nominal 20 year Life of Mine. The Company is currently finalising all assessments required for the Board to make the FID to proceed with the development of the Goschen Project, with FID targeted for H2 2023. FID represents the Company's commitment to incur the expenditure and enter into the contractual arrangements necessary to develop the Goschen Project (and initially proceed with Phase 1), which will first require receipt of all requisite approvals and confirmation of access to sufficient funds.

(b) Phased development approach

The Company will implement a phased approach to the mine development of its Goschen Project with the first phase consisting of a mining unit plant (MUP), feed preparation plant (FPP), wet concentrator plant (WCP), and rare earth mineral flotation circuit (REMFC).

These elements were defined during the Goschen DFS and represent the **Phase 1** base case for the Goschen Project.

Phase 1A involves the build of a hydrometallurgical circuit to convert the REMC product into an upgraded MREC product.

Phase 2 includes the construction of a mineral separation plant (MSP) and hot acid leach (HAL) (as defined in the Goschen DFS) to produce upgraded zircon and titanium minerals products.

The Minister's decision for the EES is expected to be received by H2 2023, with final assessment of environmental approval (including Work Plan and secondary consents for the Proposed Operations) expected in H1 2024.

The Company will also undertake further exploration drilling and associated activities to meet tenement expenditure commitments for the Cannie and Nowie Projects.

The Company intends to reach Final Investment Decision (FID) in H2 2023 for the Phase 1 Base Project. Commencement of the Phase 1A Hydromet Circuit is currently scheduled for 18 months after first production, with timing to be reassessed following the completion of pilot plant testwork and engineering studies.

VHM proposes to develop the processing capabilities in the following phases:

Phase 1: Base Project (MUP+FPP+WCP+REMFC)

Phase 1 is the Base Project and consists of a MUP, FPP, WCP, and REMFC. The product suite for Phase 1 consists of zircon/titania HMC and rare earth rich REMC products. Based on a nominal head grade of 4.7%THM and plant throughput of 5Mtpa ROM ore processing rate, the Company expects the following nominal annual production rates.

For Phase 1, the processing facility will be capable of producing the following mineral concentrate products;

- 9,000-11,000 tonnes per annum (tpa) of REMC (a concentrated mineral product with rare earth bearing minerals)
- 184,000 tpa of zircon/titania HMC (an upgraded heavy mineral concentrate which has undergone post flotation beneficiation)

The Company aims to be in first production in late H1 2025 upon receiving full environmental approvals and completing the study, development, and implementation program.

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The key assumptions which underpin the Base Project:

- The Company completed the Goschen DFS in March 2022 on the Phase 1 Base Project with Opex and Capex cost estimates within ±15% accuracy.
- The current midpoint capital cost estimate for the Base Project is A$360 million, with a level of accuracy of ±15%, noting that all aspects of the Phase 1 base plant and processing were encompassed within the Goschen DFS. Further information on material assumptions underpinning the Base Project is contained in the ITAR.

See Section 2.7(d) for a more fulsome explanation of underlying assumptions for the Goschen Project LOM Plan.

Next steps

Based on a highly compelling Goschen DFS, the Company appointed Mineral Technologies (MT) in May 2022 to progress the FEED studies. This will refine key design aspects of the Project.

Phase 1A: Base Project + Hydromet Circuit (MUP+FPP+WCP+REMFC+Hydromet)

Phase 1A includes a Hydromet Circuit with a nameplate capacity of 12,000 tpa (1.6 tonnes per hour) downstream of the REMFC at the Goschen Project site to produce a MREC product. Subject to further funds being raised (in addition to the IPO Offer proceeds) the Hydromet Circuit is currently scheduled to commence operations approximately 18 months post first production of the Phase 1 Base Project. The product suite for Phase 1A consists of the same zircon/titania HMC product as per the Base Case, with the inclusion of the MREC as a result of the further processing of the REMC.

Nominal annual production rates

- 9,000-11,000 tpa of MREC (an upgraded carbonate form of the rare earth minerals)
- 184,000 tpa of zircon/titania HMC

Key development assumptions which underpin the Hydromet Circuit (Phase 1A)

- Initial process simulation and software based modelling and metallurgical design have been completed for the Hydromet Circuit to ensure its integration into the Base Project as part of engineering services completed during the Goschen DFS. Study work to further define the next testwork program, and to gain an understanding of capital and operating costs, are underway as of July 2022.
- Testwork and study work (by industry expert consultants Australian Nuclear Science and Technology Organisation Minerals (ANSTO) validates the core metallurgical, chemistry and processing aspects of the circuit configuration.
- ANSTO's minerals business unit was commissioned to supply a proof-of-concept testwork program to determine the suitability of either the caustic conversion or sulphate bake processing route for the processing of REMC to create the MREC.
- These two processing routes are commonly known industry methods for processing similar REMC from competitor projects into a carbonate. The Company has since selected the sulphate bake route for the REMC to MREC product conversion. This is included as the Hydromet Circuit in the Project.
- This work informed the completion of study work to enable the Company to select a specific processing route with confidence. The selected processing route (sulphate bake conversion) is well understood and employed in similar rare earth processing facilities world-wide.

Next steps

Upon completion of the pilot plant testwork and engineering study the Board will determine whether to take FID on the Phase 1A Hydromet Circuit. This will also be subject to sufficient additional funding being secured.

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Phase 2: (MUP+FPP+ WCP+REMFC+ Hydromet+MSP+HAL)

Subject to prevailing market conditions, financial considerations and sufficient additional funding being secured, Phase 2 may commence approximately 18 months post-first production and consist of an additional mineral separation plant (MSP), HAL and chrome removal circuit, which will produce additional products such as premium zircon, zircon concentrate, HiTi (high titanium) rutile, Leucoxene, low chromium ilmenite.

Nominal annual production rates

- 9,000-11,000 tpa MREC
- 49,600 tpa premium zircon
- 8,400 tpa zircon concentrate
- 15,400 tpa HiTi rutile
- 2,800 tpa leucoxene
- 49,800 tpa low chromium ilmenite

The key assumptions which underpin the MSP+HAL

- The addition of the MSP and HAL were considered in the Goschen DFS in March 2022.
- The FEED study program has delivered zircon leach testwork to confirm the level of upgrade to the raw zircon product stream, this also informs the MSP, product loadout and HAL circuits.

Implementation

The Company has an advanced delivery strategy, and plans to proceed with an Engineering, Procurement and Construction (EPC) contracting model. The Company is in advanced negotiations with Mineral Technologies of Downer Group (MT) as the lead engineering consultant for the EPC. MT testwork and engineering enables development of process guarantees as part of the FEED Engineering program. The Company is also progressing early contractor involvement in the EPC model as part of the FEED program. The EPC contractor engagement is planned for 2023 with an EPC contract to be awarded following FID.

The FEED program will deliver sufficient project definition to enable capital and operating estimates for Phase 1 to be completed with an accuracy and precision of +/-5% to 10%. The Company will progress an outsourcing contracting model to deliver the key elements of the Project.

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Table 2.2 Phased Mine Development Approach

Goschen Project			
Target minerals	Heavy mineral sands and rare earth minerals		
Ore reserve	Subset of the global Company Ore Reserves (198.7Mt), being 98.8Mt as of 31 March 2022		
Project area	1,479 ha (approximately) to be mined		
Processing throughput	5Mtpa ±10%		
Processing	Phase 1	Phase 1A (~18 months post-production) subject to Board decision and sufficient funding being secured	Phase 2 (~18 months post-production) market dependent and subject to Board decision and sufficient funding being secured
	Mining unit plant Feed preparation plant Wet concentrator plant REM flotation circuit	Mining unit plant Feed preparation plant Wet concentrator plant REM flotation circuit *Hydromet circuit*	Mining unit plant Wet concentrator plant REM flotation circuit Hydromet circuit *Mineral separation plant* *HAL and ilmenite chromium removal circuit*
Products	Zircon/titania HMC REMC	Zircon/titania HMC MREC	Premium zircon Zircon concentrate HiTi rutile Leucoxene Low chromium Ilmenite MREC
Water supply	Pump station at Kangaroo Lake (Goulburn Murray Water) with buried 35km water supply pipeline		
Rehabilitation	The mined areas will be progressively backfilled in a specific staged manner, commencing with tailings dewatered in-pit to allow overburden re-placement and finally topsoil placement in a profile that reinstates the background soil structure		
Water requirements	5.5 GL/a		
Transport of products	Sealed sea containers via rail and road transport		
Power	Dual fuel on-site generators – diesel and gas (with on-site diesel and LNG (Liquefied Natural Gas) storage)		
Transport and Logistics	The concentrate products will be transported by road and rail facilities to a Port in Victoria. The Goschen DFS confirmed that the Ultima intermodal and railyard that is 18km from the processing facility, will be utilised to transfer the product to port.		

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(c) Life of Mine Plan (LOM Plan)

Current work indicates the Proposed Operation is likely to support a LOM Plan in excess of 20 years based on annual targeted plant throughput of 5Mtpa. The LOM Plan is based on the Proved and Probable Ore Reserve (JORC) on retention licence RL6806 in Area 1 and Area 3.

Mine operations are proposed to commence in Area 1, located to the immediate north and south of Bennett Road. Mining would be undertaken in Area 1 for up to eight years (Figure 2.3 and Figure 2.5), before moving into Area 3, located to the north of Area 1, and adjacent to Jobling Road (Figure 2.3 and Figure 2.6). The mining approach of Area 3 would closely follow that of Area 1.



Figure 2.5: Area 1 proposed mining blocks

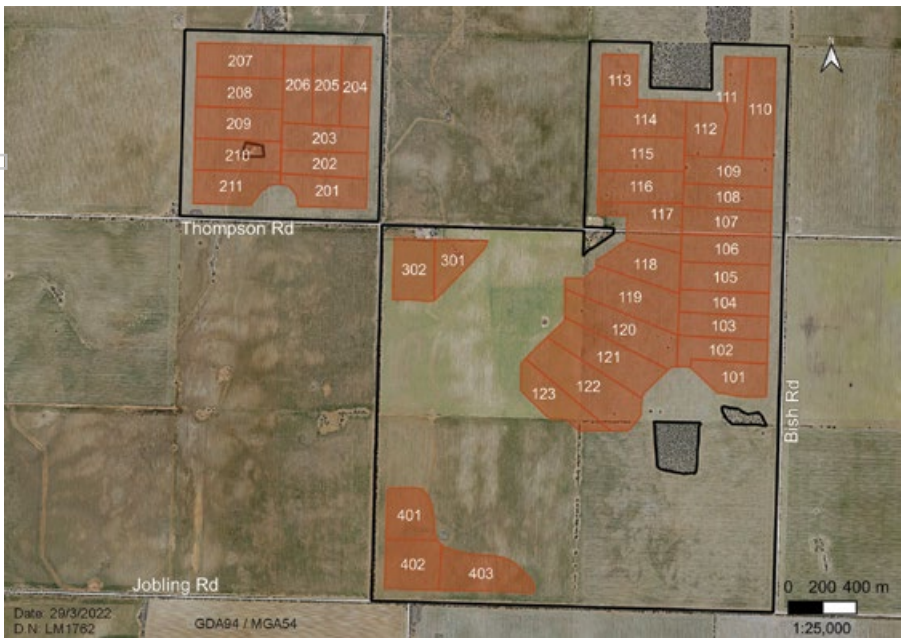


Figure 2.6: Area 3 proposed mining blocks

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Table 2.3 details the current (and indicative) projected materials (ore and waste) movement, THM concentrate grade and mineral assemblage over the life of mine.

Results presented in Table 2.3 are indicative only and subject to adjustment up to the point of FID, and to the project proceeding. It is provided to demonstrate the capability and capacity based on the Goschen DFS and current plans. Once the initial production schedules are confirmed, (and as is customary in the industry) they will be subject to ongoing review and adjustment to respond to prevailing operational and economic conditions.

Further disclosures in relation to the Production Targets and all material assumptions underpinning those targets are included in Section 2.7(d).

Table 2.3: Indicative mining production schedule (Goschen Areas 1 and 3 at 5Mtpa ROM rate) over life of mine

Year	0–5	6–10	11–15	16–21	LOM
Waste mining (kt)	64,275	60,474	59,489	75,979	260,217
Ore mining (kt)	24,667	25,131	25,021	23,864	98,683
Waste stockpile rehandle (kt)	–	9,226	–	30,411	39,637
Total heavy minerals (THM)	4.9%	3.4%	3.3%	4.3%	4.0%
Zircon	29.1%	23.5%	19.3%	20.1%	23.5%
Rutile	11.3%	9.9%	9.0%	9.3%	10.0%
HGLX	9.4%	8.5%	8.0%	7.9%	8.5%
Ilmenite	25.0%	25.1%	25.2%	25.5%	25.2%
Monazite	4.2%	3.7%	3.2%	3.3%	3.7%
Xenotime	0.8%	0.7%	0.6%	0.6%	0.7%
Other heavy minerals	20.2%	28.6%	34.7%	33.3%	28.5%
Slimes	15.0%	16.7%	20.5%	16.0%	17.4%
Oversize	4.6%	3.6%	2.7%	3.0%	3.4%

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(d) Key assumptions and sensitivities – LOM Plan and production targets (Phase 1 Base Case)

The key assumptions which underpin the LOM Plan and production targets on which it is based include:

- The economic model used to develop the LOM Plan is based solely on that portion of the Proved and Probable Ore Reserve prioritised by the Goschen DFS (being 98Mt out of the total 198.7Mt reserve). For the avoidance of doubt, Inferred Resources or Exploration Targets have been excluded in the determination of the LOM Plan.
- The 98Mt of Ore Reserve on which the LOM Plan is based is located wholly within the deposits occurring within Areas 1 and Area 3.
- The Ore Reserve underpinning the production targets have been prepared by a competent person in accordance with the requirements of the JORC Code.
- The physical pit assumptions and mining methods as discussed in Section 2.7(e) and in the ITAR.
- Overall processing recoveries of minerals to marketable products being as shown below (see also Section 8 of the ITAR at Annexure F):

Mineral	Overall recovery
Zircon	74.8%
Rutile	56.6%
Leucoxene	26.7%
Ilmenite	62.6%
Monazite	89.6%
Xenotime	80.2%

- The current midpoint estimate for Goschen Project Phase 1 Capex of $360 million is primarily derived from components estimated at DFS level of accuracy (being ±15%).
- The additional $85 million of funding required is to cover ancillaries, being corporate costs, land purchases, pre-production mining operations, process plant pre-production costs and exploration licence expenditure. Such estimates will be further refined on completion of FEED and detailed design work.
- All costing and pricing used by the Company to estimate Capex, Opex and future funding required to deliver Phase 1 are based on Goschen DFS data as at March 2022. This reflects real time pricing and data received during the final calendar quarter of 2021.
- Preliminary estimates for Phase 1A (to be further assessed following completion of the pilot plant testwork and engineering studies, with such testwork and studies not fully funded by the IPO Offer) is in the range of $115-$125 million.
- Opex is primarily based on data obtained from the Goschen DFS and testwork undertaken to date. These indicate that the Goschen Project is expected to have an initial 10-year average annual operating cost of approximately $120 million, including all mining operations, mineral processing, supply of utilities (power and water) and freight/logistics associated with transporting final products from site to port.
- Assumed commodity prices are based on near-term and longer-term forecasts by independent specialist third parties received in Q2 2022. Further information on the pricing outlook used by the Company in developing the LOM Plan are included in Section 2.7(g).

Further, the Company has applied project cost contingencies to the base cost for the estimation of the Capex and Opex to deliver the Goschen Project. Specifically, a 15% line item contingency has been adopted, in line with prudent industry standards.

Further detailed information on the underlying assumptions can be found throughout the ITAR.

(e) Mining method

Mining of ore within the project footprint, will be undertaken at a rate of 5Mtpa from Area 1 and Area 3 using dry, strip mining by conventional 'truck and shovel' bulk earthmoving equipment, with pits maintained above the water table. Ore will be mined from Ore Reserves within Area 1 for the first seven to eight years followed by Area 3. Process tailings will be returned to the pit hydraulically with mined overburden and topsoil placed on top as part of rehabilitating the land suitable for its original use.

There is currently no indication that drill-and-blast operations will be required at the Goschen Project. Cross ripping of cemented sand horizons has been allowed for in expected scheduling and in operating costs.

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Mining will be undertaken as a block/strip-mining operation. Each block will have a final floor footprint of about 500m wide and 150m long. Pit walls have been designed with a bench of slope angle 40° from surface to the base of the modelled clayey material (up to a maximum 10m from surface) where a six-metre-wide berm is included, below this berm a single bench to the base of the pit has been designed at an angle of 34° or 32° where total pit depth is less than or greater than 32m respectively.

Waste material (topsoil, clay, and overburden) will be stockpiled on surface from the start of mining operations until such time as there is sufficient capacity and suitable conditions in the mined void to allow direct deposition into the previously mined areas as either bund walls for the in-pit tailings cells or to encapsulate deposited tails. Stockpiled material on the surface will ultimately be backfilled into the final mine void to remove the visual effects of mining upon closure and help return the area to its original use.

Mining will commence three to four months ahead of ore processing, this will generate an ore stockpile on surface to ensure there is suitable material to feed the process and, more importantly to have sufficient void in the mined pit into which the co-disposed tailings (coarse and fine tails) can be deposited into the mined void. This will remove any requirement to create a surface tailings storage facility.

Review of mining methods will continue during operations to ensure the optimum mining method is employed to deliver the best outcomes for all stakeholders.

Refer also to Section 7 of the ITAR at Annexure F for an assessment of the planned mining method and waste management.

(f) Permitting

VHM will finalise preparation of the EES for the Goschen Project, which will be assessed by the Victorian Minister for Planning under the *Environment Effects Act 1978* (EE Act).

Upon completion of the EES, its public exhibition and inquiry, VHM will seek a positive assessment of the EES that will inform other decision-makers when they make statutory decisions in relation to the Goschen Project. This includes the Victorian Minister for Resources, who must have regard to the Minister for Planning's EES assessment before deciding to grant a mining licence, and approve a Work Plan, for the Goschen Project under the *Mineral Resources (Sustainable Development) Act 1990* (Mining Act).

It is noted that the Goschen Project is a 'controlled action' under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and as such the EES is an accredited assessment process through a bilateral agreement which exists between the Commonwealth and State of Victoria. This means the Commonwealth Minister will decide on approval of the Goschen Project after having considered the Victorian Minister for Planning's assessment under the EE Act.

Other secondary consents, including various permits and licences to be sought to allow construction and operation of the Goschen Project include as a minimum the following:

(i) Works Licence from Goulbourn Murray Water (GMW) for the construction of water pipeline;

(ii) Works (Operate) Licence from GMW for water pipeline;

(iii) Water Licence from GMW for necessary water allocation;

(iv) Works on a Waterway Permit from Catchment Management Authority for various water crossings;

(v) Planning Permit from Council for the construction of a water pipeline and any road upgrades within their road easements;

(vi) Approval by the relevant authority of the following management plans:

  (a) Radiation Management Plan (as is customary for all mineral sands mining operations);

  (b) Native Vegetation Off-set Management Plan; and

  (c) Traffic Management Plan.

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(g) Commodity market outlook

This section outlines the current and future projected state of the downstream markets for the Company's products, and the expected prices that could be achieved.

The products to be produced by the Company are niche intermediate products that require further processing or refining by the end user for use in final products. Such products vary from project to project globally and are very specific to each deposit. There is no uniform REMC, MREC or HMC product for mineral sands mines globally. Prices received by existing miners are a direct reflection of the mineral assemblage and the product quality of the underlying minerals which can vary widely due to the inherent geology of each mine as well as the processing flowsheet utilised. As a result, there is no readily quotable public exchange where these intermediate products like REMC, MREC and HMC are traded; rather they are sold to market participants in niche offtake contracts.

Consequently, the Company has commissioned TZ Minerals International Pty Ltd (TZMI) and Adamas Intelligence (Adamas), both renowned for their mineral sands and rare earth market knowledge. Their terms of reference were to determine the likely price that may be achieved specifically for Goschen products, by considering the metallurgical test work done in the Goschen DFS, the respective percentages of each mineral that reports to the REMC, MREC and HMC products and the overall product quality and saleability. Adamas was commissioned for a market analysis for the rare earth market and TZMI for the titanium mineral and zircon markets. Adamas and TZMI are third parties independent from VHM and experts in their respective fields.

Pricing data in this Section 2.7(g) are not forecasts, but rather current best estimates based on historical pricing data collated by Adamas and TZMI for the Company's planned products. As with all commodity price markets, prices will fluctuate and are subject to a range of factors beyond the Company's control.

Rare earth price outlook

As of May 2022, prices were closely tracking Adamas' "Base Case" scenario. This scenario assumes prices will trend incrementally higher through 2025 before more-or-less plateauing from 2025 through 2029 as battery materials and other component shortages slow the electric vehicle (EV) market's growth. With bottlenecks resolved later in the decade, Adamas predicts prices are expected to return to growth from 2029.

Price outlook under scenario

From 2022 through 2030, the so-called magnet rare earths (i.e. didymium oxide, dysprosium oxide and terbium oxide) are expected to see the greatest gains among the rare earth suite as supply increasingly struggles to keep up with rapidly growing demand.

Specifically, from 2022 through 2030, didymium oxide (NdPr oxide) will be responsible for over 57% of the Goschen Project's TREO basket value each year offering strong economic exposure to the primary rare earth input for all neodymium–iron–boron (NdFeB) magnet grades produced globally.

Moreover, from 2022 through 2030, dysprosium and terbium oxide will collectively be responsible for over 27% of the Goschen Project's TREO basket value each year offering modest economic exposure to the key rare earth additives used in high-performance NdFeB magnets for EV traction motors, wind power generators, industrial robots and more.

Overall, from 2022 through 2030 magnet rare earths are expected to drive over 85% of the Goschen Project's TREO basket value each year.

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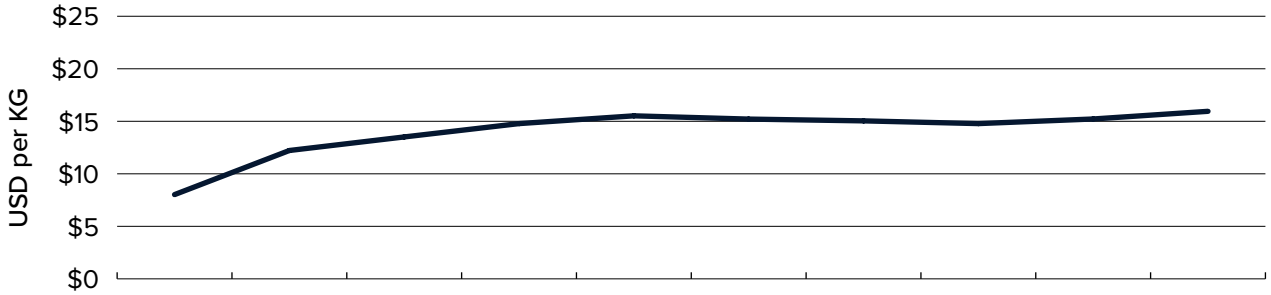
Table 2.3: Per-REO contribution to Goschen basket value under Adamas' Base Case scenario (per kg)[5]

Oxide	2021a	2022	2023	2024	2025	2026	2027	2028	2029	2030
NdPr	**53.0%**	**57.6%**	**58.4%**	**59.2%**	**59.3%**	**58.9%**	**58.9%**	**58.9%**	**59.2%**	**59.1%**
Dy	**21.7%**	**15.9%**	**16.0%**	**16.1%**	**16.2%**	**16.4%**	**16.4%**	**16.4%**	**16.2%**	**16.2%**
Tb	**12.1%**	**12.0%**	**11.9%**	**11.8%**	**11.8%**	**11.9%**	**11.9%**	**11.9%**	**11.8%**	**11.8%**
Other	13.2%	14.5%	13.6%	13.0%	12.8%	12.8%	12.8%	12.9%	12.9%	12.8%
TREO Basket Value	**$35.98**	**$54.84**	**$60.62**	**$66.32**	**$69.64**	**$68.23**	**$67.48**	**$66.33**	**$68.30**	**$71.56**

- *All prices include 13% VAT; estimated prices in real 2022 Australian dollars.*
- *If selling into China, VAT should be deducted; if selling ex-China, prices above should be taken at face value.*

Rare earth mineral concentrate (REMC) price outlook

Adamas estimates REMC from the Goschen Project (61.4 wt. % TREO) could have a value of USD11.15 to USD13.29 per kilogram (/kg) of concentrate in 2022 and may increase overall to $15.95/kg in 2030.

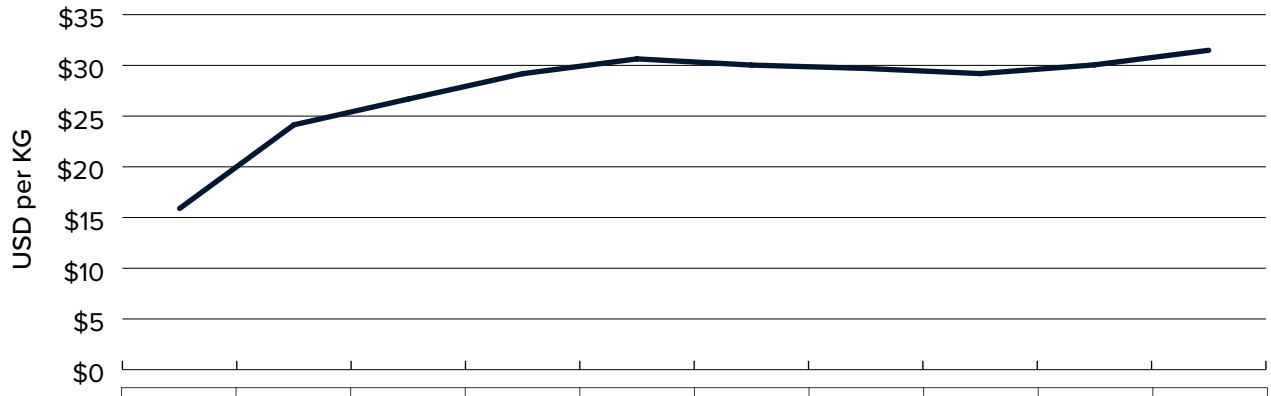


	2021a	2022	2023	2024	2025	2026	2027	2028	2029	2030
Base Case	$8.02	$12.22	$13.51	$14.78	$15.52	$15.21	$15.04	$14.78	$15.22	$15.95

Figure 2.6: Adamas Intelligence Goschen REMC price outlook[5]

Mixed rare earth carbonate (MREC) price outlook

Adamas estimates that MREC produced at the Goschen Project could have a value of USD24.14/kg in 2022 and this may increase to USD31.49/kg in 2030.



	2021a	2022	2023	2024	2025	2026	2027	2028	2029	2030
Base Case	$15.89	$24.14	$26.68	$29.18	$30.64	$30.03	$29.70	$29.19	$30.05	$31.49

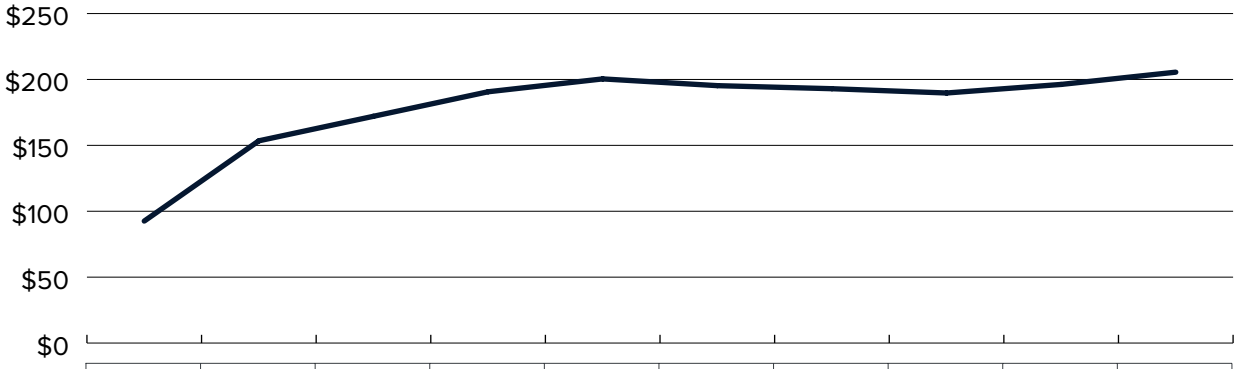
Figure 2.7: Adamas Intelligence Goschen MREC price outlook[5]

5. *Saleable product will only be available if and when all approvals are obtained and the plant is built and commences operations.*

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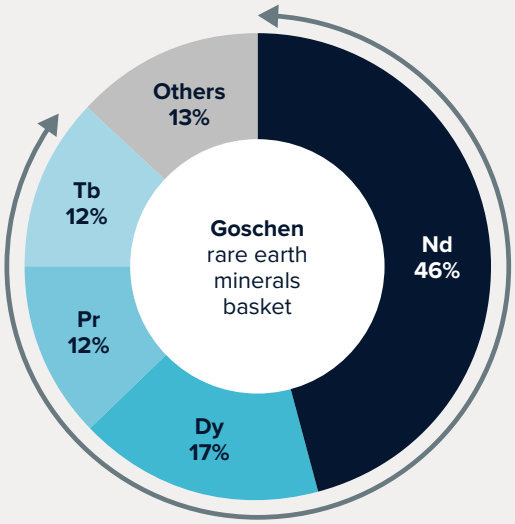
NdPr oxide price outlook

After more than doubling since 2020, Adamas expects China's domestic price of NdPr oxide may increase by upwards of 33%, from USD153.45/kg in 2022 to USD205.53/kg in 2030.



	2021a	2022	2023	2024	2025	2026	2027	2028	2029	2030
Base Case	$92.54	$153.45	$172.05	$190.65	$200.42	$195.30	$192.98	$189.72	$196.23	$205.53

Figure 2.8: Adamas Intelligence Goschen NdPr price outlook[6]



87% of Goschen's rare earth minerals basket value will be from high value dysprosium, neodymium, praseodymium and terbium oxides, all of which are high demand 'critical' rare earths used in permanent magnets for EV traction motors, wind power generators, among others and included in the US and Australian Government list of critical minerals.

6. *Saleable product will only be available if and when all approvals are obtained and the plant is built and commences operations.*

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Long-term zircon price scenario

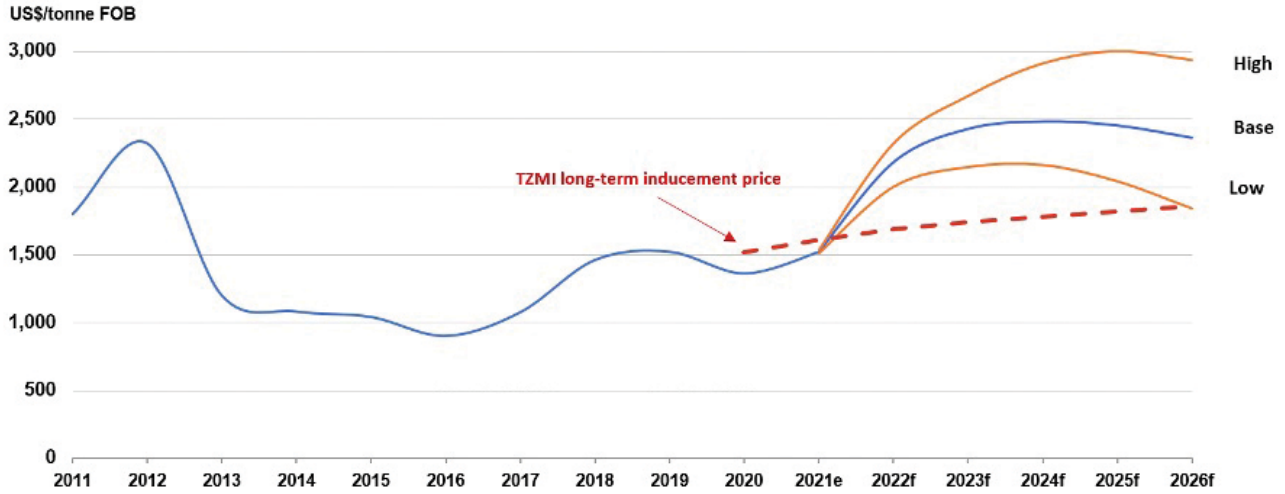


Figure 2.9: Nominal zircon (premium) price outlook to 2025

The base-case pricing estimates assumes the annual weighted average zircon price will remain above USD2,000 per tonne FOB until 2026, potentially peaking at USD2,480 per tonne FOB in 2024, before declining progressively as new incremental supply and lower cyclical demand for zircon dampens consumer sentiment. The caveat to the above outlook (Figure 2.9) is that elevated prices will not induce demand-destructive actions such as substitution from ceramic end users.

The long-term zircon inducement price[7] remains at USD1, 607 per tonne FOB (real 2021 dollars). The latest estimate puts the base-case zircon price well above the inducement price level throughout the outlook period, reflecting the sustained structural deficit in the market and a lack of likely new supply coming on stream to meet the projected supply gap. This bullish pricing environment will be favourable to enable the inducement of new supply.

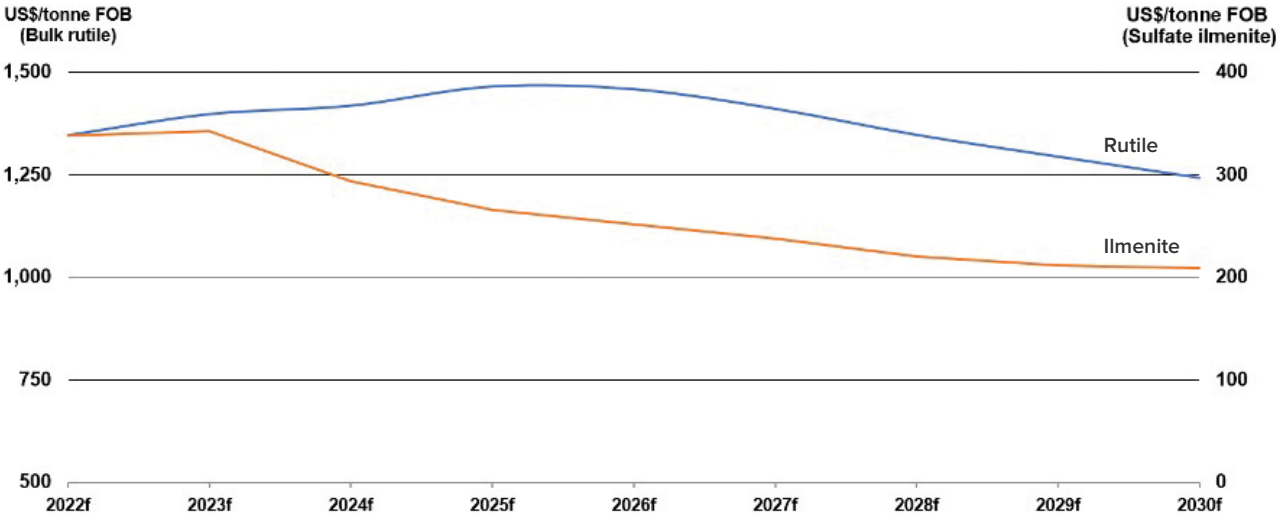


Figure 2.10 Estimated rutile and ilmenite reference prices in 2021 real USD per tonne

7. *TZMI conducts project inducement analysis on advanced brownfields and greenfields projects. Inducement prices are calculated at after-tax IRRs of 15% and 25% reflecting a range that takes account of internal hurdle rates and project returns that may be required for external sources of funding. Inducement analysis is used to inform long-term price estimates.*

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2.8 Australian Rare Earth Minerals (AREM) Refinery

Through its market analysis and testwork programs, the Company has identified that the MREC product is of high value. There is, however, an opportunity to extract increased value via further downstream processing of the MREC into higher value separable rare earth products.

The Company engaged industry leading research institute, ANSTO at Lucas Heights in New South Wales to complete the metallurgical testwork and engineering analysis.

ANSTO's minerals business unit was commissioned to supply a proof-of-concept testwork program to determine the suitability of either the caustic conversion or sulphate bake processing route for the processing of REMC to create the rare earth carbonates. These two processing routes are commonly known industry methods for processing similar REMC from competitor projects into a carbonate. The Company has since selected the sulphate bake route for the REMC to MREC product conversion. This is included as the Hydromet Circuit in the Project.

The AREM Refinery is the further downstream processing of the MREC into further developed and segregated products. This would effectively take the single MREC product and produce the three refined products consisting of a mixed heavy rare earth carbonate, a mixed neodymium praseodymium oxide and a light rare earth carbonate.

ANSTO also undertook a conceptual study of further processing of the MREC produced using industry understood, solvent extraction (SX) technology to produce the suite of separated rare earth products. The feed data used was based on the mixed rare earth carbonate product data produced from the hydrometallurgical study option. The products chosen to be targeted were mixed lanthanum/cerium carbonate, mixed neodymium/praseodymium oxide and mixed middle and heavy rare earth carbonate including terbium (Tb) and dysprosium (Dy). The purities of these products exceed 99.9% TREO.

A separate study on suitable locations for the proposed SX processing facility is underway with AECOM conducting the site location study.

The Company is considering technical and economic benefits of advancing a SX facility and if warranted the Company will consider a further DFS on a SX facility which will be located off-site from the Goschen Project and utilise feedstock from Goschen to further downstream process the MREC into mixed rare earth oxides, mixed heavy rare earth carbonates and light rare earth carbonates.

If the Company decides to proceed with the AREM Refinery additional processing at that facility would represent a further Phase 3 which is not yet included in the current development plan. Further funds would also need to be raised to proceed with studies and development.

2.9 Key Milestones Ahead

To achieve the stated aims of developing the Goschen Project and delivering the Proposed Operation the Company will need to:

- Obtain approval under the *Environment Effects Act 1978* (Vic) for the Proposed Operation to proceed. State and Commonwealth environmental referrals have been formally initiated and are in progress, with approvals expected progressively over 2022–2024. The major environmental approvals process for the Project involves assessment under the *Environment Protection Biodiversity Conservation Act 1999* (Cth) (EPBC Act) and the *Environment Effects Act 1978* (Vic) (EE Act).
- Lodge a complete EES which is expected to occur in 2023, and seek a mining licence and work plan over the Goschen Project area concurrently with the EES approvals process. Final environmental approvals including Work Plan and secondary consents are expected in H1 2024.
- Additional permits and approvals will be sought (such as an approved Work Plan, EPA Licence and planning and building permits for all proposed buildings, roads, and infrastructure). Refer to Section 2.7(f).
- Complete FEED studies for the Proposed Operation – The Company appointed Mineral Technologies in April 2022 following completion of the Goschen DFS. See Section 7.9.

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- Make the FID to proceed with the development of the Proposed Operation and associated infrastructure expected to be made by the Board following receipt of the final environmental approval (assuming other hurdles are satisfactorily met).
- Secure further equity capital and debt project financing for Phase 1 of at least a further $445 million in aggregate, in addition to the funds raised under this Prospectus as discussed in Section 2.10 below. Required funding will increase if Phase 1A is accelerated.
- Secure one or more additional offtake partners for the products not committed to Shenge, to secure adequate revenue, sufficient to support the closing of project debt financing.
- Fund the balance payments of a number of existing land acquisition agreements already entered into by the Company (see Section 7.5), with aggregate land acquisition payments being a minimum of $10.3 million and up to $15 million (depending on the length of time taken to settle the respective contracts) staggered over the next four to eight years. A further amount of $2.7 million will also be required to fund consideration payable in instalments under a fourth pending land acquisition agreement (due to be signed in the next 4-6 weeks) with the final installment due at settlement being 6 months after signing). The funds required to service these land purchase agreements over the next 12 months (as set out in Section 1.7) is approximately $8.5 million.
- Source and engage a workforce sufficient to meet the base case model for the Proposed Operation. This includes establishment of regional training facilities with registered training organisations.

Hydromet Circuit (Phase 1A)

Complete further engineering and design for the Hydromet Circuit, including improved accuracy and precision of engineering and design quantities and capital and operating costs in line with maintaining the same level of study development as Phase 1 of the Goschen Project. Further funding (in addition to the IPO Offer proceeds) will be needed to complete this work.

Study Phases and FEED Program

The Company has advanced a focused FEED study. The FEED program consists of the final level of process definition being completed, detailed progression into other selected engineering disciplines, design and detail relating to the process plants, as well as the non-process infrastructure aspects. It will identify the key challenges to be resolved to ensure the successful delivery of the implementation phase, and inform the FID decision. The IPO Offer will fund all FEED work required for Phase 1 of the Goschen Project.

Following sufficient engineering detail being developed, procurement package types (equipment and goods, site construction services, site contract services) required will be prepared and issued for market quotation. Standard quotation processing will follow through bid evaluations, selection of preferred vendors and subsequent update of the detailed design with preferred and early vendor information received. This will lead to tendering for the EPC contract.

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Hydromet Circuit Engineering Study

The Hydromet Circuit is the next processing circuit downstream from the REM flotation circuit resulting in a rare earth carbonate product. Initial process simulation/modelling and metallurgical design have already been completed for the Hydromet Circuit as part of engineering work completed for the Goschen DFS, establishing a base for the engineering study.

The core process design and modelling completed by GPA Engineering as part of the Goschen DFS validated the feed throughput (including head grade and mineral assemblage), mass balance, process design criteria, process flowsheet, reagent usage rates, utilities demand and recoveries over the LOM Plan.

The current contingency on the estimated Capex will be reviewed and adjusted as required upon completion of this future engineering study to firm-up the Capex, currently estimated to be in the range of $115-$125 million.

The Hydromet Circuit engineering study will serve to bring the level of planning, design, understanding and integration of the Hydromet Circuit up and in line with development level of the remaining facility. At the conclusion of this work, the Company will progress with its Hydromet development strategy to determine whether to proceed with Phase 1A FEED. The Hydromet Circuit engineering study is not however funded by the IPO Offer and cannot commence until the Company obtains further funds to be allocated for this purpose in future.

There are a number of risks involved in completing the above hurdles, and these are outlined in further detail in Section 4.1.

Until the FID has been made, and each of the above hurdles have been addressed, there is no guarantee the Company will be able to proceed with the base case (Phase 1) Proposed Operation, either at all, within the proposed timeframes, or within the parameters of the preliminary modelling undertaken by the Company.

Accordingly, investors who subscribe for Shares under this Prospectus do so on a speculative basis.

2.10 Further Funding Required to Deliver Goschen Project

As previously noted, the IPO Offer will provide funding required for the Company to reach the point of making the FID.

Further funds of approximately $445 million (inclusive of the currently estimated $360 million of Capex are then required to deliver Phase 1 of the Goschen Project in addition to the funds to be raised under this Prospectus.

The Company has commenced confidential discussions and early-stage negotiations with a number of potential financiers, and on that basis, expects a debt/equity ratio of 60/40 will be required. Indicatively, this is likely to represent debt financing in the vicinity of $300 million and further equity financing of approximately $145 million.

The additional equity financing will involve the issue of additional Shares which may further dilute existing Shareholders (including Shareholders who subscribe for Shares in the IPO Offer) dependent on the manner in which the additional equity is raised. For example, should a further capital raising be by way of an entitlement offer, Shareholders may not be diluted to the extent they take up their entitlements.

Based on its discussions with potential financiers, the Company expects it will need to comply with customary financial covenants for project finance facilities (such as interest coverage ratios and debt to equity ratios) and any debt financier will require security over the assets and undertakings of the Goschen Project and may potentially require a broader package of security extending to other Group entities. Further details will be released to the market as and when these arrangements are confirmed.

Committing the Company to significant debt and security arrangements will also expose the Company to additional risks.

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2.11 JORC Tables

In compliance with the JORC Code (2012), the Company has completed an assessment in respect of its Mineral Resources and Ore Reserves within the Goschen Project area, on an if not, why not basis, against the criteria prescribed in JORC Table 1 (JORC Tables).

JORC Tables for each of the following areas have been prepared by Mr Graham Howard, Mr Anthony Keers, and Mr Greg Jones, each a Competent Person as defined in the JORC Code:

Mineral Resource Estimates

- Goschen Area 1 – Competent Person: Graham Howard;
- Goschen Area 2W – Competent Person: Greg Jones;
- Goschen Area 3 Extended – Competent Person: Graham Howard;
- Goschen Area 4 – Competent Person: Greg Jones.

Ore Reserves

- Goschen Area 1 – Competent Person: Anthony Keers;
- Goschen Area 3 – Competent Person: Anthony Keers.

Competent Persons Statements:

- Competent Person Statements for each of Mr Howard (in respect of the summary Mineral Resource Table) and Mr Keers (in respect of the summary Ore Reserve Table) appear in Annexure A of this Prospectus.
- Competent Person Statements for each of Mr Howard and Mr Jones (in respect of each of the Mineral Resource estimates and JORC Tables) accompany each of the JORC Tables.

Copies of the JORC Tables can be found in Appendix A of the ITAR at Annexure F.

Each of the Competent Persons have consented to incorporation of the Mineral Resource Table, Ore Reserve Table or relevant JORC Table (as applicable) prepared by them, in this Prospectus (or the ITAR which forms part of this Prospectus) for the purpose of Section 716 of the Corporations Act.

The information in the Mineral Resource Table, Ore Reserve Table and JORC Tables is based on information, and fairly represents information and supporting documentation compiled by each of these Competent Persons (as applicable).

2.12 Victorian Royalty Regime

Under the Victorian royalties regime, the holder of a mining licence must pay royalties in accordance with the rate or method of assessment and at the times specified in the licence. As such, royalties will be payable by the Company for any commodities to be produced from the Proposed Operation, noting first production is targeted in 2025.

Pursuant to the *Mineral Resources (Sustainable Development) (Mineral Industries) Amendment Regulations 2019* (Regulations) as at the date of this Prospectus, royalties for any mineral (other than gold or lignite) are payable at the rate of 2.75% of the net market value of the mineral produced under a mining licence. In addition, royalties are payable at the rate of $1.43 per cubic metre for tailings resulting from work under a licence over Crown land disposed of by the holder of a mining licence. The royalty rates are reviewed on an ad hoc basis by the Victorian Government, with the last variation in rates introduced in January 2020.

If the Company's gold exploration activities are successful, the Company may be subject to further royalties in the future.

For all minerals (other than gold), the royalty return must be submitted once a year. The failure of a licence holder to pay royalties and/or submit royalty returns may result in the issue of penalties under the Regulations. The information provided in respect of royalty returns is used to monitor compliance obligations, including expenditure and the status of the site.

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2.13 Independent Technical Assessment Report (ITAR)

A comprehensive Independent Technical Assessment Report (ITAR) has been completed by CSA Global Pty Ltd in respect of the Goschen Project.

The ITAR provides further detail in relation to the Goschen Project and its proposed mining and processing operations, including in relation to Ore Reserves and Mineral Resources estimates and the currently proposed LOM Plan.

A copy of the ITAR is contained in Annexure F. Investors (and their advisers) are encouraged to read the ITAR in full for an independent assessment of the progress of, and risks associated with, the Goschen Project.

CSA Global Pty Ltd has consented to inclusion of the ITAR in this Prospectus for the purpose of Section 716 of the Corporations Act.

2.14 Exploration Upside Adjacent to Mining Area

(a) Overview

In addition to the planned development of the Goschen Project, the Company also plans to continue to conduct exploration over the VHM tenements over the next 12 months to expand on the current Mineral Resource estimates. Pursuant to conditions attached to the grant of its exploration licences, the Company is required to undertake further exploration drilling and associated activities to meet tenement expenditure commitments.

(b) Planned activities

The Company has allocated $800,000 for further licence, exploration, and tenement expenditure commitments over the next 12 months, with planned activities being:

- Drilling program to test historic intersections and outcomes from 2021 and 2022 airborne geophysics survey;
- Drill holes to target areas where historic drilling has intersected significant intervals of heavy mineral sands; and
- Tenement management and licence fees.

(c) Permitting – existing activities

The Company's exploration activities will be undertaken as Low Impact Exploration (LIE) as defined in the *Mineral Resources (Sustainable Development) Act 1990*.

LIE requires the notification to Earth Resources Regulation of the works program seven days prior to commence of works.

No other permits are required to conduct the proposed program of exploration set out immediately above.

2.15 Cannie Project

(a) Overview

In 2021, a geophysical survey confirmed previous historic drilling results that identified a significant deposit of heavy mineral sand located south of the Goschen Deposit. This deposit is referred to as the Cannie Project.

The Cannie Project is located approximately 50km southwest of Swan Hill and 10km south of Lalbert Victoria, located within the Company's tenements EL6664 and EL6419. The project area is divided into a southern (Cannie Towaninny) and northern (Cannie Lalbert) region. These target areas are 10km – 20km from the Company's Goschen Project.

The relevant historic heavy mineral sands explorers in the Cannie Project area include CRA Exploration Pty Ltd (CRA), Murray Basin Titanium (MBT) and Corvette Resources.

(b) Historical exploration

Drill hole intersections of significance identified during an assessment of the historic work inform the Cannie Project area. This work has defined the Cannie Project area as extending 15km in a north-south direction and 6km in an east-west direction.

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(c) Planned activities

Pursuant to conditions attached to the grant of its exploration licences, the Company is required to undertake further exploration drilling and associated activities to meet tenement expenditure commitments. The Company has allocated $800,000 for that purpose over the next 12 month period.

There are currently no defined Mineral Resources for the Cannie Project.

No further permits are required to enable the Company to conduct this program of work. The Company has land access agreements in place to support this program.

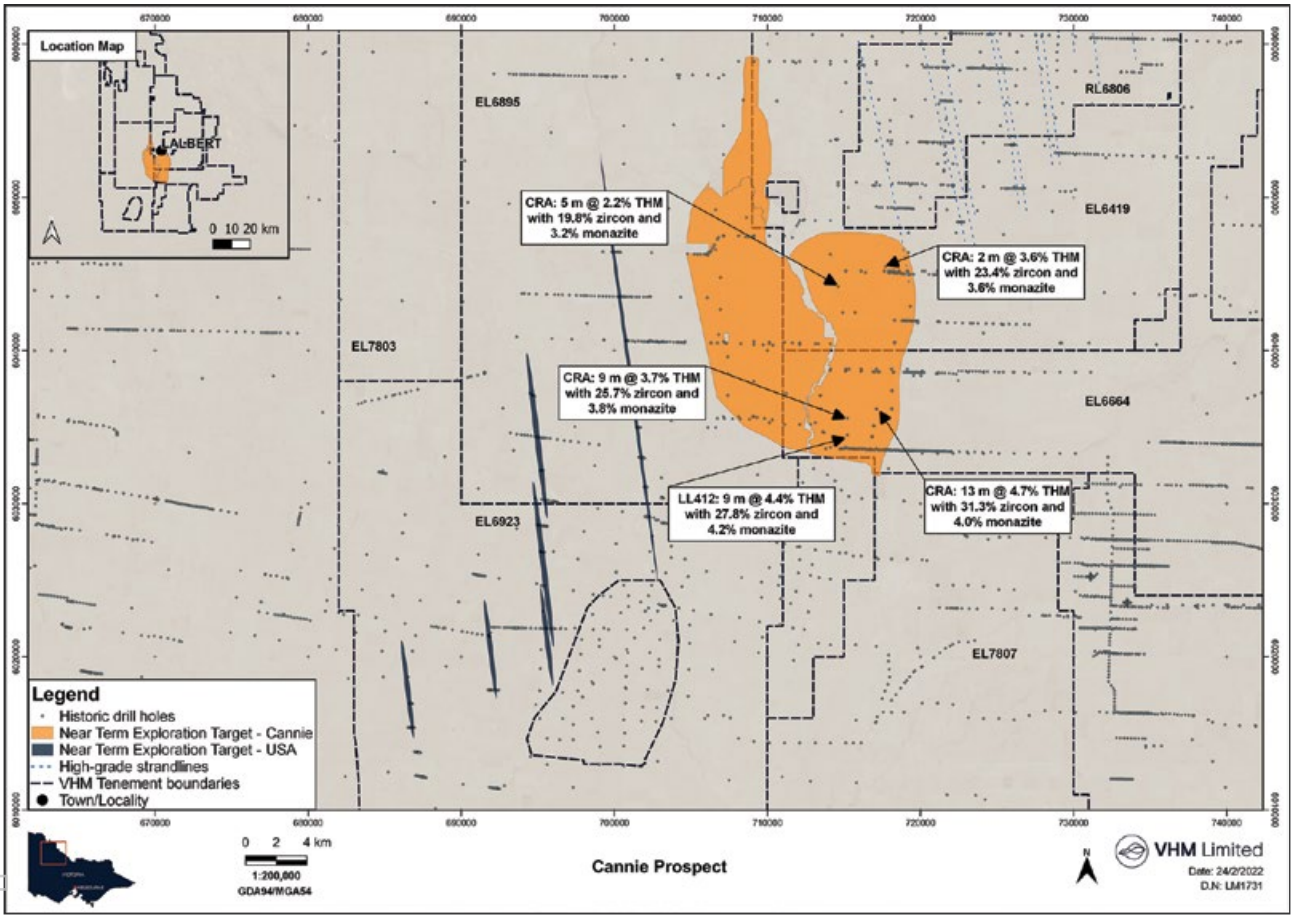


Figure 2.11: Historical drilling Cannie Project area

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2.16 Nowie Project

(a) Overview

Using 2021 geophysics, historic drilling data and company drilling data has defined a series of high-grade strandline deposits and established an aerially extensive sub horizontal sheet deposit in what is referred to as the Nowie Project. The Nowie Project is located north to northwest of the Goschen Project and includes tenement EL 6666.

(b) Historic exploration

Exploration has been conducted since 1985 and includes work completed by BHP, Basin Minerals (Basin) and RGC. All historic exploration searched for zircon and titanium deposits and overlooked the Nowie Sheet deposit as a major scale rare earth mineral endowment target.

Completed in 2021, the Company's geophysics survey has confirmed significant deposits of heavy mineral sands. There are, however, currently no defined Mineral Resources for the Nowie Project.

(c) Planned activities

Pursuant to conditions attached to the grant of its exploration licences, the Company is required to undertake work programs in satisfaction of its licence conditions to meet tenement expenditure commitments. The Company has allocated $300,000 for that purpose over the next 12 month period.

No further permits are required to enable the Company to conduct this program of work. The Company has land access agreements in place to support this resource definition program.

2.17 Basis for Commitments

The proposed use of funds and cash commitments outlined by the Company in Section 1.7 cover a range of matters relating to continued exploration of the Company's existing projects (areas surrounding the Goschen Project, Nowie, and Cannie Projects), and to further preparatory work required to assess the ability to deliver the Proposed Operation and testwork to advance the Hydromet Circuit. In terms of the Proposed Operation, the budgets presented are intended to fund Phase 1 through to FID, rather than to fund and deliver the Proposed Operation itself.

The Company confirms there are no legal, regulatory, statutory, or contractual impediments to entering the tenements covered by the resource definition and exploration programs and carrying out the planned exploration and other preparatory activities such that the Company will be able to spend its allocated cash in accordance with its commitments for the purposes of Listing Rules.

No legal, regulatory, statutory, or contractual impediments exist to the Company carrying out the further studies and FEED work outlined in Section 2.9, with advisers and consultants already contracted.

Further legal, regulatory, statutory, and contractual requirements to deliver the Proposed Operation and associated infrastructure (after the making of FID) are detailed throughout this Section; however, funds from the IPO Offer will not be committed to this implementation stage work.

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3. Industry Overview

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3.1 Rare Earth Market

Classification and terminology

On the periodic table of elements, rare earth elements comprise the lanthanide series, plus yttrium and scandium.

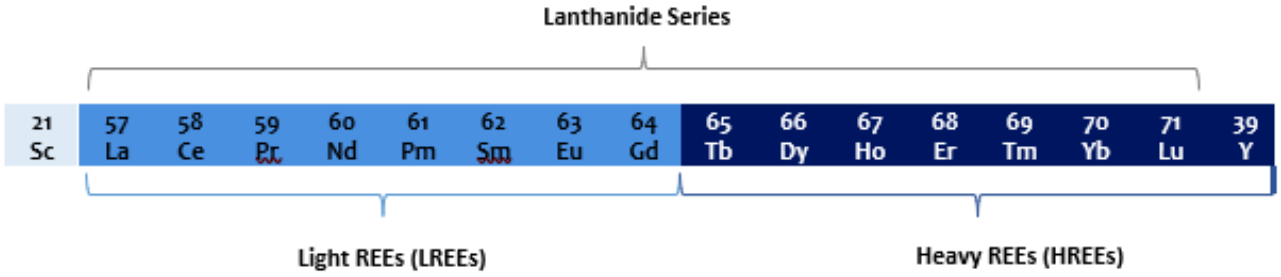


Figure 3.1: Atomic numbers and chemical symbols of the 17 rare earth elements in the periodic table.

Rare earth elements are arbitrarily classified as light rare earth elements or oxides ('LREEs' or 'LREOs') or heavy rare earth elements or oxides ('HREEs' or 'HREOs') based on their electron configurations. Collectively LREOs make up over 90% of the TREO content of a typical rare earth deposit and thereby the vast majority of the world's TREO output annually.

3.2 Application of Rare Earth Elements

Rare earth elements are used in small, but often necessary, amounts in hundreds of different technologies, materials, and chemicals worldwide, for commercial, industrial, social, medical, and environmental applications.

Broadly speaking, the applications of rare earth elements can be divided into the eight end-use categories, as shown in Table 3.1.

Table 3.1: Rare earth element end-use categories

End-use category	Description
Battery alloys	
(La, Ce, Pr, Nd)	Rare earth elements are used to produce anode materials for nickel–metal hydride (NiMH) batteries. NiMH batteries are used in hybrid electric vehicles, consumer electronics, cordless shavers, cordless power tools, baby monitors and other applications of rechargeable batteries.
Catalysts	
(La, Ce)	Rare earth elements, such as cerium and lanthanum, are used in catalytic converters of gasoline and diesel powered vehicles, as well as for fuel-cracking catalysts and additives used by oil refiners to break down crude oil into lighter distillates, such as gasoline, diesel, kerosene, and others.
Ceramics, pigments, and glazes	
(La, Ce, Pr, Nd, Y)	Rare earth elements are used to produce decorative ceramics, functional ceramics, structural ceramics, bioceramics and many other types of ceramic used in everything from jet engine coatings, ceramic cutting tools, dental crowns, ceramic capacitors, ceramic tiles and more.

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End-use category	Description
Glass polishing powders and additives	
(Ce, La, Er, Gd, Y)	Rare earth elements, such as cerium, are used to polish optical glass, hard disk drive platters, LCD display screens and gemstones, among a long list of applications. Cerium is also used as an additive in UV-filtering glass and container glass, whereas lanthanum, yttrium and gadolinium are used to produce high-quality optical glass used in camera lenses, microscopes, and telescopes.
Metallurgy and alloys	
(La, Ce, Ho, Gd, Y)	Rare earth mischmetal (a mixture of light REE metals) is used during production of some types of steel, as well as ductile iron making. Rare earth elements are also used to produce a variety of alloys, such as ferro-cerium, ferro-holmium, ferro gadolinium, and a growing list of others.
Permanent magnets	
(Nd, Pr, Dy, Tb, Sm)	Rare earth elements are used to produce high-strength permanent magnets that have enabled the production of ubiquitous gadgets and electronics, such as mobile phones and laptops, as well as power-dense, energy-efficient electric motors and generators used in electric vehicles, wind turbines, energy-efficient appliances, and hundreds of other applications.
Phosphors	
(Ce, La, Y, Tb, Eu)	Rare earth elements are used in phosphors for energy-efficient lamps, display screens and avionics, and are added to fiat currency in some nations as an anti counterfeit measure.
Other	
(La, Ce, Nd, Dy, Tb, Gd, Lu, Tm)	Aside from the above-described end uses and categories, rare earth elements are used in a long list of other end uses and applications, including many in defence, medicine, aerospace, agriculture, and the high-tech and chemical industries.

Despite accounting for only 42% of the overall rare earth element usage by volume, the permanent magnet category is by far the most valuable of all eight categories, accounting for 93% of global TREO consumption by value in 2020. The share is expected to increase further due to the importance of these permanent magnets in growing clean energy initiatives globally and growth in demand for electronic gadgetry.

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3.3 Demand for Rare Earth Elements

Adamas estimates global demand for most end-use categories will grow at 7.7% in 2022 that follows an expected 11% growth in 2021. Post-2022, demand for rare earth elements is expected to grow on a CAGR of 5.7% until 2030.

The demand for rare earth minerals is expected to grow materially over the next decade. The International Energy Agency (IEA) forecasts the number of electric vehicles (EVs) will grow from 10 million in 2020 to almost 150 million in 2030.

3.4 Demand Growth will be led by Permanent Magnet Category

Driven by growing demand for NdFeB permanent magnets used in electric vehicle (EV) traction motors, wind-power generators, consumer appliances and other end-use applications, Adamas estimates the global TREO demand for permanent magnet production will grow at 8.6% CAGR from around 65,500 tonnes in 2020 to more than 148,000 tonnes in 2030.

By 2030, Adamas projects permanent magnets will drive 51% of global TREO demand by volume and over 90% of the market's value each year.

Within the permanent magnet category, the anticipated gradual adoption of the EV industry will lead the demand for NdFeB-based magnets, driven by commercial EV traction motors (40.2% CAGR), passenger EV traction motors (20.9% CAGR) and other 'e-mobility' segments such as electric bicycles, scooters, motorcycles, and low-speed passenger EVs (14.4% CAGR). Collectively this EV end-user segment is expected to be responsible for 23% of global TREO demand for permanent magnets. Considering additional uses of NdFeB magnets in EVs, including micromotors, sensors and loudspeakers, Adamas conservatively estimates that EVs will drive one-quarter of global TREO demand for permanent magnets annually by 2030.

The proliferation of NdFeB magnets and the growing push for both gadgetry and clean energy applications imply demand for rare earth elements is likely to be skewed towards those such as neodymium, praseodymium, dysprosium, and terbium. As such, demand for these four rare earth elements is expected to grow faster than demand for all other rare earth elements, challenging the ability of the supply side to keep up.

3.5 Summary

With China's rare earth production expected to increase modestly in the years ahead, and few alternative sources of supply expected to come on stream, Adamas estimates that availability of certain rare earth elements will grow increasingly scarce from 2021 onwards.

From 2021 to 2030, Adamas expects the global rare earth industry will consistently under produce neodymium, praseodymium, dysprosium, and terbium oxides (or oxide equivalents), resulting in the depletion of historically accumulated inventories and, ultimately, shortages of these critical magnet materials if supply is not increased beyond levels currently anticipated.

The Goschen Project offers strong economic exposure to the rare earth permanent magnet sector, which is the fastest growing end-use category and most in need of additional rare earth supplies.

3.6 Global Mineral Sands Market Overview

The mineral sands industry involves two principal product chains. The first is the supply of titanium raw material, generally called titanium feedstocks and predominantly used for the production of TiO_2 pigment, with much smaller amounts used for the production of titanium metal sponge and welding electrode fluxes. The second is the supply of zircon sand to a wide range of consuming industries, of which the ceramics sector is the most important.

The rare-earth-containing minerals monazite and xenotime are present in many mineral sands deposits. Sales of these minerals have recently resumed with them either sold contained in a mineral concentrate also containing various other valuable heavy minerals, or in more concentrated forms with due care for potential elevated radioactivity.

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3.7 The Zircon Market and Products

The zircon market consists of a diverse range of end uses dominated by ceramics, predominantly tiles and sanitaryware, which account for approximately half of global consumption. End-uses also include refractory, foundry and specialty chemical and materials as well as other minor uses.

Demand for zircon was within the range of 1.15 to 1.24 million tonnes per annum for the years 2015 to 2019. The onset of COVID-19 disrupted the market in 2020 with demand decreasing to 1.02 million tonnes. Demand recovered in 2021 to an estimated 1.19 million tonnes.

Most zircon is produced as a by-product of titanium feedstock production. Supply of zircon has been relatively closely matched to demand over the period from 2015 to 2021. However, supply from existing operations is predicted to decline over the period to 2030. In addition, development of new sources of supply has been slower than expected leading to an expected deficit over the period to 2030 without new supply sources.

If demand grows at a Compound Annual Growth Rate (CAGR) of 2.4% (as estimated by TZMI) through to 2030 and no new projects are brought into production, then an estimated 0.7 million tonne deficit could result.

Zircon prices have been on the increase since a low of below USD900 per tonne free on board (FOB) in 2016 to an estimated USD1,740 per tonne FOB in Q4 2021. Price estimates from TZMI show this increasing above USD2,000 per tonne before potentially moderating below this level in 2025 as new incremental supply enters the market.

3.8 The Titanium Market and Products

The titanium feedstock minerals are defined by their titanium dioxide (TiO_2) content. Ilmenite (35-65% TiO_2) is the most abundant. Rutile (90-95% TiO_2) is the mineral with the highest TiO_2 content. Leucoxene is an altered ilmenite product containing from 65% to over 90% TiO_2.

The vast majority of titanium feedstock minerals are exported to TiO_2 pigment manufacturers around the globe. TiO_2 pigment is used as an opacifier, brightener, whitener, and/or UV protector in paint, industrial coatings, plastics, laminate materials, and paper. Titanium feedstock minerals are also used in the welding electrode and titanium metal industries.

Demand for titanium feedstocks has grown from 6.7 million TiO_2 units in 2015 to an estimated 7.7 million TiO_2 units in 2020. Growth from 2020 to 2030 is expected by TZMI to be at a CAGR of 3.2%.

Demand for lower TiO_2 grade feedstocks is currently supported by increasing demand from China to supply beneficiation operations. Demand for higher TiO_2 grade feedstocks is currently supported by a structural supply deficit.

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4. Risk Factors

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As with any share investment, there are risks involved. This Section identifies the major areas of risk associated with an investment in the Company but should not be taken as an exhaustive list of the potential risk factors to which the Company and its Shareholders are exposed. Potential investors should read the entire Prospectus and consult their professional advisers before deciding whether to apply for Securities pursuant to the Offer.

Potential investors are also directed to the ITAR at Annexure F which provides an independent assessment of progress and risks relating to the Goschen Project.

Any investment in the Company under this Prospectus should be considered highly speculative.

4.1 Risks Specific to the Company

(a) Limited history

The Company was incorporated in July 2014 and therefore has limited operational and financial history on which to evaluate its business and prospects. The prospects of the Company must be considered in light of the risks, expenses and difficulties frequently encountered by companies in the early stages of their development, particularly in the mineral exploration sector, which has a high level of inherent risk and uncertainty. No assurance can be given that the Company will achieve commercial viability through the successful exploration on, or mining development of, its projects. Until the Company is able to realise value from its projects, it is likely to incur operational losses.

(b) Conditionality of IPO Offer

The obligation of the Company to issue the Securities under the IPO Offer is conditional on ASX granting approval for Admission to the Official List. If this condition is not satisfied, the Company will not proceed with the IPO Offer. Failure to complete the IPO Offer may have a material adverse effect on the Company's financial position.

(c) Future capital requirements

The Company has no operating revenue and is unlikely to generate any operating revenue unless and until its projects are successfully developed and production commences.

The Company will require ongoing funding to meet its objectives of developing and operating the Proposed Operation, meeting obligations to maintain licensing tenure and to settle on the purchase of land which the Company has contracted to buy. Section 2.10 details the further debt and equity financing which the Company expects it will require to achieve these aims. There can be no certainty that the Company can raise the funds to undertake the development of these projects.

Any equity financing will be dilutive to Shareholders and may be undertaken at lower prices than the then market price. Debt financing, if available, may involve restrictive covenants which limit the Company's operations and business strategy. Although the Directors believe that additional capital can be obtained, no assurances can be made that appropriate capital or funding, if and when needed, will be available on terms favourable to the Company or at all. If the Company is unable to obtain additional financing as needed, it may be required to reduce the scope of its activities, and this could have a material adverse effect on the Company's activities including resulting in its tenements being subject to forfeiture and could affect the Company's ability to continue as a going concern.

(d) Potential for dilution

On completion of the IPO Offer and the subsequent issue of Securities pursuant to the IPO Offer, the number of Shares in the Company will increase from 139,781,273 to 189,665,841 (assuming the Minimum Subscription is raised). This means the number of Shares on issue will increase by approximately 35.69%. On this basis, existing Shareholders should note that if they do not participate in the IPO Offer (and even if they do), their holdings may be considerably diluted (as compared to their holdings and number of Shares on issue as at the date of this Prospectus).

Further, additional equity funding required to deliver the Proposed Operation may also be dilutive. Refer also to Section 2.10.

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(e) Permitting risk – Proposed Operation

The Company's ability to proceed with the Proposed Operation is dependent upon its ability to secure all necessary approvals, permits and licences. The most material approvals yet to be obtained include securing a mining lease, obtaining all necessary environmental approvals, planning approvals and an approved work plan.

Before construction can commence on the Goschen Project, part of Retention Licence 6806 needs to be converted to a mining lease. There is no certainty this will occur or if it does, that the mining lease will be subject to conditions which are acceptable to the Company.

A number of environmental and social impact assessments are underway to support the approvals requirements for the Company's Goschen Project. These assessments are undertaken by appropriately qualified and experienced consultants. To date, all consultants have stated their baseline monitoring and assessments are sufficient to inform the environmental approval requirements. There is a risk that regulators may not consider their requirements to have been met. This may result in the need for additional baseline monitoring and/or rework of consultant assessment reports, which may delay the Company's approval schedule. There is also a risk of delays caused by community unrest.

As approvals could be delayed due to a change in Government at the scheduled November 2022 Victorian State election, the Company has built in further contingencies in the approval schedule based on advice received from regulators and specialist consultants.

There is no guarantee the Company will be able to obtain all required approvals, licences and permits. To the extent that required authorisations are not obtained or are delayed, the Company's operational and financial performance may be materially adversely affected.

Refer to Sections 2.7(f) and 2.9 for further details on required approvals and the current progress that has been made toward achieving them.

(f) Final Investment Decision

As discussed in detail in Section 1.9, the Company is yet to make the FID to proceed with the Goschen Project.

While the Goschen DFS has been completed, there are still several other factors and hurdles that need to be adequately addressed before the economic viability of the projects can be confirmed. Until these matters are addressed, it would not be prudent for the Board to commit the Company to proceeding with these projects.

(g) LOM Plan

The Goschen Project Life of Mine (LOM) Plan discussed in Section 2.7(c) of this Prospectus is based on Goschen DFS independent commodity marketing analysis and a range of other factors. The Company is undertaking further engineering and design as part of ongoing refinement of accuracy and precision of engineering, capital and operating estimates that are used as inputs into the LOM Plan. This work will further test base case inputs and outputs which could lead to adjustments in proposed development plan and the LOM Plan. As the Company moves through its further assessment and preparatory work in relation to the Goschen Project, there is a risk that key assumptions on which the LOM Plan is based may prove to be untrue or require adjustment. This could result in material changes to expected Capex or Opex, financing costs, commodity prices and other factors, which could either significantly change the expected financial outcomes or even jeopardise the economic viability of the Goschen Project.

Currently the Company has developed its plant design based on the Goschen DFS, results of JORC 2012 Ore Reserve statement and approvals program. There is a risk that the design may be inappropriate, but it is intended that progressive programs of engineering and procurement (as described in Section 2) should de-risk the development of further stages of the Goschen Project. The Company intends to conduct a FEED phase as part of the use of funds.

(h) Regulatory risk

The availability and rights to explore and produce REM, the ability to develop the Proposed Operation, as well as operational profitability generally, can be affected by changes in government policy which are beyond the control of the Company. The governments of the relevant States in which the Company has interests conduct reviews from time to time of policies in connection with the granting and administration of exploration and mining tenements and related permits and approvals.

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Changing attitudes to environmental matters, land care, cultural heritage, and indigenous rights, together with the nature of the political process, provide the possibility for future policy changes. There is a risk such changes may affect the Company's current or planned operations.

(i) Offtake risk

The Company has signed a legally binding MOU with Shenghe in respect of over 50% of its nameplate production, for an initial three year term. This commitment is however subject to certain conditions first being met (as described at Section 7.1). There is no guarantee that these conditions will be met.

Additionally, the Company is yet to secure offtake arrangements for the balance of its expected production from the Proposed Operation. The Company's ability to generate sufficient revenue or to secure debt financing for the Goschen Project is dependent upon its ability to secure offtake partners for all or most of its production. There can be no certainty the Company can enter into offtake contracts covering all of its production, at prices or on terms which support the economics or funding of the Company's projects.

(j) Land acquisition risk

Certain of the Company's wholly owned subsidiaries are party to land acquisition contracts for freehold land on which many of the Company's projects are located, including the Goschen Project. Control of the land is critical to being able to conduct the proposed mining operations. These subsidiaries currently owe the vendors an aggregate amount of approximately $13 million under the contracts, payable in monthly instalments over five years in the case of one contract and ten years in the case of two others.

A fourth land acquisition agreement is expected to be concluded for additional freehold land within the project area in the next 4 - 6 weeks, with total consideration of approximately $2.7 million, payable in instalments within six months of signing. The ability to continue to meet those payments is dependent on the ability to raise further capital (including under the IPO Offer).

If the subsidiaries are unable to make these payments, there is a risk that the contracts will be terminated, and the subsidiaries will not acquire the land.

Likewise, if any counterparty party defaults in the performance of their obligations, it may be necessary for the Company to seek a legal remedy, which can be costly. Either of these outcomes could result in a potential delay to project development and may deny the Company access to the Ore Reserves located on those properties.

These contracts have however been structured to be binding on the vendors (and are no longer conditional) with long dated settlement dates, providing flexibility for the Company to determine when to complete the acquisitions based on operational requirements.

The fourth pending land acquisition is necessary to reduce permitting risk and secure access to a portion of the Ore Reserves. Should this land not be secured there is a risk that the mining footprint may need to be reduced and may deny the Company access to the Ore Reserves located on this property. Negotiations are however well advanced and are expected to conclude in Q4 2022.

(k) Native title risk

In relation to the Tenements, there may be areas over which legitimate common law native title rights of Aboriginal Australians exist. Where native title rights do exist, the ability of the Company to gain access to the affected parts of a Tenement or to progress from exploration to development and mining operations may be adversely affected. Generally, risk associated with native title for mining activities centres on the validity of 'future acts', being something that is done on land / waters, or the authorisation of such activities, which would be inconsistent with native title.

The grant of mining authorisations (such as a mining licence for the land covered by a retention licence) typically constitutes a 'future act.' A 'future act' can be lawfully undertaken if it is validated pursuant to certain procedures set out in the *Native Title Act 1993* (Cth) (NT Act). Native title risk associated with future acts typically crystallises when a 'future act' undertaken in non-conformity with the procedures in the NT Act is invalid to the extent of inconsistency with native title, and compensation may be payable for actions that impair the exercise of native title rights.

Native title risk also arises in relation to tenements which are yet to be granted to the Company (this includes any mining licences sought in the future for the land covered by retention licence RL6806 or any of the other Tenements).

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This risk can be managed by following appropriate 'future act' validation procedures under the NT Act, such as the 'right to negotiate' process or entry into an Indigenous Land Use Agreement (ILUA) with registered native title holders or claimants. Project scheduling must, therefore, consider and address any need to comply with 'future act' procedures.

The Company's Tenements currently overlap a native title claim, native title determination and two ILUAs to varying degrees, outlined in the Solicitor's Tenement Report. It is possible the terms and conditions of any such ILUAs may be unfavourable for, or restrictive against, the Company.

Refer to Section 6 of the Solicitor's Tenement Report for further information relating to native title.

(l) Land access risk

The Tenements overlap with land that is the subject of other rights, including:

(i) Parcels of private land;

(ii) Crown Land which is restricted under the Victorian Mining Act; and

(iii) Crown land that falls within the Box-Ironbark region of the state of Victoria.

Any delays or costs in respect of conflicting third-party rights, obtaining necessary consents, or compensation obligations may adversely impact the Company's ability to carry out exploration or mining activities within the affected areas.

(m) Contract risk

The operations of the Company will require the involvement of a number of third parties, including suppliers, contractors, and customers. With respect to these third parties, and despite applying best practice in terms of pre-contracting due diligence, the Company is unable to avoid the risk of financial failure, performance failure or default by a contractor or customer.

(n) Mineral Resource and Ore Reserve estimates

The Company's present Mineral Resource and Ore Reserve estimates are compliant with the JORC Code 2012 and are expressions of judgement based on knowledge, experience, and industry practice.

Having said this, the various statements have been prepared by differing Competent Persons, at differing times, and using differing commodity price decks. Estimates which were valid when initially prepared may alter significantly when new information or techniques become available or when updated commodity price decks are used. In addition, by their very nature, Mineral Resource and Ore Reserve estimates are imprecise and depend to some extent on interpretation which may prove to be inaccurate.

(o) Hydromet Circuit

In May 2022, the Company commenced early process and testwork definition for the Phase 1A Hydromet Circuit to establish a basis for the further engineering study.

The core process design and modelling completed by GPA Engineering in early 2022 validated the feed throughput (including head grade and mineral assemblage), mass balance, process design criteria, process flowsheet, reagent usage rates, utilities demand and recoveries over the LOM Plan.

This Hydromet Circuit is proposed to be included within the Phase 1A processing of the Goschen Project. The Hydromet Circuit is scheduled to commence operations approximately 18 months post first production of Phase 1 Base Project (with timing to be reviewed at Phase 1 FID). Further testwork and engineering work is required to be undertaken to finalise the plans and inform final assessment of the Hydromet Circuit, for which further funding will be required in addition to the IPO Offer proceeds. This further study is needed to affirm understanding of design, schedule, cost, and implementation. Uncertainties will remain until all studies are completed and implementation occurs.

(p) Results of studies

The Company has already undertaken a number of studies to progress the Goschen Project to its current point, including the Goschen DFS. Subject to the results of exploration and testing programs to be undertaken, the Company may progressively undertake a number of studies in respect to its projects. These studies will include the Goschen Project FEED studies (for Phase 1) and (subject to further funds being raised) Hydromet Circuit engineering study (for Phase 1A).

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Any studies will be completed within parameters designed to determine the economic feasibility of a project within certain limits. There can be no guarantee that any of the studies will confirm the economic viability of the projects.

Even if a study confirms the economic viability of a project, there can be no guarantee that the Company can raise the development funding or that the project will be successfully brought into production as assumed or within the estimated parameters in the pre-feasibility study (e.g. operational costs and commodity prices) once production commences.

(q) Price rise risk

All costing and pricing used by the Company to estimate Capex, Opex and future funding required to deliver the Proposed Operation are best estimates based on Goschen DFS data as at March 2022, which reflects real time pricing and data received during the final calendar quarter of 2021. There can be no certainty that costs, and prices will not increase (including due to inflation in the ordinary course) between now and the Company making contractual commitments for each of the relevant Goschen Project inputs.

(r) New miner and execution risk

While key members of the Board and Executive team have deep industry experience in developing and operating mines, the Company has not previously operated a mine.

The development and delivery of substantial projects such as the Proposed Operation will consume a large amount of management time and attention and will require the Company to scale up its workforce over time. It also carries significant risks, including potential delays or costs in implementing necessary changes, and difficulties in establishing new operations.

(s) Operational and cost risk

If the Company is able to successfully develop and deliver the Proposed Operation, it will be subject to a number of additional risks involved in running mining and processing operations. The Company's future success would be dependent upon a continuation of production generating operating surpluses to service debt financing and provide necessary working capital, including funding its other planned expenditure and exploration programs. Whether it can do so will depend largely upon an efficient and successful operation and exploitation of the resources and associated business activities and management of commercial factors.

The mining and exploration activities of the Company may be affected by a number of factors, including but not limited to geological conditions; failure to achieve predicted grades and/or resources in future project mining and processing of ore; operational and technical difficulties encountered in mining and processing and tailings deposition; unanticipated metallurgical or recovery problems which may affect extraction costs; insufficient or unreliable infrastructure, such as power, water and transport; force majeure events; power outages; adverse/seasonal weather patterns; critical equipment failures; continued availability of the necessary technical equipment, plant and appropriately skilled and experienced technicians; labour shortages; industrial and other accidents; industrial disputes; improper, defective and negligent use of technical plant and equipment; improper, defective and negligent conduct by employees, consultants and contractors; adverse changes in government policy or legislation; and access to the required level of funding and unforeseen cost changes beyond the control of the Company can negatively impact the Company's activities, thereby affecting its future profitability and the value of its securities.

There is a risk that unforeseen geological and geotechnical difficulties may be encountered when developing and mining Ore Reserves. Unforeseen geological and geotechnical difficulties could impact production and/or require additional operating or capital expenditure to rectify problems and thereby have an adverse effect on the Company's financial and operational performance.

Further, until completion of all FEED and further testwork discussed in this Prospectus and securing proposals for an EPC contract and other required infrastructure, the Company's final Capex and Opex estimates will be subject to adjustment.

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(t) Access to services

Given the high levels of activity in the resources industry currently, it may be difficult for the Company to procure access to the necessary services to undertake exploration and related activities at its key projects. These services include but are not limited to access to drill rigs and drilling crew via the relevant contractors, geologists, and timely access to assay labs and results therefrom.

(u) Access to personnel and personnel housing

Australia's labour market is currently experiencing a number of constraints which may make it difficult to procure sufficient personnel to operate the Goschen Project. Accommodation opportunities in the towns closest to the project area (Kerang and Swan Hill) are also constrained. If adequate accommodation (or transport to site) cannot be sourced, the Company may need to update its development plans to include the construction of an on-site accommodation camp which would have a corresponding impact on both Capex and Opex.

(v) New projects and acquisitions

Although the Company's immediate focus will be on its existing projects, as with similar entities conducting development activities, it will pursue and assess other new business opportunities in the resource sector over time which complement its business. These new business opportunities may take the form of direct project acquisitions, joint ventures, farm-outs, farm-ins, acquisition of tenements/permits, and/or direct equity participation.

The acquisition of projects (whether completed or not) may require the payment of monies (as a deposit and/or exclusivity fee) after only limited due diligence or prior to the completion of comprehensive due diligence. There can be no guarantee that any proposed acquisition will be completed or be successful. If the proposed acquisition is not completed, monies advanced may not be recoverable, which may have a material adverse effect on the Company.

If an acquisition is completed, the Directors will need to reassess at that time, the funding allocated to current projects and new projects, which may result in the Company reallocating funds and/or raising additional capital (if available). Furthermore, notwithstanding that an acquisition may proceed upon the completion of due diligence, the usual risks associated with the new project/ business activities will remain.

(w) Liquidity risk

Even if the Company achieves Admission, there can be no guarantee that its securities will trade in sufficient quantities to achieve liquidity.

(x) Occupational health and safety

Safety is a fundamental risk for any exploration and production company particularly concerning personal injury, damage to property and equipment and other losses. The occurrence of any of these risks could result in legal proceedings against the Company and substantial losses to the Company due to injury or loss of life, damage or destruction of property, regulatory investigation, and penalties or suspension of operations.

(y) Rehabilitation of tenements

In relation to the Company's proposed operations, issues could arise from time to time regarding abandonment costs, consequential clean-up costs, environmental concerns, and other liabilities. In these instances, the Company could become subject to liability.

(z) Insurance risk

The Company maintains insurances relevant to its current activities. However, if/ when it progresses the development of the Proposed Operation, it will require additional insurances suitable for its stage of development and operations, and consistent with prudent industry practice. No assurances can be given that the Company will be able to obtain such additional insurance coverage or will be able to obtain it at reasonable rates, or that any coverage that it arranges will be adequate and available to cover any such claims.

(aa) R&D claims

As an explorer, the Company has previously claimed material amounts of tax offsets in respect of its research and development activities. These claims have been self-assessed, but are subject to comprehensive criteria and may be subject to future audit and adjustment or claw-back.

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4.2 Mining Industry Risks

(a) Title risk

Interests in all tenements in Victoria are governed by State legislation and are evidenced by the granting of licenses or leases. Each license or lease is for a specific term and carries with it annual expenditure and reporting commitments, as well as other conditions requiring compliance. Failure to comply with these conditions may result in forfeiture of the Company's tenements.

Further, the Company's tenements are subject to periodic renewal. While there is no reason to believe such renewals will not be granted, the Company cannot guarantee this will occur. New conditions may also be imposed on the tenements under the renewal process which may adversely affect the Company.

Consequently, the Company could be exposed to additional costs, have its ability to explore or mine the tenements reduced or lose title to or its interest in the tenements if license conditions are not met or if insufficient funds are available to meet expenditure commitments.

The Company also cannot give any assurance that title to such tenements will not be challenged or impugned. Accordingly, there is a residual risk that, despite the Company's investigations, the tenements may be subject to prior unregistered agreements or transfers, or title may be affected by unregistered encumbrances, third party interests or defects.

(b) Aboriginal cultural heritage risk

There are Aboriginal heritage objects and/or places within the area of the Company's tenements which are either registered or have been lodged for registration.

There is a risk that additional Aboriginal objects or places may exist on the land the subject of the tenements, and it is an offence to disturb or damage such objects or places without a cultural heritage permit or approved cultural heritage management plan. The existence of such objects or places may preclude or limit mining activities in certain areas of the tenements or cause delays in the progression of the development of a mine.

(c) Exploration and development risks

Mineral exploration and development are a speculative and high-risk undertaking which may be impeded by circumstances and factors beyond the control of the Company. Even where apparently viable mineral resources are identified, there is no guarantee that they can be economically exploited due to changes in parameters such as downward commodity price fluctuations.

The delivery of the Goschen DFS is a significant de-risking step which informs the project definition and commercial packages which are to be taken forward as part of FEED phase. FEED will refine the project definition and commercial work packages. Even with the delivery of the Goschen DFS there are future risks such as negative change in commodity prices, which could potentially delay economic exploitation of the Ore Reserves.

The exploration and development activities of the Company may be adversely affected by a range of factors including geological conditions, unanticipated technical and operational difficulties, seasonal weather patterns, contracting risk from third parties providing essential services and changing government laws and regulations.

(d) Metallurgy

Metal and/or mineral recoveries are dependent upon the metallurgical process that is required to liberate economic minerals and produce a saleable product and by nature contain elements of significant risk such as:

(i) identifying a metallurgical process through test work to produce a saleable metal and/or concentrate;

(ii) developing an economic process route to produce a metal and/or concentrate; and

(iii) changes in mineralogy in the ore deposit can result in inconsistent metal recovery, affecting the economic viability of the project.

(e) Resource estimation risks

The Company has already defined a resource at its Goschen Project and intends to undertake further exploration activities at Goschen and to develop the ore bodies at its Cannie and Nowie Projects. However, no assurances can be given that the exploration will result in the determination of any additional resources. Even if such resources are expanded or identified, no assurance can be provided that this can be economically extracted.

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(f) Payment obligations

Pursuant to the licences comprising the Company's projects, the Company will become subject to payment and other obligations. In particular, holders are required to expend the funds necessary to meet the minimum work commitments attaching to its tenements. Failure to meet these work commitments may render the tenements subject to forfeiture or result in the holders being liable for fees. Further, if any contractual obligations are not complied with when due, in addition to any other remedies that may be available to other parties, this could result in dilution or forfeiture of the Company's interest in its existing projects. Further details of these conditions and obligations are set out in Section 5 (and Schedule 1 to 3 of the Solicitor's Tenement Report).

(g) Minerals and currency price volatility

The Company's ability to proceed with the development of the Proposed Operation and its other projects, and benefit from any future mining operations will depend on market factors, some of which may be beyond its control.

As the Company's potential earnings will be largely derived from the sale of REM and heavy mineral sands, the Company's future revenues and cash flows will be impacted by changes in the prices and available market for these commodities. The price for heavy mineral sands and REM are negotiated prices and so any substantial decline in the prices of these commodities or increase in transport or distribution costs may have a material adverse effect on the Company and the value of its Shares.

Commodity prices fluctuate and are affected by numerous factors beyond the control of the Company. These factors include current and expected future supply and demand, forward selling by producers, production cost levels in major mineral producing centres and macroeconomic conditions such as inflation and interest rates.

(h) Exchange rate risk

The international prices of most commodities are denominated in United States dollars while the Company cost base will be in Australian dollars. Consequently, changes in the Australian dollar exchange rate will impact on the earnings of the Company.

(i) Competition risk

The industry in which the Company will be involved is subject to domestic and global competition and the Company will have no influence or control over the activities or actions of its competitors. Other companies may develop new projects or expand their existing projects which result in greater supply coming into the market which adversely affects the price the Company will receive for its production.

(j) Environmental risk

The Company's activities are subject to State and Federal laws and regulations concerning the environment. As with most exploration projects and mining operations, the Company's activities are expected to have an impact on the environment, particularly if advanced exploration or field development proceeds.

The Company's tenements are subject to conditions, including in respect of environmental matters. Such conditions are on standard terms setting out the minimum operating requirements which the licence holder must comply with.

The Company intends to conduct its activities in an environmentally responsible manner and in compliance with all applicable laws, including all conditions of its environmental approvals. Areas disturbed by the Company's activities will be rehabilitated as required by regulatory authorities.

The disposal of mining and process waste and mine water discharge are under constant legislative scrutiny and regulation. There is a risk that environmental laws and regulations become more onerous making the Company's operations more expensive.

Approvals are required for land clearing and for ground disturbing activities. However, the Company may be unsuccessful in obtaining an approval, or may obtain an approval on unacceptable conditions or even with an approval, the Company may be the subject of accidents or unforeseen circumstances that could subject the Company to extensive liability.

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(k) Licences, permits and approvals – general

The Company holds all material authorisations required to undertake the exploration programs described in this Prospectus. However, many of the mineral rights and interests held by the Company are subject to the need for ongoing or new government approvals, licences and permits.

The Company's exploration and proposed development activities are also subject to other extensive laws and regulations relating to numerous matters including resource licence consent, conditions including environmental compliance and rehabilitation, taxation, employee relations, health and worker safety, waste disposal, protection of the environment, native title and heritage matters, protection of endangered and protected species and other matters. The Company will require approvals, consents, or permits from government or regulatory authorities to authorise these operations, which may not be forthcoming, or which may not be able to be obtained on terms acceptable to the Company. This said, there is no reason to believe that necessary government and regulatory approvals will not be forthcoming although there is a further risk that the obtaining of these approvals may be delayed. The costs and delays associated with obtaining necessary permits and complying with these permits and applicable laws and regulations could materially delay or restrict the Company from proceeding with the development of a project.

(l) Reliance on key personnel

The responsibility of overseeing the day-to-day operations and the strategic management of the Company depends substantially on its senior management and its key personnel. The Company may be detrimentally affected if one or more of the key management or other personnel cease their engagement with the Company.

(m) Climate change risks

Mining of mineral resources is relatively energy intensive and is dependent on the consumption of fossil fuels. As a mining development company, the Company is exposed to both transition risks and physical risks associated with climate change.

Climate change is a risk the Company has considered, particularly related to its operations in the mining industry. The climate change risks particularly attributable to the Company include:

(i) transitioning to a lower-carbon economy may entail extensive policy, legal, technology and market changes. Increased regulation and government policy designed to mitigate climate change may adversely affect the Company's cost of operations and adversely impact the financial performance of the Company; and

(ii) physical risks resulting from climate change can be acute or chronic. Acute physical risks refer to those that are event-driven, including increased severity of extreme weather events, such as cyclones or floods. Chronic physical risks refer to longer term shifts in climate patterns (for example, sustained higher temperatures) that may cause sea level rises or chronic heat waves. The transition and physical risks associated with climate change (including also regulatory responses to such issues and associated costs) may significantly affect the Company's operating and financial performance.

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4.3 General Risks

(a) Economic risks

The future viability of the Company is also dependent on a number of other factors affecting performance of all industries and not just the exploration and mining industries.

(b) Market conditions

The market price of the Shares can fall as well as rise and may be subject to varied and unpredictable influences on the market for equities in general and resource exploration stocks in particular.

Further, share market conditions may affect the value of the Company's quoted Shares regardless of the Company's operating performance. Share market conditions are affected by many factors such as:

(i) general economic outlook;

(ii) interest rates and inflation rates;

(iii) currency fluctuations;

(iv) changes in investor sentiment;

(v) the demand for, and supply of, capital; and

(vi) terrorism or other hostilities.

Neither the Company nor the Directors warrant the future performance of the Company or any return on an investment in the Company.

(c) Technology

Any failure or delay in developing new technology or an inability to exploit technology as successfully or cost-effectively as competitors could result in a decrease in customer demand, which could have a material adverse effect on the Company's business and cash flows, prospects for growth, financial condition, and results of its operations.

(d) Force majeure

Events may occur within or outside the markets in which the Company operates that could impact upon the global or Australian economies and the operations of the Company. These events include acts of terrorism, outbreaks of international hostilities, fires, pandemics, floods, earthquakes, labour strikes, civil wars, natural disasters, outbreaks of disease, and other man-made or natural events or occurrences that can have an adverse effect on the Company's ability to conduct business.

(e) Litigation risks

The Company is exposed to possible litigation risks including native title claims, tenure disputes, environmental claims, occupational health and safety claims and employee claims. Further, the Company may in the ordinary course of business become involved in litigation and disputes, for example with service providers, customers or third parties infringing the Company's intellectual property rights. Any such claim or dispute if proven, may impact adversely on the Company's operations, financial performance, and financial position. The Company is presently being prosecuted by WorkCover WA for an inadvertent failure to obtain workers compensation insurance in Western Australia. The Company expects that any financial exposure will be covered by its insurance.

(f) Taxation

The acquisition and disposal of Securities will have tax consequences, which will differ depending on the individual financial affairs of each investor. All potential investors in the Company are urged to obtain independent financial advice about the consequences of acquiring Securities from a taxation point of view and generally.

To the maximum extent permitted by law, the Company, its officers, and each of their respective advisers accept no liability and responsibility with respect to the taxation consequences of applying for Shares under this Prospectus.

(g) Unforeseen expenditure risk

Expenditure may need to be incurred that has not been taken into account by the Company. Although the Company is not aware of any such additional expenditure requirements, if such expenditure is subsequently incurred, this may adversely affect the expenditure proposals of the Company.

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(h) Infectious diseases COVID-19

The coronavirus disease (COVID-19) is continuing to impact global economic markets. The nature and extent of the effect of the outbreak on the performance of the Company remains unknown.

The Company's share price may be adversely affected in the short to medium term by the economic uncertainty caused by COVID-19. Further measures to limit the transmission of the virus implemented by governments around the world (such as travel bans and quarantining) may adversely impact the Company's operations. Examples of possible implications include delays to regulatory approvals, construction delays, site access restrictions, limited or no access to funding on commercially acceptable terms, delays in obtaining, or increases in prices of, materials required for development and construction of the Goschen Project.

The Company is monitoring the situation closely and has considered the impact of COVID-19 on the Company's business and financial position. The situation, however, is continually evolving, and the consequences are therefore inevitably uncertain.

(i) Changes to legislation or regulations

The Company may be affected by changes to laws and regulations in Australia. Such changes could have adverse impacts on the Company from a financial and operational perspective.

(j) Commercialisation risk

Even if the company discovers commercial quantities of minerals and develops its projects, there is a risk the Company will not achieve a commercial return.

(k) Other risks

This list of risk factors is not an exhaustive list of the risks faced by the Company or by investors in the Company. The risk factors described in this Section as well as risk factors not specifically referred to above may in the future materially affect the financial performance of the Company and the value of its securities.

4.4 Speculative Investment

The above list of risk factors ought not to be taken as exhaustive of the risks faced by the Company or by investors in the Company. The above factors, and others not specifically referred to above, may in the future materially affect the financial performance of the Company and the value of the Shares offered under this Prospectus.

Therefore, the Securities to be issued pursuant to this Prospectus carry no guarantee with respect to the payment of dividends, returns of capital or the market value of those Securities.

Potential investors should consider that the investment in the Company is highly speculative and should consult their professional advisers before deciding whether to apply for Securities pursuant to this Prospectus.

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5. Financial Information

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5.1 Introduction

5.1.1 Financial Information

The financial information contained in this Section 5 includes the historical financial information for VHM Limited (VHM or the Company) for the financial years ended 30 June 2020 (FY20), 30 June 2021 (FY21), and 30 June 2022 (FY22).

This Section 5 contains a summary of:

(a) The Statutory Historical Financial Information, comprising:

  (i) VHM's audited statutory historical consolidated statement of profit and loss and other comprehensive income for FY20, FY21 and FY22 (Statutory Historical Income Statement);

  (ii) VHM's audited statutory historical consolidated statement of cash flow for FY20, FY21 and FY22 (Statutory Historical Statement of Cash Flow); and

  (iii) VHM's audited statutory historical consolidated statement of financial position as at 30 June 2022 (Statutory Historical Statement of Financial Position),

  (Together, the Statutory Historical Financial Information); and

(b) Pro Forma Historical Statement of Financial Position, comprising:

  (i) VHM's unaudited Pro forma Historical Statement of Financial Position as at 30 June 2022 (Pro Forma Historical Statement of Financial Position).

The Statutory Historical Financial Information and Pro Forma Historical Statement of Financial Position is together referred to as the "Financial Information."

VHM has a 30 June financial year end.

In addition, this Section 5 summarises:

(c) the basis of preparation and presentation of the Financial Information (see Section 5.2);

(d) information regarding certain non-AIFRS financial measures (see Section 5.2.3);

(e) the pro forma adjustments to the Statutory Historical Financial Information (see Section 5.5);

(f) information regarding liquidity and capital resources (see Section 5.5.1);

(g) information regarding VHM's contractual obligations, commitments, and contingent liabilities (see Section 5.5.2);

(h) VHM's dividend policy (see Section 5.7);

(i) the Independent Limited Assurance Report, set out in Annexure D of this Prospectus;

(j) the indicative capital structure described in Section 1.6; and

(k) a description of VHM's critical accounting policies (see Annexure E to this Prospectus).

The information in Section 5 should also be read in conjunction with the risk factors set out in Section 4 and other information contained in this Prospectus.

All amounts disclosed in Section 5 and each of Annexure D and Annexure E are presented in Australian dollars (AUD) and, unless otherwise noted, are rounded to the nearest thousand. Some numerical figures included in this Prospectus have been subject to rounding adjustments. Any differences between totals and sums of components in figures or tables contained in this Prospectus are due to rounding.

5.2 Basis of Preparation and Presentation of the Financial Information

5.2.1 Overview and preparation and presentation of the Historical Financial Information

The Directors are responsible for the preparation and presentation of the Financial Information.

The Financial Information included in this Prospectus is intended to present potential investors with information to assist them in understanding the underlying historical financial performance, cash flow and financial position of VHM.

Given the fact that VHM is in an early stage of development, there are significant uncertainties associated with forecasting the future revenues and expenses of the Company. On this basis, the Directors believe that there is no reasonable basis for the inclusion of financial forecasts in the Prospectus.

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The Statutory Historical Financial Information has been prepared in accordance with the recognition and measurement principles of Australian equivalents to International Financial Reporting Standards (IFRS) issued by the Australian Accounting Standards Board. Following the listing, the Company will report under IFRS and report in AUD, which is its elected presentation currency. The VHM significant accounting policies are described in Annexure E of this Prospectus.

The Pro Forma Statement of Financial Position has been prepared in accordance with the recognition and measurement principles of Australian Accounting Standards (AAS) and IFRS other than it includes certain adjustments which have been prepared in a manner consistent with AAS and IFRS, that reflect the impact of certain transactions as if they had occurred on or before 30 June 2022.

The Financial Information is presented in an abbreviated form, and it does not include all of the presentation and disclosures, statements or comparative information required by AAS and IFRS and other mandatory professional reporting requirements applicable to general purpose financial reports prepared in accordance with the Corporations Act.

In addition to the Financial Information, Section 5 describes certain non-IFRS financial measures that VHM uses to manage and report on the business that are not defined under or recognised by AAS or IFRS.

Refer to Section 2.1 for a summary of the current corporate structure.

Independent Limited Assurance Report

The Financial Information (as defined above) has been reviewed by RSM Corporate Australia Pty Limited in accordance with the Australian Standard on Assurance Engagements ASAE 3450: "Assurance Engagements involving Corporate Fundraisings and/or Prospective Financial Information" as stated in its Independent Limited Assurance Report set out in Annexure D. Investors should note the scope and limitations of the Independent Limited Assurance Report.

5.2.2 Preparation of the Financial Information

The Financial Information has been presented on both a statutory and a pro forma basis.

The Statutory Historical Financial Information has been derived from the respective audited financial statements of VHM.

The FY20, FY21 and FY22 financial statements of the Company were audited by HLB Mann Judd, who issued an unqualified audit opinion which included a material uncertainty related to going concern.

The Pro Forma Historical Statement of Financial Position has been prepared for the purpose of inclusion in this Prospectus. The Pro Forma Historical Statement of Financial Position has been derived from the audited Statutory Historical Financial Information of VHM as at 30 June 2022 and adjusted for the effects of the subsequent events and pro forma adjustments.

Section 5.5 sets out the pro forma adjustments to the Statutory Historical Statement of Financial Position, and a reconciliation of the Statutory Historical Statement of Financial Position to the Pro Forma Historical Statement of Financial Position. Pro forma adjustments were made to the Statutory Historical Statement of Financial Position to reflect the impact of the Offer on VHM as if it had occurred as at 30 June 2022.

In preparing the Financial Information, VHM's accounting policies have been consistently applied throughout the periods presented.

Investors should note that past results are not a guarantee of future performance.

Changes in accounting standards

AASB 16 – Leases

AASB 16 sets out the principles for the recognition, measurement, presentation, and disclosure of leases and requires lessees to account for all leases under a single on balance sheet model similar to the accounting for finance leases under AASB 117. The standard includes two recognition exemptions for lessees – leases of 'low value' assets and short-term leases (i.e. leases with a lease term of 12 months or less). At the commencement date of a lease, a lessee will recognise a liability to make lease payments (i.e. the lease liability) and an asset representing the right to use the underlying asset during the lease term (i.e. the right of use asset).

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Lessees will be required to separately recognise the interest expense on the lease liability and the depreciation expense on the right of use (ROU) asset.

The Company applied AASB 16 using the modified retrospective (cumulative catch up) method from 1 July 2019. The Company has elected to use the exception to lease accounting for short term leases and leases of low value assets, and the lease expense relating to these leases are recognised in the statement of profit or loss on a straight-line basis.

Other than AASB 16 – Leases, there are no other changes in accounting standards which have had a material impact on VHM's historical performance or financial position.

Going Concern

The financial information has been prepared on a going concern basis which assumes the commercial realisation of the future potential of the Group's assets and discharge of its liabilities in the normal course of business.

The Group recorded a loss of $9.2m (FY21: $6.6m) for FY22. At 30 June 2022, the Group had net assets of $17.3m which included cash and cash equivalents of $24.4m and a working capital surplus of $19.9m.

Based on the working capital surplus at 30 June 2022 and, for the following reasons, the Directors believe that the assumption of going concern is valid in the preparation of the financial information:

- The directors have a track record of successfully raising equity capital and in January 2022, the Company commenced activities in preparation for the Company's planned 2022 IPO having appointed Canaccord as lead broker in December 2021. The Company is at the final stage of initial offer of securities to the public ('IPO') expected to be completed before the end of December 2022; and
- The Company also has the capacity to reduce discretionary expenditure in line with available funding.

Should the Group be unable to raise sufficient capital within the next 12 months, there is a material uncertainty whether the Group will be able to continue as a going concern and therefore, whether it will be able to realise its assets and discharge its liabilities in the normal course of business.

The Financial Information has been prepared on a going concern basis, which contemplates continuity of normal business activities and realisation of assets and discharge of liabilities in the normal course of business.

The Directors believe that there are reasonable grounds that VHM will be able to continue as a going concern as a result of the proceeds raised from the Offer.

Accordingly, the board of directors believe that the Company will be able to continue as a going concern and that it is appropriate to adopt the going concern basis in the preparation of the financial information.

5.2.3 Explanation of certain non-IFRS financial measures

To assist in the evaluation of the performance of VHM, certain measures are used to report on the Company that are not recognised under AAS or IFRS. These measures are collectively referred in this Section 5 and under Regulatory Guide 230 Disclosing Non-IFRS Financial Information published by ASIC as "non-IFRS financial measures". The principal non-IFRS financial measures that are referred to in this Prospectus are as follows:

- **EBITDA** is earnings / (losses) before interest (net of finance income), taxation, depreciation, and amortisation. Management uses EBITDA to evaluate the operating performance of the business without the non cash impact of depreciation, amortisation and before interest and taxation. EBITDA can be useful to help understand the cash generation potential of the business. EBITDA should not be considered as an alternative to measures of cash flow under IFRS and investors should not consider EBITDA in isolation from, or as a substitute for, an analysis of the results of VHM's operations;
- **EBIT** is earnings / (losses) before interest (net of finance income) and taxation;
- **NLBT** is net loss before tax;
- **NLAT** is net loss after tax attributable to Shareholders;
- **Operating cash outflow** is EBITDA after adding back non cash items in EBITDA and changes in working capital. VHM uses operating cash flow to indicate the level of operating cash flow generated from EBITDA; and
- **Other income** primarily includes the ATO cash flow boost and JobKeeper.

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Potential investors should also refer to the description of the key financial terms set out in Section 5.3.

Although the Directors believe that these measures provide useful information about the financial performance of VHM, they should be considered as supplements to the income statement or cash flow statement measures that have been presented in accordance with AAS and IFRS and not as a replacement for them. As these non-IFRS financial measures are not based on AAS or IFRS, they do not have standard definitions, and the way VHM has calculated these measures may differ from similarly titled measures used by other companies. Investors and readers of this Prospectus should therefore not place undue reliance on these non-IFRS financial measures.

5.3 Summary of the Historical Statutory Statement of Profit or Loss and other Comprehensive Income

Table 5.1 sets out the VHM audited Historical Statement of Profit or Loss and other Comprehensive Income for FY20, FY21 and FY22.

Table 5.1: Summary of the Historical Statutory Income Statement

$'000	FY20 Audited	FY21 Audited	FY22 Audited
Operating expenses			
Professional fees	(1,543)	(2,337)	(3,104)
Employee related expenses	(1,972)	(1,709)	(1,600)
Share based payment expense	(1,931)	(830)	(1,047)
Administration expenses	(225)	(224)	(338)
Property expenses	(195)	(86)	(175)
Other operating expenses	(305)	(148)	(336)
Total operating expenses	**(6,172)**	**(5,333)**	**(6,599)**
EBITDA	**(6,172)**	**(5,333)**	**(6,599)**
Depreciation and amortisation	(168)	(154)	(126)
EBIT	**(6,340)**	**(5,487)**	**(6,725)**
Other income	199	166	2
Interest expense, net	(1,109)	(1,270)	(2,427)
NLBT	**(7,250)**	**(6,590)**	**(9,150)**
Income tax expense	-	-	-
NLAT	**(7,250)**	**(6,590)**	**(9,150)**

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Description of the key financial terms

Set out below is a description of the key financial terms used in the presentation of the Historical Financial Information:

(a) **Professional fees** relate to consulting, accounting, audit, and legal advisory. The costs increased year on year, primarily due to the Group relied on external consultants for project management and technical services, business development, DFS, environmental effects statement, training for key management, as well as accounting and company secretarial services. Historically, 50% to 80% of the consulting fees have been capitalised into development expenditure;

(b) **Employee related expenses** decreased in FY21, mainly due to the reduction of employees as a result of the impact of COVID-19. The decrease in the FY22 costs was primarily due to the net impact of the increased salaries and wages due to the recruitment of a CFO in September 2021, an executive general manager and a financial controller in March 2022 and other employees, as well as the additional payroll tax recognised for the employees' share based payment, which were offset by the increased capitalised costs ($2.5 million in FY21 vs. $2.7 million in FY22);

(c) **Share based payment expense** relates to the equity settled costs in relation to the services provided by employees and consultants. The fair value of the options is determined using a Black Scholes model;

(d) **Administration expenditure** includes office supplies (i.e. filing, printing, stationery, and subscription), IT and telecommunication (i.e. telephone, internet, and IT support), motor vehicle costs, director fees, as well as other general expenses;

(e) **Property expenses** includes the rent and associated utilities for several premises. The large cost in FY20 was mainly due to the rent associated with the premises located in Perth and Victoria from July 2019 until May 2020, amounting to $90,000. The cost increase in FY22 was primarily due to the loss on disposal of the fixture and fittings of $76,000 as a result of the surrender of the Mount Hawthorn office lease in February 2022;

(f) **Other operating expenses** primary consist of travel and entertainment, insurance, and other miscellaneous expenses. The large costs in FY20 were primarily due to the travel and entertainment expenses incurred for the previous IPO capital raising activities ($241,000 in FY20 vs. $99,000 in FY21);

(g) **Depreciation** is expensed on a straight-line basis for the computer and office equipment (33%), fixtures and fittings (5% to 33%) and motor vehicle (14%). The right of use asset is amortised over the respective lease period;

(h) **Other income** relates to the ATO cash flow boost and JobKeeper and gains from the disposal of assets in FY20 and FY21; and

(i) **Interest expense, net** represents the interest expense in relation to the land acquisition liabilities, letter of credit, R&D loans, the capitalised interest on the convertible notes, as well as the capitalised operating lease liabilities.

General factors affecting the statutory historical operating results of VHM

Below is a discussion of the main factors which affected the VHM operations and the relative financial performance in FY20, FY21 and FY22, which VHM expects may continue to affect it in the future. The discussion of these general factors is intended to provide a summary only and does not detail all factors that affected VHM's historical operating and financial performance, nor everything which may affect VHM's operations and financial performance in the future.

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Management discussion and analysis of the Statutory Historical Financial Information

Table 5.2 sets out the mixture of professional fees incurred for FY20, FY21 and FY22.

Table 5.2: Professional fees summary

$'000	FY20 Audited	FY21 Audited	FY22 Audited
Consulting fees	910	1,953	2,175
Legal fees	520	297	771
Accounting fees	113	88	157
Total professional fees	**1,543**	**2,337**	**3,104**

(j) **Consulting fees** primarily include the costs paid to the consultants who provided the technical services to the Company, including the Goschen Project management and technical advice, preparation of the DFS (minerals, groundwater, water, and power supply and etc.), strategic and development advice, employee training, as well as the other consulting services. The increase in consulting fees (before capitalisation) in FY22 was due to the technical services provided for the Goschen Project;

(k) **Legal fees** relate to the costs paid for the previous capital raisings in FY20 and FY21 and the capital raising in FY22, as well as the legal advice for contracts, options and employee related; and

(l) **Accounting fees** mainly relate to the costs paid for bookkeeping, auditing, and the tax advice.

Table 5.3: Summary of employee costs

$'000	FY20 Audited	FY21 Audited	FY22 Audited
Salaries and wages	4,398	3,595	3,707
Superannuation	349	281	222
Payroll tax	57	82	293
Annual expenses	13	181	18
Workers' compensation	11	8	43
Recruitment	-	-	47
Other employee related costs	5	13	3
Total employee related costs	**4,833**	**4,159**	**4,334**
Capitalised exploration costs	(2,861)	(2,450)	(2,734)
Total costs after capitalisation	**1,972**	**1,709**	**1,600**

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	FY20			FY21			FY22		
	FTE	S&W ($'000)	Avg. annu. S&W per FTE ($'000)	FTE	S&W ($'000)	Avg. annu. S&W per FTE ($'000)	FTE	S&W ($'000)	Avg. annu. S&W per FTE ($'000)
Senior management	4.7	1,111	237	4.0	1,072	268	4.1	1,464	353
Project and operations	5.9	1,454	245	4.8	1,187	249	3.1	934	304
Business development	2.7	671	253	1.6	399	254	1.6	491	304
Administration (IT, Finance, HR)	5.3	843	159	3.9	693	177	2.5	467	189
Public relations	1.7	318	192	1.0	244	244	1.5	350	241
Total	**20.2**	**4,398**	**217**	**15.2**	**3,595**	**236**	**12.8**	**3,707**	**290**

(m) **Employee expenses** represents the costs paid to employees.

(i) The FY21 salaries and wages (before capitalisation) declined, primarily due to a reduction of headcount/FTEs of employees from 20.2 in FY20 to 15.2 in FY21 as a result of the reduced project activities in FY21 driven by the impact of COVID-19;

(ii) Whilst the FTEs further decreased to 12.8 in FY22 (28 full time employees), the total salaries and wages increased, primarily due to:

- a new CFO joined the Company in September 2021;
- a new executive general manager and a financial controller joined the Company in March 2022;
- other new roles (i.e. the environment and approvals specialist and the community and stakeholder engagement advisor) recruited during the period from January to June 2022; and
- the redundancy payments paid to certain employees (a business development manager, the head of HR, a financial controller, a finance manager, and an operations manager) who left the Company during the period.

(iii) Historically, over 50% of total employee related expenses were capitalised into exploration costs.

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5.4 Summary of Historical Statutory Statement of Cash Flows

Table 5.4 sets out the audited Historical Statutory Cash Flows for FY20, FY21 and FY22. The statutory cash flow information has been constructed using the indirect method (i.e. reconciling EBITDA to operating cash flows).

Table 5.4: Summary of the Historical Statutory Statement of Cash Flows

$'000	FY20 Audited	FY21 Audited	FY22 Audited
Operating cash flows			
EBITDA	**(6,172)**	**(5,333)**	**(6,599)**
Other income	199	166	2
Add back: non cash share based payment	1,931	830	1,047
Add back: surrender of lease write off	-	-	76
Add back: shares issued in lieu of salary	-	-	110
Change in trade and other receivables	(14)	45	(726)
Change in prepayments	12	(314)	247
Change in deposits	(38)	(12)	45
Change in trade and other payables	357	101	1,785
Change in employee entitlements	14	174	24
Net working capital movement	**331**	**(6)**	**1,375**
Net operating cash outflows	**(3,711)**	**(4,343)**	**(3,989)**
Investing cash flows			
Purchase of PPE	(16)	(117)	(350)
Payment of land acquisition liabilities	-	(508)	(911)
Payment of exploration expenditure	(6,549)	(4,580)	(12,182)
R&D refund	3,482	3,068	3,044
Net investing cash outflows	**(3,083)**	**(2,137)**	**(10,399)**

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$'000	FY20 Audited	FY21 Audited	FY22 Audited
Financing cash flows			
Proceeds from shares issued	1,007	16,765	-
Payment of share issue costs	(94)	(515)	-
Proceeds from the convertible notes issued	3,150	3,648	31,840
Payment of convertible notes issue costs	-	(231)	(1,948)
Proceeds from / repayment of borrowings	1,742	(1,223)	(551)
Principal repayment of lease obligations	(132)	(135)	(80)
Interest paid	(920)	(1,288)	(1,382)
Net financing cash inflows	**4,753**	**17,022**	**27,879**
Net cash movement	(2,041)	10,542	13,491
Cash at the beginning of the financial period	2,374	333	10,875
Cash at the end of the period	**333**	**10,875**	**24,366**

Management discussion and analysis of the historical cash flows

Net operating cash outflows fluctuated over the Historical Period, primarily due to the improvement/deterioration of EBITDA, the non cash share based payment, together with the movement in net working capital.

Net investing cash outflows represent the costs capitalised in relation to exploration expenditure, which is netted off against the R&D tax incentive received, as well as the cash payments for the land acquisition.

Net financing cash inflows largely relate to the historical capital raisings undertaken. The Company received funds from various investors, amounting to $900,000 (net of issue costs) in FY20, $16.3 million (net of issue costs) in FY21. In addition, the Company issued convertible notes to investors, amounting to $3.2 million in FY20, $3.4 million (net of issue costs) in FY21, and $29.9 million (pre-IPO capital raising, net of issue costs) in FY22. Borrowings include the loans acquired to fund the R&D expenditure, which was secured and repaid by way of the R&D tax incentives received.

Operating cash outflows and exploration expenditures over the Historical Period have been funded by a mixture of equity, convertible notes, and R&D tax incentives.

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5.5 Historical Statutory Statement of Financial Position and Pro Forma Historical Statement of Financial Position

Table 5.5 sets out the audited Historical Statutory Statement of Financial Position of VHM and the pro forma adjustments that have been made to prepare the Pro Forma Historical Statement of Financial Position.

The Pro Forma Historical Statement of Financial Position is provided for illustrative purposes only and is not represented as being necessarily indicative of VHM's view of its financial position upon Completion of the Offer or at a future date.

Further information on the sources and uses of funds of the Offer is contained in Section 1.7.

Table 5.5: Historical Statutory Statement of Financial Position and Pro Forma Historical Statement of Financial Position as at 30 June 2022

As at 30 June 2022 $'000	VHM Audited	Minimum Pro forma	Oversubscription Pro forma
Current assets			
Cash and cash equivalents	24,366	37,538	46,982
Other receivables	532	729	766
Prepayments	376	74	74
Deposits	31	31	31
Total current assets	**25,305**	**38,372**	**47,854**
Non current assets			
Deferred exploration expenditure	27,217	25,798	25,798
Property, plant and equipment, net	10,733	14,623	14,623
ROUA	5	5	5
Total non current assets	**37,955**	**40,426**	**40,426**
Total assets	**63,260**	**78,798**	**88,280**
Current liabilities			
Trade and other payables	3,637	3,637	3,637
Land acquisition liabilities	1,046	3,467	3,467
Convertible note	349	-	-
Provision for AL	395	395	395
Total current liabilities	**5,427**	**7,499**	**7,499**

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As at 30 June 2022 $'000	VHM Audited	Minimum Pro forma	Oversubscription Pro forma
Non current liabilities			
Convertible notes	34,073	-	-
Land acquisition liabilities	6,416	6,416	6,416
Total non current liabilities	**40,489**	**6,416**	**6,416**
Total liabilities	**45,916**	**13,915**	**13,915**
Net assets	**17,344**	**64,883**	**74,365**
Equity			
Issued capital	41,287	94,761	104,171
Share based payment reserves	5,638	5,638	5,638
Retained losses	(29,581)	(35,516)	(35,443)
Total equity	**17,344**	**64,883**	**74,365**

(a) Other receivables primarily relate to the GST and government subsidy receivables;

(b) Prepayments mainly comprise the prepaid insurance and other prepaid operating expenses;

(c) Deposits represent term deposits as security for a bank guarantee, as well as the deposits paid to the landlords for the various related premises;

(d) Deferred exploration expenditure refers to the capitalised exploration costs;

(e) PPE primarily consists of the land acquisition, computer and office equipment, fixtures and fittings and motor vehicles;

(f) Trade and other payables represent trade creditors, accruals, and payroll related payables;

(g) Land acquisition liabilities (current and non current) refers to the outstanding amount payable for the four land acquisitions;

(h) Radium Capital provided R&D loans to the Company to finance the eligible R&D expenditure which are included in borrowings. These loans were secured by the future anticipated R&D refund with an interest rate of 14% per annum and which have since been repaid in full;

(i) As at 30 June 2022, convertible notes (current and non current) represent the 2021 convertible notes of 35 convertible notes, each with a face value of $10,000 being issued to fund the Company's operations in FY21, as well as 3,184 convertible notes (pre-IPO capital raising) with a face value of $10,000 being issued in FY22, and part of the 2021 convertible notes (334 convertible notes) converted to the new convertible notes in FY22; and

(j) Issued capital increased significantly in FY21, due to the Company issuing 15,981,941 ordinary Shares at $0.35 per share in July 2020 and issuing 20,452,103 Shares at $0.60 per share in March and April 2021, which is offset by issue costs of $1.5 million. The increase in issued capital in FY22 was primarily due to 1,850,815 ZEPOs being exercised in August 2021 and 182,831 Shares being issued to the NEDs in June 2022 in lieu of the sign on bonus and director fees.

The following transactions and events had not occurred prior to 30 June 2022 but have taken place or will take place on or before the Allotment Date. The financial information in this Section 5 assumes that they occurred on or before 30 June 2022.

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In addition, the following subsequent events and pro forma transactions will take place pursuant to the Offer:

Subsequent events:

1. Interest expense accrued and capitalised on the existing convertible notes (with a face value of $350,000) for the period from 1 July up to the lodgement date, amounting to $15,000;
2. Interest expense accrued on the pre-IPO convertible notes (with a face value of $31.8 million) with an annual interest rate of 10% for the period from 1 July up to the lodgement date, amounting to $1.5 million;
3. A previous advisor exercised 320,000 options at an exercise price of $0.22 and 320,000 options at an exercise price of $0.38 prior to the IPO, with a fair value of $190,000;
4. VP Minerals was incorporated to acquire the gold exploration licences for an agreed consideration of $1.4 million (payable in Shares), together with the aggregate amount of expenditure incurred by VHM from 1 January 2022 to the completion date and was subsequently demerged from the VHM Group by way of an in-specie distribution through an equal capital reduction. At the end of May 2022, Shareholders voted (by way of poll) in favour of the demerger of VP Minerals. On 18 July 2022, the 4 existing exploration licenses were approved for transfer and registered in the name of VP Minerals. The demerger of VP Minerals was completed in August 2022. Refer to Section 7.3 for a summary of the Demerger Asset Sale Agreement;
5. An expected acquisition of new land, amounting to $2.7 million, of which, a deposit of $269,000 will be paid prior to the IPO and the remaining amount to be paid in two instalments within six months of the date of execution of the agreement (pending);
6. Acquisition of the Kerang warehouse amounting to $1.2 million (plus GST), completed in October 2022; and
7. The compensation to be paid to a landowner in August 2022 for a new residence during the operational period, amounting to $2 million.

Pro forma transactions:

8. The conversion of the remaining 2021 Notes, with a face value of $350,000 (excluding the capitalised interest) at a conversion price of $1.08 (a 20% discount to the IPO price), into 324,074 ordinary Shares, and which is a cashless conversion. Refer to Section 7.10 for a summary of the convertible note agreements;
9. The conversion of the 2022 Notes, with a face value of $31.8 million, together with the rolled-over 2021 Notes of $3.3 million (excluding the capitalised interest) at a conversion price of $1.0125 (a 25% discount to the IPO price), into 34,745,679 ordinary Shares, and which is cashless conversion. Refer to Section 7.11 for a summary of the convertible note agreements;

In relation to the IPO Offer, the following transactions are expected to occur:

10. The completion of the IPO Offer, raising $20 million (14,814,815 ordinary Shares) with an oversubscription up to $10 million (22,222,222 ordinary Shares) at $1.35 each; and
11. Total expenses (cash and non cash) associated with the minimum Offer are estimated to be $3.9 million, with $1.2 million being capitalised and $2.6 million being expensed and a GST credit of $77,000. Total expenses (cash and non cash) associated with the oversubscription are estimated to be $4.4 million, with $1.8 million being capitalised and $2.5 million being expensed and a GST credit of $115,000. As at 30 June 2022, $446,000 of the Offer costs had been prepaid.

Refer to Section 8.9 for a detailed summary of the Offer costs.

Refer to Section 7.11 for a summary of the Lead Manager mandate.

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Recognition of a deferred tax asset

A deferred tax asset has not been recognised in relation to the capitalised Offer costs due to the uncertainty surrounding the flow of economic benefits that will flow in future periods.

Refer to Section 1.6 for a detailed summary of the capital structure.

Table 5.6: Pro forma capital structure

$'000	No. of shares	Issued capital	Res.	Retained losses	Net assets
As at 30 June 2022					
Ordinary shares	139,141,273	41,287	5,638	(29,581)	17,344
Subsequent events					
Advisor options exercised	640,000	190	-	-	190
Interest accrued on the convertible notes		-	-	(1,480)	(1,480)
Demerger of VP Minerals	-	(1,419)	-	-	(1,419)
Land compensation payment		-	-	(2,000)	(2,000)
Pro forma transactions					
Conversion of existing convertible notes	324,074	364	-	-	364
Conversion of convertible notes (pre IPO)	34,745,679	35,539	-	-	35,539
Pre offer capital structure	**174,851,026**	**75,960**	**5,638**	**(33,061)**	**48,537**
Pro forma transactions in relation to the offer					
Public offer	14,814,815	20,000	-	-	20,000
Offer costs		(1,200)	-	(2,454)	(3,654)
Total (undiluted)	**189,665,841**	**94,761**	**5,638**	**(35,516)**	**64,883**
Incremental pro forma transactions in relation to oversubscription offer					
Public offer	7,407,407	10,000	-	-	10,000
Offer costs		(590)	-	72	(518)
Total (undiluted)	**197,073,248**	**104,171**	**5,638**	**(35,443)**	**74,365**

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5.5.1 Liquidity and capital resources

Following Completion of the Offer, the Company will have cash of $37.5 million on a pro forma basis as at 30 June 2022, based on the Minimum Offer.

Following Completion of the Offer, VHM's principal sources of funds are expected to be cash on hand (including the proceeds of the Offer). VHM's primary use of cash is funding its development, information technology and operations, sales, and marketing, as well as to fund working capital. VHM expects that it will have sufficient cash flow from the proceeds of the Offer to meet its operational requirements and business needs following Completion of the Offer. VHM's ability to generate sufficient cash depends on its future performance which, to a certain extent, is subject to a number of factors beyond its control including general economic, financial, and competitive conditions.

The Company expects that it will have sufficient cash to meet its short and medium term operational requirements and other business needs.

5.5.2 Contractual obligations, commitments, and contingent liabilities

Table 5.7 below sets out a summary of the exploration commitments for all the exploration licences as at 30 June 2022.

Table 5.7: Commitment's summary

As at 30 June 2022 $'000	Audited
Within one year	2,349
Later than a year but not later than five years	3,587
Later than five years	-
Total	**5,936**

Under the terms of mineral tenement licences held by the Group, minimum annual expenditure obligations are required to be expended during the forthcoming financial year in order for the tenements to maintain a status of good standing.

As at 30 June 2022, the total expenditure commitments amounted to $5.9 million, of which $2.3 million is within one year and $3.6 million is between one to five years.

5.5.3 JobKeeper and government stimulus disclosure

Table 5.8 below sets out a summary of the cash flow boost and job keeper payments received by VHM from the government over FY20, FY21 and FY22.

Table 5.8: Cash flow boost and job keeper

$'000	FY20 Audited	FY21 Audited	FY22 Audited
Job keeper	99	150	-
Cash flow boost	100	18	-
Total Cash flow boost and job keeper	**199**	**168**	**-**

These amounts were recognised separately as other revenue and not netted off against salaries and wages.

5.6 Critical Accounting Policies

Preparing financial statements in accordance with AAS requires Management to make judgements, estimates and assumptions about the application of accounting policies that affect the reported revenues and expenses, carrying values of assets and liabilities and the disclosure of contingent liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates. The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period or in the period of the revision and future periods if the revision affects both the current and future periods.

5.7 Dividend Policy

The payment of dividends by the Company is at the complete discretion of the Directors. Given the stage of development of VHM, the Directors have no current intention to declare and pay a dividend.

In determining whether to declare future dividends, the Directors will have regard to VHM earnings, overall financial condition, capital requirements and the level of franking credits available. There is no certainty that the Company will ever declare and pay a dividend.



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6. Board, Management and Corporate Governance

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6.1 Board of Directors

At the date of this Prospectus, the Board is comprised of:

(a) Donald Runge – Chairman;

(b) Graham Howard – Managing Director; and Chief Executive Officer;

(c) Michael Allen – Executive Director; and

(d) Gamini Colless – Non-Executive Director.

6.2 Directors' Profiles

At the date of this Prospectus, the names, and details of the Directors in office are:

(a) Donald Runge – Non-Executive Chairman

Mr Runge was appointed to the Board on 14 September 2017 and appointed as Chairman on 29 July 2021.

Mr Runge brings 40 years' experience in the mining industry including operational, project and construction management.

He has specific expertise in the areas of feasibility, development, construction and efficient operational control of both surface and underground mining and treatment operations.

Mr Runge has held senior management roles with Peko Wallsend, Newcrest Mining, North Ltd and the Silangan Copper Gold Project in the Philippines.

Mr Runge is considered to be independent.

(b) Graham Howard – Managing Director

Mr Howard was appointed as Managing Director on 12 August 2016. Mr Howard holds a Bachelor Science-Geology, University of Canberra, Distinguished Alumni.

Mr Howard is a Fellow of the Australasian Institute of Mining and Metallurgy. He has more than 30 years' experience, including 20 years' operating in executive leadership and senior operations management positions.

He has extensive corporate and operations experience and proven record of identifying and delivering multi-billion-dollar resource projects.

In the past, Mr Howard has held other senior executive positions, including Executive Officer of Mount Magnet South NL (an ASX listed gold company) from 2011-2013, and other significant roles in billion-dollar projects such as Newcrest Mining Ltd (ASX:NCM), Telfer (concept – feasibility – construction – operations), Boddington (Newcrest) and the Silangan Copper Gold Project in the Philippines.

Mr Howard is not considered to be independent.

(c) Michael Allen – Executive Director

Mr Allen was appointed as an Executive Director on 7 November 2017, and subsequently as Chief Financial Officer (CFO) on 1 February 2018. On 6 September 2021, Mr Allen relinquished CFO responsibilities and was appointed Executive Director of Government, Industry, Indigenous, Land and ESG.

Mr Allen holds a Bachelor of Arts in Accounting and is a member of Chartered Accountants Australian and New Zealand. He is a chartered accountant and experienced CFO with more than 30 years' experience in large companies including KPMG, Walt Disney International, Opportunity International and Engineers Australia.

He has almost 20 years' experience acting as a CFO in a range of large companies in various industries and can do so to the requirements of a publicly listed organisation.

Immediately prior to being engaged by the Company, Mr Allen was Executive General Manager of Corporate Services at Engineers Australia for 12 years.

Mr Allen is not considered to be independent.

(d) Gamini Colless – Non-Executive Director

Mr Colless was appointed as a Non-Executive Director on 23 July 2021. He holds a Bachelor of Arts and Bachelor or Laws (both from Australian National University).

Mr Colless is a partner at a leading national law firm in the banking & financial services practice group. He has been practicing as a solicitor for over 30 years' and is highly experienced in corporate finance, project finance, structured finance, major property, and infrastructure projects.

He has advised corporate, Government and joint-venture clients on complex financing transactions for numerous large-scale development projects in Australia.

Mr Colless is considered to be independent.

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6.3 Company Secretary

Mr Ian Hobson – Company Secretary

Mr Ian Hobson is a fellow chartered accountant and chartered secretary who acts as independent director and company secretary to ASX listed companies, indigenous corporations, and private organisations. Prior to commencing his own practice, Mr Hobson had more than 20 years professional accounting experience working for large, chartered accounting firms. He also has commercial experience in Australia, UK, and Canada.

As an experienced finance and corporate governance professional, Mr Hobson brings a wealth of experience to Boards contributing to financial management, corporate governance, capital raising strategies and transaction and due diligence capabilities drawn from his exposure to a variety of industries.

6.4 Senior Management

Mr Michael Sheridan – Chief Finance Officer (CFO) and Deputy CEO

Mr Sheridan was appointed on 6 September 2021 as Chief Financial Officer.

Mr Sheridan holds a Bachelor of Economics/Bachelor of Laws, University of Sydney; Master of Laws, University of Sydney; Practical Legal Training Course, College of Law, NSW; Graduate Diploma in Applied Finance and Investment, FINSIA/Securities Institute.

Mr Sheridan is an experienced commercial executive, bringing over 25 years of experience in the Australian and internal resources (mining and oil & gas) industry, as well as telecommunications and corporate advisory sectors.

- Mr Sheridan has worked at senior management levels in publicly listed companies. His previous roles include CEO/Managing Director (and prior to that CFO/Company Secretary) of Horizon Oil Limited (ASX:HXN);
- Executive Assistant to President, Minera Alumbrera Limited (Argentina);
- Commercial Manager (Peru), RGC Limited; and
- Commercial Manager, International, Ampolex Limited.

Mr Mike Reynolds – Executive General Manager Projects

Mr Reynolds possesses over 25 years' experience in engineering and project management roles within the mining and oil & gas industries.

He was an integral part of the delivery of the Telfer Project in Western Australia, where he was involved in the project design, and implementation phases through to operation. This involvement in the engineering phase stretches through to procurement, development, construction, commissioning, operational readiness, and plant operation in mines producing gold, copper, alumina, coal, and diamonds.

Mr Reynolds experiences reach beyond Australia to the International Ok Tedi Project in PNG with OTML, where he provided expertise during construction, commissioning, and operational readiness.

6.5 Interests of Directors

Except as disclosed in this Prospectus, no Director of the Company (or entity in which they are a partner or director) has, or has had in the two years before the date of this Prospectus, any interests in:

(a) the formation or promotion of the Company; or

(b) property acquired or proposed to be acquired by the Company in connection with its formation or promotion of the Offer; or

(c) the Offer, and

no amounts have been paid or agreed to be paid and no value or other benefit has been given or agreed to be given to:

(d) any Director to induce him or her to become, or to qualify as, a Director; or

(e) any Director of the Company for services which he or she (or an entity in which they are a partner or director) has provided in connection with the formation or promotion of the Company or the Offer.

Details in relation to the interests in and payments from the Company are as set out below.

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6.6 Security Holdings of Directors

The Directors and their related entities have the following interests in Securities as at the date of this Prospectus (assuming that the Minimum Subscription is raised):

Director	Shares	% (Current)[1]	% (Admission)[2]	Options
Don Runge	4,498,287[3]	3.22	2.37	500,000[4]
Graham Howard	4,515,515[5]	3.23	2.38	2,156,230[6]
Michael Allen	736,000[7]	0.53	0.39	1,519,102[8]
Gamini Colless	918,831[9]	0.66	0.48	500,000[10]

Notes:

1. *Based on 139,781,273, Shares and 11,405,811 Options being on issue at the date of this Prospectus. Rounded to 2 decimal places.*
2. *Based on 189,665,841 Shares and 11,405,811 Options proposed to be on issue at the date of Admission. Rounded to 2 decimal places.*
3. *The Shares in which Mr Runge has a relevant interest are as follows:*
   - *(a) 731,429 Shares held beneficially by Mr Runge personally;*
   - *(b) 1,170,286 Shares held beneficially by Rivine Pty Ltd, a company controlled by Mr Runge; and*
   - *(c) 2,596,572 Shares held by Mr Runge and Lynette Runge ATF The Runge Super Fund, of which he is a beneficiary.*
4. *The Options in which Mr Runge has a relevant interest are 500,000 Options held personally and beneficially, with an exercise price of $1.00 and an expiry date of 31 July 2025. They are also subject to vesting conditions on the earlier of: (a) FID); (b) a change of control of the Company; or (c) 31 December 2023.*
5. *The Shares in which Mr Howard has a relevant interest are as follows:*
   - *(a) 384,000 Shares held beneficially by Mr Howard personally;*
   - *(b) 3,253,800 Shares held beneficially by Flower & Dough Pty Ltd.*
   - *(c) 877,715 Shares held by Howard Super Nominees Pty Ltd ATF Howard Super Fund, of which he is a beneficiary.*
6. *The Options in which Mr Howard has a relevant interest are as follows:*
   - *(a) 634,375 ZEPOs with an expiry date of 31 December 2024;*
   - *(b) 423,938 ZEPOs with an expiry date of 28 February 2026;*
   - *(c) 1,097,917 ZEPOs with an expiry date of 19 May 2027.*
7. *The Shares in which Mr Allen has a relevant interest are as follows:*
   - *(a) 352,000 Shares held in the name of Mr Allen personally;*
   - *(b) 256,0000 held by Alison Jane Campbell (being Mr Allen's spouse)*
   - *(c) 128,000 Shares held by Willamina Super Pty Ltd, as trustee of Mr Allen's personal super fund.*
8. *The Options in which Mr Allen has a relevant interest are as follows:*
   - *(a) 465,208 ZEPOs with an expiry date of 31 December 2024;*
   - *(b) 310,144 ZEPOs with an expiry date of 28 February 2026;*
   - *(c) 743,750 ZEPOs with an expiry date of 19 May 2027.*
9. *The Shares in which Mr Colless has a relevant interest are as follows:*
   - *(a) 576,000 Shares held by Cicero Superannuation Pty Limited ATF Cicero Super Fund, of which he is a beneficiary; and*
   - *(b) 342,831 Shares held by Percolare Pty Limited ATF Percolare Investment Trust, of which he is a beneficiary.*
10. *The Options in which Mr Colless has a relevant interest are 500,000 Options held by Percolare Pty Limited ATF Percolare Investment Trust, of which he is a beneficiary, with an exercise price of $1.00 and an expiry date of 31 July 2025. They are also subject to vesting conditions on the earlier of: (a) FID); (b) a change of control of the Company; or (c) 31 December 2023.*
11. *Refer to Section 8.1 for a summary of the rights attaching to the Shares.*
12. *Refer to Section 8.2 for a summary of the rights attaching to the Options.*

As at the date of this Prospectus, none of the Directors or their related entities intend to participate in the IPO Offer.

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6.7 Remuneration of Directors

The Constitution provides that the Company may remunerate the Directors. The remuneration shall, subject to any resolution of a general meeting, be fixed by the Directors. The maximum aggregate amount of fees that can be paid to non-executive Directors is currently set at $450,000 per annum. The remuneration of the executive Directors will be determined by the Board.

The Company has entered into an executive services agreement with Mr Howard and Mr Allen as well as letters of appointment with Mr Runge and Mr Colless as set out in Section 7.

The table below summarises the remuneration provided to the current Directors and their associates for the financial year ended 31 June 2022, and the financial year ending 31 June 2021, inclusive of directors' fees, consultancy fees, share-based payments, and superannuation.

Director	Financial year ended 30 June 2022 (A$)		Financial year ended 30 June 2021 (A$)	
	Fees & Consultancy	Share based payments[5]	Fees & Consultancy	Share based payments
Don Runge[1]	126,667	5,924	56,250	-
Graham Howard[2]	516,667	343,416	574,813	354,819
Michael Allen[3]	375,000	249,643	429,731	268,852
Gamini Colless[4]	154,699	5,924	-	-

Notes:

1. *Mr Runge was appointed Director of the Company on 14 September 2017.*
2. *Comprising Managing Director remuneration. Mr Howard was appointed Managing Director of the Company on 12 August 2016.*
3. *Comprising Executive Director remuneration. Mr Allen was appointed a Director of the Company on 7 November 2017 and an Executive Director 1 February 2018.*
4. *Mr Colless was appointed Director of the Company on 23 July 2021.*
5. *Share based payments made under the employee incentive scheme for Mr Howard and Mr Allen relate to the previous year's performance.*

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6.8 Related Party Transactions

The Company has entered into the following related party transactions on arms' length terms:

(a) executive services agreements with Directors Mr Allen and Mr Howard and letters of appointment with Directors Mr Colless and Mr Runge on standard terms (refer Section 7.12 for details);

(b) deeds of indemnity, insurance, and access with each of its Directors on standard terms (refer Section 7.16 for details); and

At the date of this Prospectus, no other material transactions with related parties and Directors' interests exist that the Directors are aware of, other than those disclosed in the Prospectus.

6.9 ASX Corporate Governance Council Principles and Recommendations

The Company has adopted comprehensive systems of control and accountability as the basis for the administration of corporate governance. The Board is committed to administering the Company's policies and procedures with openness and integrity, pursuing the true spirit of corporate governance commensurate with the Company's needs.

To the extent applicable, the Company has adopted the 4th edition of the ASX Corporate Governance Council's Corporate Governance Principles and Recommendations (Recommendations).

In light of the Company's size and nature, the Board considers that the current Board is a cost effective and practical method of directing and managing the Company. As the Company's activities develop in size, nature and scope, the size of the Board and the implementation of additional corporate governance policies and structures will be reviewed.

The Company's main corporate governance policies and practices as at the date of this Prospectus are detailed below. The Company's full Corporate Governance Plan is available in a dedicated corporate governance information section of the Company's website at **https://www.vhmltd.com.au/about-us/corporate-governance**.

(a) Board of Directors

The Board is responsible for the corporate governance of the Company. The Board develops strategies for the Company, reviews strategic objectives and monitors performance against those objectives. Clearly articulating the division of responsibilities between the Board and management will help manage expectations and avoid misunderstandings about their respective roles and accountabilities.

In general, the Board assumes (amongst others) the following responsibilities:

(i) providing leadership and setting the strategic objectives of the Company;

(ii) appointing and when necessary replacing the Executive Directors;

(iii) approving the appointment and when necessary, replacement, of other senior executives;

(iv) undertaking appropriate checks before appointing a person, or putting forward to security holders a candidate for election as a Director;

(v) overseeing management's implementation of the Company's strategic objectives and its performance generally;

(vi) approving operating budgets and major capital expenditure;

(vii) overseeing the integrity of the Company's accounting and corporate reporting systems including the external audit;

(viii) overseeing the Company's process for making timely and balanced disclosure of all material information concerning the Company that a reasonable person would expect to have a material effect on the price or value of the Company's securities;

(ix) ensuring that the Company has in place an appropriate risk management framework and setting the risk appetite within which the Board expects management to operate; and

(x) monitoring the effectiveness of the Company's governance practices.

The Company is committed to ensuring that appropriate checks are undertaken before the appointment of a Director and has in place written agreements with each Director which detail the terms of their appointment.

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(b) Composition of the Board

Election of Board members is substantially the province of the Shareholders in a general meeting. The Board currently consists of one Non-Executive Chairman, one Managing Director, one Executive Director, and one Non-Executive Director. The Company considers the Non-Executive Chairman and the Non-Executive Director to be independent. As the Company's activities develop in size, nature and scope, the composition of the Board and the implementation of additional corporate governance policies and structures will be reviewed.

(c) Identification and management of risk

The Board's collective experience will assist in the identification of the principal risks that may affect the Company's business. Key operational risks and their management will be recurring items for deliberation at Board meetings.

(d) Ethical standards

The Board is committed to the establishment and maintenance of appropriate ethical standards.

(e) Independent professional advice

Subject to the Chairman's approval (not to be unreasonably withheld), the Directors, at the Company's expense, may obtain independent professional advice on issues arising in the course of their duties.

(f) Remuneration arrangements

The Nomination and Remuneration Committee makes recommendations to the Board in relation to the Company's remuneration framework for Directors, including the process by which any pool of Directors' fees approved by Shareholders is allocated to Directors; the remuneration packages to be awarded to senior executives; equity-based remuneration plans for senior executives and other employees. If the Committee includes an executive director, he or she will not be involved in deciding his or her own remuneration, either directly or indirectly.

In addition, subject to any necessary Shareholder approval, a Director may be paid fees or other amounts as the Directors determine where a Director performs special duties or otherwise performs services outside the scope of the ordinary duties of a Director (e.g. non-cash performance incentives such as options).

Directors are also entitled to be paid reasonable travel and other expenses incurred by them in the course of the performance of their duties as Directors.

The Board is also responsible for reviewing any employee incentive and equity-based plans including the appropriateness of performance hurdles and total payments proposed.

(g) Securities trading policy

The Board has adopted a policy that sets out the guidelines on the sale and purchase of securities in the Company by its key management personnel (i.e. Directors and, if applicable, any employees reporting directly to the Executive Directors). The policy generally provides that the written acknowledgement of the Chairman (or the Board in the case of the Chairman) must be obtained prior to trading.

(h) Diversity and inclusion policy

The Board values diversity and recognises the benefits it can bring to the organisation's ability to achieve its goals. Accordingly, the Company has set in place a diversity policy. This policy outlines the Company's diversity objectives in relation to gender, age, cultural background, and ethnicity. It includes requirements for the Board to establish measurable objectives for achieving diversity, and for the Board to assess annually both the objectives, and the Company's progress in achieving them.

(i) Audit and risk

The Company maintains a combined audit and risk committee. The Committee carries out the tasks under the written terms of reference for the committee, including but not limited to, corporate governance and sustainability, financial reporting, internal control framework, external audit, tax risk management and compliance, risk management, internal audit, and the compliance with the Corporations Act, ASX Listing Rules and Corporate Governance Principles. The audit and risk committee are responsible for the appointment of the external auditors of the Company, and the Board from time to time will review the scope, performance, and fees of those external auditors.

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(j) External audit

The Company in general meetings is responsible for the appointment of the external auditors of the Company, and the Board from time to time will review the scope, performance, and fees of those external auditors.

(k) Whistleblower policy

The Board has adopted a whistleblower protection policy to ensure concerns regarding unacceptable conduct including breaches of the Company's code of conduct can be raised on a confidential basis, without fear of reprisal, dismissal, or discriminatory treatment. The purpose of this policy is to promote responsible whistle blowing about issues where the interests of others, including the public, or of the organisation itself are at risk.

(l) Anti-bribery and anti-corruption policy

The Board has a zero-tolerance approach to bribery and corruption and is committed to acting professionally, fairly and with integrity in all business dealings. The Board has adopted an anti-bribery and anti-corruption policy for the purpose of setting out the responsibilities in observing and upholding the Company's position on bribery and corruption and to provide information and guidance to those working for the Company on how to recognise and deal with bribery and corruption issues.

(m) Shareholder communications policy

The Board has adopted a shareholder communication policy to ensure that shareholders are informed of all major developments affecting the Company's state of affairs. The policy details the communication methods that the Company will use to convey information to shareholders in a timely manner.

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6.10 Departures from Recommendations

Following admission to the Official List, the Company will be required to report any departures from the Recommendations in its annual financial report.

The Company's compliance and departures from the Recommendations as at the date of this Prospectus are detailed in the table below.

Principles and Recommendations	Comply?	Explanation for Departures
Principle 1 - Lay solid foundations for management and oversight		
Recommendation 1.1 A listed entity should have and disclose a board charter setting out: • the respective roles and responsibilities of its board and management; and • those matters expressly reserved to the board and those delegated to management.	Yes	The Board has adopted a Board Charter (available on the Company's website) detailing the functions and responsibilities of the Board and management. That Charter sets out the role and responsibilities of the Board, generally and in relation to corporate governance, the role and responsibilities of Board Committees, the Board's relationship with management, the structure of the Board, and the role of the chair.
Recommendation 1.2 A listed entity should: • undertake appropriate checks before appointing a director or senior executive or putting someone forward for election as a director; and • provide security holders with all material information in its possession relevant to a decision on whether to elect or re-elect a director.	Yes	The Company's Nomination and Remuneration Committee Charter requires the Board to undertake appropriate checks before appointing a person or putting forward to security holders a candidate for election, as a Director. All material information relevant to a decision on whether to elect or re-elect a Director will be provided to security holders in any notice of meeting pursuant to which the resolution to elect or re-elect such Director will be voted on.
Recommendation 1.3 A listed entity should have a written agreement with each director and senior executive setting out the terms of their appointment.	Yes	Each Non-Executive Director receives a letter formalising their appointment and outlining their material appointment terms. Each Executive Director and each senior executive have signed an executive service agreement setting out their duties, obligations, and remuneration.
Recommendation 1.4 The Company Secretary of a listed entity should be directly accountable to the board, through the chair, on all matters to do with the proper functioning of the board.	Yes	The Board Charter provides that the Company Secretary is accountable to the Board, through the Chair, on all governance matters, and reports directly to the Chair. The Company Secretary has primary responsibility for ensuring the Board processes and procedures run efficiently and effectively.

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Principles and Recommendations	Comply?	Explanation for Departures
Recommendation 1.5 A listed entity should: • have and disclose a diversity policy; • through its board or a committee of the board, set measurable objectives for achieving gender diversity in the composition of its board, senior executives, and workforce generally; and • disclose in relation to each reporting period: – the measurable objectives set for that period to achieve gender diversity; – the entity's progress towards achieving those objectives; and – either: – the respective proportions of men and women on the board, in senior executive positions and across the whole workforce (including how the entity has defined "senior executive" for these purposes); or – if the entity is a "relevant employer" under the *Workplace Gender Equality Act*, the entity's most recent "Gender Equality Indicators", as defined in and published under the Act.	Partially	The Board has adopted a diversity policy, but due to its size and stage of development does not disclose at the end of each reporting period, the measurable objectives for achieving gender diversity targets and whether this is in accordance with the Company's policy. The Board monitors the extent to which the level of diversity within the Company is appropriate and periodically considers measure to improve. The Board will further consider the establishment of objectives for achieving gender diversity as the Company develops and its circumstances change.
Recommendation 1.6 A listed entity should: • have and disclose a process for periodically evaluating the performance of the board, its committees, and individual directors; and • disclose for each reporting period whether a performance evaluation has been undertaken in accordance with that process during or in respect of that period.	Yes	The Remuneration and Nomination Committee Charter outline the processes to be used for evaluating the performance, development and improvement of the Board, its committees, and individual Directors. The Board regularly monitors its performance and the performance of the Directors and Board Committees throughout the year. This may occur through an internal review led by the Chair or be performed with the assistance of external advisers as considered appropriate. No performance evaluation review with respect to the Board, its committees or individual Directors was undertaken during the year given the appointment dates of the current Directors.

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Principles and Recommendations	Comply?	Explanation for Departures
Recommendation 1.7 A listed entity should: • have and disclose a process for evaluating the performance of its senior executives at least once every reporting period; and • disclose for each reporting period whether a performance evaluation has been undertaken in accordance with that process during or in respect to that period.	Yes	All senior executives are subject to performance targets, set annually and aligned with overall business goals and the Company's requirements to the position. Formal performance evaluation against these targets occurs annually, with informal assessment carried out throughout the year. Performance evaluation informs the executive's development plan. Performance pay components of executives' packages are also dependent on the outcome of the evaluation.
Principle 2 – Structure the board to be effective and add value		
Recommendation 2.1 The board of a listed entity should: • have a nomination committee which: – has at least three members, a majority of whom are independent directors: and – is chaired by an independent director; • and disclose: – the charter of the committee; – the members of the committee; and – as at the end of each reporting period, the number of times the committee met throughout the period and the individual attendances of the members at those meetings; or if it does not have a nomination committee, disclose that fact and the processes it employs to address board succession issues and ensure that the board has the appropriate balance of skills, knowledge, experience, independence, and diversity to enable it to discharge its duties and responsibilities effectively.	Yes	The Company has implemented a combined Nomination and Remuneration Committee, operating under the Nomination and Remuneration Committee Charter (available on the Company's website). The Committee is comprised of a majority of independent directors, being Don Runge (Non-Executive Chairman), Gamini Colless (Non-Executive Director) and Graham Howard (Director/CEO). Mr Runge (Board Chair) also acts as Committee Chair. The role of the Committee is to review and make nomination recommendations to the Board in relation to: • succession planning for the Board, CEO and senior executives, recruitment and the appointment and re-election of Directors; • induction and continuing professional development; • performance evaluation; • evaluating the balance of skills, knowledge, experience, independence, and diversity on the Board; and • preparing a description of the role and capabilities required for a particular appointment.

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Principles and Recommendations	Comply?	Explanation for Departures
Recommendation 2.2 A listed entity should have and disclose a board Skills Matrix setting out the mix of skills and diversity that the board currently has or is looking to achieve in its membership.	Yes	The Board's Skills Matrix seeks to achieve a balance of diverse attributes relevant to the Company's operations and markets, including skills sets, background, gender, geography, and industry experience. In addition, the following skills have also been identified as being necessary: operational management, exploration and geology, mining engineering, project delivery, finance, corporate governance, legal, and commercial negotiations. A profile of each Director's skills, experience and period of office is set out in the Directors' Report as part of the latest Annual Report.
Recommendation 2.3 A listed entity should disclose: • the names of the directors considered by the board to be independent directors; • if a director has an interest, position or relationship of the type described in Box 2.3 (Factors relevant to assessing the independence of a director) but the board is of the opinion that it does not compromise the independence of the director, the nature of the interest, position or relationship in question and an explanation of why the board is of that opinion; and • the length of service of each director.	Yes	The Company will disclose in its Annual Report those Directors it considers independent Directors and the considerations given in determining independence. The Annual Report also includes the length of service of each Director.
Recommendation 2.4 A majority of the board of a listed entity should be independent directors.	Partially	Two of the current four Directors, (Don Runge, Non-Executive Chairman and Gamini Colless, Non-Executive Director) are considered to be independent. The Board considers that given the size and scope of the Company's operations, it has the relevant experience in the exploration and mining industry and is appropriately structured to discharge its duties in a manner which is in the best interests of the Company and its Shareholders.
Recommendation 2.5 The chair of the board of a listed entity should be an independent director and should not be the same person as the CEO of the entity.	Yes	The roles of Chair of the Board and CEO are separate and distinct. The Non-Executive Chairman, Mr Don Runge, is considered to be independent.

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Principles and Recommendations	Comply?	Explanation for Departures
Recommendation 2.6 A listed entity should have a program for inducting new directors and provide appropriate professional development opportunities for directors to develop and maintain the skills and knowledge needed to perform their role as directors effectively.	Yes	In accordance with the Company's Board Charter, the Board is responsible for the approval and review of induction and continuing professional development programs and procedures for Directors to ensure they can effectively discharge their responsibilities.
Principle 3 – Instil a culture of acting lawfully, ethically, and responsibly		
Recommendation 3.1 A listed entity should articulate and disclose its values.	Yes	The Board has approved a statement of Company Values (available on the Company's website) and charges the Directors with the responsibility of implementing them.
Recommendation 3.2 A listed entity should: • have and disclose a code of conduct for its directors, senior executives, and employees; and • ensure the board or a committee of the board is informed of any material breaches of that code.	Yes	The Company has adopted a Code of Conduct (available on the Company's website) for the Board, senior executives and employees which promote the highest standards of ethics and integrity in carrying out their duties to the Company.
Recommendation 3.3 A listed entity should: • have and disclose a whistleblower policy; and • ensure that the board or a committee of the board is informed of any material incidents reported under that policy.	Yes	The Board has adopted a whistleblower policy (available on the Company's website) to ensure concerns regarding unacceptable conduct including breaches of the Company's code of conduct can be raised on a confidential basis, without fear of reprisal, dismissal, or discriminatory treatment.
Recommendation 3.4 A listed entity should: • have and disclose an Anti-Bribery and Corruption Policy; and • ensure that the board or a committee of the board is informed of any material breaches of that policy.	Yes	The Board has a zero-tolerance approach to bribery and corruption and is committed to acting professionally, fairly and with integrity in all business dealings. The Board has adopted an Anti-bribery and Anti-corruption Policy (available on the Company's website) for the purpose of setting out the responsibilities in observing and upholding the Company's position on bribery and corruption and provide information and guidance to those working for the Company on how to recognise and deal with bribery and corruption issues.

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Principles and Recommendations	Comply?	Explanation for Departures
Principle 4 – Safeguard the integrity of corporate reports		
Recommendation 4.1 The board of a listed entity should: • have an audit committee which: – has at least three members, all of whom are non-executive directors and a majority of whom are independent directors; and – is chaired by an independent director, who is not the chair of the board, • and disclose: – the charter of the committee; – the relevant qualifications and experience of the members of the committee; and – in relation to each reporting period, the number of times the committee met throughout the period and the individual attendances of the members at those meetings; or if it does not have an audit committee, disclose that fact and the processes it employs that independently verify and safeguard the integrity of its corporate reporting, including the processes for the appointment and removal of the external auditor and the rotation of the audit engagement partner.	Partially	The Board does not have a standalone Audit Committee. Instead, it has implemented a combined Audit and Risk Committee operating under the Audit Committee Charter (available on the Company's website) Due to the Company's size and stage of development, this Committee does not have at least three non-executive members. It is however Chaired by an independent Director, being Mr Gamini Colless.
Recommendation 4.2 The board of a listed entity should, before it approves the entity's financial statements for a financial period, receive from its CEO and CFO a declaration that, in their opinion, the financial records of the entity have been properly maintained and that the financial statements comply with the appropriate accounting standards and give a true and fair view of the financial position and performance of the entity and that the opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.	Yes	The Board relies on management accountability for the Company's financial statements and reports for a financial period where it requires the CEO and CFO/ Company Secretary, to provide declarations that in their opinion, the financial records and reports have been properly maintained and presented and comply with appropriate accounting standards, giving a true and fair view, in all material respects, of the financial position and performance of the Company and its entities.

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Principles and Recommendations	Comply?	Explanation for Departures
Recommendation 4.3 A listed entity should disclose its process to verify the integrity of any periodic corporate report it releases to the market that is not audited or reviewed by an external auditor.	Yes	When preparing reports for release to the market including the periodic reports, these reports shall be prepared and reviewed by the CEO before being presented to the Board for review and approval. Such reports shall not be released to market without this review and approval process.
Principle 5 – Make timely and balanced disclosure		
Recommendation 5.1 A listed entity should have and disclose a written policy for complying with its continuous disclosure obligations under ASX Listing Rule 3.1.	Yes	The Company has adopted a Continuous Disclosure Policy (available on the Company's website) which details the Company's disclosure requirements as required by the Listing Rules and other relevant legislation.
Recommendation 5.2 A listed entity should ensure its board promptly receives copies of all material market announcements after they have been made.	Yes	The Company Secretary is responsible for communicating with ASX and overseeing and coordinating the timely disclosure of information to ASX, subject to prior review and approval of all announcements by the Directors. The Company Secretary ensures that the Board are aware of when any announcement is due to go out and when the confirmation of release is received by the ASX, the Company Secretary promptly forwards this to the Board.
Recommendation 5.3 A listed entity that gives a new and substantive investor or analyst presentation should release a copy of the presentation materials on the ASX Market Announcements Platform ahead of the presentation.	Yes	The Company Secretary is charged with this responsibility in accordance with the Continuous Disclosure Policy.

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Principles and Recommendations	Comply?	Explanation for Departures
Principle 6 – Respect the rights of security holders		
Recommendation 6.1 A listed entity should provide information about itself and its governance to investors via its website.	Yes	The Company keeps investors informed through its website, which contains information on the Company, the Board and the corporate governance policies and procedures of the Company. Through its website, investors can access copies of the Company's annual, half-yearly and quarterly reports (for at least three historical years), announcements to the ASX, notices of meeting, presentations, and key media coverage.
Recommendation 6.2 A listed entity should have an investor relations program which facilitates effective two-way communications with investors.	Yes	The Company has a Shareholder Communication Policy (available on the "Corporate Governance" page of the Company's website). The policy encourages shareholder participation and engagement with the Company. It also facilitates communication directly between Shareholders and the Company, with any Shareholder queries coordinated through the Company Secretary.
Recommendation 6.3 A listed entity should disclose how it facilitates and encourages participation at meetings of security holders.	Yes	The Shareholder Communications Policy encourages Shareholder participation at Shareholders' meetings. Shareholders are provided with all notices of meeting and the Chair's address prior to meetings. The Company's lead auditor is also made available for questions at the annual general meeting. Shareholders are also always given the opportunity to ask questions of the Directors and management, either during or after Shareholders' meetings.
Recommendation 6.4 At a meeting of security holders, a listed entity should ensure all substantive resolutions are decided by a poll rather than by a show of hands.	Yes	The Company conducts a poll at meetings of security holders to decide each resolution.
Recommendation 6.5 A listed entity should give security holders the option to receive communications from, and send communications to, the entity and its security registry electronically.	Yes	Shareholders can register with Automic to receive email notifications of when an announcement is made by the Company to the ASX, including the release of annual, half-yearly and quarterly reports.

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Principles and Recommendations	Comply?	Explanation for Departures
Principle 7 – Recognise and manage risk		
Recommendation 7.1 The board of a listed entity should: • have a committee or committees to oversee risk, each of which: – has at least three members, a majority of whom are independent directors; and – is chaired by an independent director, • and disclose: – the charter of the committee; – the members of the committee; and – as at the end of each reporting period, the number of times the committee met throughout the period and the individual attendances of the members at those meetings; or if it does not have a risk committee or committees that satisfy above, disclose that fact and the processes it employs for overseeing the entity's risk management framework.	Yes	The Company has implemented a combined Audit and Risk Committee, operating under the Audit and Risk Committee Charter (available on the Company's website). The Committee consists of two independent Directors (Mr Colless and Mr Runge) and one executive Director (Mr Allen) who is not considered to be independent. The Committee is Chaired by independent Director, Mr Colless, who is not the Chair of the Board.
Recommendation 7.2 The board or a committee of the board should: • review the entity's risk management framework at least annually to satisfy itself that it continues to be sound, and that the entity is operating with due regard to the risk appetite set by the board; and • disclose, in relation to each reporting period, whether such a review has taken place.	Partially	As stated above, the Company has a combined Audit and Risk Committee which oversees the Company's risk management framework. The committee will review the Company's risk management framework bi-yearly to satisfy itself that it continues to be sound.
Recommendation 7.3 A listed entity should disclose: • if it has an internal audit function, how the function is structured and what role it performs; or • if it does not have an internal audit function, that fact and the processes it employs for evaluating and continually improving the effectiveness of its risk management and internal control processes.	No	The Company does not have an independent internal audit function. Due to the nature and size of the Company's operations, and the Company's ability to derive substantially all of the benefits of an independent internal audit function, the expense of an independent internal auditor is not considered to be appropriate.

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Principles and Recommendations	Comply?	Explanation for Departures
Recommendation 7.4 A listed entity should disclose whether it has any material exposure to environmental and social risks and, if it does, how it manages or intends to manage those risks.	Partially	The Company identifies and manages material exposure to environmental and social risks in a manner consistent with its Risk Management Policy (available on the Company's website). The Company has, and continues to, undertake various organisation wide risk reviews to identify potential business risks. The Company does not disclose climate and carbon related risks and opportunities with reference to the framework developed by the Task Force on Climate-Related Financial Disclosures.
Principle 8 – Remunerate fairly and responsibly		
Recommendation 8.1 The board of a listed entity should: • have a remuneration committee which: – has at least three members, a majority of whom are independent directors; and – is chaired by an independent director, • and disclose: – the charter of the committee; – the members of the committee; and – as at the end of each reporting period, the number of times the committee met throughout the period and the individual attendances of the members at those meetings; or if it does not have a remuneration committee, disclose that fact and the processes it employs for setting the level and composition of remuneration for directors and senior executives and ensuring that such remuneration is appropriate and not excessive.	Yes	The Company has a combined Nomination and Remuneration Committee, which operates under the Nomination and Remuneration Committee Charter (available on the Company's website). The composition of the Committee complies with Recommendation 8.1, and is discussed above in respect of Recommendation 2.1.

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Principles and Recommendations	Comply?	Explanation for Departures
Recommendation 8.2 A listed entity should separately disclose its policies and practices regarding the remuneration of non-executive directors and the remuneration of executive directors and other senior executives.	Yes	The Nomination and Remuneration Committee reviews and approves the Executive Directors' Board and Committee fees and any other forms of remuneration, subject to shareholder approved limits and the Company's constitution. All Directors of the Company typically receive remuneration comprising of a base salary component and other fixed benefits based on the terms of their respective employment agreements with the Company or its subsidiaries, and potentially the ability to participate in incentive plans. Details of the remuneration of the Directors and other executives are outlined in Sections 6.7, 7.14 and 7.15 of this Prospectus and are included in the Company's Annual Reports.
Recommendation 8.3 A listed entity which has an equity based remuneration scheme should: • have a policy on whether participants are permitted to enter into transactions (whether through the use of derivatives or otherwise) which limit the economic risk of participating in the scheme; and • disclose that policy or a summary of it. For the purposes of this policy, hedging includes the entry into any derivative transaction such as options, forward contracts, swaps, futures, warrants, caps and collars and any other transaction in financial products which operate to limit (in any way) the economic risk associated with holding the relevant securities.	Yes	The Company's Trading Policy (available on the Company's website) prohibits the hedging of unvested performance share rights and vested securities that are subject to disposal restrictions at all times, irrespective of trading windows. This is intended to prevent transactions which could distort the proper functioning of performance hurdles or reducing the intended alignment between management's and Shareholders' interests. For the purposes of this policy, hedging includes the entry into any derivative transaction such as options, forward contracts, swaps, futures, warrants, caps and collars and any other transaction in financial products which operate to limit (in any way) the economic risk associated with holding the relevant securities.

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7. Material Contracts

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The Directors consider that certain contracts entered into by the Company are material to the Company or are of such a nature that an investor may wish to have particulars of them when assessing whether to apply for Shares under the Offer. The provisions of such material contracts are summarised in this Section.

7.1 Offtake MOU – Goschen Project

On 25 October 2022, the Company signed a Memorandum of Understanding with Shenghe Resources (Singapore) Pte. Ltd. (Shenghe), a subsidiary of Shenghe Resources Holding Co. Ltd. (Shenghe Holdings) for the sale REMC and HMC to be produced at the Goschen Project (together, the Products).

Shenghe Holdings is a world-class developer, producer and supplier of rare earth resources and related products, is listed on the Shanghai Stock Exchange (SSE:600392).

A summary of the key terms:

(a) **Legally binding**

The MOU is preliminary to entry into a binding take or pay offtake agreement (Offtake Agreement), to occur within four months of the MOU. The key commercial terms are however set out in the MOU which is legally binding, subject to satisfaction of the conditions precedent (described below). The agreement is governed by the laws of the United Kingdom.

(b) **Offtake commitment, Term and Termination**

(i) Level of commitment: Shenghe has commitment to purchase 6,400tpa of REMC and 100,000tpa of HMC for each calendar year of the Term, and is to be on a take or pay basis. This represents approximately 53.33% and 54.35% respectively of the expected annual nameplate production of REMC and HMC.

The obligation to supply or take monthly contracted tonnages will not commence until production at the Plant has achieved at least 90% of the nameplate production rate for a period of 30 days. Until then, ramp up arrangements have been agreed, with Shenghe able to request further supply if otherwise available and not sold.

(ii) Term (General): The initial term is for three years commencing on the first commercial shipment of the Product (Term), subject to termination on the earlier of: (1) mutual agreement; or (2) material breach by a party following failure to remedy on either 7 days' notice (for monetary breaches) or 21 days' notice (for non-monetary breaches). The Term may be extended by mutual agreement on the same or varied terms.

(iii) Term (Specific Products): Notwithstanding the Term, the obligation to supply REMC ends upon the commissioning of the Hydromet Circuit and to supply HMC ends upon the commissioning of the mineral separation plant (MSP) and associated facilities. In each case, the beneficiated products may still be supplied for the unexpired portion of the Term, subject to terms being agreed no later than 6 months from the planned commissioning date.

The parties have also committed to undertaking extension or renewal discussions within 180 days of the expiry of the initial Term.

(iv) Additional supply: If the nameplate capacity of the Goschen Project processing facilities are to be expanded the Company may notify that intention to Shenghe, which will in turn have 30 days to advise if it wishes to acquire any of the increased production and its proposed terms. The Company is not obligated to accept.

(c) **Conditions precedent**

Commencement is subject to the following conditions:

(i) Agreement of detailed pricing calculations for Product sales, including related costs, treatment expenses and premiums or discounts against agreed reference prices, default pricing methodology and payment terms, on or before 31 December 2022;

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(ii) The Company making the FID to proceed with the Goschen Project;

(iii) The Company raising debt and equity funding on satisfactory terms that are sufficient to develop the Goschen Project;

(iv) The grant of one or more mining licenses over the area of RL 6806;

(v) Granting of all required approvals and consents in order to construct and operate the Goschen Project and to sell the Products;

(vi) Securing land ownership or use for the area of the mining licence or mining licences overlay; and

(vii) Entry into the Offtake Agreement to the Company's satisfaction on terms consistent with the MOU.

Other than the pricing calculation condition at (i) above, no time frame is specified for satisfaction of the other conditions.

(d) **Pricing**

The MOU establishes a methodology for determining base prices for the Products (in US dollars) against agreed published benchmark prices and subject to adjustment for premiums or discounts against such reference prices, recovery factors and agreed cost netbacks.

Pricing is to be reviewed and agreed quarterly. Either party has the right to request price re-negotiation where the prices vary by more than 5% from the price that would have been payable in accordance with one of two alternative pricing methods set in the MOU (based on actual market prices and separation and refining costs or benchmark prices). If agreement is not reached within 30 days, that alternative method will apply to the remainder of the Term.

(e) **Other terms**

The Product is to be sold CIF (Incoterms 2020) with the loading port yet to be confirmed. Title for each shipment is to pass on loading (subject to a letter of credit or payment of invoice) and risk shall pass upon the Product being loaded (irrespective of payment). All taxes are payable by the Company to the point on loading, and by Shenghe thereafter.

The final Offtake Agreement shall provide for other terms customary for take or pay arrangements, including payment terms, warranties, force majeure, mutual limitation of liability, sampling, weighing, shipping, scheduling, loading, laytimes, demurrage and dispatch, and dispute resolution processes (to provide for expert determination and if required, arbitration to be conducted in Singapore pursuant to the rules of the International Chamber of Commerce).

7.2 Demerger Asset Sale Agreement

The Company entered into an asset sale agreement (ASA) on 9 March 2022 with newly incorporated wholly owned subsidiary VP Minerals Limited (VPM). Pursuant to the ASA, the Company agreed to transfer certain Demerger Assets comprising four existing exploration licences (ELs) and the ELs granted under four exploration licence applications (ELAs), and related information and intellectual property (together, the Demerger Assets). The ELs and the ELAs are prospective for gold and other metalliferous elements. The ASA also includes obligations in respect of two ELs that are to remain with the Company.

A summary of the key terms of the ASA is outlined below:

(a) (**Exploration Licences**):

(i) The existing ELs to be transferred under the ASA are:

(a) EL 6926, granted on 12 July 2019;

(b) EL 6915, granted on 12 July 2019;

(c) EL 6895, granted on 1 May 2019; and

(d) EL 6923, granted on 21 May 2019.

Together, these are the Existing Licences.

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(ii) The licences to be granted as a result of the ELAs, and subsequently transferred under the ASA, are:

(a) EL 7807;

(b) EL 7810;

(c) EL 7803; and

(d) EL 7827.

Together, these are the New Licences.

It is noted that four New Licences (EL 7807, EL 7810 and EL 7827) have since been granted, however, due to legal restrictions cannot be transferred to VPM until August 2023 (being 12 months after their grant date).

(iii) The ELs that are subject to obligations under the ASA, but remain held by the Company, are:

(a) EL 6664; and

(b) EL 6419.

Together, these are the VHM Licences.

(b) (**Consideration**): The total consideration payable by VPM for the Demerger Assets is the sum of the:

(i) 'Base Consideration', being $1,418,834; and

(ii) the aggregate amount of expenditure incurred by the Company in respect of the Demerger Assets in the period on and from 1 January 2022 to the 'First Completion Date'.

VPM must pay the Consideration in cash upon 'First Completion' or by issuing 139,141,272 fully paid ordinary Shares in VPM (Consideration Shares), as required at the election of the Company. The Company has elected to receive the Consideration Shares which were issued on 20 July 2022.

(c) (**First and Second Completion and related Conditions**): Completion is to occur in two stages, with:

(i) the 'First Completion' to relate to the transfer of the Existing Licences and to occur following receipt of the regulatory approvals required for the transfer of the Existing Licences (First Condition); and

(ii) the 'Second Completion' to relate to the ELAs and to occur following the grant of the New Licences (noting ELAs are not legally capable of transfer unless the relevant EL is granted, and until 12 months after grant date) and receipt of the regulatory approvals required for the transfer of the New Licences (Second Condition).

Between First Completion and Second Completion, VPM must pay for all exploration costs relating to the ELAs (Exploration Costs), noting the Company may provide a loan to VPM to pay for the Exploration Costs (on terms to be separately agreed between the parties). First completion has occurred.

(d) (**Termination**): The Agreement may be terminated by the parties as follows:

Whilst First Completion has already occurred, the Agreement may still be terminated by the parties if the Second Condition is not satisfied by the relevant date, in which case the Company must repay to VPM the amount of the purchase price attributable to the licences granted as a result of the ELAs (being $156,000), pay VPM the Exploration Costs, and return any relevant information.

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(e) (**First and last rights of negotiation and refusal regarding deposits**): For a period of 10 years after the First Completion Date (the Post-Completion Period) the parties are subject to reciprocal undertakings concerning the disposal by VHM of any gold deposits in the VHM Licences and by VPM of any rare earth and minerals sands deposits in the Existing Licences or New Licences (together, Deposits), as follows:

(i) in relation to any Deposits identified by a party prior to First Completion – the other party may, at any time during the Post-Completion Period, notify the holder of Deposit that it wishes to purchase the Deposit, triggering an exclusive three month negotiation period to conclude a sale; and

(ii) in relation to any Deposits discovered during the Post-Completion Period – the discovering party must promptly notify the other party of the discovery, triggering a right of that other party to acquire the Deposit. If taken up, this triggers an exclusive three month negotiation period to conclude sale.

In each case, the proposed buyer must nominate a proposed sale price (Nominated Price), which the proposed seller may accept or reject.

Within six months of negotiations ceasing, the Deposit may be offered to a third party. If the price proposed by the third party is not more than 110% of the Nominated Price, the other party has a last right of refusal to acquire the Deposit on the same terms and conditions as proposed by the third party.

If this last right of refusal is not taken up, the proposed seller has a further three months within which to conclude a sale with the third party. If no transaction is concluded within the stipulated time frames, these first and last rights of refusal shall be re-enlivened.

(f) (**Demerger and VPM Options**):

The VPM Demerger (including transfer of the Demerger Assets and in-specie distribution of all Shares held by the Company in VPM) completed in August 2022.

The ASA obliged VPM to issue options to subscribe for ordinary Shares in the capital of VPM to each of the Company's Noteholders to compensate those Noteholders for the Demerger. These options have been issued by VPM as part of finalising the VPM Demerger.

(g) **(Farm-out):**

If at any time prior to Second Completion, the Company and VPM cease to be related parties (including due to the Demerger), the parties must negotiate a farm-out arrangement, in good faith and on terms to be agreed.

The ASA is otherwise on standard commercial terms, with the Company (as the purchaser) liable to pay duty, and neither party granting any indemnities to the other.

7.3 VPM Support Agreements

The Company continues to support VPM in a technical and financial sense with support available to VPM to fund working capital. This includes support to fund tenement commitments until such time as VPM conducts its own capital raising.

(a) **Loan Facility Agreement**

The Company (as Lender) has entered into a Loan Facility Agreement and General Security Agreement with VPM (as Borrower and Grantor) on 9 May 2022 to ensure VPM has sufficient funding for the Demerger Assets, until such time as it can raise its own funds.

The key terms of the loan are as follows:

(i) (Maximum draw down amount): $3 million from the date of the Agreement until the first anniversary of that date, and $2 million on and from the first anniversary of the date of Agreement.

(ii) (Purpose): payment of VPM's exploration licence work commitments and budgeted administrative expenses (subject to the Company's written consent).

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(iii) (Term): Two years.

(iv) (Interest): Bank Bill Swap Rate (BBSW) + 10% with interest to accrue on the daily balance and payable when the loan is repayable.

(v) (Repayment events): The loan is repayable on the second anniversary of the date of the Agreement. If VPM raises equity prior to that date, it must repay the lower of (i) the amount of the loan, and (ii) 90% of the funds raised. VPM may prepay all or part of the loan amount to the Company at any time prior to the termination date without penalty.

Pursuant to a separate General Security Agreement, VPM has also granted a security interest in, and charge over, all of its present and after-acquired property (including personal and real property, undertakings, assets, rights and interests) to secure the repayment of the loan.

The Loan Facility Agreement and General Security Agreement otherwise contain terms and conditions considered standard for agreements of those types.

(b) **Services Agreement**

The Company also entered into a Services Agreement with VPM in August 2022 under which the Company provides technical, finance, administrative and support services to VPM on a cost plus 10% basis.

7.4 Land Access Agreements – Goschen Project

The Company has entered into separate land access and compensation agreements (Land Access Agreements) with landowners and occupiers of the land within the Goschen Project area. The Land Access Agreements provide compensation to, and consent from, the owners and occupiers of land pursuant to Section 43(1) (e) and Part 8 of the *Mineral Resources (Sustainable Development) Act 1990*.

The Land Access Agreements have several key terms in common, including:

(a) (**Consideration**): The Company is required to pay compensation to various parties under the Land Access Agreements as follows:

(i) sign on payment of $1,000 to the landowner and/or Occupier;

(ii) an amount for disturbed crop to be negotiated by reference to a calculation formula to the Crop Owner;

(iii) drilling fee of $50/hole to the landowner; and

(iv) compensation for other activities as negotiated pursuant to an application to be paid.

(b) (**Term**): The term of each Land Access Agreement is the period from the date of the Agreement to the earlier of two years after the Company ceases to hold the Exploration Licence and termination of the Agreement. This ensures that the Company has land access for the life of the relevant licence tenure. The Land Access Agreements were entered into between the period of 14 February 2018 to 17 September 2021.

(c) (**Termination**): Each Land Access Agreement shall terminate on the earlier of:

(i) expiration of the term of the Agreement;

(ii) expiration of 30 business days' written notice by the Company to the Land Holder and/or Occupier;

(iii) upon cancellation of the relevant Exploration Licence which overlies the subject land parcel;

(iv) expiration of 30 business days' written notice by the Land Holder to the Company where the Company has committed a material breach of the Agreement and failed to remedy that breach; or

(v) expiration of five business days' written notice by the Company to the Land Holder and/or Occupier when that counterparty has committed a material breach of the Agreement and failed to remedy that breach.

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There have been various activities conducted by the Company requiring compensation under the Land Access Agreements to date. The aggregate amount of compensation paid to landowners and Occupiers under these agreements is immaterial, but indicatively the aggregate compensation paid for the financial year ended 30 June 2021 was in the vicinity of $5,000. The aggregate amount for the year ended 30 June 2022 being approximately $nil.

The Land Access Agreements are otherwise on standard commercial terms, and pertinently are sufficient (in terms of geographic coverage and subject matter) to cover the Company's current activities. The identity of the counterparties is otherwise not material to investors and subject to obligations of confidentiality.

7.5 Land Acquisition Agreements – Goschen Project

GPB Land Holdings Pty Ltd (GPB Land Holdings) and GPF Land Holdings Pty Ltd (GPF Land Holdings), both wholly owned subsidiaries of the Company, have separately entered into three Land Acquisition Agreements for land within the Goschen Project area (Land Acquisition Agreements).

The subject land underlies that part of the Goschen Project area that is needed for the Proposed Operation and includes associated infrastructure. The identity of the counterparties is otherwise not material to investors.

The total consideration payable for the three existing Land Acquisition Agreements will depend on the dates that these agreements are finally settled and may vary from $10.3 million to $15 million. The Company also has monthly instalment obligations to be met for these contracts until their respective settlement dates in the vicinity of $153,000 in aggregate for all three contracts.

A further breakdown of the consideration payable under each is outlined in the below table.

Land Acquisition Agreement	Consideration	Land
First Agreement dated 29 July 2020	$2,819,229, with payments structured as follows: • $510,000 deposit paid on the date of the Agreement; and • monthly instalments in accordance with the payment schedule in the Agreement; • with the balance of the purchase price due at settlement on 15 December 2030.	Land located in Lalbert Victoria which underlies RL6806
Second Agreement also dated 29 July 2020	$1,416,403, with payments structured as follows: • $260,000 deposit paid on the date of the Agreement; • monthly instalments in accordance with the payment schedule in the Agreement; • with the balance of the purchase price due at settlement on 15 December 2030.	Land located in Lalbert Victoria which underlies RL6806
Third Agreement dated 8 December 2020	$6,550,000, with payments structured as follows: • $550,000 deposit paid on the date of the Agreement; • $1,200,000 per annum by monthly instalments of $100,000 commencing 1 January 2021; and • interest only monthly instalments of $35,500 from the date of Agreement to 31 December 2020; • with the balance of the purchase price due at settlement on 1 January 2026.	Land located in Lalbert Victoria which underlies RL6806

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A summary of the key terms of the First Agreement and Second Agreement is outlined below:

(a) (**Settlement**): Settlement is due on 15 December 2030 or earlier by mutual agreement.

(b) (**Early completion**): GPF Land Holdings may at any time request the contract be completed earlier than 15 December 2030 by giving not less than a period of nine calendar months written notice requiring settlement to be completed (Early Completion Notice) and paying the relevant sum prescribed by the Agreement.

(c) (**Adjustment of purchase price**):
The adjustment date is the earlier of the date of the Early Completion Notice and 2 February 2023 (Adjustment Date). Within 21 days of the Adjustment Date, GPF Land Holdings must obtain an independent valuation of the subject land to ascertain its market value as at 1 January 2018 and the Adjustment Date. If the value of the land at the Adjustment Date is greater than the purchase price, an adjustment will be due to the vendor, calculated as follows.

Any increase (if any) in value will be applied as a percentage:

(i) in the case of the First Agreement, to the figure of $2,763,950, and to the extent that the resulting sum exceeds the sum of $55,279, the resulting sum must be paid by GPF Land Holdings to the vendor; and

(ii) in the case of the Second Agreement, to the figure of $1,388,639, and to the extent that the resulting sum exceeds the sum of $27,773, the resulting sum must be paid by GPF Land Holdings to the vendor.

A summary of the key terms of the Third Agreement is outlined below:

(d) (**Settlement date**): Settlement is due on 1 January 2026.

(e) (**Early settlement**): GPB Land Holdings may request an earlier settlement date by giving 30 days' written notice. If GPB Land Holdings serves such notice, the contract must be completed within 30 days' of receipt by the vendor of said notice.

(f) (**Adjustment of purchase price**): In the event of GPB Land Holdings (within three years of settlement), purchasing any other farming zoned land exceeding 300 acres within a radius of 10km of the land the subject of this contract at a price exceeding an agreed price per acre (Benchmark Price), then GPB Land Holdings will advise the vendors of such sale and will pay to the vendors a further sum reflecting the difference between the price paid for the other land and the Benchmark Price applied to the relevant land area.

(g) (**Vendor licence to reside**): On the settlement date, GPB Land Holdings will grant to the vendors a licence to reside in the homestead on the land.

All three Agreements also contains a first right of refusal in favour of the vendor. If GPF Land Holdings Pty Ltd decides to sell or dispose of any or all of the land acquired under the First Agreement, it must first offer the vendor the opportunity to re-purchase that land for the sum of $1.00 plus GST. The vendor has 60 days within which to accept. There is no time limit on this obligation.

None of the three Land Acquisition Agreements provide any right of access prior to the date of settlement. However, the land the subject of these agreements is the subject of Land Access Agreements discussed in Section 7.4, ensuring that the appropriate regulatory requirements in respect of conduct and compensation are met for any activities conducted by the Company during the pre-acquisition period.

The Land Acquisition Agreements are otherwise on standard commercial terms for contracts for the sale of land and adopt the Law Institute of Victoria/Real Estate Institute of Victoria terms (applicable as at August 2019).

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Fourth Land Acquisition Agreement

The Company via newly incorporated wholly owned subsidiary (GPBJ) will shortly enter into a further Land Acquisition Agreement in respect of a further parcel of land within the Goschen Project area. Whilst not yet signed, in principle agreement has been reached with the vendor; with final contract paperwork expected within the next 4-6 weeks. A summary of the key terms agreed between the parties follows:

Land Acquisition Agreement	Consideration	Land
Fourth Agreement (pending)	$2,690,000 with payments structured as follows: • $269,000 deposit payable on execution • $1,210,500.00 payable on or before 15 December 2022; and • the balance of $1,210,500.00 payable at settlement (due six months after the date of execution).	Land located in Lalbert Victoria which underlies RL6806

A summary of the key terms of the Fourth Agreement is outlined below:

(a) (**Settlement**): Due six months from execution of the Agreement;

(b) (**Vendor right of first refusal**): GPBJ will offer the vendor the right to buy back the land the subject of the Agreement at a price of $1.00 when the Company has completed mining and rehabilitation of the land.

This obligation will occur when the earlier of the mining operations on the land have ceased and rehabilitation is completed; or in 35 years from the date of the Agreement.

(c) (**Rehabilitation**): Prior to the commencement of mining, an agricultural consultant shall be appointed to prepare a report to assess the "Productivity" of that part of the land required to carry out mining operations. The purchaser must rehabilitate that land so that it is returned to a condition which is at least as productive as determined by that report.

(d) (**Vendor right to lease**): The vendor will enter into a lease with GPBJ to farm the subject land for nominal rent until the Company requires the land for mining or other resource development processes.

Once this Fourth Land Acquisition Agreement is finalised, the Company will have secured land access to 100% of the mine footprint area and no further land acquisitions are required or intended to facilitate the Proposed Operation.

7.6 Property Purchase Agreement

The Company entered into a contract of sale on or about 29 July 2022 with Nursub Pty Ltd (Nursub), pursuant to which the Company recently acquired a property located in Kerang, Victoria for total consideration of $1,200,000 (plus GST).

The warehouse is situated in a light industrial area, which includes office space, display space, substantial secure storage for core samples and a laydown yard. The warehouse will provide an office base for VHM personnel visiting site, a central meeting point for future site visits for key stakeholders and community and will accommodate safety inductions and other briefings prior to any site visits. It will house the core samples extracted from the field and the laydown area will be used for the receipt, temporary storage, and assembly of construction equipment and other supplies.

The contract of sale is otherwise on standard terms and conditions.

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7.7 Land Compensation Agreement – Goschen Project

The Company entered into a further Land Access Agreement dated 19 August 2022 concerning approximately 2,500 acres of land which comprises a portion of the area required for the Proposed Operation. During the operational period of the Proposed Operation (Operational Period). That agreement provides that the landowner must not reside on the subject land and must support the Proposed Operation and any applications made by the Company in connection with the Goschen Project.

A summary of the key terms of this agreement is outlined below:

(a) (**Compensation**): The landowner will be paid an amount of $2 million after execution of the Agreement to be put towards a new residence for the landowner during the operational period of the Proposed Operation.

The Company will pay the landowner $150 per acre per annum from the date the Operational Period commences, amounting to an aggregate total of approximately $368,667 per annum.

The Company will also pay the landowner $12,500 towards travel expenses.

(b) (**Restrictions on the landowner**): The landowner is bound by the restrictions and obligations set out in the Deed, including that they may not reside on the property and must maintain the property in good condition, during the operational period of the mine, which is expected to be at least 20 years.

(c) (**Right of refusal**): If the landowner seeks to sell the subject land during the term, the Company will have the right to purchase the land on the same terms as the landowner is prepared to sell to a third party.

(d) (**Sale of land to third party**): If the landowner sells the subject land to a third party, prior to the settlement of that sale, the landowner must procure that the new owner executes and deliver a deed of novation to the Company by which the new owner agrees to observe and comply with the landowner's obligations under this Agreement.

7.8 Land Access Agreements – Cannie and Nowie Projects

The Company proposes to undertake drilling at its Cannie and Nowie Projects on private land and has entered into multiple commercial consent agreements for land access.

Commercial consent agreements were entered into on 4 August 2022, 2 September 2022 and 19 September 2022 in relation to land within the Nowie Project area (Nowie LAAs).

Commercial consent agreements were entered into on 12 September 2022, 19 September 2022, 30 September 2022 (x2), and 31 October 2022 in relation to the Cannie Project area (Cannie LAAs).

The Nowie LAAs and Cannie LAAs have key terms in common, a summary of which is set out below:

(a) (**Compensation**): Each landowner was paid an amount of $2,000 on signing of the agreement. The Company will pay each landowner agreed amounts (as set out in the agreement) as compensation for exploration activities conducted on the land (none of which are material).

(b) (**Term**): Two years from the date of each agreement.

(c) (**Indemnity**): The Company indemnifies each landholder against any loss or damage to neighbouring properties, public roads and places, and people caused by exploration activities in connection with the relevant agreement.

The Company has secured all land access required to carry out the programs for each of the Cannie and Nowie Projects (as detailed at Sections 2.15 and 2.16 respectively).

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7.9 Consulting, Design and Engineering Contracts – Goschen Project

The Company is party to master consultancy agreements and consultancy service agreements (together, Service Agreements) with several Tier-1 consultants and design and engineering companies under which those parties are providing and will provide services in connection with the Goschen Project.

The Service Agreements are otherwise on terms considered customary for commercial agreements of this type. The Company presently has $27 million committed over the next 12 months, which includes land access and compensation, land acquisitions, tenement expenditure and exploration programs (as detailed at Sections 2.14 to 2.16) and payments to consultants and design and engineering companies. Set out below is a summary of the more material Service Agreements within the abovementioned committed expenditure, and funds contractually committed under them, noting that under the Service Agreements, most of the committed services and associated costs are subject to successful completion of the IPO.

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Material Agreements	Current Contractual Commitments
Master Consultancy Agreement with **Minerals Technologies Pty Ltd**	$600,000 addressing the following work packages: • FEED • Bulk sample metallurgical testing and REMC production • Resource, metallurgical and verification testwork
Master Consultancy Agreement with **AECOM Australia Pty Ltd**	$400,000 AECOM commitments addressing the following work packages: • Coordination of EES process, the scope of which includes management of subsidiary VHM contracts • Management of work plan • Sourcing and documentation for statutory licences, planning and permit fees and rehabilitation plan • Sourcing and quotations for VHM procurement of environmental equipment for monitoring and governance • Facilitating negotiations for vegetation offsets
Master Consultancy Agreement with **Right Solutions**	$1.7 million is committed to addressing the following work packages: • Bulk sample site project management for drilling contractors, storage, handling, and transport of ore samples • Site management of exploration drilling program on non Goschen, Cannie and Nowie tenements) • Consultant services including contract staffing in VHM key disciplines
Consultant Agreement with **TZ Minerals International Pty Ltd**	$600,000 addressing the following work packages: • Peer review and expert mineral sands market advice • Owner's representative for processing during FEED, to oversee and guide the development of the relevant aspects relating to metallurgical processing • Quarterly mineral sands market update report
Letter of Engagement with **Lawyers** (regulatory and land access)	$1.9 million addressing the following work packages: • Legal support in relation to the Goschen Project EES process through to the Minister for Planning's assessment under the *Environment Effects Act 1978* • Advising on subsequent approvals up to the grant of a work plan • Ongoing support in respect of managing land access arrangements

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7.10 Financing Arrangements

Convertible Note Agreements

As at the Prospectus Date, the Company has two classes of convertible notes on issue, being the 2021 Notes (issued in March and April 2021) and the 2022 Notes (issued in March and May 2022 pursuant to the Pre-IPO Offer).

The Company has entered into Convertible Note Agreements with each of the Noteholders.

Each of the 2021 Notes and 2022 Notes were issued without a disclosure document to Noteholders who are a 'sophisticated investor', an 'experienced investor' or a 'professional investor' (within the meaning of Sections 708(8), 708(10) and 708(11) of the Corporations Act respectively).

The key terms of the Notes and Convertible Note Agreements are summarised follows:

Feature	2021 Notes	2022 Notes
Issued	29 March 2021 and 30 April 2021	Tranche 1: 15 March 2022 Tranche 2: 12 May 2022
Status	Unsecured	
Number	369 (334 of which have now rolled over into the 2022 Notes leaving 35 remaining)	3,184 newly issued (Now 3,518 in total including 2021 Notes rolled over)
Face Value	$10,000	$10,000
Aggregate Face Value/Amount Raised	$3,690,000 (now $350,000)	$31,840,000 (now $35,180,000)
Maturity Date	31 March 2023, which may be extended by the Company for six months to 30 September 2023 if a Force Majeure Event first occurs, or such later date agreed by the parties in writing.	31 January 2024, which may be extended by the Company for six months to 31 July 2024 if a Force Majeure Event first occurs.
Coupon	10% per annum, paid quarterly in arrears	
Conversion into Shares	At Company's election, following receipt of ASX's Conditional Admission Letter, and prior to Admission. Any accrued but unpaid interest will be settled in cash. If the Notes are converted and the IPO does not occur, the Company will selectively buy-back the resulting Shares at a price equal to 110% of the Face Value of the Notes, together with accrued interest.	
Conversion Price	80% of the IPO Issue Price	Dependent on date of Admission: 1. Admission on or before 30 June 2022 – 20% discount to the Offer Price ($1.08); 2. Admission between 1 July 2022 and 31 December 2022 – 25% discount to the Offer Price $($1.0125); 3. Admission after 31 December 2022, but before the Maturity Date – 30% discount to the Offer Price $($0.945).

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Feature	2021 Notes	2022 Notes
Conversion Shares (Number of Shares to be issued on conversion)	324,074 (Based on conversion at a 20% discount to the Offer Price, for remaining unrolled 2021 Notes only)	34,745,679 (Based on conversion at a 25% discount to the Offer Price, for 2022 Notes and rolled 2021 Notes)
Voting Rights	The Notes do not confer any voting rights at shareholder meetings. Shares issued upon conversion will however rank equally in all respects with existing Shares in issue.	
Redemption	Redemption occurs as follows: **Maturity** – If the Company has not elected to convert by the Maturity Date, the Notes must be redeemed within 10 Business Days (in the case of the 2021 Notes) or 5 Business Days (in the case of the 2022 Notes) of the Maturity Date. **Change of control** – The Company may redeem all of the Notes in the event of a Change of Control (e.g. trade sale, takeover, scheme of arrangement, merger or similar) before the Maturity Date. **Default** – The Noteholder may require redemption by notice to the Company within 60 days after the occurrence of any Default Event. In each case, redemption will occur at a price equal to 110% of the Face Value of the Notes, together with accrued interest.	
Impact of VPM Demerger	As part of completing the VPM Demerger, holders of the 2021 Notes and 2022 Notes were granted options in VPM to acquire Shares in VPM, exercisable at a nominal price to ensure that Noteholders positions and interest in VPM is in parity with the Noteholders interest in the Company prior to the VPM Demerger.	
Force Majeure	Each of the following is a Force Majeure Event: • act of war (whether declared or not), hostilities, invasion, act of foreign enemies, terrorism, or civil disorder; • a strike or other industrial action or any other form of civil disturbance; • a natural disaster; • a pandemic event; • any other unforeseeable circumstance beyond the control of the Company against which it would have been unreasonable for the Company to take precautions, in each case affecting on a general basis the business of the Company.	
Default Event	Default Events include: • non-payment of amount owing; • breach of warranty; • material un-remedied breach of the Convertible notes agreement; • the occurrence of an insolvency event.	
Transferability	The Notes are not transferable without the Company's consent.	

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7.11 Lead Manager Mandate and Co-Manager Agreement

Lead Manager Mandate

The Company appointed Canaccord Genuity (Australia) Limited (Lead Manager) to act as lead manager in connection with the IPO Offer pursuant to a mandate letter dated 30 December 2021 (Lead Manager Mandate), which was subsequently amended.

Under the Lead Manager Mandate, the Lead Manager will provide services and assistance customarily provided in connection with marketing and execution of an initial public offer.

(a) (**Fees**): The Company will pay the Lead Manager (or its nominees) a management fee equating to 5.0% of the funds raised pursuant to the IPO Offer (being $1,000,000 net of GST if the Minimum Subscription is raised), subject to successful completion of the IPO Offer. Refer to Section 1.10 for further information regarding the Lead Manager's interests in the Offer, including fees payable.

(b) (**Termination**) The Lead Manager Mandate may be terminated by either party without cause upon 7 days' written notice to the other.

(c) (**Withdrawal Fees**): A Withdrawal Fee is payable to the Lead Manager if the Company terminates the mandate (other than as a result of certain conduct of the Lead Manager or the Lead Manager's advice that the IPO cannot be successfully completed) and during the term of the mandate, and on or prior to the earlier of 60 days after termination or 30 June 2022 (Tail Period) either of the following (being a 'Withdrawal Event') occurs:

  (i) the Company undertakes any alternative form of equity or hybrid capital raising other than the IPO Offer or the Pre-IPO Offer, other than from any existing Company Shareholders or their related bodies or affiliates;

  (ii) the Company enters into an agreement with a third party pursuant to which the third party agrees to acquire 50% of more of the Company (whether by way of share, business, or asset purchase).

  The amount of the Withdrawal Fee depends on the timing of the withdrawal. As at the Prospectus Date, the only relevant circumstance remaining is where withdrawal occurs after the signing of the Offer Management Agreement or lodgement of this Prospectus with ASIC. In that case, the Withdrawal Fee shall be $1,000,000, being 5% of the gross proceeds of the IPO Offer (assuming the Minimum Subscription is raised), representing the amount the Lead Manager would have been paid had the IPO Offer completed.

(d) (**Indemnities**): To the maximum extent permitted by law, the Company indemnifies the Lead Manager from all claims against them arising from the Lead Manager Mandate, this Prospectus, the IPO Offer, misleading statements or omissions in the Prospectus, any claims under the Corporations Act, the Australian Competition and Consumer Act or similar legislation, reviews or investigations undertaken by ASIC or other governmental agencies pertaining to this Prospectus or the IPO Offer, and any advertising, publicity, statement and reports in relation to the IPO Offer made by or with the written agreement of the Company. These indemnities extend to all reasonable costs and expenses incurred in connection with investigations and defences (including reasonable legal fees and expenses on a full indemnity basis). These indemnities do not apply to the extent that any claims have resulted from fraud, gross negligence or wilful breaches by the Lead Manager or any penalty or fine imposed on them for any contravention of the Corporations Act.

The Lead Manager Mandate contains additional provisions considered standard for agreements of this nature.

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Co-Manager Agreement

On 2 November 2022, the Lead Manager entered into a co-manager appointment letter appointing Reach as co-manager in relation to the Offer (Co-Manager Agreement). Reach will perform obligations including actively marketing and procuring applications under the Offer from its clients. The key terms of the Co-Manager Appointment Letter are:

(a) (**Co-manager allocation**): Reach must apply and pay the Offer Price for (or procure application for and payment of the Offer Price for) the Shares allocated to it (Co-Manager Allocation) to be distributed among Reach's clients.

(b) (**Minimum Co-Manager Allocation**): Reach is guaranteed a minimum Co-Manager Allocation of Shares under the IPO Offer to the value of $5 million. Any bid in excess of the minimum Co-Manager Allocation may be scaled back by the Lead Manager and the Company at their absolute discretion.

(c) (**Co-Manager fee**): The Lead Manager will pay Reach a fee of 4.0% on the Co-Manager Allocation (exclusive of GST), representing a fee of $200,000 on the minimum Co-Manager Allocation. This fee is payable by the Lead Manager (out of its own offer management fee) and not by the Company.

7.12 Pre-IPO Mandates

The Company is a party to three mandates in respect of the Pre-IPO Offer with each of Reach Markets Pty Ltd (Reach), William Buck Financial Services (WA) Pty Ltd (William Buck) and Canaccord Genuity (Australia) Limited (Canaccord) to conduct the Pre-IPO Offer.

The Pre-IPO Offer was successfully completed in April 2022 having raised a total of $31,840,000 by way of the issue of the 2022 Notes.

(a) Canaccord Pre-IPO Mandate

The Canaccord Pre-IPO Mandate was entered into on 15 February 2022 and has now completed. It provided for a capital raising fee of 6% of the proceeds raised under the Pre-IPO Offer from funds introduced by Canaccord, which equated to approximately $720,000. It contained indemnities very similar to those contained in the Lead Manager Mandate, save that such indemnities relate to the conduct of the Pre-IPO Offer. Canaccord also has the benefit of lock-up and clear market provisions, which prevent the Company from conducting any further capital raising (debt or equity) or entering into any other material transactions or contracts, without Canaccord's consent.

(b) Reach Pre-IPO Mandate

The Company entered into a mandate with Reach on 18 December 2021, pursuant to which Reach provided advice and assistance in connection with the Pre-IPO Offer. The Reach Pre-IPO Mandate has now completed.

Total fees paid to Reach upon conclusion of the Pre-IPO were $1,172,160 plus GST.

(c) William Buck Pre-IPO Mandate

The Company entered into a mandate with William Buck on 6 May 2022, for professional services in connection with the Pre-IPO Offer. The mandate has now been completed.

The fee payable under the William Buck Pre-IPO Mandate was a success fee calculated as 6% of the funds raised by William Buck from sophisticated and wholesale investors. The total fees paid to William Buck upon conclusion of the pre-IPO were $60,000.

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7.13 Offer Management Agreement

The Company has entered into an offer management agreement dated 21 November 2022 (OMA) with Canaccord Genuity (Australia) Limited ACN 075 071 466 (Canaccord) pursuant to which Canaccord has agreed to manage and act as bookrunner of the Offer.

The key provisions of the OMA are:

(a) (**Fees and expenses**): The fees and expenses payable to Canaccord are those set out in the Lead Manager Mandate described at Section 7.11 above, plus an incentive fee of up to 0.5% of the proceeds raised pursuant to the IPO Offer, to be determined at the Company's absolute discretion.

(b) (**Conditions precedent**): The OMA includes common conditions precedent (including conducting due diligence, lodgement of this Prospectus, the entry into escrow deeds by existing relevant Shareholders, and the ASX and ASIC granting the waivers and modifications necessary to enable the Offer to proceed in accordance with the timetable).

(c) (**Conditional Obligations**): The obligations of Canaccord in relation to settlement and payment obligations under the OMA are conditional on a number of common obligations which include the receipt by Canaccord of valid applications under the IPO Offer for no less than the Minimum Subscription amount.

(d) (**Representations and warranties**): The OMA contains representations and warranties considered standard for agreements of this nature.

(e) (**Termination events**): Canaccord may terminate their obligations under the OMA on the occurrence of certain termination events (in some circumstances, having regard to the materiality of the relevant event) including, but not limited to, where:

(i) a statement in (or omission from) this Prospectus becomes misleading or deceptive or is likely to mislead or deceive;

(ii) the Company lodges a supplementary prospectus without Canaccord's consent or is required (by law) to lodge a supplementary prospectus;

(iii) a 10% fall (relative to the date of the OMA) in the S&P/ASX 300 Metals and Mining Index on at least two consecutive business days during the period up to settlement date for the IPO securities; or the business day immediately prior to the settlement date;

(iv) any Convertible Note becomes due for repayment prior to its conversion in connection with the IPO Offer;

(v) any restriction agreements (either ASX imposed or voluntary) are withdrawn, varied, terminated, breached, or failed to be complied with;

(vi) the Company, their directors or officers engage, or have been alleged by a governmental authority to have engaged in any fraudulent conduct since the date of the OMA;

(vii) ASX listing approval is refused, or is granted subject to non-customary conditions on or before the date on which Securities are settled or quoted on ASX, or if granted, the approval is subsequently withdrawn, qualified (other than by customary conditions) or withheld;

(viii) any regulatory action occurs in relation to the Offer, including orders, inquiries, hearings or proceedings of ASIC or other governmental agencies in relation to the Offer, the Company, or into its Directors and senior management;

(ix) a person (other than Canaccord) who had previously consented to the inclusion of its name in the Prospectus withdraws consent, or a person gives notice under Section 730 of the Corporations Act in relation to the Prospectus (in respect of a deficiency in the Prospectus);

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(x) the Company withdraws the Prospectus or the Offer, fails to provide a closing certificate (to the effect that all obligations of the Company have been complied with, all representations and warranties remain true, and that none of the termination events have occurred), or the Offer timetable is delayed (other than as a result of a regulatory requirement or with Canaccord's consent);

(xi) the Company is prevented from issuing the Offer Securities within the time required by the Listing Rules and the Corporations Act;

(xii) the Company is required to repay money received from Applicants or to offer an opportunity to withdraw Applications and be repaid Application moneys after lodgement of this Prospectus;

(xiii) there is an event or occurrence which makes it illegal for Canaccord to market, promote, settle the Offer, or satisfy a material obligation of the OMA;

(xiv) the Company alters the issued capital of the Company or a Group member; or disposes or attempts to dispose of a substantial part of the business or property of the Group without Canaccord's prior approval;

(xv) the Company varies any term of its Constitution without Canaccord's prior approval;

(xvi) the Company or its subsidiaries becomes insolvent, or there is an act or omission which is likely to result in insolvency;

(xvii) the Company is rendered unable to perform its obligations under the OMA due to regulatory approvals being revoked or amended;

(xviii) any Director, board member or the chief financial officer of the Company cease to perform their roles without the written consent of Canaccord, other than due to injury, unsoundness of mind or death;

(xix) a director or proposed director of the Company is charged with an indictable offence or is disqualified from managing a corporation under Part 2D.6 of the Corporations Act.

The following termination events are subject to the event having a material adverse effect on the Offer, or the event giving rise to, or being likely to give rise to, a liability of or contravention of any applicable law by, Canaccord or its affiliates:

(xx) any of the 'Offer Documents' (including this Prospectus, any pathfinder prospectus, application form, supplementary prospectus, investor presentation, confirmation letters and the like) or any aspect of the Offer does not comply with the Corporations Act, the Listing Rules, or any other applicable laws or regulations;

(xxi) a new circumstance that arises after the Prospectus is lodged, that otherwise would have been required to be included in the Prospectus;

(xxii) a statement contained in the Offer Documents, or any information supplied by the Company in any of the Offer Documents (other than the Prospectus) or the due diligence reports is or becomes misleading or deceptive or is likely to mislead or deceive;

(xxiii) certain events occur which render any material contracts incapable of being performed or enforced, or such contracts are materially breached or varied without Canaccord's consent;

(xxiv) if any of the tenements are revoked, not renewed, illegal, invalid, or void, or the terms of any tenements are materially breached;

(xxv) if there is an adverse change in the assets, liabilities, financial position or performance, profits, losses, nature of the business or prospects of the Group from those disclosed in this Prospectus;

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(xxvi) in the opinion of Canaccord there are not reasonable grounds for any statement or estimate (both financial and non-financial) in the Offer Documents which relate to a future matter, or such statements or estimates are unlikely to be met in the projected timeframe;

(xxvii) a statement in any closing certificate is false, misleading, inaccurate, untrue, or incorrect;

(xxviii) there is a contravention by any entity in the Group of the Corporations Act, the *Competition and Consumer Act 2010* (Cth), the ASIC Act, its Constitution, the Listing Rules, or any other applicable law;

(xxix) a representation, warranty or undertaking of the Company contained in the OMA is breached, becomes not true or correct or is not performed;

(xxx) there is an outbreak of hostilities (whether or not a war or a national emergency has been declared) not presently existing, or a major escalation in existing hostilities occurs, or there is a declaration of war in relation to any one or more of Australia, New Zealand, the United States, Japan, the United Kingdom, a European Union member state, or the People's Republic of China (each a Specified Jurisdiction); or in relation to the existing conflict in Ukraine, there is a nuclear incident or confirmed use of chemical weapons or hostilities are commenced between Russia and any other country;

(xxxi) a general moratorium on commercial banking activities in a Specified Jurisdiction is declared by the relevant central banking authority in those countries for at least one business day;

(xxxii) any adverse effect on the financial markets in a Specified Jurisdiction, or in foreign exchange rates or any development involving a prospective change in political, financial, or economic conditions in any of those countries; or

(xxxiii) trading in all securities quoted or listed on ASX, the London Stock Exchange, the New York Stock Exchange, NASDAQ, Euronext, the Shanghai Stock Exchange, or the Tokyo Stock Exchange is suspended for at least one day on which that exchange is open for trading.

The OMA contains additional termination provisions considered standard for agreements of this nature (such as changes in law and breaches of the OMA).

(f) (**Indemnity**): Subject to certain exclusions relating to, amongst other things, fraud, wilful default, or gross negligence of Canaccord, its respective related bodies corporate, affiliates and each of their respective directors, officers, partners, employees, agents and advisers, the Company undertakes to keep Canaccord indemnified from losses suffered by them in connection with, but not limited to, the Offer, the Offer documents, the VPM Demerger or the OMA.

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7.14 Executive Services and Employment Agreements

The Company has entered into Executive Services Agreements with Mr Howard, Mr Sheridan, Mr Allen, and Ms O'Regan, the key terms of which are summarised below.

	Base Salary	Incentives awarded	Termination
Mr Howard (Managing Director, CEO)	$525,000 per annum (including statutory superannuation)	634,375 ZEPOs (expiry date: 31 December 2024) 423,938 ZEPOs (expiry date: 28 February 2026) 1,097,917 ZEPOs (expiry date: 19 May 2027)	six months' notice
Mr Sheridan (CFO)	$500,000 per annum (including statutory superannuation)	826,389 ZEPOs (expiry date: 25 March 2027)	six months' notice
Mr Allen (Executive Director – Government, Industry, Indigenous, Land and ESG)	$375,000 per annum (including statutory superannuation)	465,208 ZEPOs (expiry date: 31 December 2024) 310,144 ZEPOs (expiry date: 28 February 2026) 743,750 ZEPOs (expiry date: 19 May 2027)	four months' notice
Mr Reynolds (Executive General Manager Projects)	$450,000 per annum (including statutory superannuation capped at $23,568)	Entitled to up to an additional 12 months' salary (being $450,000) each year in the first two years of employment as an incentive payment for meeting certain performance milestones.	three months' notice or as otherwise agreed with the Company
Ms Carly O'Regan (Executive General Manager, Strategy and Corporate Relations)	$398,568 per annum (including statutory superannuation capped at $23,568)	349,305 (expiry date: 31 December 2024) 152,345 (expiry date: 28 February 2026) 529,344 ZEPOs (expiry date: 19 May 2027)	six months' notice

The agreements otherwise contain provisions that are considered standard for agreements of this nature.

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7.15 Non-Executive Director Letters of Appointment

The Company has entered into letters of appointment with Mr Runge and Mr Colless confirming the terms of their appointment and their roles and responsibilities. The appointment letters are on standard commercial terms. Please refer to Section 6.7 for details on the remuneration of Non-Executive Directors.

7.16 Deeds of Indemnity, Insurance, and Access

The Company is party to a deed of indemnity, insurance, and access with each of the Directors and the Company Secretary. Under these deeds, the Company indemnifies each Director and the Company Secretary to the extent permitted by law against any liability arising as a result of the Director or Company Secretary (as applicable) acting as an officer of the Company. The Company is also required to maintain insurance policies for the benefit of the Directors and Company Secretary and must allow the Directors and Company Secretary to inspect board papers in certain circumstances. The deeds are considered standard for documents of this nature.

7.17 Standard Chartered Bank (SCB) Engagement

The Company has engaged Standard Chartered Bank (SCB) as its corporate financial advisor pursuant to an engagement letter (SCB Agreement) dated 1 April 2020.

On 10 May 2021, the Company entered into an addendum to the SCB Agreement (SCB Addendum) confirms an additional engagement, to act as independent financial advisor to the Company in relation to the IPO.

In exchange for the 'IPO Advisory Fee', SCB has agreed to undertake a range of strategic and advisory activities in connection with the IPO that are standard for an agreement of this nature.

The IPO Advisory Fee is to be paid by the Company on completion of the IPO and will be based on the amount of funds raised under the IPO Offer. The Company expects that the fees payable will be US$750,000.

If the SCB Agreement is terminated prior to completion of the IPO, being the date on which the Company is Admitted, the IPO Advisory Fee is not payable by the Company, unless:

(a) a party terminates for any other reason than a material breach of the SCB Agreement by the other party; or

(b) a party has engaged in fraud, wilful misconduct, or gross negligence; and

(c) an IPO transaction is completed by the Company within three months of the date of termination.

The SCB Agreement and SCB Addendum are otherwise on standard commercial terms.

7.18 Right Solutions Consultancy Agreement

The Company entered into a consultancy agreement with Right Solutions Australia Pty Ltd (Right Solutions) on 15 August 2016 (RS Agreement). Right Solutions is a consultant specialising in mining, agricultural and industrial projects. The services are to be delivered pursuant to any engagement letter or purchase order entered into by the parties from time to time and include:

(a) exploration and tenement management;

(b) project feasibility studies and management;

(c) technical due diligence;

(d) project management;

(e) technical advice for research and development projects;

(f) environmental approvals, management, and audit;

(g) metallurgical and process review services;

(h) community and indigenous liaison management; and

(i) database and administration support services.

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The Company has extended the services provided by Right Solutions under the RS Agreement by way of a purchase order dated 19 January 2022. Right Solutions will now also provide various resources and support services for the Goschen Project for the period from 1 January 2022 to 31 September 2022 to the value of $3,763,240. The terms and conditions of the RS Agreement are considered standard for a commercial arrangement of this type.

7.19 CSA Global

The Company entered into an agreement with CSA Global Pty Ltd (CSA Global) dated 21 March 2022 (CSA Global Agreement), pursuant to which CSA Global was to prepare an Independent Technical Assessment Report (ITAR) for the Goschen Project. A copy of which is included into this Prospectus at Annexure F.

The total fees incurred under the CSA Global Agreement were $236,000 (exclusive of GST).

A summary of the key terms of the CSA Global Agreement is outlined below:

(a) (**Use of ITAR and liability to third parties**): The ITAR is a technical specialist's report prepared for inclusion in this Prospectus. CSA Global's services are provided for the exclusive benefit of the Company and the investors who will receive a copy of the Prospectus. CSA Global accepts no liability to any person other than the Company and those investors. The Company will be fully responsible for and must indemnify CSA Global against any claim made by any other third-party in connection with the ITAR.

(b) (**Limitation of liability**): CSA Global's liability to the Company in connection with preparation of the ITAR and their services:

  (i) is limited to the greater of the amount CSA Global is insured for in respect of that liability and the amount equal to 10 times the fees (excluding expenses, costs, and disbursements) actually paid to CSA Global;

  (ii) but only to the extent that such loss or damage was caused by the wilful misconduct, fraud, criminal act, or negligent act or omission, of CSA Global or its officers, agents, employees, and consultants.

The CSA Global Agreement was otherwise on standard commercial terms.

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8. Additional information

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8.1 Rights Attaching to Shares

A summary of the rights attaching to the Shares is detailed below. This summary is qualified by the full terms of the Constitution (a full copy of the Constitution is available from the Company on request free of charge) and does not purport to be exhaustive or to constitute a definitive statement of the rights and liabilities of Shareholders. These rights and liabilities can involve complex questions of law arising from an interaction of the Constitution with statutory and common law requirements. For a Shareholder to obtain a definitive assessment of the rights and liabilities which attach to the Shares in any specific circumstances, the Shareholder should seek legal advice.

(a) (**Ranking of Shares**): At the date of this Prospectus, all Shares are of the same class and rank equally in all respects. Specifically, the Shares issued pursuant to this Prospectus will rank equally with existing Shares.

(b) (**Voting rights**): Subject to any rights or restrictions, at general meetings:

(i) every Shareholder present and entitled to vote may vote in person or by attorney, proxy, or representative;

(ii) has one vote on a show of hands; and

(iii) has one vote for every Share held, upon a poll.

(c) (**Dividend rights**): The Company may pay a dividend as permitted by the Corporations Act from time to time. Each Share of a class on which the Board resolves to pay a dividend carries the right to participate in the dividend in the same proportion that the amount being paid on the Share bears to the total issue price of the Share at the time of the distribution.

The power to determine that a dividend is payable and to declare dividends (including interim dividends) is vested in the Directors and no Shareholder may claim, and the Company must not pay, interest on a dividend.

(d) (**Variation of rights**): The rights attaching to the Shares may only be varied by the consent in writing of the holders of three-quarters of the Shares, or with the sanction of a special resolution passed at a general meeting.

(e) (**Transfer of Shares**): Shares can be transferred by any means permitted by the Corporations Act or by law. The document of transfer must be delivered to the registered office of the Company, accompanied by the certificate (if any) for the Shares to be transferred, and marked with payment of any stamp duty payable. Until the transferee has been registered, the transferor is deemed to remain the holder, even after signing the instrument of transfer.

In some circumstances, the Board may refuse to register a transfer, including if upon registration the transferee will hold less than a marketable parcel or if the Corporations Act, the Listing Rules, or the Operating Rules forbid registration.

(f) (**General meetings**): Shareholders are entitled to be present in person, or by proxy, attorney or representative to attend and vote at general meetings of the Company.

The Directors may convene a general meeting at their discretion. General meetings shall also be convened on requisition as provided for by the Corporations Act.

(g) (**Unmarketable parcels**): The Company's Constitution provides for the sale of unmarketable parcels subject to any applicable laws and provided a notice is given to the minority Shareholders stating that the Company intends to sell their relevant Shares unless an exemption notice is received by a specified date.

(h) (**Rights on winding up**): If the Company is wound up, the liquidator may with the sanction of a special resolution, divide the assets of the Company amongst members as the liquidator sees fit.

(i) (**Restricted Securities**): A holder of Restricted Securities (as defined in the Listing Rules) must comply with the requirements imposed by the Listing Rules in respect of Restricted Securities.

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8.2 Terms and Conditions of Options

The following terms and conditions apply to each of the Director Options and the Zero Exercise Price Options (ZEPOs) issued under the Plan (together in this clause 8.2 referred to as the Options):

(a) (**Entitlement**): Each Option entitles the holder to subscribe for one Share upon exercise of the Option.

(b) (**Issue price**): The issue price for the various parcels of Options is as follows:

(i) the recently issued Director Options were issued in consideration for 'special exertion' in connection with the IPO, but are otherwise issued for nil cash consideration; and

(ii) the ZEPOs represent an equity based award under the Company's Plan, but are otherwise issued for nil consideration;

(c) (**Exercise price**): The Options have the following exercise prices:

Table 8.1: Key terms of Options

Type	Options	Exercise Price	Expiry Date
Director Options (Subject to vesting conditions)	1,000,000	$1.00	31 July 2025
ZEPOs issued under Plan	96,000	Nil	2 November 2023
	3,716,355		31 December 2024
	183,642		30 September 2025
	2,250,672		28 February 2026
	4,159,142		19 May 2027
Total:	**10,405,811**		

(d) (**Expiry date**): Each Option will expire at 5:00pm (AET) on the corresponding expiry date set out at Table 8.1 above (Expiry Date). An Option not exercised before the Expiry Date will automatically lapse on the Expiry Date.

(e) (**Vesting conditions**): Vesting conditions apply to the following Options:

(i) Director Options: earlier of:

(a) the date of Board approval of the FID to proceed with the development of the Goschen Project;

(b) the date of a change in control of the Company; or

(c) 31 December 2023.

(ii) ZEPOs issued under Plan: three years of continuous employment with the Company from date of issue.

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(f) (**Exercise Period and Notice of Exercise**): Subject to the satisfaction of any applicable vesting conditions, the Options are exercisable by delivering a duly completed notice of exercise together with payment of the exercise price at any time and from time to time on or prior to the Expiry Date.

The ZEPOs issued under the Plan are otherwise subject to the terms and conditions set out in the Plan and summarised in Section 8.3.

The following additional terms and conditions apply to the Director Options:

(a) (**Transferability of the Options**): The Options are not transferable and will not be quoted on ASX.

(b) (**Allotment of Shares**): Upon exercise of an Option, the holder will be issued a Share that ranks equally with the then issued Shares not more than 14 days after the date of the notice of exercise.

The Company will apply to ASX to have the Shares granted Official Quotation, subject to the Company's admission to the Official List.

(c) (**Participation in new issues**): There is no participating entitlement inherent in the Options to participate in new issues of capital in the Company. Prior to a pro rata issue of securities to Shareholders, Option holders will be notified by the Company in accordance with the requirements of the Listing Rules.

(d) (**Adjustment for bonus issues of Shares**): There are no rights to a change in exercise price, or the number of Shares over which the Options can be exercised, in the event of a bonus issue by the Company.

(e) (**Adjustments for reorganisation**): In the event of any reconstruction (including consolidation, reduction, or return) of the issued capital of the Company prior to the expiry date, all rights of the Option holder are to be changed in a manner consistent with the Listing Rules.

8.3 Retired Incentive Option Plan

The Company has issued Options to employees and Directors under its retired Incentive Option Plan (Plan) initially implemented in May 2017 and amended in September 2018 and December 2019. This Plan shall only remain relevant to the ZEPOs currently on issue. No further securities will be issued under this Plan. The full terms of the Plan may be inspected at the registered office of the Company during normal business hours and will be released to market as pre-quotation disclosure.

A summary of the terms of the Plan is set out below.

(a) (**Eligible Participant**): Eligible Participant means a person that:

(i) a Director (whether executive or non-executive) of any Group company (being the Company and each of its wholly owned subsidiaries);

(ii) a full or part time employee of any Group company;

(iii) a casual or contractor of a Group company; or

(iv) a prospective participant, being a person to whom an offer of Options under the Plan is made but who can only accept the offer if an arrangement has been entered into that will result in the person becoming one of (i) to (iii) above, who is declared by the Board to be eligible to receive grants of Options under the Plan.

(b) (**Maximum allocation**): The Company must have reasonable grounds to believe, when making an offer under the Plan, that the number of Shares to be received on exercise of the Options offered will not exceed 10% of the total number of Shares on issue.

(c) (**Purpose**): The purpose of the Plan is to:

(i) assist in the reward, retention, and motivation of Eligible Participants;

(ii) link the reward of Eligible Participants to performance and the creation of Shareholder value;

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(iii) align the interests of Eligible Participants with the interests of Shareholders by providing an opportunity for Eligible Participants to receive Shares in the Company;

(iv) provide Eligible Participants with the opportunity to share in any future growth in value of the Company; and

(v) provide greater incentive for Eligible Participants to focus on the Company's longer term goals.

(d) (**Offer and application**): The Board may, from time to time, in its absolute discretion, make a written offer to any Eligible Participant to apply for Options upon the terms set out in the Plan and upon such additional terms and conditions as the Board determined.

On receipt of an offer, the Eligible Participant may accept the offer in whole or in part by returning an acceptance form to the Company. The Board may accept or reject any acceptance form in its absolute discretion.

(e) (**Grant of Options**): The Company must, to the extent the Board has received and accepted an acceptance form for Options, promptly grant Options to the applicant upon the terms set out in the offer, the acceptance form, and the Plan.

(f) (**Terms of Options**): Each Option will entitle the holder to be issued or transferred one Share (or to be paid a cash payment in lieu of the issue or transfer of one Share) unless the offer otherwise provides.

Prior to an Option issued under the Plan being exercised, the Option is only transferable, assignable, or able to be otherwise disposed with the consent of the Board. A Participant must not enter into any arrangement for the purpose of hedging, or otherwise affecting their economic exposure, to their Option. Once the Board has notified a Participant that all vesting and/or exercise conditions have been satisfied or otherwise waived by the Board, the Participant may exercise any vested Option at any time.

(g) (**Vesting of Options**): An Option granted under the Plan will not vest and be exercisable unless any vesting conditions and/or exercise conditions attaching to that Option have been satisfied. If any vesting condition or exercise condition has been met, the Board must notify the Participant within 10 Business Days of becoming aware of this fact.

(h) (**Exercise of Options and cashless exercise**): To exercise an Option that has vested, the Participant must deliver a signed notice of exercise and, subject to a cashless exercise of the Options, pay the exercise price to the Company.

The Participant may, subject to Board approval, elect to pay the exercise price by using the cashless exercise facility. This enables the Participant to be issued or transferred that number of Shares equal in value to the positive difference between the Market Value of the Shares at the time of exercise and the exercise price that would otherwise be payable to exercise those Options.

Market Value means the volume weighted average price for Shares traded on ASX over the 10 most recent trading days on which the Shares were traded prior to the day on which the Market Value is to be determined.

(i) (**Delivery of Shares on exercise of Options**): Within 10 Business Days of the exercise of vested Options, the Company will issue or transfer to the Participant the Shares credited as being fully paid and despatch a share certificate or enter the Shares in the Participant's uncertificated holding, as the case may be, and issue a replacement certificate reflecting the number of Options which remain unexercised, if any.

(j) (**Lapsing of Options**): An Option will lapse on the earlier to occur of:

(i) an unauthorised dealing in, or hedging of, the Option;

(ii) a vesting condition in relation to the Option is not satisfied by the due date or become incapable of satisfaction, as determined by the Board;

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(iii) in respect of an unvested Option only, a person ceasing to be an Eligible Participant unless the Board exercises its discretion to vest the Option or the person is a Good Leaver, as defined by the Plan (applies to Options issued under the December 2019 amendment of the Plan only).

(iv) in respect of a vested Option only, a person ceasing to be an Eligible Participant and failing to exercise the Option within a period determined by the Board, or the payment of a cash payment in respect of the Option;

(v) the Board deeming that the Option lapses due to fraud, dishonesty, or other improper behaviour of the holder;

(vi) in respect of an unvested Option, a liquidity event or the making of a winding up order or resolution, where the Option does not otherwise vest and become exercisable under the Plan; and

(vii) the expiry date of the Option.

(k) (**Change of control**): If a company obtains control of the Company as a result of a change of control and both the Company, the acquiring company and the Participant agrees, a Participant may, in respect of any vested Options that are exercised, be provided with Shares of the acquiring company or its parent in lieu of Shares, on substantially the same terms and subject to substantially the same conditions as the Shares, but with appropriate adjustments to the number and kind of Shares subject to the Options.

(l) (**Rights attaching to Plan Shares**): All Shares issued under the Plan will rank equally in all respects with the Shares of the same class. The owner of the Shares will be entitled to dividends and to exercise voting rights attached to the Shares.

(m) (**Disposal restrictions on Shares**): The Board may, in its discretion, determine at any time up to the exercise of an Option issued under the Plan that a restriction period will apply to some, or all of the Shares issued or transferred on exercise. A Participant must not dispose of or otherwise deal with any Shares issued to them under the Plan while restrictions are in place.

(n) (**Adjustment of Convertible Securities**): If, at any time, the issued capital of the Company is reorganised (including consolidation, subdivision, reduction, or return), all rights of a Participant are to be changed in a manner consistent with the Corporations Act and the ASX Listing Rules at the time of the reorganisation.

(o) (**Participation in new issues**): There are no participating rights or entitlements inherent in the Options issued under the Plan and holders will not be entitled to participate in new issues of capital offered to Shareholders during the currency of the Options without exercising the Options.

(p) (**Amendment of Plan**): Subject to the Corporations Act and the ASX Listing Rules, the Board may, at any time, by resolution amend or add to all or any of the provisions of the Plan, an offer under the Plan, or the conditions of any Options granted under the Plan. Any such amendment may be given retrospective effect.

No adjustment or variation to the terms of an Option under the Plan will be made without the consent of the Participant who holds the relevant Option if such an adjustment or variation would have a materially prejudicial effect upon the Participant, other than to comply with Relevant Law or to correct a mistake.

(q) (**Plan duration**): the Plan will continue until terminated by the Board. The Board may terminate the Plan at any time by resolution.

Termination shall not affect the rights or obligations of a Participant (being an Eligible Participant who has taken up an offer to receive Options under the Plan) or the Company which has arisen under the Plan before the date of termination. Provisions of the Plan relating to a Participant's Options shall survive termination of the Plan.

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As at the date of the Prospectus, 10,405,811 existing Options are on issue that have been granted to employees and Directors under the Plan. Each of these existing Options have a zero exercise price (referred to as 'ZEPOs') and are to vest on completion of the IPO; or after the employee holds continuous employment or office with the Company for three years. Details of these Options are summarised in the table below.

Table 8.2: ZEPOs currently on issue under the retired Plan

CLASS	Issue Date	Expiry Date	Number	Exercise Price
EMPOPT	02-Nov-2018	2-Nov-23	96,000	$0.00
EMPOPT1	Various (02 Nov-18 – 17-Jan-2020)	31-Dec-24	3,716,355	$0.00
EMPOPT2	Various (31-Dec-2019 & 23-Oct-2020)	30-Sep-25	183,642	$0.00
EMPOPT3	Various (31-Dec-2019 to 01-Mar-21)	28-Feb-26	2,250,672	$0.00
2022 ZEPOs	19-May-2022	19-May-27	4,159,142	$0.00

Further information on the interests of the Directors and officers of the Company, including the number of Options held by each, can be found in Section 6.6.

8.4 New Employee Option Plan

Prior to the date of the Prospectus, the Company adopted a new employee option plan (New Plan) under which any future Options or equity-based incentives will be issued. No grants of Options have been made under the New Plan as at the date of the Prospectus. Each Option issued under the New Plan shall entitle the holder to subscribe for one Share upon exercise of the Option.

The Board has determined that the aggregate number of Options able to be issued under the New Plan during the three years following Admission shall not exceed 20,000,000, excluding the Options issued under the retired existing Plan (as disclosed in Section 8.3 of this Prospectus).

A summary of the key terms of the New Plan is set out below:

(a) (**Eligible participant**): Eligible participants include natural persons who are a:

  (i) permanent full time or permanent part-time employee

  (ii) consultant or contractor; or

  (iii) director of the Company or any associated company who the Board determines to be eligible to participate in the New Plan (Eligible New Plan Participant).

(b) (**Plan interests**): Eligible New Plan Participants will be provided with an opportunity to acquire a financial interest in the Company, which will align their interests more closely with shareholders and provide greater incentive for them to focus on the Company's longer-term goals.

(c) (**Quantum**): The number of Options offered to an Eligible New Plan Participant will be specified in the invitation made to that Eligible New Plan Participant.

(d) (**Terms and conditions**): The Board may from time to time invite an Eligible New Plan Participant to participate in the New Plan. Invitations will be subject to such terms as the Board determines and will specify, amongst other things, the following:

  (i) any option fee that may be applicable;

  (ii) the exercise price of the Options;

  (iii) the duration of the Options, including the first and last exercise date of the Options, subject to a maximum expiry date of 5 years from the date of issue of the Option;

  (iv) any vesting conditions (including length of service or performance milestones) that the Board considers appropriate; and

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(v) the time period for making an application to participate in the New Plan.

Following receipt by an Eligible New Plan Participant of an invitation as described above, the Eligible New Plan Participant may make an application by delivering to the Company a duly completed and executed application form within the closing time specified in the invitation or in accordance with any other procedure set out in the invitation. The Board may then decide to accept or reject the offer made by the Eligible New Plan Participant.

(e) (**Nominee**): Following receipt by a New Plan Eligible Participant of an invitation, a New Plan Eligible Participant may nominate a nominee in whose favour the New Plan Eligible Participant wishes to renounce its invitation (Nominee).

A Nominee, in relation to a New Plan Eligible Participant, means:

(i) an immediate family member of the New Plan Eligible Participant;

(ii) a company whose members comprise only the New Plan Eligible Participant or their immediate family members; or

(iii) a corporate trustee of a self-managed superannuation fund where the New Plan Eligible Participant is a director of the trustee, and the self-managed superannuation fund is an associate of the New Plan Eligible Participant, as defined in the *Income Tax Assessment Act 1936* (Cth).

Following the receipt by a New Plan Eligible Participant of an invitation, a Nominee may apply for Options by delivering to the Company a duly completed and executed renunciation form.

The terms and conditions of the New Plan as summarised in this Section 8.4 otherwise apply to a Nominee of a New Plan Participant where applicable.

(f) (**Exercise of Options**): Subject to the satisfaction of any vesting conditions and the New Plan rules, an Option which has not lapsed may be exercised by the New Plan Participant during the relevant exercise period by lodging an exercise notice with the Company secretary or such other period nominated by the Board accompanied by the exercise price for the number of Options specified in the exercise notice and the certificate for those Options.

(**Cashless exercise**): At the time that a participant provides an exercise notice, the participant may request that the Board approves the application of the cashless exercise rule. If approved, this would enable the participant to satisfy the aggregate exercise price, by the Company allocating a number of Shares that are equal in value to the difference between the aggregate exercise price and the market value of the Shares which would otherwise have been allocated as at the time of exercise (rounded down to the nearest whole Share).

(g) (**Issue of Shares on exercise**):Following the valid exercise of an Option, the Company will:

(i) issue the number of Shares required under the terms and conditions attached to the Options (being one Share per Option); and

(ii) if admitted to the official list of ASX at the time (and subject to any escrow arrangements), apply for official quotation on ASX of Shares issued pursuant to the exercise of the Options.

(h) (**Shares issued on exercise**): Shares issued on exercise of the Options rank equally with the then issued Shares of the Company.

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(i) (**Restrictions**): A New Plan Participant may only exercise an Option in accordance with the terms of the New Plan.

An Option issued under the New Plan:

(i) is not transferable and must not be assigned, sold, or subject to a security interest or otherwise dealt with;

(ii) does not carry any voting rights or entitle the holder to any dividends;

(iii) does not confer any right to participate in the surplus profits or assets of the Company upon winding up of the Company. The Options do not confer any right to a return of capital, whether in winding up, upon reduction of capital or otherwise;

(iv) does not confer any participation rights or entitlements in respect of new issues of new securities (including bonus issues or entitlement issues to existing Shareholders) during the currency of the Options without exercising the Options, unless and until any applicable vesting conditions or performance milestones are achieved and the Option converts into Shares.

(j) (**Amendments**): Subject to compliance with the ASX Listing Rules, the Board may at any time amend the New Plan or waive or amend the application of any of the rules under the New Plan in relation to an Eligible New Plan Participant at any time and a change may be given retrospective effect. However, where any amendments will reduce any of the New Plan Participants' rights in respect of their Plan Options, the Board must obtain the prior written consent of at least 75% of the New Plan Participants affected by the change unless the amendment is to correct a manifest error or for the purpose of complying with applicable laws or to take into consideration possible adverse tax implications to the New Plan arising from changes to relevant tax guidance.

8.5 Effect of the Offer on Control and Substantial Shareholders

Shareholders (and their associates) holding an interest in 5% or more of the Shares on issue as at the date of this Prospectus are outlined in the table below.

Name	Number of Shares	% of Shares
Ellison (WA) Pty Ltd (**Ellison**)	14,392,724	10.3

Ellison also holds Convertible Notes. When converted, and assuming that Ellison does not subscribe for any additional Shares under the IPO Offer his interest will be as set out below (based on the Minimum Subscription amount being raised). The Company is not presently aware of any other party who will hold 5% of more of the Shares on Admission, however, will update the market in due course.

Name	Number of Shares	% of Shares
Ellison[1]	18,007,539	9.49

1. *Should Ellison choose to participate in the IPO Offer to the extent necessary to prevent dilution, this amount will increase to 19,529,239 (10.30%).*

8.6 ASX Waivers

ASX has advised the Company that upon receiving an application from the Company for Admission to the Official List that it would be likely to grant a waiver from Listing Rule 1.1 condition 12 to the extent necessary to permit the Company to have a total of 10,405,810 Options on issue with an exercise price that is less than $0.20. These Options are the ZEPOs issued under the Plan, as further described in Section 8.3.

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8.7 Interests of Promoters, Experts and Advisers

(a) **No interest except as disclosed**

Other than as set out below or elsewhere in this Prospectus, no persons or entity named in this Prospectus as performing a function in a professional, advisory, or other capacity in connection with the preparation or distribution of this Prospectus holds at the date of this Prospectus, or held at any time during the last 2 years, any interest in:

(i) the formation or promotion of the Company;

(ii) property acquired or proposed to be acquired by the Company in connection with its formation or promotion, or the Offer; or

(iii) the Offer,

and the Company has not paid any amount or provided any benefit, or agreed to do so, to any of those persons for services rendered by them in connection with the formation or promotion of the Company or the Offer.

(b) **Share registry**

Automic has been appointed to conduct the Company's share registry functions and to provide administrative services in respect to the processing of Applications received pursuant to this Prospectus, and will be paid for these services on standard industry terms and conditions.

(c) **Auditor**

HLB Mann Judd (WA Partnership) ABN 22 193 232 714 has acted as auditor to the Company. The Company estimates it will pay HLB Mann Judd a total of $30,000 (excluding GST) in respect of the audit for the year ending 30 June 2022 and less than $2,000 for services in respect of the Prospectus. During the 24 months preceding lodgement of this Prospectus with ASIC, HLB Mann Judd has been paid approximately $61,000 (excluding GST) for these services.

(d) **Australian Lawyers**

HWL Ebsworth Lawyers (HWLE) has acted as the Australian Lawyers to the Company in relation to the Offer and has prepared the Solicitor's Tenement Report which is included in Annexure C of this Prospectus. The Company estimates it will pay HWLE $700,000 (excluding GST) for these services. Subsequently, fees will be charged in accordance with normal charge out rates.

During the 24 months preceding lodgement of this Prospectus with ASIC, HWLE has been paid approximately $342,000 (excluding GST) for other legal services to the Company, including in respect of the VPM Demerger.

(e) **Independent Technical Expert**

CSA Global Pty Ltd (ACN 077 165 532) has acted as the Independent Technical Expert and has prepared the Independent Technical Assessment Report which is included by reference into this Prospectus. The Company estimates it will pay CSA Global a total of $236,000 (excluding GST) for these services.

During the 24 months preceding lodgement of this Prospectus with ASIC, CSA Global has been paid approximately $218,000 (excluding GST) for other services provided to the Company.

(f) **Lead Manager**

Canaccord has acted as the Lead Manager to the Offer. Details of the payments to be made to the Lead Manager in connection with the IPO Offer are set out in Section 7.11.

During the 24 months preceding lodgement of this Prospectus with ASIC, the Lead Manager has also acted as 'joint lead manager' (together with Reach) of the Company's recent Pre-IPO Offer raising $31.84 million via the issue of the 2022 Notes, and has been paid approximately $720,000 (excluding GST) for these services.

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(g) **Investigating Accountant**

RSM Corporate Australia Pty Ltd (RSM) has acted as Investigating Accountant of the Company and has prepared the Independent Limited Assurance Report which is included in Annexure D of this Prospectus.

The Company estimates it will pay RSM a total of $143,000 (excluding GST) for these services.

During the 24 months preceding lodgement of this Prospectus with ASIC, RSM has also provided other services to the Company, for which they have been paid approximately $50,000 for (excluding GST).

8.8 Consents

(a) Each of the parties referred to below:

(i) do not make the Offer;

(ii) do not make, or purport to make, any statement that is included in this Prospectus, or a statement on which a statement made in this Prospectus is based, other than as specified below or elsewhere in this Prospectus;

(iii) to the maximum extent permitted by law, expressly disclaims and takes no responsibility for any part of this Prospectus other than a reference to its name and a statement contained in this Prospectus with the consent of that party as specified below; and

(iv) has given and has not, prior to the lodgement of this Prospectus with ASIC, withdrawn its consent to the inclusion of the statements in this Prospectus that are specified below in the form and context in which the statements appear.

(b) **Share Registry**

Automic has given, and has not withdrawn prior to the lodgement of this Prospectus with ASIC, its written consent to being named in this Prospectus as Share Registry of the Company in the form and context in which it is named.

(c) **Auditor**

HLB Mann Judd (WA Partnership) ABN 22 193 232 714 has given, and has not withdrawn prior to the lodgement of this Prospectus with ASIC, its written consent to being named in this Prospectus as the auditor of the Company in the form and context in which it is named.

(d) **Australian Lawyers**

HWLE has given, and has not withdrawn prior to the lodgement of this Prospectus with ASIC, its written consent to being named in this Prospectus as the Australian Lawyers to the Company, and as having prepared the Solicitor's Tenement Report, in the form and context in which it is named.

(e) **Independent Technical Expert**

CSA Global Pty Ltd has given, and has not withdrawn prior to the lodgement of this Prospectus with ASIC, its written consent to being named in this Prospectus as the Independent Technical Expert to the Company in the form and context in which it is named and has given and not withdrawn its consent to the inclusion of the Independent Technical Assessment Report in the form and context in which it is incorporated.

(f) **Lead Manager**

Canaccord has given, and has not withdrawn prior to the lodgement of this Prospectus with ASIC, its written consent to being named in this Prospectus as the Lead Manager to the Offer in the form and context in which it is named.

(g) **Co-Manager**

Reach has given, and has not withdrawn prior to the lodgement of this Prospectus with ASIC, its written consent to being named in this Prospectus as the Lead Manager to the Offer in the form and context in which it is named.



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(h) **Investigating Accountant**

RSM Corporate Australia Pty Ltd has given, and has not withdrawn prior to the lodgement of this Prospectus with ASIC, its written consent to being named in this Prospectus as the Investigating Accountant to the Company in the form and context in which it is named and has given and not withdrawn its consent to the inclusion of the Investigating Accountant's Report in the form and context in which it is included.

(i) **TZMI**

TZ Minerals International has given, and has not withdrawn prior to the lodgement of this Prospectus with ASIC, its written consent to being named in this Prospectus as an independent third party providing commodity pricing outlook data in Section 2.7(g) (Pricing Data) in the form and context in which it is named and has given and not withdrawn its consent to the inclusion of the Pricing Data attributed to it in the form and context in which it is included.

(j) **Adamas Intelligence**

Adamas Intelligence has given, and has not withdrawn prior to the lodgement of this Prospectus with ASIC, its written consent to being named in this Prospectus as an independent third party providing commodity pricing outlook data in Section 2.7(g) (Pricing Data) in the form and context in which it is named and has given and not withdrawn its consent to the inclusion of the Pricing Data attributed to it in the form and context in which it is included.

8.9 Expenses of Offer

The total approximate expenses of the Offer payable by the Company (assuming the Minimum Subscription is raised) are:

$'000	Minimum amount	Oversubscription amount
Corporate advisory	1,231	1,231
HWLE, legal costs	770	770
Investigating accountants fees	157	157
Independent technical assessment	260	260
Tax due diligence	44	44
Share registry fee	24	24
Prospectus design and printing	18	18
ASIC prospectus lodgement fee	3	3
Lead manager fees	1,100	1,650
ASX listing fee	268	273
Total cash costs of the offer (GST inclusive)	**3,876**	**4,431**
Offer costs paid as at 30 June 2022	(446)	(446)
Unpaid offer costs (GST inclusive)	**3,429**	**3,985**

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8.10 Continuous Disclosure Obligations

Following Admission, the Company will be a 'disclosing entity' (as defined in Section 111AC of the Corporations Act) and, as such, will be subject to regular reporting and disclosure obligations. Specifically, like all listed companies, the Company will be required to continuously disclose any information it has to the market which a reasonable person would expect to have a material effect on the price or the value of the Shares (unless a relevant exception to disclosure applies). Price sensitive information will be publicly released through ASX before it is otherwise disclosed to Shareholders and market participants. Distribution of other information to Shareholders and market participants will also be managed through disclosure to ASX. In addition, the Company will post this information on its website after ASX confirms that an announcement has been made, with the aim of making the information readily accessible to the widest audience.

8.11 Litigation and Claims

So far as the Directors are aware, there is no current or threatened civil litigation, arbitration proceedings or administrative appeals, or criminal or governmental prosecutions of a material nature in which the Company (or any other member of the Group) is directly or indirectly concerned which is likely to have a material adverse effect on the business or financial position of the Company or the Group.

8.12 Electronic Prospectus

Pursuant to Regulatory Guide 107 ASIC has exempted compliance with certain provisions of the Corporations Act to allow distribution of an Electronic Prospectus on the basis of a paper Prospectus lodged with ASIC and the issue of Shares in response to an electronic application form, subject to compliance with certain provisions. If you have received this Prospectus as an Electronic Prospectus, please ensure that you have received the entire Prospectus accompanied by the Application Form. If you have not, please email the Company and the Company will send to you, for free, either a hard copy or a further electronic copy of this Prospectus or both.

The Company reserves the right not to accept an Application Form from a person if it has reason to believe that when that person was given access to the electronic Application Form, it was not provided together with the Electronic Prospectus and any relevant supplementary or replacement prospectus or any of those documents were incomplete or altered. In such a case, the Application Monies received will be dealt with in accordance with Section 722 of the Corporations Act.

8.13 Documents Available for Inspection

Copies of the following documents are available for inspection during normal business hours at the registered office of the Company:

(a) this Prospectus;

(b) the Constitution; and

(c) the consents referred to in Section 8.8 of this Prospectus.

8.14 Statement of Directors

The Directors report that after due enquiries by them, in their opinion, since the date of the financial statements in Section 5, there have not been any circumstances that have arisen or that have materially affected or will materially affect the assets and liabilities, financial position, profits or losses or prospects of the Company, other than as disclosed in this Prospectus.

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9. Authorisation

The Prospectus is issued by the Company and its issue has been authorised by a resolution of the Directors.

In accordance with Section 720 of the Corporations Act, each Director has consented to the lodgement of this Prospectus with ASIC and has not withdrawn that consent.

This Prospectus is signed for and on behalf of the Company by:



Don Runge
Chairman

Dated: 21 November 2022

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10. Glossary of Terms

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These definitions are provided to assist persons in understanding some of the expressions used in this Prospectus.

$	means Australian dollars.
2021 Notes	means the Convertible Notes issued by the Company having the terms set out in Section 7.10, and convertible into Shares prior to Admission at the Company's election.
2022 Notes	means the Convertible Notes issued by the Company pursuant to the Pre-IPO Offer having the terms set out in Section 7.10, and convertible into Shares prior to Admission at the Company's election.
Admission	means admission of the Company to the Official List, following completion of the Offer.
AET	means Australian Eastern Time, being the time in Sydney, New South Wales.
Applicant	means a person who submits an Application Form.
Application	means a valid application for Shares pursuant to this Prospectus.
Application Form	means the application form attached to this Prospectus.
Application Monies	means application monies for Shares under the Offer received and banked by the Company.
AREM Refinery	means a final solvent extraction (SX) facility to deliver optional further downstream processing of the MREC from Goschen into further refined rare earth products, to be located offsite from Goschen as further described in Section 2.8. The AREM Refinery does not form part of currently planned Phases 1, 1A and 2.
ASIC	means the Australian Securities and Investments Commission.
ASX	means ASX Limited ACN 008 624 691 or, where the context requires, the financial market operated by it.
ASX Settlement	means ASX Settlement Pty Limited ACN 008 504 532.
ASX Settlement Rules	means ASX Settlement Operating Rules of ASX Settlement Pty Ltd ABN 49 008 504 532.
Board	means the board of Directors of the Company as at the date of this Prospectus.
Broker Offer	means the offer of Shares under this Prospectus to Australian retail clients of participating brokers that have a registered address in Australia and received an invitation from a broker to acquire Shares under this Prospectus.
Broker Offer Application Form	means the Application Form made available with a copy of this Prospectus, identified as the Broker Offer Application Form.
Canaccord or Lead Manager	means Canaccord Genuity (Australia) Limited (ACN 075 071 466).
Capex	means capital expenditure in connection with the Goschen Project.

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CHESS	means the Clearing House Electronic Subregister System operated by ASX Settlement.
Closing Date	means the date that the Offer closes as contained in the Indicative Timetable.
Company	means VHM Limited (ACN 601 004 102).
Constitution	means the constitution of the Company.
Conditional Admission Letter	means a letter from ASX indicating that the Company's Shares will be admitted to official quotation on ASX subject to the satisfaction of certain conditions.
Convertible Note Agreements	means the convertible note agreements between the Company and the Noteholders holding the 2021 Notes and the 2022 Notes, as further described in Section 7.10.
Convertible Notes	means the 2021 Notes and the 2022 Notes.
Convertible Note Offer	means the offer of 35,069,753 Shares to be issued on conversion of the Convertible Notes.
Corporations Act	means the *Corporations Act 2001* (Cth), as amended from time to time.
Demerger Record Date	means 16 June 2022, being a date prior to allotment of securities under the IPO Offer and prior to the Company's Admission. Shares received under the IPO Offer are unaffected.
DFS	means a definitive feasibility study, being a feasibility study undertaken to a high degree of accuracy which may be used as a basis for raising finance for the construction of a project.
Directors	means the directors of the Company.
Directors Options	means an aggregate of 1,000,000 Options issued to certain Directors as a "special exertion" fee, having the terms as further described in Section 8.2.
EES	means environment effects statement.
EL	means exploration licence.
Electronic Prospectus	means the electronic copy of this Prospectus located at the Company's website https://vhmltd.com.au/.
Eligible Participant	means a person eligible to participate in the Plan, as described in Section 8.3.
Exposure Period	means the period of seven days after the date of lodgement of this Prospectus, which period may be extended by ASIC by not more than seven days pursuant to Section 727(3) of the Corporations Act.
FEED	means front-end engineering and design.
FPP	means feed preparation plant, being a component of Phase 1.

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Final Investment Decision or 'FID'	means the decision to be made by the Board to commit the Company to proceeding with the development of the Goschen Project, as further described in Section 1.9.
Goschen DFS	means the DFS based on the Company's Proved and Probable Ore Reserve and completed in March 2022 in respect of the Goschen Project, covering the mining unit plant (MUP), feed preparation plant, wet concentrator plant (WCP) and REM flotation circuit and all required non-process infrastructure aspects. The Goschen DFS forms the basis for the Company's current Capex and Opex estimates with a current contingency of ±15% on items covered by this DFS.
Goschen Project	means the Goschen Project located in North East Victoria, further described in Section 2.6, part of which (being Area 1 and Area 3 located in RL6806) is proposed to be developed into the Proposed Operation, further described in Section 2.7.
GST	means goods and services tax.
Group	means the Company and the Group Subsidiaries.
Group Subsidiaries	means each of the Companies subsidiaries described in Section 2.1.
HAL	means hot acid leach.
HMC	means heavy mineral concentrate.
HMS	means heavy mineral sands.
Hydromet Circuit	means a circuit with a planned throughput of 1.2 tonnes per hour (approx.) downstream of the REM flotation circuit at Goschen Project processing plant, to produce a mixed rare earth carbonate product, and proposed to be implemented as Phase 1A of the Goschen Project.
ILUA	means Indigenous Land Use Agreements.
Indicative Timetable	means the indicative timetable for the Offer on page x of this Prospectus.
Independent Technical Assessment Report or 'ITAR'	means the Independent Technical Assessment Report prepared by CSA Global Pty Ltd (ACN 077 165 532), contained in Annexure F.
Independent Limited Assurance Report	means the report prepared by the Investigating Accountant, contained in Annexure D.
Investigating Accountant	means RSM Corporate Australia Pty Ltd (ACN 050 508 024).
Institutional Investor	means an institutional or professional investor (and any person for whom it is acting) who is: • if in Australia, a person who is a wholesale client under Section 761G of the Corporations Act and either a "professional investor" or "sophisticated investor" under Sections 708(11) and 708(8) of the Corporations Act; or

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	• if outside Australia, an institutional or professional investor in other Permitted Jurisdictions to whom offers of Shares may lawfully be made without the need for a lodged or registered prospectus or other form of disclosure document or filing with, or approved by, any government agency (except Canada, where a notice reporting any sales of securities must be filed with the relevant provincial securities regulator), and in particular:
	• if in **Bermuda**, it acknowledges that any communications received in relation to the IPO Offer occurred from outside Bermuda;
	• if in **Canada (British Columbia, Ontario, and Quebec provinces only)**, it is an "accredited investor" as defined in National Instrument 45-106 – Prospectus Exemptions ("NI 45-106");
	• if in **Cayman Island**, it acknowledges that any communications received in relation to the IPO Offer occurred from outside the Cayman Islands;
	• if in **European Union (excluding Austria)**, it is a "qualified investor" (as defined in Article 2(e) of the Regulation (EU) 2017/1129 of the European Parliament and the Council of the European Union);
	• if in **Hong Kong**, it is a "professional investor" (as defined in the Securities and Futures Ordinance of Hong Kong, Chapter 571 of the Laws of Hong Kong);
	• if in **Japan**, it is a Qualified Institutional Investor, as defined under the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948, "FIEL");
	• if in **New Zealand**, it is a person who (i) is an investment business within the meaning of clause 37 of Schedule 1 of the Financial Markets Conduct Act 2013 (New Zealand) (the "FMC Act"), (ii) meets the investment activity criteria specified in clause 38 of Schedule 1 of the FMC Act, (iii) is large within the meaning of clause 39 of Schedule 1 of the FMC Act, (iv) is a government agency within the meaning of clause 40 of Schedule 1 of the FMC Act or (v) is an eligible investor within the meaning of clause 41 of Schedule 1 of the FMC Act (and, if an eligible investor, have provided the necessary certification);
	• if in **Norway**, it is a "professional client" as defined in Norwegian Securities Trading Act of 29 June 2007 no. 75;
	• if in **Singapore**, it is an "institutional investor" or an "accredited investor" (as such terms are defined in the Securities and Futures Act 2001 of Singapore ("SFA"))
	• if in **Switzerland**, it is a “professional client” within the meaning of article 4(3) of the Swiss Financial Services Act ("FinSA") or have validly elected to be treated as a professional client pursuant to article 5(1) of the FinSA;

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	• if in **United Kingdom**, it is a (i) "qualified investor" within the meaning of Article 2(e) of the UK Prospectus Regulation; and (ii) within the categories of persons referred to in Article 19(5) (investment professionals) or Article 49(2)(a) to (d) (high net worth companies, unincorporated associations, etc.) of the UK Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended;
	• if in **United States**, it is "institutional accredited investors" (within the meaning of Rule 501(a)(1), (2), (3), (7), (8), (9) and (12) under the US Securities Act); and (ii) dealers or other professional fiduciaries organized or incorporated in the United States that are acting for a discretionary or similar account (other than an estate or trust) held for the benefit or account of persons that are not US persons and for which they exercise investment discretion, within the meaning of Rule 902(k)(2)(i) of Regulation S under the US Securities Act.
Institutional Offer	means the offer of Shares under this Prospectus to Institutional Investors, as described in Section 1.1(b)(ii), and to the extent that such investors are foreign investors, as described in Section 1.18.
IPO Offer	means the offer by the Company, pursuant to this Prospectus, of up to 14,841,815 Shares to raise up to $20,000,000 (before costs), comprising the Broker Firm Offer, the Institutional Offer, the Priority Offer and the Public Offer.
Issue Date	means the date, as determined by the Directors, on which the Shares offered under this Prospectus are allotted, which is anticipated to be the date identified in the Indicative Timetable.
JORC Code	means the *Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves* (2012 edition).
Listing Rules	means the listing rules of ASX.
LOM Plan	means the Life of Mine Plan in respect of the Proposed Operation, as further described in Section 2.7(c).
May EGM	means the extraordinary meeting held on 24 May 2022, at which Shareholders approved all VPM Demerger related resolutions.
Mineral Resource	has the meaning ascribed by the JORC Code.
Minimum Subscription	means the raising of $20 million (before costs) pursuant to the IPO Offer.
MREC	means mixed rare earth carbonate.
MSP	means mineral separation plant.
MUP	means mining unit plant
New Plan	means the Company's new Incentive Option Plan, as further described in Section 8.4.
Offer	means together, the IPO Offer and the Convertible Note Offer.

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Offer Price	means $1.35 per Share under the IPO Offer.
Official List	means the official list of ASX.
Official Quotation	means official quotation by ASX in accordance with the Listing Rules.
Opening Date	means the date specified as the opening date in the Indicative Timetable.
Opex	means operational expenditure.
Option	means an option to acquire a Share.
Ore Reserve	has the meaning ascribed by the JORC Code.
Permitted Jurisdictions	Australia, Bermuda, Canada (British Columbia, Ontario, and Quebec provinces only), Cayman Island, European Union (excluding Austria), Hong Kong, Japan, New Zealand, Norway, Singapore, Switzerland, United Kingdom, and the United States.
Phase 1	means Phase 1 processing of the ore from the Goschen Project consisting of a mining unit plant (MUP), feed preparation plant (FPP), wet concentrator plant (WCP) and rare earth mineral (REM) flotation circuit. For more information see Section 2.7(b).
Phase 1A	means Phase 1A processing of the REMC via the Hydromet Circuit to produce a MREC at the Goschen Project. Scheduled to commence operations approximately 18 months post first production from Phase 1.
Phase 2	means Phase 2 processing of ore from the Goschen Project which may commence approximately 18 months post first production and consist of an additional mineral separation plant (MSP) and, subject to prevailing market circumstances at that time, HAL, and chrome removal circuit, which will produce additional products such as premium zircon. For more information see Section 2.7(b).
Plan	means the Company's retired Incentive Option Plan, as further described in Section 8.3.
Pre-IPO Offer	means the capital raising conducted by the Company prior to the issue of this Prospectus to raise $31,8400,000 by way of the issue of the 2022 Notes, which concluded in April 2022.
Priority Offer	means the priority allocation of no more than 1,481,481 Shares to raise $2 million (before costs) open to selected retail investors and Institutional Investors in Australia, New Zealand, and certain other jurisdictions around the world (as set out in and subject to the restrictions listed in Section 1.18) who have received an invitation to participate in the Priority Offer.
Proposed Operation	means the heavy mineral sands and rare earth minerals mining and processing operation proposed to be developed in phases by the Company within the Goschen Project area which will extract ore capable of being refined to produce critical minerals (including rare earth elements, zircon and titanium), further described in Section 2.7.
Prospectus	means this prospectus dated 21 November 2022.

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Public Offer	means the offer of Shares under this Prospectus to the general public, provided they are Australian residents with registered addresses in Australia.
Public Offer Application Form	means the Application Form made available with a copy of this Prospectus, identified as the Public Offer Application Form.
Reach	means Reach Markets Pty Ltd (ACN 145 312 232) appointed by the Lead Manager to act as Co-Manager.
REM	means rare earth minerals.
REMC	means rare earth mineral concentrate.
REMFC	means rare earth mineral flotation circuit
Relevant Interest	has the meaning given in the Corporations Act.
RL	means retention licence.
Section	means a Section of this Prospectus.
Securities	means any securities, including Shares, Options or performance securities, issued, or granted by the Company.
Share	means a fully paid ordinary share in the capital of the Company.
Share Registry	means Automic Pty Ltd (ACN 152 260 814).
Shareholder	means a holder of one or more Shares.
Shenghe	means Shenghe Resources (Singapore) Pte Ltd, being the Company's offtake partner in respect of at least 50% of nameplate production for an initial three year term, as detailed at Section 7.1.
Solicitor's Tenement Report	means the report on the Company's tenements included in this Prospectus as Annexure C.
SX	means solvent extraction.
THM	means total heavy mineral.
TREO	means total rare earth oxide.
US Offering Circular	means the offering circular that must accompany any distribution of this Prospectus in the United States to Institutional Investors.
VPM	means VP Minerals Limited, previously a wholly owned subsidiary of the Company, before the VPM Demerger occurred.
VPM Demerger	means the demerger of VPM together with certain tenements and tenement applications as detailed in Sections 2.2 and 7.2 of this Prospectus.
WCP	means wet concentrator plant.
ZEPO	means a zero exercise price Option issued under the Company's exiting Plan.



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Annexure A

Mineral Resources and Ore Reserves

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Table 1: Company Mineral Resources as at 30 June 2021

Area	Resource Category	Material	Total Heavy Mineral Tonnage	Bulk Density	Total Heavy Mineral Grade	Slimes	Oversize material >2mm	THM Assemblage[2]			
		(Mt)	(Mt)	(gcm3)	(%)	(%)	(%)	Zircon (%)	Rutile (%)	Leucoxene (%)	Ilmenite (%)
Area 1	Measured	30.7	1.8	1.76	5.72	15	5	29.9	10.8	9.0	24.7
	Indicated	62.2	1.4	1.72	2.31	18	2	26.6	11.5	9.2	25.0
	Total[1]	**92.9**	**3.2**	**1.73**	**3.44**	**17**	**3**	**27.7**	**11.2**	**9.1**	**24.9**
Area 2 West	Indicated	26.0	0.7	1.72	2.80	20	8	22.0	16.0	12.0	25.0
	Total[1]	**26.0**	**0.7**	**1.72**	**2.80**	**20**	**8**	**22.0**	**16.0**	**12.0**	**25.0**
Area 3	Indicated	204.1	6.9	1.73	3.38	19	3	19.2	9.0	8.0	25.0
	Inferred	287.7	6.7	1.72	2.32	18	3	17.2	8.7	7.5	22.7
	Total[1]	**491.8**	**13.6**	**1.73**	**2.76**	**18**	**3**	**18.2**	**8.9**	**7.7**	**23.9**
Area 4	Indicated	18.0	0.8	1.74	4.60	20	5	19.0	11.0	10.0	24.0
	Total[1]	**18.0**	**0.8**	**1.74**	**4.60**	**20**	**5**	**19.0**	**11.0**	**10.0**	**24.0**
Grand Total	**Measured**	30.7	1.8	1.76	5.72	15	5	29.9	10.8	9.0	24.7
	Indicated	310.3	9.8	1.73	3.19	19	3	20.5	10.1	8.6	24.9
	Inferred	287.7	6.7	1.72	2.32	18	3	17.2	8.7	7.5	22.7
	TOTAL	**628.7**	**18.3**	**1.73**	**2.92**	**18**	**3**	**20.2**	**9.6**	**8.2**	**24.1**

	Material (t)	TREO Grade[3] (%)	TREO Tonnage (t)
Area 1, Area 2 West, Area 3, Area 4	628,703,134	0.07	413,107

Notes:

Any discrepancies in totals are a function of rounding

(1) Mineral resources reported at a cut-off grade of 1.0% THM

(2) Mineral assemblage, via QEMScan Particle Analysis, is reported as a percentage of THM content.

(3) TREO Grade is calculated by THM Grade (2.92%) multiplied by TREO Grade (2.25%)

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THM Assemblage[2]		Rare Earth Oxides													
Monazite (%)	Xenotime (%)	CeO_2 (%)	Dy_2O_3 (%)	Er_2O_3 (%)	Eu_2O_3 (%)	Gd_2O_3 (%)	La_2O_3 (%)	Nd_2O_3 (%)	Pr_6O_{11} (%)	Sm_2O_3 (%)	Tb_4O_7 (%)	Tm_2O_3 (%)	Y_2O_3 (%)	Yb_2O_3 (%)	TREO (%)
4.3	0.8	0.96	0.07	0.05	0.004	0.06	0.48	0.38	0.11	0.07	0.01	0.01	0.47	0.05	2.72
4.6	0.9	1.11	0.07	0.05	0.004	0.07	0.53	0.46	0.12	0.08	0.02	0.01	0.48	0.05	3.04
4.5	**0.8**	**1.06**	**0.07**	**0.05**	**0.004**	**0.07**	**0.51**	**0.43**	**0.12**	**0.08**	**0.02**	**0.01**	**0.48**	**0.05**	**2.94**
3.0	1.0	0.66	0.06	0.04	0.003	0.05	0.31	0.28	0.07	0.05	0.01	0.01	0.39	0.04	1.97
3.0	**1.0**	**0.66**	**0.06**	**0.04**	**0.003**	**0.05**	**0.31**	**0.28**	**0.07**	**0.05**	**0.01**	**0.01**	**0.39**	**0.04**	**1.97**
3.2	0.6	0.78	0.05	0.04	0.000	0.05	0.36	0.33	0.09	0.06	0.01	0.01	0.37	0.04	2.19
2.9	0.5	0.76	0.05	0.03	0.003	0.05	0.35	0.31	0.08	0.06	0.01	0.01	0.36	0.03	2.10
3.0	**0.6**	**0.77**	**0.05**	**0.03**	**0.003**	**0.05**	**0.36**	**0.32**	**0.09**	**0.06**	**0.01**	**0.01**	**0.36**	**0.04**	**2.14**
3.0	1.0	0.67	0.05	0.03	0.002	0.05	0.32	0.28	0.07	0.05	0.01	0.01	0.33	0.04	1.90
3.0	**1.0**	**0.67**	**0.05**	**0.03**	**0.002**	**0.05**	**0.32**	**0.28**	**0.07**	**0.05**	**0.01**	**0.01**	**0.33**	**0.04**	**1.90**
4.3	0.8	0.96	0.07	0.05	0.004	0.06	0.48	0.38	0.11	0.07	0.01	0.01	0.47	0.05	2.72
3.4	0.7	0.81	0.05	0.04	0.00	0.05	0.38	0.34	0.09	0.06	0.01	0.01	0.38	0.04	2.27
2.9	0.5	0.76	0.05	0.03	0.00	0.05	0.35	0.31	0.08	0.06	0.01	0.01	0.36	0.03	2.10
3.3	**0.6**	**0.81**	**0.05**	**0.04**	**0.00**	**0.05**	**0.38**	**0.33**	**0.09**	**0.06**	**0.01**	**0.01**	**0.38**	**0.04**	**2.25**

Mineral Resources are inclusive of Ore Reserves
There is no certainty that Mineral Resources not included in Ore Reserves will be converted to Ore Reserves.

Competent Person Statement: *The information in this Prospectus that relates to the Goschen Mineral Resource is based on information collated and evaluated by, and fairly represents information and supporting documentation compiled by Mr Graham Howard who 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 which he has undertaken to qualify as a Competent Person a defined in the JORC Code. Mr Howard is a full-time employee of the Company. Mr Howard consents to the inclusion in this Prospectus of the matters based on his information in the form and context in which it appears.*
Accompanying JORC Tables can be found at Appendix A of the ITAR contained at Annexure F of this Prospectus.

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Table 2: Company Ore Reserves as at 31 March 2022

Area	Date	Classification	Ore (Mt)	THM (%)	Zircon (%)	Rutile (%)	Leucoxene (%)	Ilmenite (%)	Monazite (%)	Xenotime (%)
Area 1	Mar-21	Proved	24.5	5.4	29.9	10.8	9.0	24.7	4.3	0.8
Area 1	Mar-21	Probable	14.6	3.2	29.2	11.7	9.2	25.5	4.5	0.9
Area 3	Feb-21	Probable	159.6	3.5	20.3	9.4	8.1	25.8	3.4	0.6
Total		**Proved**	**24.5**	**5.4**	**29.9**	**10.8**	**9.0**	**24.7**	**4.3**	**0.8**
		Probable	**174.2**	**3.5**	**21.0**	**9.6**	**8.2**	**25.8**	**3.5**	**0.6**
Grand Total			**198.7**	**3.7**	**21.7**	**9.7**	**8.2**	**25.7**	**3.5**	**0.6**

Area	Date	Classification	CeO_2 (%)	Dy_2O_3 (%)	Er_2O_3 (%)	Eu_2O_3 (%)	Gd_2O_3 (%)	La_2O_3 (%)	Nd_2O_3 (%)	Pr_6O_{11} (%)	Sm_2O_3 (%)	Tb_4O_7 (%)	Tm_2O_3 (%)	Y_2O_3 (%)	Yb_2O_3 (%)	TREO (%)
Area 1	Mar-21	Proved	0.960	0.070	0.050	0.004	0.060	0.480	0.380	0.110	0.070	0.012	0.008	0.470	0.050	2.720
Area 1	Mar-21	Probable	0.971	0.067	0.047	0.004	0.060	0.468	0.400	0.108	0.072	0.011	0.007	0.458	0.050	2.721
Area 3	Feb-21	Probable	0.805	0.057	0.039	0.003	0.056	0.378	0.339	0.093	0.064	0.009	0.006	0.386	0.040	2.297
Total		**Proved**	**0.960**	**0.070**	**0.050**	**0.004**	**0.060**	**0.480**	**0.380**	**0.110**	**0.070**	**0.012**	**0.008**	**0.470**	**0.050**	**2.720**
		Probable	**0.817**	**0.058**	**0.039**	**0.003**	**0.056**	**0.385**	**0.344**	**0.094**	**0.065**	**0.009**	**0.006**	**0.391**	**0.041**	**2.328**
Grand Total			**0.844**	**0.060**	**0.041**	**0.003**	**0.057**	**0.402**	**0.351**	**0.097**	**0.066**	**0.010**	**0.006**	**0.406**	**0.043**	**2.401**

Competent Person Statement: *The information in this Prospectus that relates to the Company's Ore Reserves are based on information collated and evaluated by, and fairly represents information and supporting documentation compiled by Anthony Keers who 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 which he has undertaken to qualify as a Competent Person a defined in the JORC Code. Mr Keers is a full-time employee of Auralia Mining Consulting Pty Ltd. Mr Keers consents to the inclusion in this Prospectus of the matters based on his information in the form and context in which it appears.*

Accompanying JORC Tables can be found at Appendix A of the ITAR contained at Annexure F of this Prospectus.

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Table 3: Goschen Project DFS Ore Reserves as at 31 March 2022 (subset of global Company Ore Reserves)

Area	Date	Classification	Ore (Mt)	THM (%)	Zircon (%)	Rutile (%)	Leucoxene (%)	Ilmenite (%)	Monazite (%)	Xenotime (%)
Area 1	Mar-21	Proved	25.5	5.6	29.6	10.8	9.1	24.7	4.3	0.8
Area 1	Mar-21	Probable	7.6	2.2	27.6	12.7	10.5	25.9	4.3	0.9
Area 3	Feb-21	Probable	65.7	3.6	19.7	9.1	7.9	25.3	3.3	0.6
Total		**Proved**	**25.5**	**5.6**	**29.6**	**10.8**	**9.1**	**24.7**	**4.3**	**0.8**
		Probable	**73.3**	**3.4**	**20.2**	**9.3**	**8.1**	**25.4**	**3.4**	**0.6**
Grand Total			**98.8**	**4.0**	**23.6**	**9.9**	**8.5**	**25.1**	**3.7**	**0.7**

Area	Date	Classification	CeO_2 (%)	Dy_2O_3 (%)	Er_2O_3 (%)	Eu_2O_3 (%)	Gd_2O_3 (%)	La_2O_3 (%)	Nd_2O_3 (%)	Pr_6O_{11} (%)	Sm_2O_3 (%)	Tb_4O_7 (%)	Tm_2O_3 (%)	Y_2O_3 (%)	Yb_2O_3 (%)	TREO (%)
Area 1	Mar-21	Proved	0.960	0.070	0.050	0.004	0.060	0.480	0.380	0.110	0.070	0.012	0.008	0.470	0.050	2.720
Area 1	Mar-21	Probable	0.957	0.065	0.045	0.003	0.059	0.454	0.398	0.104	0.071	0.012	0.007	0.456	0.050	2.682
Area 3	Feb-21	Probable	0.795	0.056	0.038	0.003	0.055	0.373	0.335	0.091	0.063	0.009	0.006	0.383	0.039	2.271
Total		**Proved**	**0.960**	**0.070**	**0.050**	**0.004**	**0.060**	**0.480**	**0.380**	**0.110**	**0.070**	**0.012**	**0.008**	**0.470**	**0.050**	**2.720**
		Probable	**0.806**	**0.056**	**0.039**	**0.003**	**0.055**	**0.379**	**0.339**	**0.092**	**0.064**	**0.009**	**0.006**	**0.388**	**0.040**	**2.298**
Grand Total			**0.862**	**0.061**	**0.043**	**0.003**	**0.057**	**0.415**	**0.354**	**0.099**	**0.066**	**0.010**	**0.007**	**0.417**	**0.044**	**2.451**

Competent Person Statement: *The information in this Prospectus that relates to the Company's Ore Reserves are based on information collated and evaluated by, and fairly represents information and supporting documentation compiled by Anthony Keers who 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 which he has undertaken to qualify as a Competent Person as defined in the JORC Code. Mr Keers is a full-time employee of Auralia Mining Consulting Pty Ltd. Mr Keers consents to the inclusion in this Prospectus of the matters based on his information in the form and context in which it appears.*

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Annexure B

Mineral Resource Estimate and Ore Reserve Statements

Please note that the information in this Annexure is provided in accordance with ASX Listing Rule 5.8 (Requirements applicable to reports of Mineral Resources for material mining projects) and ASX Listing Rule 5.9 (Requirements applicable to reports of Ore Reserves for material mining projects).

Mineral Resource Statement

For a separate report providing all information that is material to understanding the estimates of mineral resources, in relation to each of the criteria in Section 1 (sampling techniques and data), Section 2 (reporting of exploration results), and Section 3 (estimation and reporting of mineral resources) of Table 1 of the JORC Code, refer to Appendix A of the ITAR.

Area 1, Area 2 West, Area 3 Extended, Area 4

Geology and geological interpretation

Regional geological setting

The Murray Basin underlies an area of 300,000km² of north-western Victoria, south-eastern South Australia and south-western New South Wales and comprises flat, late Miocene to Pliocene, Epoch-aged sediments (Brown & Stephenson, 1991).

Accumulations of heavy mineral sands (HMS) are widespread over most of the Victorian portion of the Murray Basin. The upper sequences of the Murray Basin sediments, principally the Loxton Sand (formerly known as Loxton-Parilla Sand), are known to contain economic accumulations of HMS.

The Murray Basin is a large sedimentary basin that formed by subsidence occurring at the beginning of the Tertiary period. As global sea levels rose during the middle Tertiary, the basin was flooded to form what has been named the Murravian Gulf into which HMS was deposited by several paleo-river systems. These rivers transported sediments enriched with ilmenite, rutile, zircon, monazite, and xenotime derived from weathering and erosion of Palaeozoic granites of the Lachlan Fold Belt, sandstone of the Mesozoic basins and rocks of the “Great Dividing Range”.

The distribution of the mineralisation within the Loxton Sand is controlled by the paleo-location of the various deltas/discharges of the Great Darling Anabranch, the Darling River, the Murray River, the Loddon River, the Glenelg River, and possibly other paleochannels, into the Murravian Gulf. The discharges zones were possibly controlled by movement of regional faults in the Cambro-Ordovician and Ordovician-aged metasediments that form the hard-rock basement of the Murray Basin.

The Goschen Project area is interpreted to straddle the Avoca Fault, which separates the Bendigo and Stawell structural zones. Basement rock within the Bendigo Zone comprises Early to Middle Ordovician turbidites of the Castlemaine Group intruded by granites. The Bendigo Zone extends west to the Avoca Fault and east to the Heathcote Fault. The Stawell Zone extends west from the Avoca Fault to its western limit at the Moyston Fault.

The Cannie Fault, which extends northeast-southwest across the project area, is a small splay fault connecting the Avoca Fault in the eastern part of the project area to a second, north-westerly trending splay of the Avoca Fault. The Cannie Fault bisects the mineralisation at Area 1 and Area 3.

The Murray Basin formed as a result of ongoing regional extension which created the relatively shallow, saucer shaped depression of the Murravian Gulf. The gulf was open to the Southern Ocean which allowed for semi-continuous marine incursions and local oscillations in shoreline position during the Tertiary Period.

The HMS mineralisation of the Murray Basin is unique to the Loxton Sand unit as a result of deposition occurring during the break-up of Gondwana in the Cretaceous Period, which allowed for a sufficiently high-energy system and large supply of sediment for the concentrated strandlines to form.

The Loxton Sand unit includes the deposits derived from the bottom of the lower shoreface facies and the upper shoreface facies, i.e. the finer sand and silt deposited beyond the high-energy beach zone; the very coarse material from the breaker zone; the well-sorted, medium-grained material from the swash zone; and the supralittoral material, including dunes. The Bookpurnong Formation (formerly the Bookpurnong beds), the Loxton Sand, and the Shepparton Formation were deposited contemporaneously and are lateral equivalents of a single “system” and, as such, it is difficult to distinguish between them in transitional zones.

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The Murravian Gulf was dammed in the late Pleistocene by uplift of the Pinnaroo Block to the southwest of the depocentre of the basin. The restriction of the oceanic system changed the depositional environment of the basin to one dominated by lakes and rivers which allowed for the accumulation of fluvial sediments, primarily sand and clay. Later deposits of aeolian sand continue to cover the basin to this day.

Area 1

Geology and geological interpretation

Local geology

The zircon and rare earth minerals (REM) of the Goschen deposit are hosted in HMS deposits. Marine and fluvial processes have concentrated the economically important minerals of zircon, REM, and titania minerals (rutile, leucoxene and ilmenite) which were most likely sourced from eroding igneous rocks in the drainage catchments of the rivers mentioned above, into HMS placer deposits. There are two broad styles of deposits that comprise the Goschen HMS deposit. The most extensive HMS deposits occur in sub-horizontal sheet style deposits. These deposits are typically 2–12m thick and are formed from fine-grained particles of sand and HMS (HMS typically with a SG >4.05).

A series of sub-linear deposits have subsequently been deposited immediately above the sheet-style deposits and may represent shore (beach) parallel deposits. Typically, these deposits contain fine to coarser grained HMS and in the Goschen area contain either elevated concentrations of the high value titania mineral, rutile, and xenotime or zircon dominant with elevated concentrations of rutile and monazite.

Sampling and subsampling techniques

Aircore drilling was used to acquire samples at 1m intervals which generated approximately 7kg of drill cuttings that were split to produce a 1.2–2.5kg composite sample using a rotary splitter. The smaller subsamples were labelled and bagged for transport to the primary laboratory for processing. The sampling method and sample size dispatched for processing is considered appropriate and reliable based on accepted industry practices and experience. All sample intervals and geological logging information were recorded digitally onto a laptop at the drill rig, validated, and later uploaded to an off-site database.

Drilling techniques

All drillhole and assay data were extracted from VHM's acQuire database where it had been validated and stored to maintain data security.

Drillholes and collars

Four-hundred and fifty-four drill (454) holes were used to inform the mineral resource. All holes were completed in drilling campaigns conducted in 2018 and 2019 to determine the mineralisation extent of the deposit. Drilling was carried out by Wallis Drilling using a Mantis 80 mounted on a custom Land Cruiser six-wheel drive. Reverse circulation aircore was used to drill the Area 1 Goschen deposits. Aircore is considered a standard mineral sands industry technique for evaluating HM mineralisation where the sample is collected at the drill bit face and returned inside an inner tube. The drill rods are 76mm diameter (NQ) and 3m in length. All holes were drilled vertically with the majority of samples downhole taken at 1m intervals.

Drilling and sampling have been carried out over and around the Goschen Project area since 1977, however, the quality of that historical data is unverifiable and so was not used in this resource estimate. VHM has superseded the historical data through the targeted resource definition drilling and sampling programs since 2017. Drilling and sampling at Area 1 were completed in 2018 and 2019.

Drillhole collars were all surveyed by Heil Engineering Consultants. RTK GNSS survey equipment was used to establish horizontal and vertical control to GDA94, MGA zone 54 and to the Australian Height Datum by utilising three permanent Survey Marks within the immediate project area.

In October 2018, VHM commissioned a LiDAR survey across the entire Goschen Project area. The resultant data was used to create a centimetre accurate digital terrain model (DTM) to which all surveyed drill collars were levelled.

A regular rectangular grid spacing for the Area 1 deposit was on a spacing of 200m in the north-south direction and with 100m and 200m stations to the east-west direction, with some close spacing drilling as close as 50m along traverses. The collar spacing and regular grid pattern are sufficient to provide a good degree of confidence in geological models and grade continuity within the holes. The close spaced drilling of 50m along traverses further confirms continuity across strike.

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The criteria used for classification, including drill and data spacing and distribution – this includes separately identifying the drill spacing used to classify each category of mineral resources (inferred, indicated, and measured) where estimates for more than one category of mineral resource are reported

The Area 1 Mineral Resource has been classified as Measured and Indicated. The Measured classification is based the analytical results from metallurgical test work of a 9.1-tonne bulk sample collected from aircore samples within the project area. The Measured Resource reflects the spatial location from which the bulk sample was collect and overprints the estimated grades with the metallurgical testwork outcomes. The Indicated classification is based on the drill spacing of 200m x 100m and 200m x 50m, geological and grade continuity, variography of the primary assay grades and the distribution of composited assemblage data.

Sample analysis method

Assaying for the Goschen Project has been carried out immediately subsequent to each phase of drilling and sampling. Samples collected in 2017 and 2018 were assayed for total heavy mineral (THM), slimes and oversize by Diamantina Laboratories. A total of 4,388 samples (47.5% of the total) were assayed by the method that produced a sand fraction between 2mm and 38µm between December 2017 and September 2018. Diamantina also assayed 4,847 samples (52.5% of the total) that used a sample preparation method that produced a sand fraction of between 1mm and 20µm, between mid-January 2018 and 30 January 2019.

VHM also undertook a program of re-assaying samples selected from Domain 2 and Domain 3 of Area 1 East using centrifuge assisted HLS.

Diamantina assay process

Samples weighing between 1.5kg and 2.5kg were received into the Diamantina Laboratories check-in process then oven dried for lots of 2 hours at 110°C until samples were completely dry. Samples were then rotary split down to approximately ~100g sub-splits (weighed and captured) with one sample then submitted to screening via vibrating deck screens with the application of water. Every 25th sample was submitted to the same process as a laboratory repeat. The vibrating screens used a top screen of 2mm and a bottom screen of 38µm. Material captured by the 2mm (OS) and 38µm (SAND) screens was individually captured, dried and weighed, whilst material passing through the 38µm (SLIMES) screen was lost to wastewater streams. This passing 38µm material (SLIMES) weight was then calculated by difference (SLIMES weight = sample split weight – OS – SAND).

A total of 4,388 assays were submitted for analysis using the 2mm to 38µm method (approximately 54%).

The SAND fraction (2mm to -38µm) was submitted to heavy liquid separation (HLS) using tetrabromoethane (TBE). The THM sinks were then washed with acetone, dried, and weighed with the floats discarded.

Diamantina also submitted an internal laboratory standard every 40th sample for quality assurance/quality control (QAQC).

Samples from drillholes from (and inclusive of) VHM0386 to VHM0587 (4,847 samples in total) utilised smaller screen meshes of 1mm and 20µm to generate the SAND fraction.

ALS assay method (centrifuge-assisted heavy liquid separation)

There was a further change in size fraction for 1,225 samples originally screened at 2mm – 38µm (by Diamantina) to 2mm – 20µm (by ALS) for assays located within the primary mineralised domains (Domains 2 and 3) of Area 1 East.

The samples selected for re-assay were received by ALS Laboratories check-in process then oven dried at approximately 110°C until samples were completely dry. Samples were then riffle split from 1.5kg to approximately ~500g sub-splits (weighed and captured) then soaked for 24 hours in 1% tetrasodium pyrophosphate (TSPP – a dispersing agent used to help disaggregate clays). Every 25th sample was submitted to the same process as a laboratory repeat. The wet screens used a top screen of 2mm (ALS flowchart states a mix of both 1mm and 2mm material), and a bottom screen of 20µm. After the first screening samples were subjected to a mechanical agitation (1% TSPP) for 5 minutes then re-screened for a second time. Material captured by the upper screen (OS) and 20µm (SAND) screens was individually captured, dried, and weighed, whilst material passing through the 20µm (SLIMES) screen was lost to wastewater systems.

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Estimation methodology

Ordinary kriging

Horizontal continuity analyses were carried out for each of the five mineralised Area 1 domains. Analysis of normal scores transformed data sets showed each domain in Area 1 East has a stronger continuity bearing 350. Area 1 West domains vary between north (000) and northwest (310).

The preferred mineralisation continuity direction for each dataset was used to generate series of variograms which were used to generate ordinary kriging parameters. That data, along with search ellipse and minimum/maximum data point informers for model cells, was used to undertake a Mineral Resource estimate using ordinary kriging.

Ordinary Kriging was used to estimate THM, SLIMES and Oversize (OS) into the block model. The estimates were controlled by hard domain wireframe boundaries.

The search ellipse for Area 1 East was set at 400 x 100 x 5 with multipliers of 2 and 3 for second and third pass estimates. The minimum number of samples required was 12 and the maximum was 28.

The search ellipse for Area 1 west was set at 400 x 200 x 5 with multipliers of 2 and 3 for second and third pass estimates. The minimum number of samples required was six and the maximum was 28.

Metallurgical testwork outcomes assignment

The Company used Datamine to create a 3D solid envelope that encapsulated the samples used to create the 9.1-tonne bulk sample and other, later, aircore samples around them. That envelope was used to inform the Mineral Resource estimate by overwriting the estimated grade data with the metallurgical testwork outcomes.

Given the disparate nature of the data used to generate the resource within the metallurgical testwork envelope compared to the traditional assay and estimation, the decision was taken by the Company to clearly delineate and report the two "sub-resources" while still reporting a global Mineral Resource for Area 1.

Bulk density

As no bulk density measurement program has yet been completed at any of the Goschen Project deposits, the density used throughout the model is a calculated value.

The bulk density was applied to the model using a standard linear formula originally described by Baxter (1977). This approach was refined in a practical application using first principles calculations. This regression formula was then used to convert the block model volumes to mass with block tonnages dependant on estimated heavy mineral grades.

Cut-off grade(s), including the basis for the selected cut-off grade(s)

A cut-off grade of 1.0% THM was used to prepare the reported resource estimate grade and tonnage. The cut-off grade was used at the recommendation of VHM's Geology Manager and is based on extensive mineral sands project resource development and mining experience. That cut-off grade represents a reasonable level for the definition of HMS deposits and is regularly used throughout the Murray Basin and elsewhere in Australia by various resource companies.

Mining and metallurgical methods and parameters, and other material modifying factors considered to date

Complete extraction of ore is planned using open pit strip mining down to the top of the water table, and currently only within the areas that the Company has sought to secure land access and environmental approvals which are still pending. All waste material (including overburden and clay) will be used to create in-pit bunds to contain tailings, and to cap tailings after drying to bring the landform back to its original state. Minor additional earthworks may be required in each "tailings cell" to assist in water recovery and drying/consolidation time.

Mining will be undertaken as a block/strip-mining operation, with progressive backfilling of the pit as the mine progresses. Each block will have a final floor footprint of approximately 500m x 150m. Waste material (overburden, interburden, clay and topsoil) will be stockpiled on surface at the commencement of mining operations until there is sufficient capacity and suitable conditions in the mined void to allow direct deposition into the mined areas. Stockpiled material on the surface will ultimately be rehandled to the final mine void to remove the visual effects of mining upon closure and to return the area to its original use.

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Metallurgical bulk sample

During October 2018, VHM created a bulk sample from aircore drilling sample residues and the samples collected from a task-specific sonic drilling program. The drilling samples which comprise the bulk were primarily collected from Domain 2 and Domain 3 of Area 1 East, however, some samples from Domain 5 were also included.

The 9.1-tonne sample was sent to Mineral Technologies Pty Ltd and formed the basis of a metallurgical testwork program for Area 1.

The bulk sample was subjected to a series of processing stages, with products from each stage being measured and the product yields and chemistry being calculated. The final head-grade and assemblage of the bulk sample was back-calculated to produce data representing the entire bulk sample.

The testwork included the creation of a Wet Concentrator feed (WCF) sample using a 1mm oversize separation screen and a screw classifier fitted with a 20µm screen. The resultant sample is equivalent to the 20-micron sand sample generated by the Diamantina Laboratories assay process.

The back calculations of the 2018–2019 bulk sample wet concentrator feed produced a THM value of 5.72%, slimes content of 15.3% and an oversize value of 5.38%.

A series of detailed analysis of the outcomes of the Mineral Technologies Area 1 bulk sample testwork were completed by TZMI and the Company. This work was focused on confirming the validity and appropriateness to use the Mineral Technologies Area 1 testwork as a basis for use in process plant design, product specification and production tonnage forecast for Definitive Feasibility Study, Ore Reserve and Mineral Resource.

This enabled the Company Mineral Resource and Ore Reserve to align with JORC 2012 reporting guidelines.

The Mineral Technologies bulk sample testwork results were subject to further testwork in the 2020 TZMI analysis confirmed repeatability of assay outcomes. The greatest differences occurred in zircon analysis which displayed a variation of ±4.5% to ±6%. It is concluded this is down to a calculation difference in metallurgical assay methodology between Mineral Technologies and the other laboratories which performed umpire assaying of the samples.

The additional data acquired during the 2018-2019 Mineral Technologies bulk sample testwork represents data that is superior to the simple assay values and, in line with Clause 49 of the JORC Code (2012 Edition) this other quality criteria supersede the assay data. The use of this data is possible as the Victorian Government Earth Resources Regulation (ERR) considers mineral sands to be Industrial Minerals.

Area 2 West

Geology and geological interpretation

A series of sub-linear HMS deposits have subsequently been deposited immediately above the sheet-style deposits and may represent shore (beach) parallel deposits similar to eastern Area 1 geology. Typically, these deposits contain fine to coarser grained HMS and in the Goschen area contain either elevated concentrations of the high value titania mineral, rutile, and xenotime or zircon dominant with elevated concentrations of rutile and monazite.

The Area 2 West deposit is formed from four strands plus a sheet deposit. The highest zircon grades are associated with an elevated downhole gamma response and forms one of four strand deposits. There are three other strands deposits formed from elevated THM grades and referred to as Zones 3, 4 and 7. Zone 2 is defined as high-grade sheet deposit. Two other low THM grade estimation zones were developed by IHC Robbins and include Zones 1 and 11.

The Area 2 West Mineral Resource is open along strike to the north and south. Drilling to the east in an area referred to as Area 2 East confirms that the Goschen sheet-style deposits continue to Area 3. The thickness of Area 2 West ranges from 2m to 16m (Figure B1).

Geological interpretations were supplied by VHM via scanned and annotated hard copy sections. VHM provided the zones used for estimation based on downhole gamma response, geological logging and high THM grades.

IHC Robbins analysed the digitised strings provided by VHM.

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Sampling and subsampling techniques

Drill samples were obtained at 1m intervals generating approximately 8kg of drill spoil that was then split during sample collection from the sample cyclone down to 1,200–2,500g using a rotary splitter underneath the cyclone. The sub-split samples were labelled and bagged for transport to the primary laboratory for processing. All sample intervals and the correlating sample mass were recorded digitally onto a laptop at the drill rig and later uploaded to a master Microsoft Excel spreadsheet.

The sampling method and sample size dispatched for processing is considered appropriate and reliable based on accepted industry practices and experience.

Drilling techniques

All drillhole and assay data were extracted from VHM's acQuire database where it had been validated and stored to maintain data security.

A drilling program of 135 drillholes was conducted between January and April 2019 to determine the mineralisation extended. Twelve holes from previous drilling programs were also included to total 147 holes. Drilling was carried out by Wallis Drilling using a Mantis 80 mounted on a custom Land Cruiser six-wheel drive. Reverse circulation aircore was used to drill the Area 2 West Goschen deposit. Aircore is considered a standard mineral sands industry technique for evaluating heavy mineral mineralisation where the sample is collected at the drill bit face and returned inside an inner tube. The drill rods are 76mm diameter (NQ) and 3m in length. All holes were drilled vertically with majority of the samples downhole taken at 1m intervals.

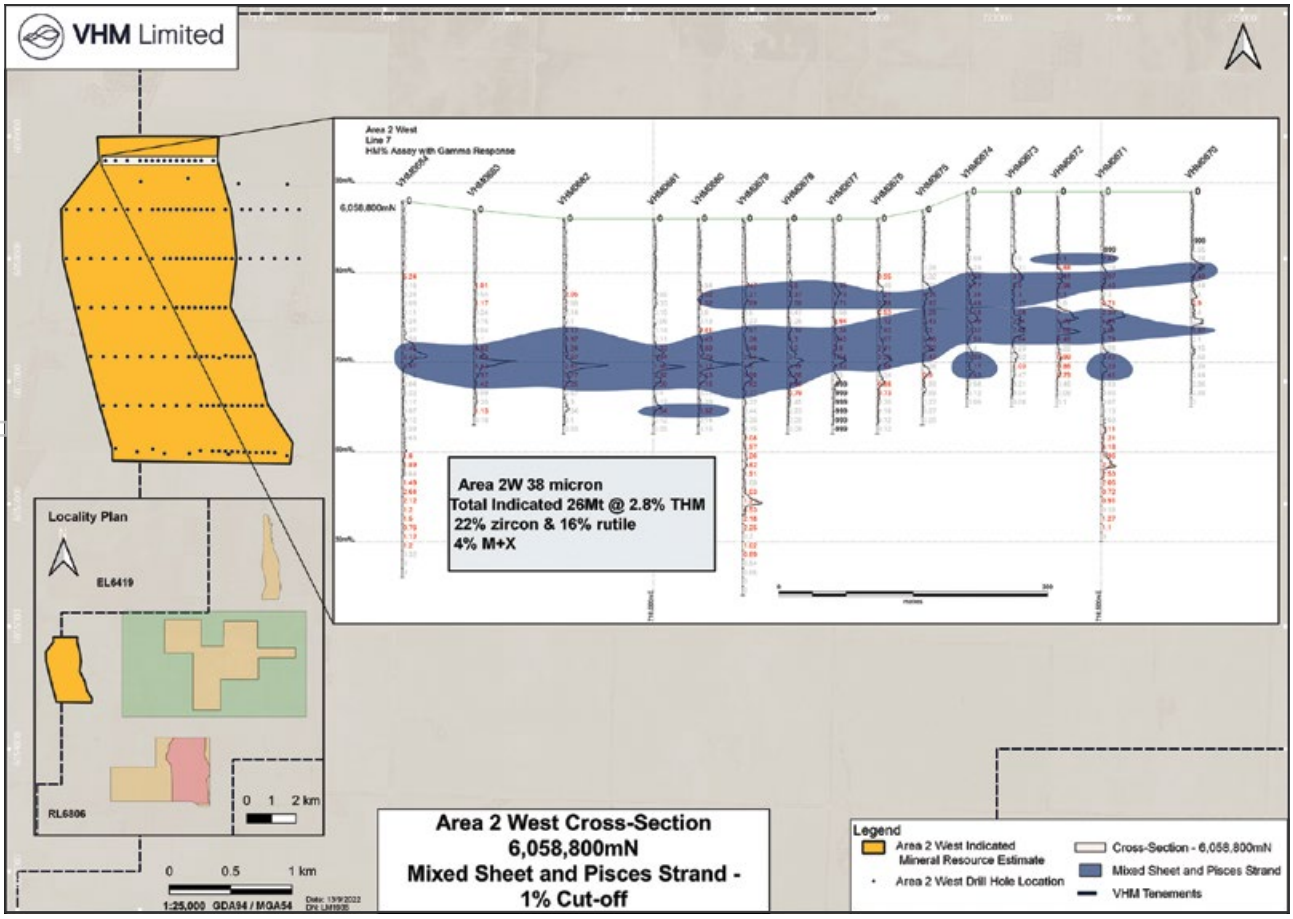


Figure B1: Area 2 West cross section 6058800mN

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A regular rectangular grid spacing for the Area 2 West deposit was on a spacing of 400m in the north-south direction and with 50m and 100m stations to the east-west direction. The 400m x 100m spaced aircore holes and regular grid pattern are sufficient to provide a good degree of confidence in geological models and grade continuity within the holes. The 50m spacing on the eastern side of the deposit further confirms continuity across strike.

The criteria used for classification, including drill and data spacing and distribution – this includes separately identifying the drill spacing used to classify each category of mineral resources (inferred, indicated, and measured) where estimates for more than one category of mineral resource are reported

The Area 2 West Mineral Resource has been classified as Indicated based on the drill spacing of 400m x 100m and 400m x 50m, geological and grade continuity, variography of primary assay grades and the distribution of composited assemblage data.

Sample analysis method

Samples were dispatched to Diamantina Laboratories which followed the general assay process flow described as follows;

- 1.5–2.5kg samples were received into the Diamantina Laboratories check-in process then oven dried for lots of 2 hours at 110°C until samples were completely dry.
- Samples were then rotary split down to approximately ~100g sub-splits (weighed and captured) with one sample then submitted to screening via vibrating deck screens with the application of water.
- Every 25th sample was submitted to the same process as a laboratory repeat.
- The vibrating screens for all drillhole samples utilised a top screen of 2mm and a bottom screen of 38µm.
- Material captured by the 2mm (OS) and 38µm (SAND) screens was individually captured, dried, and weighed, whilst material passing through the 38µm (SLIMES) screen was lost to wastewater streams.
- This passing 38µm material (SLIMES) weight was then calculated by difference (SLIMES weight = sample split weight - OS - SAND).
- The SAND fraction (2mm to -38µm) was submitted to HLS using tetrabromoethane (TBE).

Mineral assemblage composites have been prepared for the Goschen Area 2 West deposit by different methods since the early stages of exploration. Techniques utilising both x-ray fluorescence (XRF) and QEMSCAN have been used to define the mineralogy as a proportion of the THM. All bulk sample composites were prepared exclusively by VHM.

Estimation methodology

A total of 130 drillholes were used for the Goschen Area 2 West resource estimate. Drillhole collars were all surveyed using RTK GNSS survey equipment to establish horizontal and vertical control to Map Grid of Australia Zone 54 and to the Australian Height Datum. Three Permanent Survey Marks were located, and the data adjusted to suit TALGITCHA PM 7.

IHC Robbins generated a topographic DTM surface within Datamine using the surveyed drill collars for Area 2 West as VHM did not provide a topographic surface for the area. The generated topographic DTM surface was used for this Mineral Resource estimation.

Sampling and assaying were subjected to QAQC processes by VHM with the submission of blind field duplicates and by Diamantina using internal duplicates and standards.

The rate of submission for field duplicates was 1:21 which is well in line with industry standards of between 1:20 and 1:40. The rate of submission for lab duplicates was 1:22 which provides a high level of precision quality assurance.

An analysis of the 143 field duplicates assayed for THM shows a good correlation of 93% between the original assay and the duplicate assay. However, a slight bias towards the duplicates exists on assays below a THM value of 5.5%; the duplicate THM assays are higher than the original assays.

All the 61 standard samples submitted to the laboratory by VHM were within acceptable limits of +3SD.

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Inverse distance cubed was used along with nearest neighbour to interpolate grades and values into the block model. Part of the rationale for using ID3 is centred around the good continuity of the mineralisation, low nugget effect displayed by the experimental variograms, the regular drillhole and assay spacing and the nature of the sampling process.

A bulk density was applied to the model using a standard linear formula originally described by Baxter (1977). This regression formula was then used to calculate the conversion of tonnes from each cell volume and from there the calculation of material, THM and SLIMES tonnes.

The bulk density formula is described as:

- Bulk density = (0.009 * HM) + 1.698.

Cut-off grade(s), including the basis for the selected cut-off grade(s)

Grade cutting or capping was not used during the interpolation because of the regular nature of sample spacing and the fact that samples were not clustered nor wide spaced to an extent where elevated samples could have a deleterious impact on the resource estimation.

Sample distributions were reviewed, and no extreme outliers were identified either high or low that necessitated any grade cutting or capping.

Mining and metallurgical methods and parameters, and other material modifying factors considered to date

No specific mining method is assumed other than potentially the use of dry mining methods.

Area 3 Extended

Geology and geological interpretation

The Area 3 Extended deposit is part of the Goschen Project which is formed from a mix of near surface high-grade strandlines and multiple stacked sheet like deposits of heavy mineral sands. The sheet-like deposits are typically fine-grained with a measured D50 THM particle diameter of 87 microns (metallurgical testwork). The Goschen deposit hosts significant accumulations of zircon, titanium minerals and rare earth element minerals.

The Area 3 Extended deposit includes part of the Orion Strandline system as well as a series of unnamed strandlines defined in drillholes in both 2017 and 2019. These strandlines are typically 300–600m in width and trend north-northwest. The strandlines are part of a larger HMS deposit formed contemporaneously with is a multiple, stacked, sheet-like accumulation of heavy minerals sands These sheet-like deposits are regionally extensive and work by the Company has not closed out the limits of economic mineralisation to date.

The geological interpretation for Area 3 Extended was completed by VHM, initially generated using cross sections at 1:25,000 scale. Using the cross sections developed the understanding of the relationship of the various mineralisation sequences, this included the Orion Strandline which was located by Company drilling in 2017 but not included in any resource update. Cross sections at 1:5,000 scale were then generated, and a reinterpretation of the Area 3 Extended was completed. A series of primary, west-east, cross-sections, and numerous supporting cross sections, including downhole gamma response, metallurgy samples and validation resource model sections (282 sections in total) were developed as part of the geological interpretation approach.

Section spacing included nominal 100m and 200m spaced north-south sections with some sections in the southern Area 3 Extended to 400m centres. Clipping was used to capture off-section drillhole data for presentation on sections. A process of more detailed geological and assay grade interpretation and comparison of relatively close-sections was used to develop a 3D, spatially coherent set of domains that approximated the earlier interpretations but that also included outlying mineralisation that was not included in the preliminary interpretations. The paper copies of the interpreted domains were scanned and georeferenced in Datamine and strings representing the three new domains were created. The 2020 geological interpretation defined a series of mineralised systems within the Area 3 Extended Mineral Resource. Mineralisation either strikes sub parallel to the crest of the Cannie Fault or north-northwest such as Orion Strandline. The Orion Strandline demonstrates similar geometry and grade characteristics as defined in Area 4 (3km north), confirming that the high-grade strandline system has a minimum strike length greater than 6km.

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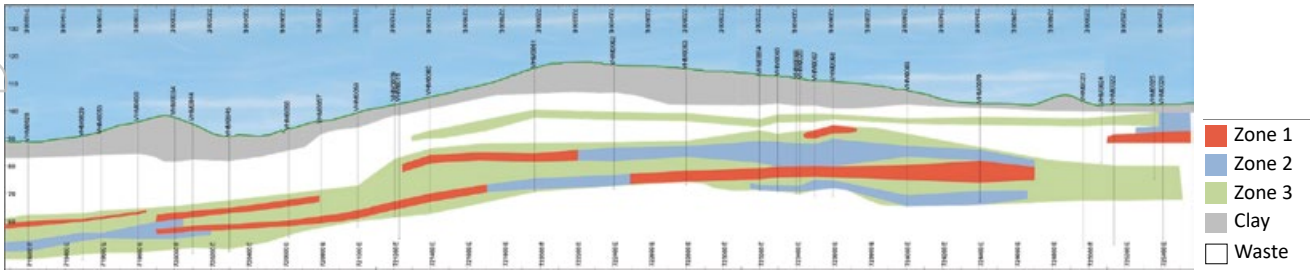


Figure B2: Representation of a west-east cross section through Area 3 Extended resource area showing the relative location of the three mineralised zones (vertical exaggeration applied)

The current interpretation within Area 3 Extended comprises of three mineralised domains. These domains are interpreted as sheet-like horizons, Figure B2. The three mineralised horizons have been domain as high-, medium- and low-grade horizons and are geologically continuous along and across strike.

The Mineral Resource field for the Goschen Project is approximately 7km in length (at the longest point) and 5km wide (at the widest point).

Sampling and subsampling techniques

Drill samples were obtained at 1m intervals. Each meter drilled was sampled by returning the sample from the bit-face using compressed air to lift it up the inside of the inner tube of the drill string. The sample was de pressured using a rig-mounted cyclone. Most solid material was presented to a rotary splitter which was mounted at the base of the cyclone. The rotary splitter produces a composite sample of approximately 1.5kg for each metre drilled.

The sample was captured in pre-labelled calico sample bags. The excess, "non-sample" material was captured in large, numbered, green plastic exploration sample bags. The primary sample was logged on-site and a geological description and estimate of THM, slimes and overside was made. The data produced was captured using a spreadsheet, with limited validation rules, installed on a Toshiba Toughbook. The logs were emailed to VHM's Database Administrator at the end of each day for upload into the primary database.

The 1.5kg samples were sent to Diamantina Laboratories in Perth, Western Australia, for THM assay.

The sampling method and sample size dispatched for processing is considered appropriate and reliable based on accepted industry practices and experience.

Drilling techniques

All drillhole and assay data were extracted from VHM's acQuire database where it had been validated and stored to maintain data security.

Three drilling programs were completed between 2017 to 2019, totalling 160 drillholes. Of these 160 drillholes, 91 were drilled in 2017, two were drilled in 2018 and 67 were drilled between January to February 2019. Drilling was carried out by Wallis Drilling using a truck mounted Mantis 81 aircore rig. Reverse circulation aircore was used to drill the Area 3 Extended Goschen deposits. Aircore is considered a standard mineral sands industry technique for evaluating heavy mineral mineralisation where the sample is collected at the drill bit face and returned inside an inner tube. Holes were drilled vertically to a variety of depths using drill rod lengths of 3m at a diameter of 76mm (NQ). Majority of the samples downhole were taken at 1m intervals.

For the 2017 drill program, the drillhole spacing was an offset pattern with spacing between collars of 300–400m. A regular rectangular grid spacing was completed during the 2019 drill program with a spacing of 400m in the north-south direction and with 50m and 100m stations to the east-west direction. The collar spacing is sufficient to provide a high degree of confidence in geological model and grade continuity within the holes.

The criteria used for classification, including drill and data spacing and distribution – this includes separately identifying the drill spacing used to classify each category of mineral resources (inferred, indicated, and measured) where estimates for more than one category of mineral resource are reported

The Area 3 Extended Mineral Resource has been classified as Indicated based on the drill spacing of 400m x 100m and 400m x 50m, geological and grade continuity, variography of the primary assay grades and the distribution of composited assemblage data.

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Sample analysis method

Samples were dispatched to Diamantina Laboratories which followed the general assay process flow described as follows:

- 1.5–2.5kg samples were received into the Diamantina Laboratories check-in process then oven dried for lots of 2 hours at 110°C until samples were completely dry.
- Samples were then rotary split down to approximately ~100g sub-splits (weighed and captured) with one sample then submitted to screening via vibrating deck screens with the application of water.
- Every 25th sample was submitted to the same process as a laboratory repeat.
- The vibrating screens for all drillhole samples utilised a top screen of 2mm and a bottom screen of 38µm.
- Material captured by the 2mm (OS) and 38µm (SAND) screens was individually captured, dried, and weighed, whilst material passing through the 38µm (SLIMES) screen was lost to wastewater streams.
- This passing 38µm material (SLIMES) weight was then calculated by difference (SLIMES weight = sample split weight - OS - SAND).
- The SAND fraction (2mm to -38µm) was submitted to HLS using TBE.
- The material that sank through the heavy liquid was then washed with acetone, dried, and weighed with the floats discarded.

Mineral assemblage composites have been prepared for the Goschen Area 3 Extended deposit by different methods since the early stages of exploration. Techniques utilising both XRF and QEMSCAN have been used to define the mineralogy as a proportion of the THM. All bulk sample composites were prepared exclusively by VHM.

Estimation methodology

A total of 160 drillholes were used for the Goschen Area 3 Extended Resource estimate. Drillhole collars were all surveyed by an independent surveyor using industry standard equipment. Three permanent survey marks in the area provided survey control, allowing for repeatable and accurate survey readings across the project area. The datum used is GDA 94 and coordinates are projected as MGA zone 54.

A digital topographic surface, DTM, was generated by VHM Limited from data collected during a LiDAR survey commissioned by VHM. The DTM was used to cross-check the locations of the collars and no differences were observed.

Sampling and assaying were subjected to QAQC processes by VHM with the submission of blind field duplicates and by Diamantina using internal duplicates and standards.

The VHM QAQC data for drilling undertaken in 2019 was analysed and the THM, duplicates/replicates were subjected to log scatter plot, cumulative probability plot and general statistical investigation.

The rate of submission for field duplicates was 1:26 which is well in line with industry standards of between 1:20 and 1:40. The rate of submission for lab duplicates was 1:25 which provides a high level of precision quality assurance.

An analysis of the 173 field duplicates assayed for THM shows a good correlation of 94% between the original assay and the duplicate assay.

All except one of the 45 standard samples submitted to the laboratory by VHM were within acceptable limits of +3SD.

The geological grade model for Goshen Area 3 Extended was based on coding model cells below open wireframe surfaces, including topography, mineralisation, and basement. The drillhole file was also flagged with the domains and used for grade estimation. All the string, wireframe, and drillhole files were used to build and interpolate the model.

In the 2017 drilling area, drill traverses are spaced at 200m with holes spaced between 100m and 400m. Accordingly, 100m was selected as the parent cell size in the direction of the long axis (Y). To avoid having too many blocks without drillholes within them, a dimension of 25m was selected for the intermediate axis direction (X) and all parent cells were 1m thick (Z).

Sub-blocking was permitted in all the cell dimensions. Four sub-cells were allowed in the X and Y direction and a resolution value of 5 was used in the Z direction, meaning that sub-cells as thin as 0.2m high were possible.

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The model was interpolated using inverse distance techniques. The decision was taken to used ID2 which is considered the industry standard for mineral sands. A subsequent evaluation of the results on a section-by-section basis showed very good correlation between block grades and drillhole assay grades.

The interpolation was undertaken using three expanding passes. The search ellipse used in the first pass was of the dimensions 250 x 100 x 1 (y:x:z respectively). To inform model cells that were not populated with assay data during the first interpolation pass, a distance multiplier of 2 was applied for the second interpolation pass and a distance multiplier of 4 was applied for the third interpolation pass. The second and third passes generally only inform cells where data density is low. The long search radius was considered appropriate given the good correlation of sample variance over long ranges.

For the first interpolation a minimum of two samples and a maximum of six sample were allowed to inform each cell. For the second and third pass the minimum number of samples required to inform a model cell was reduced to one sample. The maximum remained at six samples.

Estimation was controlled by ZONE numbers.

An array of 3 x 3 x 3 was used for discretisation in each cell.

This process resulted in all domains of the block model having interpolated grades in all model cells.

Metallurgical testwork outcomes assignment

The Company identified Zone 1 north of 6058000 mN as the envelope that encapsulated the samples used to create the 1.8-tonne bulk sample and other, later, aircore samples around them. That envelope was used to inform the Mineral Resource estimate by overwriting the estimated grade data with the metallurgical testwork outcomes.

Given the disparate nature of the data used to generate the resource within the metallurgical testwork envelope compared to the traditional assay and estimation, the decision was taken by the Company to clearly delineate and report the two "sub-resources" while still reporting a global Mineral Resource for Area 3 Extended.

Bulk density

A bulk density was applied to the model using a standard linear formula originally described by Baxter (1977). This regression formula was then used to calculate the conversion of tonnes from each cell volume and from there the calculation of material, THM and SLIMES tonnes.

The bulk density formula is described as:

- Bulk density = (0.009 * HM) + 1.698

Cut-off grade(s), including the basis for the selected cut-off grade(s)

Effectively there is an averaging over the length of the sample interval down hole (in this case being 1m). There is already a dilution effect on any potential high-grade mineralisation leading to inverse distance being a less complex and more straight forward methodology.

Grade cutting or capping was not used during the interpolation because of the regular nature of sample spacing and the fact that samples were not clustered nor wide spaced to an extent where elevated samples could have a deleterious impact on the resource estimation.

Sample distributions were reviewed, and no extreme outliers were identified either high or low that necessitated any grade cutting or capping. The sample length of 1m does result in a degree of grade smoothing also negating the requirement for grade cutting or capping.

For reporting purposes, cut-off grades of >1% THM were used to prepare the reported resource estimates.

Mining and metallurgical methods and parameters, and other material modifying factors considered to date

Complete extraction of ore is planned using open pit strip mining down to the top of the water table, and currently only within the areas that the Company has sought to secure land access and environmental approvals which are still pending. All waste material (including overburden and clay) will be used to create in-pit bunds to contain tailings, and to cap tailings after drying to bring the landform back to its original state. Minor additional earthworks may be required in each "tailings cell" to assist in water recovery and drying/consolidation time.

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Mining will be undertaken as a block/strip-mining operation, with progressive backfilling of the pit as the mine progresses. Each block will have a final floor footprint of approximately 500m x 150m. Waste material (overburden, interburden, clay and topsoil) will be stockpiled on surface at the commencement of mining operations until there is sufficient capacity and suitable conditions in the mined void to allow direct deposition into the mined areas. Stockpiled material on the surface will ultimately be rehandled to the final mine void to remove the visual effects of mining upon closure and to return the area to its original use.

Metallurgical bulk sample

A 1.8-tonne sample was composited from predominantly Area 3 drillhole samples, selected to represent Area 3 feed material and be used for characterisation and flowsheet development.

The sample comprised the remains of the 1m drilling samples from which the geological laboratory samples were split. Figure B3 illustrates the relative position of the drillholes comprising this bulk sample.

The combination of drillhole and sample source locations provides a high level of confidence that the sample is representative of the mineralised zone.

The 1.8-tonne sample was sent to Mineral Technologies and formed the basis of a metallurgical testwork program for Area 3 Extended.

The bulk sample was subjected to a series of processing stages, with products from each stage being measured and the product yields and chemistry being calculated. The final head-grade and assemblage of the bulk sample was back-calculated to produce data representing the entire bulk sample.

The testwork included the creation of a WCF sample using a 1mm oversize separation screen and a screw classifier fitted with a 20µm screen. The resultant sample is equivalent to the 20-micron sand sample generated by the Diamantina Laboratories assay process.

The back calculations of the June 2020 bulk sample wet concentrator feed produced a THM value of 5.42%, slimes content of 13.5% and an oversize value of 7.5%.

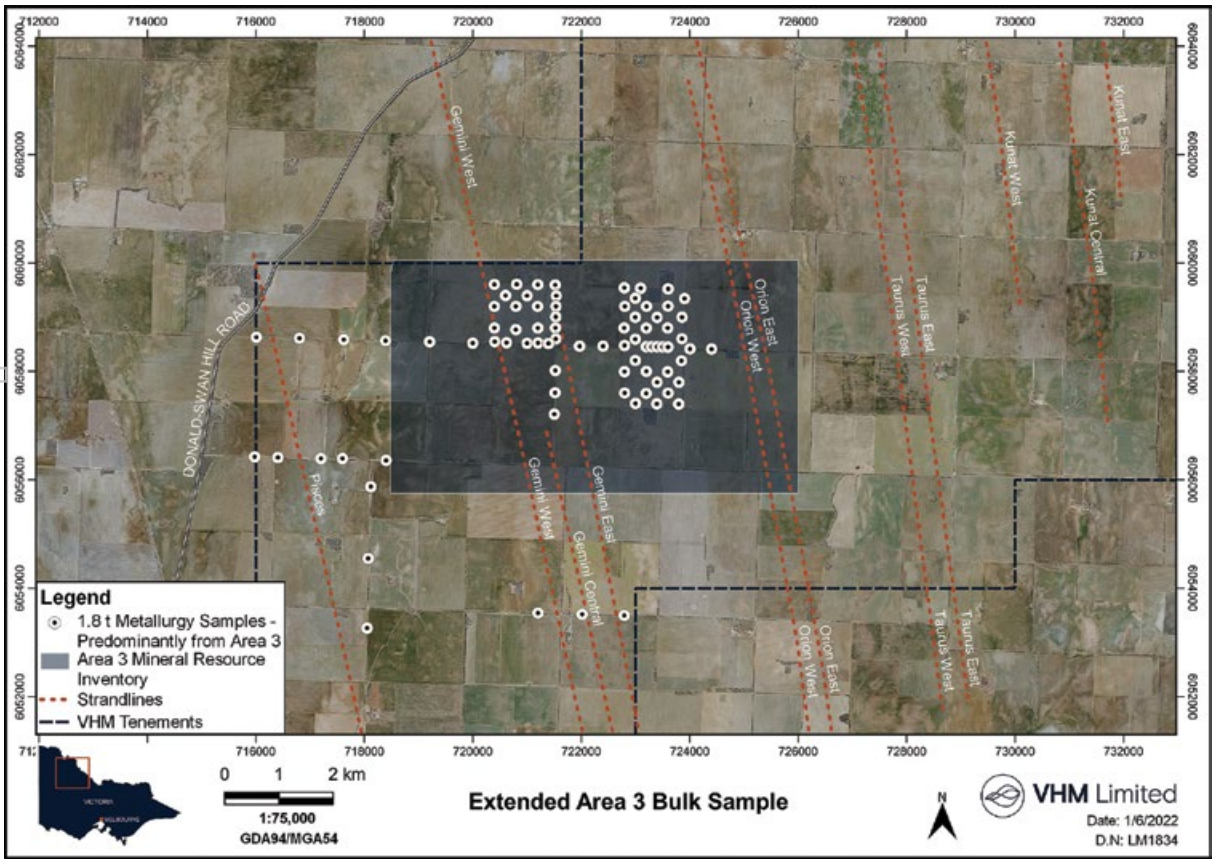


Figure B3: Area 3 Extended metallurgical bulk sample – aircore sample locations

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Area 4

Geology and geological interpretation

The HMS at the Goschen Area 4 deposit is hosted within the offshore and near shore/marginal marine depositional paleo-environment of the Loxton Parilla Sands. There are three main strands and one sheet-like horizon of mineralisation within the deposit which are predominantly zircon-rutile enriched. Zone 3 is high in tourmaline and low in zircon, although is high in contained THM. These zones are geologically continuous along strike, with grades varying along and across strike and from domain to domain (Figure B4).

Geological interpretations were supplied by VHM via scanned and annotated hard copy sections. VHM provided five domains and four of the mineralogical domain boundaries based on downhole gamma response, geological logging and high THM grades. These zones were named Zone 2, 3, 4 and 5 in the Resource estimation. Zone 1 is immediately below the topography.

IHC Robbins analysed the digitised strings provided by VHM and determined an additional geological domain using the gamma signatures from down hole geophysical surveys, oversize material, slimes, logged lithology colour and THM grades in the deposit. The additional geological zone has background mineralisation that sits between Zone 2 and the basement.

The interpretations were prepared by utilising a "fill down" method whereby each zone is assigned a roof boundary string that is digitised and snapped to the corresponding down hole mineralisation interval, aligned with the down hole geophysical data. The younger geological units were filled in first followed by the older units of the stratigraphy.

The Mineral Resource field for the project is approximately 3.5km in length (at the longest point) and 400m wide (at the widest point).

Sampling and subsampling techniques

Drill samples were obtained at 1m intervals generating approximately 8kg of drill spoil that was then split during sample collection from the sample cyclone down to 1,200–2,500g using a rotary splitter underneath the cyclone. The sub-split samples were labelled and bagged for transport to the primary laboratory for processing. All sample intervals and the correlating sample mass were recorded digitally onto a laptop at the drill rig and later uploaded to a master Microsoft Excel spreadsheet.

The sampling method and sample size dispatched for processing is considered appropriate and reliable based on accepted industry practices and experience.

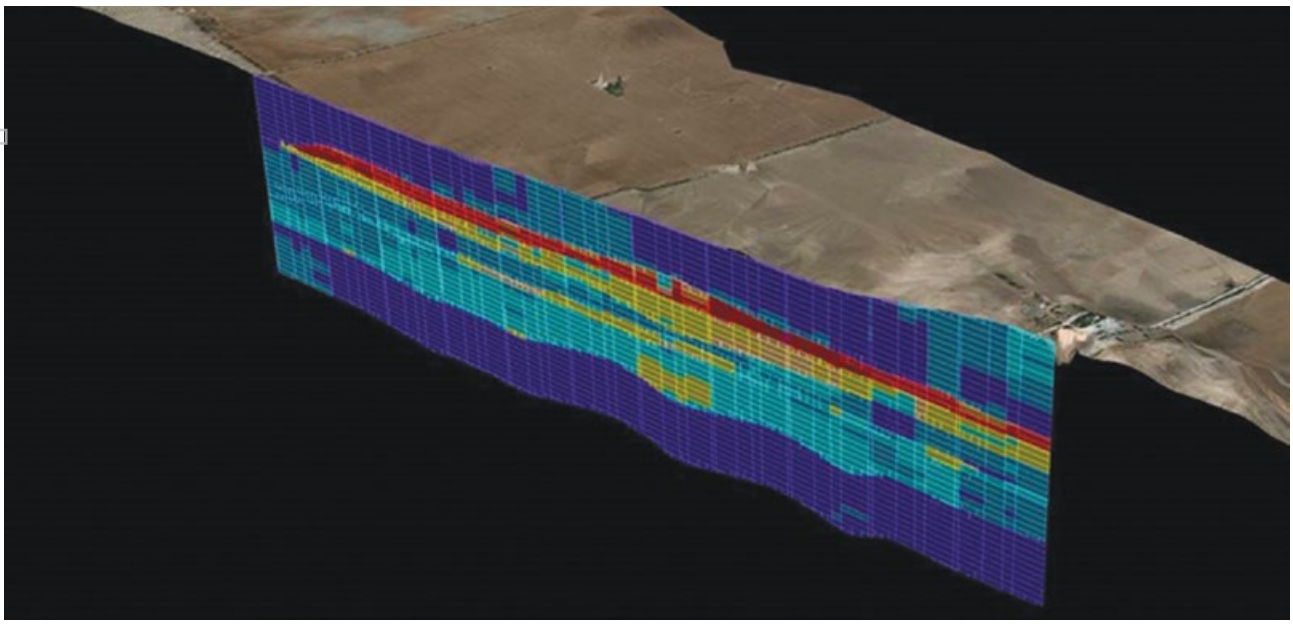


Figure B4: Area 4 Long section schematic over 3.5km strike length

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Drilling techniques

All drillhole and assay data were extracted from VHM's acQuire database where it had been validated and stored to maintain data security.

A drilling program of 116 holes was conducted in February 2019 to determine the mineralisation extent of the deposit. Drilling was carried out by Wallis Drilling using a Mantis 80 mounted on a custom Land Cruiser six-wheel drive. Reverse circulation aircore was used to drill the Area 4 Goschen deposits. Aircore is considered a standard mineral sands industry technique for evaluating heavy mineral mineralisation where the sample is collected at the drill bit face and returned inside an inner tube. The drill rods are 76mm diameter (NQ) and 3m in length. All holes were drilled vertically with majority of the samples downhole taken at 1m intervals.

A regular rectangular grid spacing for the Area 4 deposit was on a spacing of 400m in the north-south direction and with 25m and 50m stations to the east-west direction. The 400m x 50m spaced aircore holes and regular grid pattern are sufficient to provide a good degree of confidence in geological models and grade continuity within the holes. The 25m spacing on two of the nine drilling lines further confirms continuity across strike.

The criteria used for classification, including drill and data spacing and distribution – this includes separately identifying the drill spacing used to classify each category of mineral resources (inferred, indicated, and measured) where estimates for more than one category of mineral resource are reported

The Area 4 Mineral Resource has been classified as Indicated based on the drill spacing of 400m x 50m and 400m x 25m, geological and grade continuity, variography of the primary assay grades and the distribution of composited assemblage data.

Sample analysis method

Samples were dispatched to Diamantina Laboratories which followed the general assay process flow described as follows:

- 1.5–2.5kg samples were received into the Diamantina Laboratories check-in process then oven dried for lots of 2 hours at 110°C until samples were completely dry.
- Samples were then rotary split down to approximately ~100g sub-splits (weighed and captured) with one sample then submitted to screening via vibrating deck screens with the application of water.
- Every 25th sample was submitted to the same process as a laboratory repeat.
- The vibrating screens for all drillhole samples utilised a top screen of 2mm and a bottom screen of 38µm.
- Material captured by the 2mm (OS) and 38µm (SAND) screens was individually captured, dried, and weighed, whilst material passing through the 38µm (SLIMES) screen was lost to wastewater streams.
- This passing 38µm material (SLIMES) weight was then calculated by difference (SLIMES weight = sample split weight – OS – SAND).
- The SAND fraction (2mm to -38µm) was submitted to HLS using TBE.

Mineral assemblage composites have been prepared for the Goschen Area 4 deposit by different methods since the early stages of exploration. Techniques utilising both XRF and QEMSCAN have been used to define the mineralogy as a proportion of the THM. All bulk sample composites were prepared exclusively by VHM.

Estimation methodology

A total of 116 drillholes were used for the Goschen Area 4 Resource estimate. Drillhole collars were all surveyed using RTK GNSS survey equipment to establish horizontal and vertical control to Map Grid of Australia Zone 54 and to the Australian Height Datum. Three Permanent Survey Marks were located, and the data adjusted to suit TALGITCHA PM 7.

IHC Robbins generated a topographic DTM surface within Datamine using the surveyed drill collars for Area 4 as VHM did not provide a topographic surface for the area. The generated topographic DTM surface was used for this Mineral Resource estimation.

Sampling and assaying were subjected to QAQC processes by VHM with the submission of blind field duplicates and by Diamantina using internal duplicates and standards.

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The VHM QAQC data for drilling undertaken in February 2019 was analysed and the THM, duplicates/replicates were subjected to log scatter plot, cumulative probability plot and general statistical investigation.

The rate of submission for field duplicates was 1:21 which is well in line with industry standards of between 1:20 and 1:40. The rate of submission for lab duplicates was 1:23 which provides a high level of precision quality assurance.

An analysis of the 119 field duplicates assayed for THM shows a good correlation of 97% between the original assay and the duplicate assay. However, a slight bias towards the duplicates exists on assays below a THM value of 0.6%; the duplicate THM assays are higher than the original assays.

All the 71 standard samples submitted to the laboratory by VHM were within acceptable limits of +3SD.

The geological grade model for Goshen Area 4 was based on coding model cells below open wireframes surfaces, including topography, mineralisation, and basement. The drillhole file was also flagged with the domains and used for grade estimation. All the string, wireframe, and drillhole files that were used to build and interpolate the model.

The dominant drill grid spacing for the Area 4 deposit was 400m north south and 50m east west direction. However, two of the nine drilling sections had 25m spacing in the east-west direction. A parent cell dimension of 100m x 25m x 1m in XYZ was selected in order to have a floating cell between drillholes and drill lines.

Sub-cell splits of 4 x 4 in the X and Y and to the nearest 20 cm in the Z direction were used to control sub-cell splitting of parent cells (as dictated by the modelling routine used in Studio RM). The smaller parent cell sizes were selected to give a better estimation of the volume of the deposit and effectively cover the narrow domains. It is not anticipated that this will have an adverse effect on the overall grade estimation.

The smaller parent cell sizes are also not anticipated to result in an adverse effect on the overall grade estimation.

Inverse distance cubed was used along with nearest neighbour to interpolate grades and values into the block model. Part of the rationale for using ID3 is centred around the good continuity of the mineralisation, low nugget effect displayed by the experimental variograms, the regular drillhole and assay spacing and the nature of the sampling process.

A bulk density was applied to the model using a standard linear formula originally described by Baxter (1977). This approach was refined in a practical application by this author using the following first principles calculations. This regression formula was then used to calculate the conversion of tonnes from each cell volume and from there the calculation of material, THM and SLIMES tonnes. The bulk density formula that has been applied to Area 4 has also been used in the VHM Mineral Resource estimate for Goschen Area 1 and 2 completed in March 2019 by IHC Robbins.

The bulk density formula is described as:

- Bulk density = (0.009 * HM) + 1.698.

Cut-off grade(s), including the basis for the selected cut-off grade(s)

Effectively there is an averaging over the length of the sample interval downhole (in this case being 1m). There is already a dilution effect on any potential high-grade mineralisation leading to inverse distance being a less complex and more straight forward methodology.

Grade cutting or capping was not used during the interpolation because of the regular nature of sample spacing and the fact that samples were not clustered nor wide spaced to an extent where elevated samples could have a deleterious impact on the resource estimation.

Sample distributions were reviewed, and no extreme outliers were identified either high or low that necessitated any grade cutting or capping.

The sample length of 1m does result in a degree of grade smoothing also negating the requirement for grade cutting or capping.

Cut-off grades for THM were used to prepare the reported resource estimates. These cut-off grades

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were defined by the Competent Person by utilising multiplying THM by VHM to get an in-ground VHM grade (TVHM). This was used to report the block model on material >1% TVHM.

IHC Robbins utilised a value per tonne (VPT) algorithm as an internal process to validate the TVHM cut-off grade for repeatability.

This validation provided a close reconciliation to the 1% TVHM cut-off grade.

Mining and metallurgical methods and parameters, and other material modifying factors considered to date

No specific mining method is assumed other than potentially the use of dry mining methods.

Ore Reserve Statement

For a separate report providing all information that is material to understanding the estimates of ore reserves, in relation to each of the criteria in Section 1 (sampling techniques and data), Section 2 (reporting of exploration results), and Section 3 (estimation and reporting of Mineral Resources) Section 4 estimation and reporting of Ore Reserves of Table 1 of the JORC Code, refer to Appendix A of the ITAR.

Preliminary Feasibility Study, March 2021 (Area 1 and Area 3)

The material assumptions and the outcomes from the preliminary feasibility study or the feasibility study (as the case may be); if the economic assumptions are commercially sensitive to the mining entity, an explanation of the methodology used to determine the assumptions rather than the actual figure can be reported

Life of mine average mining costs of $2.43/t for all mined material was calculated, including rehandling of stockpiled waste material. Overall processing costs for the Goschen Project were calculated to be $4.21/t ore fed to the MUP. Up front capital costs of $1.96/t.ore, sustaining capital costs of $0.12/t. ore and $1.37/t.ore for product handling were calculated to mine and process the stated Ore Reserve. Net revenue deducted 2.75% for state royalties. Revenues were calculated based on long term reference prices supplied by TZMI and Adamas Intelligence as listed in the following table:

	Unit	Long term reference price
Monazite/Xenotime	US$/t	5,670
Zircon	US$/t	1,495
Rutile	US$/t	1,138
Ilmenite	US$/t	274

The criteria used for classification, including the classification of the mineral resources on which the ore reserves are based and the confidence in the modifying factors applied

Measured Resources within the pit design situated on the two paddocks in Area 1 that house the processing facility and overburden stockpiles were converted to Proven Ore Reserves, Measured Resources outside those paddocks and all Indicated Resources within the Area 1 and Area 3 pit designs were converted to Probable Ore Reserves.

The mining method selected and other mining assumptions, including mining recovery factors and mining dilution factors

Mining will be undertaken using conventional truck and shovel operations with all production being above the water table.

Pits were designed with batter angles of 40° with berms located approximately every 10 vertical metres. A 10m wide berm was placed at the approximate upper contact of the ore zone with all berms above that being 5m wide.

Mining recovery of 98% and dilution of 5% was applied to the optimisation and production schedule.

Full extraction of recoverable ore in the pit design is planned, with the mined void to be backfilled with co disposed process tailings and waste overburden to return the mining area to its pre-mining land use.

The processing method selected and other processing assumptions, including the recovery factors applied and the allowances made for deleterious elements

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Several processes will be used to generate six products. The selected processes are common within the mineral sands industry with a feed preparation plant (FPP), wet concentrator plant (WCP) and mineral separation plant (MSP). The MSP will consist of a rare earth float circuit, Wet High Intensity Magnet (WHIM) circuit, a non-magnetic upgrade circuit and chrome float circuit. The overall recovery of the valuable heavy metals through the entire process, and to products from which value can be attributed are shown in the table below:

Mineral	Area 1 overall recovery	Area 3 overall recovery
Zircon	84.6%	86.6%
Rutile	43.7%	46.1%
Leucoxene (HG)	31.3%	24.3%
Ilmenite	47.1%	45.5%
Monazite	86.1%	83.8%
Xenotime	78.8%	76.5%

The basis of the cut-off grade(s) or quality parameters applied

A single cut-off grade (using THM or TVHM) was found to not accurately reflect the results obtained through Whittle modelling. So, a block value calculation was done to classify each block within the final pit designs as ore or waste. This involved three steps per block: calculating the revenue, calculating the processing cost, and so determining the cashflow. If block revenue was greater than the processing cost, the block was treated as ore; otherwise, the block was treated as waste.

Estimation methodology

Pit designs were based on optimisation shells generated using Geovia Whittle software. Exclusion zones around public infrastructure and areas of vegetation were applied to determine mineable pits.

Material modifying factors, including the status of environmental approvals, mining tenements and approvals, other governmental factors, and infrastructure requirements for selected mining methods and for transportation to market

The Reserve calculated for the PFS was unconstrained except for a small area directly to the east of the Area 1 pit due to an existing dwelling and an area potentially sterilised by the early mining operations.

Environmental approvals have been sought in relation to the DFS Ore Reserves and are in the process of being evaluated, variations may be required to the application to incorporate the larger PFS footprint. The Goschen Project is well serviced by road, rail, power and water, infrastructure upgrades may be required to develop the project area and to transport products to market.

Definitive Feasibility Study, March 2022 (Area 1 and Area 3)

The material assumptions and the outcomes from the preliminary feasibility study or the feasibility study (as the case may be); if the economic assumptions are commercially sensitive to the mining entity, an explanation of the methodology used to determine the assumptions rather than the actual figure can be reported

Life of mine average mining costs of $2.78/t for all mined material was calculated, including rehandling of stockpiled waste material. Overall processing costs for the Goschen Project were calculated to be $13.27/t ore fed to the MUP, this included all power and water requirements for the Project. Upfront capital costs of $4.07/t.ore, sustaining capital costs of $2.36/t.ore, $1.20/t.ore G&A and $1.21/t. ore for product handling were calculated to mine and process the stated Ore Reserve. Net revenue deducted 2.75% for state royalties. Revenues were calculated based on reference prices supplied by TZMI and Adamas Intelligence as listed in the table below:

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	Unit	2022	2023	2024	2025	2026	2027	2028	2029	2030
Mixed Rare Earth Carbonate	US$/kg	16.22	17.26	17.87	18.34	18.87	19.14	19.39	19.65	19.90
Zircon	US$/t	1,877	2,042	1,897	1,722	1,580	1,528	1,529	1,529	1,512
Rutile	US$/t	1,345	1,293	1,270	1,283	1,308	1,305	1,286	1,307	1,299
Leucoxene	US$/t	249	267	275	278	272	275	277	280	282
Ilmenite	US$/t	287	225	225	229	228	227	223	214	205

The criteria used for classification, including the classification of the mineral resources on which the ore reserves are based and the confidence in the modifying factors applied

All Measured Resources within the pit design were converted to Proven Ore Reserves, all Indicated Resources within the pit design were converted to Probable Ore Reserves.

The mining method selected and other mining assumptions, including mining recovery factors and mining dilution factors

Mining will be undertaken using conventional truck and shovel operations with all production being above the water table.

Pits were designed with a batter angle of 40° applied to the uppermost bench (in the topsoil/clayey-sand material), with a 6m wide berm created at the base of the clayey material or 10m below surface, whichever produces the lower berm level (i.e. a maximum depth of 10m). Beneath this berm, a single slope was designed to the pit floor; the slope angle used for this bench was either 34° in Area 1 East (overall pit depth generally <= 32m) and 32° in Area 1 West and Area 3 (overall pit depth generally > 32m).

The Resource model provided contained blocks down to a minimum size of 12.5m x 12.5m x 0.2m, this was regularised to mining SMU of 25m x 25m x 1m, this process generated a mining model inclusive of mining recovery and dilution equivalent to approximately 98% and 5% respectively.

Full extraction of recoverable ore in the pit design is planned, with the mined void to be backfilled with co disposed process tailings and waste overburden to return the mining area to its pre-mining land use.

The processing method selected and other processing assumptions, including the recovery factors applied and the allowances made for deleterious elements

Several processes will be used to generate six products. The selected processes are common within the mineral sands industry with a FPP, WCP and MSP. The MSP will consist of a rare earth float circuit, WHIM circuit, a non-magnetic upgrade circuit, chrome float circuit and Hot Acid Leach (HAL) process.

The overall recovery of the valuable heavy metals through the entire process, and to products from which value can be attributed are shown in the table below:

Mineral	Overall mineral recovery
Zircon	74.8%
Rutile	56.6%
Leucoxene (HG)	26.7%
Ilmenite	62.6%
Monazite	89.6%
Xenotime	80.2%

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The basis of the cut-off grade(s) or quality parameters applied

A single cut-off grade (using THM or TVHM) was found to not accurately reflect the results obtained through Whittle modelling. So, a block value calculation was done to classify each block within the final pit designs as ore or waste. This involved three steps per block: calculating the revenue, calculating the processing cost, and so determining the cashflow. If block revenue was greater than the processing cost, the block was treated as ore; otherwise, the block was treated as waste.

Estimation methodology

Pit designs were based on optimisation shells generated using Geovia Whittle software. Exclusion zones around public infrastructure and areas of vegetation were applied to determine mineable pits.

Material modifying factors, including the status of environmental approvals, mining tenements and approvals, other governmental factors, and infrastructure requirements for selected mining methods and for transportation to market

The Reserve calculated for the DFS was constrained within paddocks over which VHM have current access agreements in place. Environmental approvals have been sought and are in the process of being evaluated. The Goschen Project is well serviced by road, rail, power and water, infrastructure upgrades may be required to develop the project area and to transport products to market.

Annexure C

Solicitor's Tenement Report

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HWL EBSWORTH
LAWYERS

14 October 2022

The Directors
VHM Limited
Suite 9, Level 2
389 Oxford Street
MT HAWTHORN WA 6016

Dear Directors

VHM Limited
Solicitor's Report – Mining Tenements

This report has been prepared for VHM Limited ACN 601 004 102 (**Company**) for inclusion in the Company's prospectus (**Prospectus**) issued in connection with the Company's application for the admission of the ordinary shares of the Company to the Official List of the ASX.

1. Scope

We have been requested to report on:

(a) 8 granted exploration licences (prefixed '**EL**');

(b) 1 granted retention license (prefixed '**RL**'),

all of which are located in Victoria, (collectively the **Tenements**).

Key details of the Tenements are set out in Schedule 1 of this Report and must be read in conjunction with this Report.

The purpose of this Report is to determine and identify, as at the date of the relevant searches:

(a) the interests held by the Company in the Tenements;

(b) any third party interests, including encumbrances, in relation to the Tenements;

(c) any material issues existing in respect of the Tenements;

(d) the good standing, or otherwise, of the Tenements; and

(e) any concurrent interests in the land the subject of the Tenements, including other mining tenements, private land, pastoral leases, native title and Aboriginal heritage.

Adelaide
Brisbane
Canberra
Darwin
Hobart
Melbourne
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This Report is limited to the matters contained within and, for example, does not consider risks and issues (such as any additional approvals) that may arise in relation to the development of a mining project on the Tenements and any subsequent mining and processing of ore.

2. Searches

For the purposes of this Report, we have conducted searches and made enquiries in respect of the Tenements as follows:

(a) **(Native Title**) We have reviewed the results of searches of the schedule of native title applications, register of native title claims, national native title register, register of indigenous land use agreements and national land use agreements as maintained by the NNTT for any native title claims (registered or unregistered), native title determinations and Indigenous Land Use Agreements that overlap or apply to the Tenements (**NNTT Searches**). These searches were conducted on 12 October 2022.

(b) (**Title Searches**) We have reviewed the results of searches from GeoVic, maintained by the Earth Resources branch of the Victorian Department of Jobs, Precincts and Regions (**Victorian Department**). These searches were conducted on 14 October 2022.

(c) (**Material Contracts**) We have examined the Material Contracts described in Section 7 of the Prospectus. It is our opinion, based upon an examination of the Material Contracts, that the description of them does not contain any statement or matter that is false in a material particular or is materially misleading in the form and context in which it appears.

3. Summary of key items and overview of risk factors

3.1 Tenements and Title

As at the date of this Report, the Company is the 100% registered holder of EL006419, EL006664, EL006666, EL006769, EL007803, EL007807, EL007810, EL007827 and RL006806.

EL006419, EL006664, EL006666, EL006769 were originally granted in the name of VHM Exploration Pty Ltd, the former name of the Company.

3.2 Native title

The existence of native title determinations or claims over the area covered by the Tenements, or a subsequent determination of native title over the area, will not impact the rights or interests of the holder under the Tenements provided the Tenements have been or will be validly granted in accordance with the Native Title Act.

The grant of any future tenure to the Company over areas that are covered by registered claims or determinations will likely require engagement with the relevant claimants or native title holders (as relevant) in accordance with the Native Title Act.

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For information on native title affecting the Tenements, please see section 5.9 for details.

Our Searches also indicate that the Tenements are all subject to an ILUA. For further information on those ILUAs, please see section 5.10 below.

3.3 **Aboriginal Heritage**

There is a risk that Aboriginal sites or places may exist on the land the subject of the Tenements. The existence of such sites may preclude or limit mining activities in certain areas of the Tenements or cause delays in the progression of the development of a mine.

See section 6 below for further details.

3.4 **Overlapping Tenure**

Our Searches indicate that the Tenements overlap with land that is the subject of other rights, including:

(a) parcels of private land (see section 7(a) for details);

(b) Crown Land which is restricted under the Victorian Mining Act (see section 7(b) for details); and

(c) Crown land that falls within the Box-Ironbark region of the state of Victoria (see section 7(c) for details).

Any delays or costs in respect of conflicting third-party rights, obtaining necessary consents, or compensation obligations, may adversely impact the Company's ability to carry out exploration or mining activities within the affected areas.

3.5 **Rehabilitation Bonds**

In accordance with section 80 of the Victorian Mining Act, a licensee or an applicant for an extractive industry work authority must enter into a rehabilitation bond for an amount determined by the Minister prior to receiving approval for extractive works. The Title Searches indicate that, in relation to the Tenements, the Company has lodged 2 cash bonds, each in the amount $10,000, for EL006419 and RL006806.

4. Tenements

The following provides a description of the nature and key terms of the tenements (including potential successor tenements) that may be granted under the Victorian Mining Act which are relevant to the Tenements.

(a) **Exploration Licences**

(i) Rights

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An exploration licence authorises the holder to carry out exploration for the specified minerals to which it relates on the land covered by the licence. It entitles the holder to:

(A) conduct geological, geochemical and geophysical surveys;

(B) conduct drilling;

(C) take samples for chemical or other analysis;

(D) extract minerals from the land, other than for the purpose of producing them commercially; and

(E) undertake any other activity that is specified in the licence.

Before work other than low impact exploration can be undertaken, the licensee must have an approved work plan, have entered into a rehabilitation bond, have complied with any condition to provide an environmental offset, obtained all necessary consents and other authorities, obtained public liability insurance and given the required period of notice of intention to commence work to the Chief Inspector and to owners and occupiers of the affected land, as applicable. Where the land is private land the licensee must have obtained written consent of the owners and occupiers of the land or registered a compensation agreement, as noted in further detail in section 7(a).

(ii) Application

A person may lodge an application for an exploration licence in accordance with the Victorian Mining Act and the Minister responsible for the Victorian Mining Act will determine whether to grant the application. An application for an exploration licence cannot be legally transferred and continues in the name of the applicant.

The area of land in respect of which an exploration licence may be granted must be contained in a single licence area and cannot be less than one or more than 500 graticular sections, with a graticular section being the 1,000 metre interval blocks based on the Australian Geodetic Datum 1966, as shown on the National Topographic Map Series published by the National Mapping Council.

(iii) Term

An exploration licence is current for the time specified in the licence unless surrendered, cancelled earlier or as otherwise provided in the Victorian Mining Act.

An exploration licence may be granted for a period of up to five years from the date on which it is registered. An exploration licence can be renewed twice, each for a period of up to five years (which takes effect on the anniversary of the registration of the licence). The

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renewal or, if the renewal is refused, the refusal to renew, has no effect until the instrument of renewal or refusal to renew is registered.

The Minister may renew an exploration licence for a first term of up to five years. The Minister must refuse to renew if the applicant does not satisfy the Minister that the applicant genuinely intends to do work unless the Minister is satisfied that the licensee has identified minerals in the land covered by the licence and that additional time is required to assess the economic viability of mining those minerals or it is not presently economically viable to mine those minerals but it may become so in the future.

The Minister may only renew the licence for a second term if the Minister considers there are exceptional circumstances to warrant the second renewal, and is satisfied that there is a likelihood of the licensee identifying minerals in the land covered by the licence during the period of renewal.

The Minister may renew an exploration licence subject to any conditions specified in the renewal, and grant a renewal for a smaller area than as stipulated in the application for renewal.

(iv) Decrease in Area

The Minister must, unless her or she decides otherwise, cancel an exploration licence in relation to at least 25%, 35%, 20% and 10% of the total number of graticular sections covered by the licence on the second, fourth, seventh and tenth anniversaries of the initial registration of the exploration licence by 25%, 35%, 20% and 10% respectively. The areas to be cancelled can be nominated, but is otherwise determined by the Minister. See section 4(c) in relation to a current determination of the Minister in relation to these cancellation requirements.

In calculating the area to be cancelled, if the licensee holds two or more exploration licences, at the Minister's discretion the combined areas covered by the licences may be treated as a single area.

(v) Conditions

A standard condition of an exploration licence is the requirement to expend in connection with the exploration of land a minimum amount in every year of the term of the licence. An exploration licence may also be granted subject to other conditions, including matters such as:

(A) rehabilitation of the land;

(B) elimination and minimisation of the risks that the work may pose to the environment, to any member of the public, or to land, property or infrastructure in the vicinity of the work;

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(C) protection of groundwater;

(D) providing and implementing environmental offsets on the land or any other land;

(E) work undertaken under a licence;

(F) reporting the discovery of minerals;

(G) entering into a rehabilitation bond;

(H) payment of fees;

(I) payment of an environmental levy;

(J) access to and use of the land by the holder of another licence that is limited to a particular stratum; and

(K) protection of community facilities.

A failure to comply with these conditions or any other conditions associated with an exploration licence may lead to forfeiture of the exploration licence. Schedule 1 of this Report describes specific conditions attached to the Tenements.

The Minister may after consultation with the licensee, vary an exploration licence or vary, suspend or revoke a condition of a licence or add a new condition, at the request of the licensee, or if the Minister decides it is necessary to eliminate or minimise the risk that the work may pose to the environment, for the rehabilitation or stabilisation of the land, or to ensure appropriate environmental offsets are provided for, and other prescribed circumstances.

(vi) Rent

It is a condition of an exploration licence that the licensee pays annual rent from the date of registration of the grant of the licence, in accordance with the rate or method of assessment and at the times prescribed. The current prescribed rate of rent is 6·9 fee units per 10 graticules or part thereof of the land covered by the licence as at 30 June of that year. The fee unit for the 2021/2022 financial year is $15.03 such that the rent payable for an exploration licence is currently $103.707 per 10 graticules.

Rent is required to be paid within 28 days after 30 June each year. The Minister may extend the period for payment of rent in prescribed circumstances. A failure to pay rent may result in licence cancellation processes being implemented.

(vii) Priority for mining lease

The holder of an exploration licence has priority to apply for a mining lease over any of the land the subject of the exploration licence.

(viii) Transfer

No legal or equitable interest in an exploration licence can be transferred or otherwise dealt with during the first year of its term. After the first year of its term, the licence may only be transferred by an instrument approved by the Minister.

An application for an exploration licence is not transferrable.

Refer to Schedule 2 and Schedule 3 for the conditions attaching to the Company's exploration licences.

(b) **Retention Licence**

(i) Application

Prior to the application for (or renewal of) a retention licence, a mineral resource needs to be identified over the subject land. The applicant must describe the mineral resource in accordance with guidelines issued by the Minister.

If the mineral resource so described is not being mined from the land that will be covered by the retention licence, the applicant must submit a mineralisation report prepared by a competent person, which demonstrates a mineral resource and a program of work.

(ii) Rights

The holder of a retention licence is entitled:

(A) to retain rights to a mineral resource in the land covered by the licence:

(1) that is not economically viable to mine but may become economically viable to mine in the future; or

(2) for the purpose of sustaining the operations of an existing mine; and

(B) to explore and carry out other work to establish the economic viability of mining a mineral resource in the land covered by the licence.

The holder of a retention licence is also entitled to apply for a mining licence in respect of the land covered by the licence or give consent to another person to apply for a mining licence in respect of the land covered by the licence.

(iii) Term and renewal

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A retention licence is current for the time specified in the licence, not exceeding 10 years from the date on which it is registered and may be renewed twice for up to 10 years, subject to the following requirements being satisfied.

The Minister can only renew a retention licence if the Minister is satisfied that the mining of a mineral resource would be economically viable in the future. The retention licence can only be renewed for a second renewal if the licensee has also demonstrated that there are exceptional circumstances to warrant the second renewal. A renewal will have effect on the anniversary of the registration under the Victorian Mining Act of the initial licence, and the renewal may be subject to conditions, or may cover a smaller area than that covered by the application for renewal.

(iv) Area

The area of the land subject to a retention licence is the area the Minister determines as the area that may be required for the purpose of mining a mineral resource in the future and is described in the grant document.

(v) Transfer

A retention licence may only be transferred with the Minister's approval.

(vi) Rent

The holder of a retention licence must pay rent from the date of registration of the grant of the licence. Rent must be paid within 28 days of 30 June each year. The Minister may extend the period for payment of rent in prescribed circumstances. The current prescribed rate of rent is 2.4 fee units per 10 hectares or part thereof of the land covered by the licence as at 30 June of that year. The fee unit for the 2021/2022 financial year is $15.03 such that the rent payable for an retention licence is currently $36.072 per 10 graticules.

Refer to Schedule 4 for the conditions of RL006806.

(c) **Temporary COVID-19 Relief**

The Minister has endorsed a temporary waiver of partial cancellation requirements outlined in section 4(a)(iv) for exploration licences between 1 March 2022 to 31 March 2023 (**Relief**).

The following Tenements have registration anniversaries that fall within the period of the Relief as set out below.

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Tenement	Grant Date	Anniversary	Partial Cancellation Requirement
EL006419	18 May 2018	Fourth	35%
EL006664	18 June 2018	Fourth	35%
EL006666	18 June 2018	Fourth	35%
EL006769	27 August 2018	Fourth	35%

As a consequence of the Relief, subject to the Company being up-to-date with its annual return submissions and rent payments, 35% of the areas of the above exploration licences will not be cancelled by the Minister on the anniversary dates unless the Company requests otherwise.

Following the Relief period, and unless further relief is granted by the Minister, all Tenements will again be subject to partial cancellation in accordance with the Victorian Mining Act. For example, unless further relief is granted by the Minister, exploration licence EL006419 will be subject to partial cancellation of 20% of its area on the seventh anniversary of its registration, being 18 May 2025.

The Relief does not apply to the Tenements not listed in the table above.

5. Native title

5.1 General

(a) On 3 June 1992, the High Court of Australia held in *Mabo v. Queensland (No. 2)* (1992) 175 CLR 1 that the common law of Australia recognises a form of native title. The Native Title Act came into effect on 1 January 1994, largely in response to the decision in *Mabo v. Queensland (No. 2)* (1992) 175 CLR 1.

(b) The law in Australia recognises that Aboriginal people may hold native title rights and interests in respect of their land. Native title exists where Aboriginal people have maintained a traditional connection to their land and waters, provided it has not been extinguished.

(c) The grant of a mining tenement also creates rights in respect of land. Those mining tenement rights may affect (ie be inconsistent with) certain native title rights and interests. As a general statement, those mining tenement rights will be invalid as against any native title rights, unless made valid by certain procedures in the Native Title Act.

5.2 Native title claims

(a) The Native Title Act sets out a process by which Aboriginal people may seek a determination by the Federal Court that they hold native title rights and

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interests. Whilst the Federal Court is assessing the claimed native title rights and interests, a Registrar of the NNTT will assess whether the native title claim meets certain registration requirements set out in the Native Title Act, and if so, the native title claim will be entered on the Register of Native Title Claims (**RNTC**). If the Federal Court determines that the claimed native rights and interests exist, details of the determined native title claim (and the determined native title rights held) are then entered on the National Native Title Register (**NNTR**).

(b) If a claim for native title is entered on the RNTC, or a determined claim is entered on the NNTR, the Native Title Act provides the claimants / holders with certain rights, including procedural rights where a 'future act' is proposed. An example of a 'future act' is the grant of a mining tenement.

(c) The Native Title Act sets out when 'acts' will be 'valid' in the event they affect (ie are inconsistent with) native title, however, this process need only apply where native title exists (a determined native title claim entered on the NNTR) or is claimed to exist (a native title claim entered on the RNTC). The 'acts' can be a proposed activity or development on land and waters. A common example is the proposed grants of mining tenements.

5.3 **'Past Acts' (ie grants of mining tenements): Prior to 1 January 1994**

The Native Title Act permits, and all States and Territories of Australia have passed, legislation validating certain 'acts' which were done before 1 January 1994. In Victoria, that legislation is the *Land Titles Validation Act 1994* (Vic). Both legislation provides that all 'acts' (eg grants of mining tenements) prior to 1 January 1994 are valid to the extent they affect native title.

5.4 **'Future Acts' (ie proposed grants of mining tenements): After 1 January 1994**

(a) Generally, a 'future act' is an 'act' (eg grant of mining tenement) occurring after 1 January 1994 which affects native title.

(b) The Native Title Act sets out the circumstances in which, and procedures by which, 'future acts' will be valid should that 'act' affect native title.

(c) Such circumstances include if the 'act' was done in certain circumstances between 1 January 1994 and 23 December 1996 (called 'Intermediate Period Acts'), or if the 'act' is permitted by an Indigenous Land Use Agreement (**ILUA**), or if certain procedures are to be followed where a claim for native title is entered on the RNTC, or a determined claim is entered on the NNTR. Such procedures include the 'Right to Negotiate Procedure' and the 'Expedited Procedure'. The key elements of these processes are outlined below.

5.5 **Right to Negotiate Procedure**

(a) Under the Right to Negotiate Procedure the native title party whose details are registered on the RNTC or NNTR, the applicant for the mining tenement and the relevant State or Territory (collectively, the **Negotiation Parties**) are

required to negotiate in good faith with a view to the native title party agreeing to the proposed future act.

(b) The scope of the negotiations includes any matters relating to the effect of the grant of the future act on the claimed or determined native title rights and interest. Where the future act is the proposed grant of an exploration or prospecting licence, usually an agreement is reached which aims to protect Aboriginal heritage. This is because exploration licences confer only limited rights to the registered holder of the licence, conferring rights to conduct exploration and disturb the land for that purpose.

(c) Where the future act is the proposed grant of a mining lease, the negotiations and resulting agreement are usually more complex, as the nature of rights granted for a mining lease contemplates substantial ground disturbance over a portion of the area granted. Such an agreement may address employment and training, environmental rehabilitation, Aboriginal heritage protection, cultural awareness and the payment of compensation.

(d) If the Negotiation Parties negotiate in good faith but cannot reach agreement as to the doing of the future act, then provided at least 6 months have elapsed since the S29 Notice, any party (in most cases the applicant for the mining tenement) may apply to the NNTT for a determination as to whether the future act may be done, and if so, on what conditions.

5.6 **Expedited Procedure**

Where the grant of a tenement is unlikely to directly interfere with community or social activities or areas or sites of particular significance, or involve major disturbance to land or waters, the Native Title Act permits the State to follow an expedited procedure for the grant of a tenement. The State applies the expedited procedure to the grant of exploration and prospecting tenements. Registered native title parties can lodge an objection to the use of the expedited procedure within the period of 4 months following the issue of the Section 29 Notice by the State (**Objection Period**). If no objections are lodged or if the objections are withdrawn, the State may grant the tenement at the expiry of the Objection Period without undertaking a negotiation process. If an objection is lodged, the NNTT must determine whether the grant of the tenement is an act attracting the expedited procedure. If the NNTT determines the expedited procedure does not apply, the parties must follow the right to negotiate procedure or enter into an indigenous land use agreement. If an agreement is not reached within 6 months from the notification day, any party may refer the matter to the NNTT for determination by arbitration.

5.7 **Compensation**

In certain circumstances holders of native title (a determined native title claim that is registered on the NNTR) may be entitled to apply under the Native Title Act to the Federal Court for compensation for any effect on their native title. The Victorian Mining Act provides that holders of mining tenements are liable for such compensation where awarded by reason of their mining tenements having affected native title. Consequently, if it has been, or is in the future, determined that native title exists over any of the land the subject of a mining tenement (or granted future act) and the holders of the native title apply to the Federal Court for compensation,

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the holder of the tenement may be liable and directed to pay any compensation determined.

5.8 **Victorian Traditional Owner Settlement legislation**

In 2010, the Victorian Government introduced an alternative settlement framework to the claims system under the Native Title Act with the enactment of the *Traditional Owner Settlement Act 2010* (Vic) (**TOS Act**).

The TOS Act provides for an out-of-court settlement of native title, and sets out a framework for agreements between Victorian traditional owners and the State of Victoria to:

(a) recognise traditional owners' relationship to land;

(b) provide traditional owners' with certain rights on Crown land; and

(c) resolve issues which may otherwise be dealt with through native title claims.

Under the TOS Act a 'settlement' may include:

(d) an overarching Recognition and Settlement Agreement – that recognises the named traditional owner group and their traditional owner rights over certain public land;

(e) a Land Agreement – that provides for land transfers for economic or cultural purposes and grants of Aboriginal title to parks and reserves;

(f) a Land Use Activity Agreement (**LUAA**) – that provides procedures for future use of public land that take account of traditional owner rights and interests;

(g) a Natural Resource Agreement – that enables access and use of natural resources and traditional owner group participation in natural resource management

(h) a Funding Agreement, regarding a payment into the 'Victorian Traditional Owners Trust' and payments for economic development and other purposes

(i) an ILUA which binds all native title holders and validates future acts, which must be registered under the Native Title Act;

(j) a Traditional Owner Land Management Agreement that facilitates joint management of certain parks and reserves.

In return for entering into a settlement, traditional owners must agree to withdraw any native title and compensation applications under the Native Title Act. A LUAA must be accompanied by an ILUA which provides for the ‘contracting out’ of Native Title Act processes.

All of the Tenements other than RL006806 have been granted subject to a condition requiring compliance with any conditions specified in a LUAA under the TOS Act.

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5.9 **Native title claims and determinations affecting the Tenements**

Our searches indicate that the area of each Tenements overlaps native title determinations and applications as follows:

Tenement (% affected)	Group	Type	NNTT Number
EL006419 (100.00%)	Wamba Wemba	Applications (Schedule)	VC2021/001
EL006664 (79.35%)	Wamba Wemba	Applications (Schedule)	VC2021/001
EL006666 (100.00%)	Wamba Wemba	Applications (Schedule)	VC2021/001
EL006769 (4.16%)	Wamba Wemba	Applications (Schedule)	VC2021/001
EL007803 (87.57%)	Wamba Wemba	Applications (Schedule)	VC2021/001
EL007807 (12.34%)	Wamba Wemba	Applications (Schedule)	VC2021/001
EL007827 (6.58%)	Wotjobaluk, Jaadwa, Jadawadjali, Wergaia and Jupagulk Peoples No. 1	Determinations	VCD2005/001
RL006806 (100%)	Wamba Wemba	Applications (Schedule)	VC2021/001

The existence of any native title claims over the area covered by the Tenements, or a subsequent determination of native title over the area, will not impact the rights and interests of the holder under the Tenements provided they have been validly granted.

However, the grant of any future tenure over areas that are covered by a registered claim or a positive determination of native title will require engagement with the relevant claimants or native title holders (as relevant) in accordance with the Native Title Act.

Pursuant to the Native Title Act, a native title claim application cannot be determined for an area over which there is already an approved determination of native title. However, in very limited circumstances, an application may be made to vary or revoke an approved determination of native title determination over an area, but only the relevant RNTBC, the Commonwealth Minister, the relevant State or Territory Minister or the Native Title Registrar can make a revised native title determination application. Whilst a number of approved determinations of native title have been revised on applications made by the relevant RNTBCs, to date, no approved determination of native title is yet to be revoked.

5.10 **Indigenous Land Use Agreements**

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An Indigenous Land Use Agreement (**ILUA**) is an agreement which has been authorised by the NTC group and has been registered with the NNTT. An ILUA binds the parties to the ILUA and also all persons holding native title to the relevant area that may not be a party. If an ILUA provides that any particular mining tenement(s) may be granted, then the relevant mining tenement(s) may be granted as provided for by the ILUA, generally without following other procedures, including the Right to Negotiate Procedure or the Expedited Procedure.

Our searches indicate that the area of each granted Tenement overlaps areas the subject of ILUAs as follows:

Tenement (% affected)	ILUA	ILUA Type and Subject Matters	NNTT File Number
EL006419 (100.00%)	Low Impact Exploration and Exploration - Wamba Wamba, Barapa Barapa, & Wadi Wadi Peoples	Area Agreement - mining and exploration	VI2004/010
EL006419 (100.00%)	NGMA Regional Mining/ Exploration ILUA	Area Agreement - exploration and mining	VI2011/001
EL006664 (100.00%)	Low Impact Exploration and Exploration - Wamba Wamba, Barapa Barapa, & Wadi Wadi Peoples	Area Agreement - mining and exploration	VI2004/010
EL006664 (100.00%)	NGMA Regional Mining/ Exploration ILUA	Area Agreement - exploration and mining	VI2011/001
EL006666 (100.00%)	Low Impact Exploration and Exploration - Wamba Wamba, Barapa Barapa, & Wadi Wadi Peoples	Area Agreement - mining and exploration	VI2004/010
EL006666 (100.00%)	NGMA Regional Mining/ Exploration ILUA	Area Agreement - exploration and mining	VI2011/001
EL006769 (71.51%)	Low Impact Exploration and Exploration - Wamba Wamba, Barapa	Area Agreement - mining and exploration	VI2004/010

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Tenement (% affected)	ILUA	ILUA Type and Subject Matters	NNTT File Number
	Barapa, & Wadi Wadi Peoples		
EL006769 (30.89%)	NGMA Regional Mining/ Exploration ILUA	Area Agreement - exploration and mining	VI2011/001
EL007803 (100.00%)	Low Impact Exploration and Exploration - Wamba Wamba, Barapa Barapa, & Wadi Wadi Peoples	Area Agreement - mining and exploration	VI2004/010
EL007803 (100.00%)	NGMA Regional Mining/ Exploration ILUA	Area Agreement - exploration and mining	VI2011/001
EL007807 (100.00%)	Low Impact Exploration and Exploration - Wamba Wamba, Barapa Barapa, & Wadi Wadi Peoples	Area Agreement - mining and exploration	VI2004/010
EL007807 (100.00%)	NGMA Regional Mining/ Exploration ILUA	Area Agreement - exploration and mining	VI2011/001
EL007810 (71.99%)	Low Impact Exploration and Exploration - Wamba Wamba, Barapa Barapa, & Wadi Wadi Peoples	Area Agreement - mining and exploration	VI2004/010
EL007827 (62.17%)	Wotjobaluk, Jaadwa, Jadawadjali, Wergaia and Jupagulk	Area Agreement co-management and consultation protocol, extinguishment	VI2004/008
RL006806 (100%)	Low Impact Exploration and Exploration - Wamba Wamba, Barapa Barapa, & Wadi Wadi Peoples	Area Agreement - mining and exploration	VI2004/010

Tenement (% affected)	ILUA	ILUA Type and Subject Matters	NNTT File Number
RL006806 (100%)	NGMA Regional Mining/ Exploration ILUA	Area Agreement - exploration and mining	VI2011/001

5.11 Validity of Tenements

With respect to the Tenements, we have assumed that, prior to grant, the Victorian Department were satisfied that the Native Title Act had been complied with. Provided that the Tenements are validly granted in accordance with the Native Title Act, they will be valid as against native title rights and interests.

6. Aboriginal heritage

6.1 General

Aboriginal heritage is protected by both Commonwealth legislation as well as legislation in each State and Territory of Australia.

We have not conducted any legal, historical, anthropological or ethnographic research regarding the existence or likely existence of any such Aboriginal heritage sites or objects within the area of the Tenements.

6.2 Commonwealth Legislation

The Commonwealth Heritage Act is aimed at the preservation and protection of any Aboriginal objects that may be located on the Tenements.

Under the Commonwealth Heritage Act, the Minister for Aboriginal Affairs may make interim or permanent declarations of preservation in relation to significant Aboriginal areas or objects, which have the potential to halt exploration activities. Compensation is payable by the Minister for Aboriginal Affairs to a person who is, or is likely to be, affected by a permanent declaration of preservation.

It is an offence to contravene a declaration made under the Commonwealth Heritage Act.

6.3 Victorian Legislation

The legislation governing Aboriginal heritage in Victoria is the *Aboriginal Heritage Act 2006* (Vic) (**Victoria Heritage Act**).

The Victoria Heritage Act makes it an offence to do an act which harms Aboriginal places, Aboriginal objects and Aboriginal ancestral remains and provides protection and management for Aboriginal cultural heritage.

Certain activities, such as large developments and other high impact activities in culturally sensitive landscapes may require that a Cultural Heritage Management

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Plan be prepared (which in some areas, is required by law) or that the person or company undertaking the activity obtains a cultural heritage permit.

A Cultural Heritage Management Plan is usually in the form of a written report prepared by a Heritage Advisor. It includes results of an assessment of the potential impact of the proposed activity on Aboriginal cultural heritage and outlines measures to be taken before, during and after an activity in order to manage and protect Aboriginal cultural heritage in the activity area.

A cultural heritage permit is required for the following activities:

(a) disturbing or excavating land to uncover or discover Aboriginal cultural heritage;

(b) rehabilitating land at an Aboriginal place;

(c) carrying out research on an Aboriginal place; and

(d) carrying out activities that will, or are likely to, harm Aboriginal cultural heritage.

7. Land access

(a) **Private Land**

The Tenements overlap with several parcels of private land.

Prior to commencing any work on an exploration licence which affects private land, under the Victorian Mining Act, the holder will need to either:

(i) obtain the written consent of the owners and occupiers of the affected land; or

(ii) enter into and register compensation agreements with the owners and occupiers; or

(iii) have been advised in writing of the determination made in respect to the compensation payable, where the amount of compensation payable to the owner and occupier has been determined under the Victorian Mining Act.

The Victorian Mining Act provides that where a mining tenement overlaps private land, the tenement holder and the owner or occupier of the land may enter into a written agreement as to the amount or kind of compensation payable to the owner or occupier for any loss or damage that has been or will be sustained as a direct, natural and reasonable consequence of the approval of the work plan or the doing of work under the mining tenement.

The tenement holder must lodge any agreement entered in with the mining registrar for registration.

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As at the date of this Report, the GeoVic register maintained by the Victorian Department shows the Company has registered 15 compensation agreements with affected landholders (**Compensation Access Agreements**) with respect to tenements EL006419, EL006666 and EL006769.

(b) **Restricted Crown land**

The Tenement grant documents indicate that certain Tenements overlap Crown land which is restricted pursuant to Schedule 3 of the Victorian Mining Act, although, formal searches to determine the extent and percentage of these overlaps have not been conducted.

Land that is classified as 'restricted' Crown land includes land reserved under the *Crown Land (Reserves) Act 1978* (Vic), for purposes such as

(i) regional, coastal or marine parks;

(ii) wildlife reserves, wildlife areas, flora or flora and fauna reserves;

(iii) general reserves (including bushland reserves, scenic reserves, cave reserves, geological reserves, coastal reserves or natural features); and

(iv) national heritage parks.

The Consent of the Crown land Minister is required prior to undertaking any work on the area of a mining tenement which overlaps restricted Crown land

Conditions related to monitoring and auditing, may also be set as part of the consent requirements for work on restricted Crown land. These conditions often require pre-work surveys for cultural sites and artefacts, pre and post-work flora and fauna surveys, and in some cases, during-work observations for significant flora and fauna.

(c) **Box-Ironbark Region**

The Tenements have all been granted with certain conditions in respect to activities proposed in the Box-Ironbark region. Formal searches to determine the extent and percentage of these overlaps have not been conducted.

The Box-Ironbark region contains Victoria's most significant gold mineralisation and contains areas that are of high nature conservation and cultural heritage value. As the region has been extensively cleared and the remaining ecosystem contains a large number of threatened species, certain conditions are imposed on mining tenements granted in this region to afford protection to native vegetation, faunal habitats and Aboriginal cultural heritage.

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(d) **Commonwealth Land**

The Commonwealth Government holds parcels of land in all Australian states and territories. The rights associated with Commonwealth land could adversely impact the use of a tenement. However, the Title Searches indicate that there are no parcels of land marked as Commonwealth land within the Tenements.

8. Material Contracts

For a summary of the Demerger Asset Sale Agreement please refer to section 7.1 of the Prospectus.

For a summary of the Land Access Agreements in relation to the Tenements, please refer to sections 7.3 of the Prospectus.

9. Definitions

In this Report:

ASX means the ASX Limited (ABN 98 008 624 691).

Commonwealth Heritage Act means the *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* (Cth).

Company means VHM Limited ACN 601 004 102.

Compensation Access Agreements has the meaning given in section 7(a).

Expedited Procedure means the procedure described in section 5.6.

Federal Court means the Federal Court of Australia.

ILUA has the meaning given in section 5.4(c).

LUAA means Land Use Activity Agreement.

LUAA Conditions means the conditions contained in Schedule 4 of the LUAAs.

Material Contracts means any agreements summarised in section 8.

Minister means the responsible Minister of the Crown for the time being administering the Victorian Mining Act.

Native Title Act means the *Native Title Act 1993* (Cth).

Negotiation Parties has the meaning given in section 5.5(a).

NNTR has the meaning given in section 5.2(a).

NNTT means the Australian National Native Title Tribunal.

NNTT Searches has the meaning given in section 2(a).

Prospectus has the meaning given in the opening section of this Report.

Report means this document, including any schedule or annexure to this Report.

RNTBC means a registered native title body corporate as defined in the Native Title Act.

RNTC has the meaning given in section 5.2(a).

Searches means the searches referred to in section 2.

Tenements means the tenements set out in Schedule 1 and Tenement means any one of them.

TOS Act means the Traditional Owner Settlement Act 2010 (Vic).

Victoria Heritage Act means the *Aboriginal Heritage Act 2006* (Vic).

Victorian Department means the Earth Resources branch of the Victorian Department of Jobs, Precincts and Regions.

Victorian Mining Act means the *Mineral Resources (Sustainable Development) Act 1990* (Vic).

10. Qualifications and assumptions

10.1 General

This is a high level report covering material legal issues affecting the Tenements and does not purport to cover all possible issues which may affect the Tenements. This Report is given only as to, and based on, circumstances and matters of fact existing and known to us on the date of this Report.

10.2 Assumptions

This Report is based on, and subject to, the following assumptions (in addition to any assumptions expressed elsewhere in this Report):

(a) any instructions, documents and information given by the Company or any of its officers, agents or representatives are accurate and complete;

(b) that the registered holder of a Tenement has valid legal title to the Tenement;

(c) unless apparent from the Searches or the information provided to us, we have assumed compliance with the requirements necessary to maintain each Tenement in good standing;

(d) where a Tenement has been granted, the future act provisions of the Native Title Act have been complied with;

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(e) all information obtained from the Victorian Department, the NNTT and any other governmental or regulatory department referred to in this Report is accurate and complete;

(f) the Company has complied with the terms and conditions of the relevant legislation and any applicable agreements;

(g) this Report does not cover any third party interests, including encumbrances, in relation to the Tenements that are not apparent from the Searches and the information provided to us;

(h) all facts stated in documents, and responses to requests for further information, and other material on which we have relied in this Report are and continue to be correct, and no relevant matter has been misstated or withheld from us (whether deliberately or inadvertently);

(i) that there are no other documents or materials other than those which were disclosed to us and which we were instructed to review, which related to the matters examined;

(j) the Material Contracts have been duly executed and the copies of the Material Contracts made available to us are accurate, complete and conform to the originals of the Material Contracts and there have been no material breaches of the Material Contracts.

10.3 **Qualifications**

This Report is subject to the following qualifications:

(a) Native title or Aboriginal heritage sites may exist in the areas covered by the Tenements. Whilst we have conducted searches to ascertain what native title determinations and claims have been registered over these areas, we have not undertaken the considerable legal, historical, anthropological and ethnographic research which would be necessary to determine if additional claims are likely, or to form an opinion as to whether the existing or any future claims for native title will succeed and, if so, what the implications would be for the Tenements or the Company;

(b) the information in Schedule 1, Schedule 2, Schedule 3 and Schedule 4 is accurate as at the date of the relevant Searches. We do not comment on whether any changes have occurred in respect of the Tenements between the date of the Searches and the date of this Report;

(c) this Report is based only upon the information and materials which are described in this Report. There may be additional information and materials (of which we are unaware) which contradict or qualify that which we have described;

(d) a recording in the mining tenement register of a person's holding in a mining tenement is not absolute proof of that person's entitlement to the tenement. The mining tenement system is not based on a system of indefeasibility by registration;

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(e) a registered mining tenement holder's entitlement to a tenement can be defective if there were procedural defects in the original grant of a tenement or if there are any subsequent dealings with a tenement. We are unable to confirm whether there are any such defects in the Tenements disclosed in this Report without a detailed review of the register for each Tenement and other matters;

(f) this Report relates only to the laws of Victoria and the Commonwealth of Australia in force at the date of this Report and we do not express or imply any opinion as to the laws at any other time or of any other jurisdiction;

(g) in the performance of our enquiries for this Report, we have acted on the Company's written and oral instructions as to the manner and extent of enquiries to be conducted;

(h) this Report is strictly limited to the matters it deals with and does not extend by implication or otherwise to any other matter;

(i) we have relied upon information provided by third parties, including various departments, in response to searches made, or caused to be made, and enquiries by us and have relied upon that information, including the results of Searches, being accurate, current and complete as at the date of its receipt by us;

(j) references in the Schedules are taken from details shown on the Searches we have obtained from the relevant departments referred to in section 2 above. We have not undertaken independent surveys of the land the subject of the Tenements to verify the accuracy of the Tenement areas or the areas of the relevant native title claims;

(k) where compliance with the terms and conditions of the Tenements and all applicable provisions of the mining legislation and regulations in Victoria and all other relevant legislation and regulations, or a possible claim in relation to the Tenements is not disclosed on the face of the searches referred to above, we express no opinion as to such compliance or claim;

(l) where Ministerial consent is required, we express no opinion as to whether such consent will be granted, or the consequences of consent being refused, although we are not aware of any matters which would cause consent to be refused;

(m) we have not conduced searches of the Database of Contaminated Sites maintained by the Western Department of Water and Environmental Regulation or the Contaminated Land Record maintained by the Victorian Environment Protection Authority;

(n) native title may exist in the areas covered by the Tenements. Whilst we have conducted searches to ascertain what native title claims, if any, have been lodged in the Federal Court in relation to the areas covered by the Tenements, we have not conducted any research on the likely existence or non-existence of native title rights and interests in respect of those areas.

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Further the Native Title Act contains no sunset provisions and it is possible that additional native title claims could be made in the future; and

(o) Aboriginal heritage sites, sacred sites or objects (as defined in the Victoria Heritage Act or under the Commonwealth Heritage Act) may exist in the areas covered by the Tenements regardless of whether or not that site has been entered on the relevant Register or is the subject of a declaration under the Commonwealth Heritage Act. We have not conducted any legal, historical, anthropological or ethnographic research regarding the existence or likely existence of any such Aboriginal heritage sites, sacred sites or objects within the area of the Tenements.

10.4 **Disclaimer**

HWL Ebsworth Lawyers has prepared this Report for the purposes of the Prospectus only, and for the benefit of the Company and the directors of the Company in connection with the issue of the Prospectus and is not to be disclosed to any other person or used for any other purpose or quoted or referred to in any public document or filed with any government body or other person without our prior consent.

Yours sincerely



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Schedule 1 Tenement Summary

Tenement	Registered Holder	Applied Area	Current Area	Application Date	Grant date	Expiry date	Annual Reporting Date	Expenditure commitment for licence term as per licence instrument	Material dealings
EL006419	VHM Limited	443 GRS	443 GRS	30 May 2017	18 May 2018	17 May 2023	30 June	First year: $48,225 Second year: $68,160 Third year: $68,160 Fourth year: $91,787 (Current Year) Fifth year: $147,900	Nil
EL006664	VHM Limited	1,106 GRS	618 GRS	25 January 2018	18 June 2018	17 June 2023	30 June	First year: $97,950 Second year: $133,560 Third year: $90,600 Fourth year: $126,240 (Current Year) Fifth year: $200,400	Nil

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Tenement	Registered Holder	Applied Area	Current Area	Application Date	Grant date	Expiry date	Annual Reporting Date	Expenditure commitment for licence term as per licence instrument	Material dealings
EL006666	VHM Limited	561 GRS	447 GRS	25 January 2018	18 June 2018	17 June 2023	30 June	First year: $57,075 Second year: $82,320 Third year: $78,900 Fourth year: $89,500 (Current Year) Fifth year: $149,100	Nil
EL006769	VHM Limited	1,767 GRS	1,041 GRS	4 June 2018	27 August 2018	26 August 2023	30 June	First year: $147,525 Second year: $155,707 Third year: $155,810 Fourth year: $202,380 (Current Year) Fifth year: $327,300	Nil

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Tenement	Registered Holder	Applied Area	Current Area	Application Date	Grant date	Expiry date	Annual Reporting Date	Expenditure commitment for licence term as per licence instrument	Material dealings
EL007807	VHM Ltd	421 GRS	421 GRS	12 November 2021	15 August 2022	14 August 2027	30 June	First year: $78,150 Second year: $99,200 Third year: $99,200 Fourth year: $99,200 Fifth year: 141,300	Nil
EL007827	VHM Ltd	335 GRS	335 GRS	16 February 2022	15 August 2022	14 August 2027	30 June	First year: $65,250 Second year: $82,000 Third year: $82,000 Fourth year: $82,000 Fifth year: 115,500	Nil

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Tenement	Registered Holder	Applied Area	Current Area	Application Date	Grant date	Expiry date	Annual Reporting Date	Expenditure commitment for licence term as per licence instrument	Material dealings
EL007810	VHM Ltd	424 GRS	424 GRS	12 November 2021	15 September 2022	14 September 2027	30 June	First year: 78,600 Second year: 99,800 Third year: 99,800 Fourth year: 99,800 Fifth year: 142,200	Nil
EL007803	VHM Ltd	609 GRS	609 GRS	6 January 2022	11 October 2022	10 October 2027	30 June	First year: 106,350 Second year: 136,800 Third year: 136,800 Fourth year: 136,800 Fifth year: 197,700	Nil

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Tenement	Registered Holder	Applied Area	Current Area	Application Date	Grant date	Expiry date	Annual Reporting Date	Expenditure commitment for licence term as per licence instrument	Material dealings
RL006806	VHM Limited	31,141 HA	31,141 HA	17 June 2019	10 January 2020	9 January 2027	30 June	First year: $2,430,000 Second year: $2,130,000 Third year: $1,520,000 (Current Year) Fourth year: $1,520,000 Fifth year: $465,000 Sixth year: $465,000 Seventh year: $465,000	Nil

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Schedule 2 EL006419, EL006664, EL006666 and EL006769 Licence Conditions

EL006419, EL006664, EL006666 and EL006769 are each subject to the following conditions set out in the exploration licence itself and the Schedule of Conditions attached to the exploration licence.

Conditions in Licence

1. Only low impact exploration work may be undertaken in the licensed area until the licensee has an approved work plan.

2. Activities on the licensed area must be limited to those specified in the Act and the licence.

3. The licensee must expend in connection with exploration of the land the minimum amounts as set out in Schedule 1, unless this requirement is varied, or application of this requirement is suspended for a specified period, in accordance with the Act. The required expenditure may be varied on the second and fourth anniversaries (as applicable) of the licence grant if the area of the licence is decreased in accordance with section 38A of the Act.

4. The licensee must report immediately in writing to the Department Head the discovery of minerals potentially capable of production in commercial quantities.

5. The reporting date is 30 June annually.

6. The licensee must pay rent from the date of registration of the licence.

7. The licensee must comply with any conditions specified in a land use activity agreement under section 31(3) of the Traditional Owner Settlement Act 2010 that were accepted by the applicant for the licence.

Conditions in Schedule of Conditions

1. (**General Conditions**) The program of work submitted with the licence application must be completed, in accordance with any schedule included in that program of work. The program of work, including scheduling, may only be varied with the agreement of the Minister. This does not apply if

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the variation only involves work which is additional to that described in the program of work. During the term of the licence, the Minister may request updated details of the proposed program of work to be provided by a specified date. The licensee must comply with any such request.

2. (**Administrative Arrangements**) The licensee must ensure that the relevant Earth Resources Regulation (ERR) Regional Manager is at all times aware of the appropriate contact person for activities conducted under an exploration licence. Where work is approved by an area work plan, the licensee must submit a written work schedule for any program of work. The work schedule must be submitted to the relevant ERR Regional Manager and the Crown land Manager (for work on Crown land) at least twenty-one (21) days prior to the commencement of work. The licensee must comply with any request by the relevant ERR Regional Manager to defer, cease or modify the proposed works. Prior to commencing ground intrusive work or work involving the removal or damaging of native vegetation under the definition of low impact exploration the licensee must submit a rehabilitation bond to the satisfaction of the Minister. Where ground intrusive work or work involving the removal or damaging of native vegetation is carried out under the definition of low impact exploration the licensee must notify the Crown land manager (for works on Crown land) and the relevant ERR Regional Manager at least 7 days prior to the commencement of work. Notification must include:

   (a) Start date, and

   (b) Proposed ground intrusive work, and/or

   (c) Proposed removal or damaging of native vegetation, and

   (d) Location.

3. (**Community engagement**) The licensee must identify their communities for the proposed operation and consult with the identified communities.

4. (**Native Vegetation and Fauna**) The licensee must take all reasonable measures to avoid, minimise and/or offset the removal and disturbance of native vegetation and faunal habitats.

5. (**Box-ironbark region**) Where activities are proposed to be undertaken in a Box-Ironbark region, the licensee must undertake a preliminary assessment of vegetation and faunal habitats of areas of interest in that Box-Ironbark region to identify and mark areas or sites to be avoided in the exploration project.

6. (**Public liability insurance**) Prior to commencing any work, the licensee must have public liability insurance that covers all work authorised under the licence and ensure the insurance is valid at all times while work occurs under the licence.

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7. (**Public safety zones**) The licensee must take all reasonable measures to minimise their impact on the operation of a Public Safety Zone.

8. (**Soil management**) The licensee must take all reasonable measures to minimise impacts on the physical and biological health of soil.

9. (**Plant diseases, weeds and pest animals**) The licensee must ensure that all soil that is imported into the exploration licence area is free of disease and noxious weeds. The licensee must take all reasonable measures to minimise the spread of weeds, pest animals and plant diseases whilst undertaking exploration activities. The licensee must adhere to any biosecurity protocols that have been adopted on private or Crown land.

10. (**Water quality and aquatic habitat**) The licensee must design, install and maintain erosion and sediment controls to prevent erosion of areas of disturbed land and sedimentation of waterways. Where exploration activities are being conducted in waters or on the banks of waterways with water in them, the licensee must take all reasonable measures to minimise sedimentation of the waterway. The licensee must take all reasonable measures to prevent contaminated runoff from entering receiving waterways.

11. (**Fuels, lubricants and hazardous materials**) The licensee must take all reasonable measures to prevent contamination of the environment by the release of fuels, lubricants and hazardous materials. The licensee must ensure that spills of hazardous materials are cleaned up as quickly as practicable. Such spillage must not be cleaned up by hosing, sweeping or otherwise releasing such contaminant into waterways. Within the Box-Ironbark region, the licensee must install trays or similar apparatus beneath machinery to protect the soil and vegetation from oil/fuel leaks or spills.

12. (**Aboriginal cultural heritage**) The licensee must ensure Aboriginal cultural heritage is not harmed as a result of works undertaken within the licence area. Within areas where ground intrusive works or the removal of native vegetation are proposed on Crown land in the Box-Ironbark region, an assessment of Aboriginal cultural heritage values must be undertaken.

13. (**Heritage (Non-Indigenous)**) The licensee must ensure non-indigenous cultural heritage is not harmed as a result of works undertaken within the licence area. Within areas where ground intrusive works or the removal of native vegetation are proposed on Crown land in the Box-Ironbark region, an assessment of non-indigenous cultural heritage values must be undertaken.

14. (**Fire precaution**) The licensee must take all reasonable measures to prevent the ignition and spread of fire. Prior to undertaking any exploration activities, the licensee must develop and implement a fire response and readiness plan.

15. (**Waste and redundant equipment**) The licensee must ensure all waste generated on site is disposed of at an appropriate waste management facility.

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16. (**Camping**) The licensee may only establish campsites with the permission of the Crown land Manager or private land owner/occupier. The licensee must select, establish and manage campsites to minimise risks to the environment and/or the health and safety of people.

17. (**Noise**) Within the licensed area, the licensee must ensure that noise generated by exploration activities does not exceed limits set by the Environment Protection Authority, Victoria and the local council. The licensee must take all reasonable measures to avoid causing nuisance noise.

18. (**Air emissions, dust and lighting**) The licensee must take all reasonable measures to prevent adverse impacts as a result of the release of dust, odour and/or emission of light.

19. (**Livestock, domestic animals and crop**) The licensee must take all reasonable measures to prevent adverse impacts to livestock (including bees) and crops.

20. (**Geophysical and geological surveys and gridlines**) In designing and constructing geophysical and geochemical surveys, the licensee must take all reasonable measures to prevent adverse impacts to the environment and/or the health and safety of people. Prior to designing and constructing geophysical and geochemical surveys, the licensee must consult with the Crown land Manager and/or private land owner/occupier about the position of gridlines and geophysical lines.

21. (**Explosives**) When using explosives or high electrical currents, all reasonable measures must be taken to prevent harm or disturbance to people, domestic animals, livestock and wildlife.

22. (**Tracks and roads**) In designing and constructing tracks and roads, the licensee must take all reasonable measures to prevent adverse impact to the environment. Prior to designing and constructing tracks and roads, the licensee must consult with the public land manager, responsible road authority and/or private landowner/occupier. Prior to using a closed road the licensee must gain consent from the responsible road authority. Prior to conducting ground intrusive exploration works on a road the licensee must gain consent form the responsible road authority.

23. (**Drill sites, costeans, trenches and bulk sampling excavations**) The licensee must take all reasonable measures to prevent adverse impacts of establishing costeans, drill holes, bulk sample excavations and trenches to the environment and/or the health and safety of people.

24. (**Drillhole operations, construction and decommissioning**) The licensee must ensure that all reasonable measures are taken to minimise the impacts of drilling operations and that the operations are conducted in a manner that ensures protection of the environment, human health and amenity. The licensee must prevent contamination of aquifers as a result of drilling operations. The licensee must ensure that where a drillhole is to be left open overnight or longer, a temporary cap is fitted. The licensee must ensure that accurate records of decommissioning procedures are

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kept to provide future reference, and to demonstrate to the Department of Jobs, Precincts and Regions (formerly Department of Economic Development, Jobs, Transport and Resources) that the drillholes have been satisfactorily plugged and abandoned.

25. (**Underground exploration**) The licensee must ensure that during underground exploration and development works, access shafts, adits and declines are made safe. The licensee must ensure that on completion of underground exploration and development works, access shafts, adits or declines no longer required are permanently closed off and the site made safe for the public and wildlife.

26. (**Rehabilitation**) The licensee must ensure that disturbed areas are rehabilitated as soon as possible after the completion of exploration works. The licensee must ensure that indigenous species used in rehabilitation are sourced from the local area, of local provenance and appropriate to the site's Ecological Vegetation Class (EVC).

27. (**Reporting, monitoring and auditing**) The licensee must implement a program for monitoring environmental impacts and rehabilitation. The licensee must submit an Annual Report that includes:

    (a) A report about the environmental management of exploration activities including the result of any environmental audits conducted.

    (b) Quantity, area and type of native vegetation removed.

    (c) Details of current progressive rehabilitation activities.

    (d) A rehabilitation report detailing completed rehabilitation activities over that year.

    The licensee must notify the Department of Jobs, Precincts and Regions (formerly Department of Economic Development, Jobs, Transport and Resources) as soon as practical of any environmental incident which results in:

    (a) An emission not authorised by licence, work authority or work plan.

    (b) Any deviations from conditions or environmental standards outlined for the site.

    Within seven (7) days of an environmental incident, the licensee must prepare and forward a report to the Department of Jobs, Precincts and Regions (formerly Department of Economic Development, Jobs, Transport and Resources) detailing the following information:

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(a) The cause, time and duration of the incident.

(b) The native vegetation or threatened flora/fauna affected by the incident (if applicable).

(c) The type, volume and concentration of every pollutant discharged as a result of the incident.

(d) Action taken by the licensee in relation to the incident.

(e) Action taken to prevent any recurrence of the incident.

28. (**Documentation and records**) The licensee must record activities undertaken and results arising from the environmental and rehabilitation monitoring program, any auditing undertaken and any complaints received. The licensee must ensure that documentation generated through the environmental and rehabilitation monitoring program, auditing and any complaints received is appropriately stored and accessible to relevant personnel and is available upon request by an ERR Inspector.

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Schedule 3 EL007803, EL007807, EL007810 and EL007827 Licence Conditions

EL007803, EL007807, EL007810 and EL007827 are each subject to the following conditions set out in the exploration licence itself and the Schedule of Conditions attached to the exploration licence.

Conditions in Licence

1. The licensee must expend in connection with exploration of the land the minimum amounts as set out in Schedule 1, unless this requirement is varied, or application of this requirement is suspended for a specified period, in accordance with the Act. The required expenditure may be varied on the second and fourth anniversaries (as applicable) of the licence grant if the area of the licence is decreased in accordance with section 38A of the Act.

2. The reporting date is 30 June annually.

Conditions in Schedule of Conditions

1. (**General Conditions**) The program of work submitted with the licence application must be completed, in accordance with any schedule included in that program of work. The program of work, including scheduling, may only be varied with the agreement of the Minister. This does not apply if the variation only involves work which is additional to that described in the program of work. During the term of the licence, the Minister may request updated details of the proposed program of work to be provided by a specified date. The licensee must comply with any such request.

2. (**Administrative Arrangements**) The licensee must ensure that the relevant Earth Resources Regulation (ERR) Regional Manager is at all times aware of the appropriate contact person for activities conducted under an exploration licence. Prior to commencing ground intrusive work or work involving the removal or damaging of native vegetation under the definition of low impact exploration the licensee must submit a rehabilitation bond to the satisfaction of the Minister. Where ground intrusive work or work involving the removal or damaging of native vegetation is carried out under the definition of low impact exploration the licensee must notify the Crown land manager (for works on Crown land) and the ERR Chief Inspector at least 7 days prior to the commencement of work. Notification must include:

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(a) Start date,

(b) Proposed ground intrusive work, and/or

(c) Proposed removal or damaging of native vegetation, and

(d) Location.

3. (**Community Engagement**) The licensee must identify their communities for the proposed operation and consult with the identified communities.

4. (**Native Vegetation and Fauna**) The licensee must take all reasonable measures to avoid, minimise and/or offset the removal and disturbance of native vegetation and faunal habitats.

5. (**Box-ironbark Region**) Where activities are proposed to be undertaken in a Box-Ironbark region, the licensee must undertake a preliminary assessment of vegetation and faunal habitats of areas of interest in that Box-Ironbark region to identify and mark areas or sites to be avoided in the exploration project.

6. (**Public Liability Insurance**) Prior to commencing any work, the licensee must have public liability insurance that covers all work authorised under the licence and ensure the insurance is valid at all times while work occurs under the licence.

7. (**Public Safety Zones**) The licensee must take all reasonable measures to minimise their impact on the operation of a Public Safety Zone.

8. (**Soil Management**) The licensee must take all reasonable measures to minimise impacts on the physical and biological health of soil.

9. (**Plant Diseases, Weeds and Pest Animals**) The licensee must ensure that all soil that is imported into the exploration licence area is free of disease and noxious weeds. The licensee must take all reasonable measures to minimise the spread of weeds, pest animals and plant diseases whilst undertaking exploration activities. The licensee must adhere to any biosecurity protocols that have been adopted on private or Crown land.

10. (**Water Quality and Aquatic Habitat**) The licensee must design, install and maintain erosion and sediment controls to prevent erosion of areas of disturbed land and sedimentation of waterways. Where exploration activities are being conducted in waters or on the banks of

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waterways with water in them, the licensee must take all reasonable measures to minimise sedimentation of the waterway. The licensee must take all reasonable measures to prevent contaminated runoff from entering receiving waterways.

11. (**Fuels, Lubricants and Hazardous Materials**) The licensee must take all reasonable measures to prevent contamination of the environment by the release of fuels, lubricants and hazardous materials. The licensee must ensure that spills of hazardous materials are cleaned up as quickly as practicable. Such spillage must not be cleaned up by hosing, sweeping or otherwise releasing such contaminant into waterways. Within the Box-Ironbark region, the licensee must install trays or similar apparatus beneath machinery to protect the soil and vegetation from oil/fuel leaks or spills.

12. (**Aboriginal Cultural Heritage**) The licensee must ensure Aboriginal cultural heritage is not harmed as a result of works undertaken within the licence area. Within areas where ground intrusive works or the removal of native vegetation are proposed on Crown land in the Box-Ironbark region, an assessment of Aboriginal cultural heritage values must be undertaken.

13. (**Heritage (Non-Indigenous)**) The licensee must ensure non-indigenous cultural heritage is not harmed as a result of works undertaken within the licence area. Within areas where ground intrusive works or the removal of native vegetation are proposed on Crown land in the Box-Ironbark region, an assessment of non-indigenous cultural heritage values must be undertaken.

14. (**Fire Precaution**) The licensee must take all reasonable measures to prevent the ignition and spread of fire. Prior to undertaking any exploration activities, the licensee must develop and implement a fire response and readiness plan.

15. (**Waste and Redundant Equipment**) The licensee must ensure all waste generated on site is disposed of at an appropriate waste management facility.

16. (**Camping**) The licensee may only establish campsites with the permission of the Crown land Manager or private land owner/occupier. The licensee must select, establish and manage campsites to minimise risks to the environment and/or the health and safety of people.

17. (**Noise**) Within the licensed area, the licensee must ensure that noise generated by exploration activities does not exceed limits set by the Environment Protection Authority, Victoria and the local council. The licensee must take all reasonable measures to avoid causing nuisance noise.

18. (**Air Emissions, Dust and Lighting**) The licensee must take all reasonable measures to prevent adverse impacts as a result of the release of dust, odour and/or emission of light.

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19. (**Livestock, Domestic Animals and Crops**) The licensee must take all reasonable measures to prevent adverse impacts to livestock[1] and crops.

20. (**Geophysical and Geochemical Surveys and Gridlines**) In designing and constructing geophysical and geochemical surveys, the licensee must take all reasonable measures to prevent adverse impacts to the environment and/or the health and safety of people. Prior to designing and constructing geophysical and geochemical surveys, the licensee must consult with the Crown land Manager and/or private land owner/occupier about the position of gridlines and geophysical lines.

21. (**Explosives**) When using explosives or high electrical currents, all reasonable measures must be taken to prevent harm or disturbance to people, domestic animals, livestock and wildlife.

22. (**Tracks and Roads**) In designing and constructing tracks and roads, the licensee must take all reasonable measures to prevent adverse impact to the environment. Prior to designing and constructing tracks and roads, the licensee must consult with the public land manager, responsible road authority and/or private landowner/occupier. Prior to using a closed road the licensee must gain consent from the responsible road authority. Prior to conducting ground intrusive exploration works on a road the licensee must gain consent form the responsible road authority.

23. (**Drill Sites, Costeans, Trenches and Bulk Sampling Excavations**) The licensee must take all reasonable measures to prevent adverse impacts of establishing costeans, drill holes, bulk sample excavations and trenches to the environment and/or the health and safety of people.

24. (**Drillhole Operations, Construction and Decommissioning**) The licensee must ensure that all reasonable measures are taken to minimise the impacts of drilling operations and that the operations are conducted in a manner that ensures protection of the environment, human health and amenity. The licensee must prevent contamination of aquifers as a result of drilling operations. The licensee must ensure that where a drillhole is to be left open overnight or longer, a temporary cap is fitted. The licensee must ensure that accurate records of decommissioning procedures are kept to provide future reference, and to demonstrate to the Department of Jobs, Precincts and Regions that the drillholes have been satisfactorily plugged and abandoned.

[1] For the purpose of these conditions, bees are defined as livestock.

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25. (**Underground Exploration**) The licensee must ensure that during underground exploration and development works, access shafts, adits and declines are made safe. The licensee must ensure that on completion of underground exploration and development works, access shafts, adits or declines no longer required are permanently closed off and the site made safe for the public and wildlife.

26. (**Rehabilitation**) The licensee must ensure that disturbed areas are rehabilitated as soon as possible after the completion of exploration works. The licensee must ensure that indigenous species used in rehabilitation are sourced from the local area, of local provenance and appropriate to the site's Ecological Vegetation Class (EVC).

27. (**Reporting, Monitoring and Auditing**) The licensee must implement a program for monitoring environmental impacts and rehabilitation. The licensee must submit an Annual Report that includes:

    (a) A report about the environmental management of exploration activities including the results of any environmental audits conducted.

    (b) Quantity, area and type of native vegetation removed.

    (c) Details of current progressive rehabilitation activities.

    (d) A rehabilitation report detailing completed rehabilitation activities over that year.

    The licensee must notify the Department of Jobs, Precincts and Regions as soon as practical of any environmental incident which results in:

    (a) An emission not authorised by licence, work authority or work plan.

    (b) Any deviations from conditions or environmental standards outlined for the site.

    Within seven (7) days of an environmental incident, the licensee must prepare and forward a report to the Department of Jobs, Precincts and Regions detailing the following information:

    (a) The cause, time and duration of the incident.

    (b) The native vegetation or threatened flora/fauna affected by the incident (if applicable).

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(c) The type, volume and concentration of every pollutant discharged as a result of the incident.

(d) Action taken by the licensee in relation to the incident.

(e) Action taken to prevent any recurrence of the incident.

28. **(Documentation and Records**) The licensee must record activities undertaken and results arising from the environmental and rehabilitation monitoring program, any auditing undertaken and any complaints received. The licensee must ensure that documentation generated through the environmental and rehabilitation monitoring program, auditing and any complaints received is appropriately stored and accessible to relevant personnel and is available upon request by an ERR Inspector.

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Schedule 4 Retention Licence Conditions

Tenement RL006806 is subject to the following conditions.

Conditions in Licence

This licence is subject to the following conditions and to the Schedule of Conditions attached:

1. The licensee must expend in connection with retention licence activities of the land the minimum amount as set out in Schedule 1 (removed where necessary, depending on term of years from date of registration) unless this requirement is varied or application of this requirement is suspended for a specified period, in accordance with the Act.

2. The reporting date is 30 June annually.

3. Only low impact exploration work may be undertaken in the licensed area until the licensee has an approved work plan.

4. Activities in the licensed area must be limited to those specified in the Act and the licence.

5. On discovering an additional mineral resource deposit that may be economically viable to mine in the future, the licensee must report the occurrence immediately in writing to the Department Head, giving the estimated size, grade and suitability for mining the deposit, and an estimate of the value of the deposit at the time of discovery.

6. The licensee must pay rent from the date of registration of the licence.

Conditions in Schedule of Conditions

Part A - Specific Conditions

2. (**Work Program**) The licence is granted subject to compliance and completion of the program of work (outlined in the schedule of project milestones), being undertaken during the term of the licence. The program of work may be varied with the agreement of the Minister. This

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does not apply if the variation only involves work which is additional to that described in the program of work. During the term of the licence, the Minister may request updated details of the proposed program of work.

Year 1 - Geological Work / Project Development (Expenditure - $2,430,000)		
Milestone	**Category**	**Work Description**
1.	Community Consultation	Establish land access agreements for drilling activities. Refine strategy for effective communication with landowners and traditional owners.
2.	Environmental Studies and approvals	Seek approval for road reserve drilling and low impact exploration activities. Continue progressing environmental studies.
3.	Indicated mineral resource	Continue air core drilling program, assaying, geological interpretation, sonic core drilling, resource estimation and block modelling.
4.	Metallurgical test work	Undertake metallurgical variability test work for Zone 1.
5.	Pre-feasibility study	Continue prefeasibility mining studies, Block model review, pit optimization and design, scheduling, and cashflow modelling. Metallurgy and process engineering studies, geotechnical investigations, marketing studies and financial modelling.
6.	Project funding	Using the finding of the prefeasibility study to raise funds to continue exploration activities and mine development studies.
7.	Permitting and approvals	Incorporate TRG feedback into EES specialist studies and re-submit EES specialist studies to TRG. Draft EES chapters for submission to TRG. Commence Cultural Heritage Management Plan (CHMP). Finalise environmental assessments. Undertake work to establish native vegetation offset strategy. Submit EES in accordance with EE Act.

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8.	Permitting and approvals	Commence approval process for wet concentrate plant, field pilot plant and bulk sample.
Year 2 - Geological Work / Project Development (Expenditure - $4,200,000)		
9.	Permitting and approvals	Continue exploration drilling approvals for paddock and road reserve. Continue EES approval process. Prepare secondary approvals - Final Work Plan, Works Approval, Licence and Planning Permit.
10.	Measured mineral resource	Continue drilling in Zone 1 and undertake air core drilling, assaying, geological interpretation, sonic core drilling, resource estimation and block modelling.
11.	Wet concentrate plant field pilot and bulk sample trial	Construct and commence field pilot plant test work.
12.	Feasibility study	Commence and complete feasibility mining studies for Zone 1.
13.	Project Funding	Use the findings of the Feasibility Study to raise funds to continue exploration activities and mine development studies.
14.	Project Infrastructure	In consultation with regulators and government authorities finalise infrastructure planning (access roads, rail loading facility etc.). Prepare preliminary plans for key infrastructure.
15.	Community consultation	Continue land access negotiations and agreements for mining and commence Land Access Agreements for Zone 3.
Year 3 - Geological Work / Project Development (Expenditure - $1,520,000)		

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16.	Permitting and Approvals	Continue exploration drilling approvals for paddock and road reserve. Implement and maintain secondary approvals - Final Work Plan, Works Approval, Licence and Planning Permit.
17.	Complete indicated mineral resource for Zone 3	Commence drilling in Zone 3 and undertake air core drilling, assaying, geological interpretation, sonic core drilling, resource estimation and block modelling.
18.	Community Consultation	Continue community consultation and land access agreement process for Zone 3 exploration drilling.
19.	Permitting and Approvals	Seek approval for road reserve drilling and low impact exploration activities in farm paddocks in Zone 3.
Year 4 - Geological Work / Project Development (Expenditure - $1,745,000)		
20.	Indicated Mineral Resource	Continue drilling in Zone 3 and undertake the following: Air core drilling program, assaying, geological interpretation, sonic core drilling, resource estimation and block modelling.
21.	Metallurgical test work	Complete ore and tailings characterization tests on Zone 3.
22.	Mining studies	Commence mining studies for Zone 3. Mining studies: block model review, mineral resources need to be measured or indicated to be able to name a reserve, pit optimization, pit design, scheduling and cashflow modelling. Metallurgy and process engineering studies.
23.	Community consultation	Continue community consultation for the project.
Year 5 - Geological Work / Project Development (Expenditure - $465,000)		

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24.	Measured Mineral Resource for Zone 3	Commence work required to prepare measured mineral resource for Zone 3. Air Core drilling program, assaying, geological interpretation, resource estimation, block modelling.
25.	Pre-Feasibility Study for Zone 3	Commence Pre-feasibility mining studies: Mining studies, metallurgy and process engineering studies. Marketing studies, financial modelling, environmental studies and project scheduling.
26.	Community consultation	Commence community consultation for Zone 2 exploration drilling.
27.	Environmental studies and approvals	Seek approval for road reserve drilling and low impact exploration activities in Zone 2.
Year 6 - Geological Work / Project Development (Expenditure - $465,000)		
28.	Indicated Mineral resource for Zone 2	Commence work required to complete indicated mineral resource. Air core drilling program, assaying, geological interpretation, sonic core drilling, resource estimation and block modelling.
29.	Metallurgical test work	Commence metallurgical test work, ore characterization tests on Zone 2.
30.	Pre-feasibility mining studies	Commence feasibility mining studies for Zone 2. Mining studies: Block Model review, mineral resources need to be measured or indicated to be able to name a reserve. Pit optimization, pit design and scheduling. Cashflow modelling, Metallurgy and process engineering studies. Marketing studies and financial modelling.
31.	Community Consultation	Commence community consultation for developing a mine in Zone 2 and Zone 3.
Year 7 - Geological Work / Project Development (Expenditure - $465,000)		

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32.	Permitting and approvals	Commence the regulatory approval process to develop a mine in Zone 2 and Zone 3. Commence any additional environmental studies that may be required.
33.	Measured Mineral Resource for Zone 2	Commence work required to prepare measured mineral resource for Zone 2. Air core drilling program, assaying, geological interpretation, resource estimation and block modelling.
34.	Feasibility study for Zone 2	Commence feasibility mining studies. Mining studies: block model review, mineral resources need to be measured or indicated to be able to name a reserve, pit optimization, pit design, scheduling and cashflow modelling. Metallurgy and process engineering studies. Marketing studies, financial modelling and project scheduling.

Part B General Conditions

2. (**General**) the licence holder must not undertake, cause or allow the undertaking of any exploration for coal seam gas.

3. (**Administrative Arrangements**) the licensee must ensure that the relevant Earth Resources Regulation (ERR) regional manager is at all times aware of the appropriate contact person for activities conducted under the licence. Where work is approved by an area work plan, the licensee must submit a written work schedule for any program of work. The work schedule must be submitted to the relevant ERR regional manager and the Crown land manager (for work on Crown land) at least twenty-one (21) days prior to the commencement of work. The licensee must comply with any request by the relevant ERR Regional Manager to defer, cease or modify the proposed works. Prior to commencing ground intrusive work or work involving the removal or damaging of native vegetation under the definition of low impact exploration the licensee must submit a rehabilitation bond to the satisfaction of the Minister. Where ground intrusive work or work involving the removal or damaging of native vegetation is carried out under the definition of low impact exploration the licensee must notify the Crown land manager (for works on Crown land) and the relevant ERR regional manager at least 7 days prior to the commencement of work. Notification must include:

   (a) Start date, and

   (b) Proposed ground intrusive work, and/or

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(c) Proposed removal or damaging of native vegetation, and

(d) Location.

4. (**Community engagement**) The licensee must identify their communities for the proposed operation and consult with the identified communities.

5. (**Native Vegetation and Fauna**) The licensee must take all reasonable measures to avoid, minimise and/or offset the removal and disturbance of native vegetation and faunal habitats.

6. (**Box-ironbark region**) Where activities are proposed to be undertaken in a Box-Ironbark region, the licensee must undertake a preliminary assessment of vegetation and faunal habitats of areas of interest in that Box-Ironbark region to identify and mark areas or sites to be avoided in the exploration project.

7. (**Public liability insurance**) Prior to commencing any work, the licensee must have public liability insurance that covers all work authorised under the licence and ensure the insurance is valid at all times while work occurs under the licence.

8. (**Public safety zones**) The licensee must take all reasonable measures to minimise their impact on the operation of a Public Safety Zone.

9. (**Soil management**) The licensee must take all reasonable measures to minimise impacts on the physical and biological health of soil.

10. (**Plant diseases, weeds and pest animals**) The licensee must ensure that all soil that is imported into the exploration licence area is free of disease and noxious weeds. The licensee must take all reasonable measures to minimise the spread of weeds, pest animals and plant diseases whilst undertaking exploration activities. The licensee must adhere to any biosecurity protocols that have been adopted on private or Crown land.

11. (**Water quality and aquatic habitat**) The licensee must design, install and maintain erosion and sediment controls to prevent erosion of areas of disturbed land and sedimentation of waterways. Where exploration activities are being conducted in waters or on the banks of waterways with water in them, the licensee must take all reasonable measures to minimise sedimentation of the waterway. The licensee must take all reasonable measures to prevent contaminated runoff from entering receiving waterways.

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12. (**Fuels, lubricants and hazardous materials**) The licensee must take all reasonable measures to prevent contamination of the environment by the release of fuels, lubricants and hazardous materials. The licensee must ensure that spills of hazardous materials are cleaned up as quickly as practicable. Such spillage must not be cleaned up by hosing, sweeping or otherwise releasing such contaminant into waterways. Within the Box- Ironbark region, the licensee must install trays or similar apparatus beneath machinery to protect the soil and vegetation from oil/fuel leaks or spills.

13. (**Aboriginal cultural heritage**) The licensee must ensure Aboriginal cultural heritage is not harmed as a result of works undertaken within the licence area. Within areas where ground intrusive works or the removal of native vegetation are proposed on Crown land in the Box-Ironbark region, an assessment of Aboriginal cultural heritage values must be undertaken.

14. (**Heritage (Non-Indigenous)**) The licensee must ensure non-indigenous cultural heritage is not harmed as a result of works undertaken within the licence area. Within areas where ground intrusive works or the removal of native vegetation are proposed on Crown land in the Box-Ironbark region, an assessment of non-indigenous cultural heritage values must be undertaken.

15. (**Fire precaution**) The licensee must take all reasonable measures to prevent the ignition and spread of fire. Prior to undertaking any exploration activities, the licensee must develop and implement a fire response and readiness plan.

16. (**Waste and redundant equipment**) The licensee must ensure all waste generated on site is disposed of at an appropriate waste management facility.

17. (**Camping**) The licensee may only establish campsites with the permission of the Crown land Manager or private land owner/occupier. The licensee must select, establish and manage campsites to minimise risks to the environment and/or the health and safety of people.

18. (**Noise**) Within the licensed area, the licensee must ensure that noise generated by exploration activities does not exceed limits set by the Environment Protection Authority, Victoria and the local council. The licensee must take all reasonable measures to avoid causing nuisance noise.

19. (**Air emissions, dust and lighting**) The licensee must take all reasonable measures to prevent adverse impacts as a result of the release of dust, odour and/or emission of light.

20. (**Livestock, domestic animals and crop**) The licensee must take all reasonable measures to prevent adverse impacts to livestock (including bees) and crops.

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21. (**Geophysical and geological surveys and gridlines**) In designing and constructing geophysical and geochemical surveys, the licensee must take all reasonable measures to prevent adverse impacts to the environment and/or the health and safety of people. Prior to designing and constructing geophysical and geochemical surveys, the licensee must consult with the Crown land Manager and/or private land owner/occupier about the position of gridlines and geophysical lines.

22. (**Explosives**) When using explosives or high electrical currents, all reasonable measures must be taken to prevent harm or disturbance to people, domestic animals, livestock and wildlife.

23. (**Tracks and roads**) In designing and constructing tracks and roads, the licensee must take all reasonable measures to prevent adverse impact to the environment. Prior to designing and constructing tracks and roads, the licensee must consult with the public land manager, responsible road authority and/or private landowner/occupier. Prior to using a closed road the licensee must gain consent from the responsible road authority. Prior to conducting ground intrusive exploration works on a road the licensee must gain consent form the responsible road authority.

24. (**Drill sites, costeans, trenches and bulk sampling excavations**) The licensee must take all reasonable measures to prevent adverse impacts of establishing costeans, drill holes, bulk sample excavations and trenches to the environment and/or the health and safety of people.

25. (**Drillhole operations, construction and decommissioning**) The licensee must ensure that all reasonable measures are taken to minimise the impacts of drilling operations and that the operations are conducted in a manner that ensures protection of the environment, human health and amenity. The licensee must prevent contamination of aquifers as a result of drilling operations. The licensee must ensure that where a drillhole is to be left open overnight or longer, a temporary cap is fitted. The licensee must ensure that accurate records of decommissioning procedures are kept to provide future reference, and to demonstrate to the Department of Jobs, Precincts and Regions that the drillholes have been satisfactorily plugged and abandoned.

26. (**Underground exploration**) The licensee must ensure that during underground exploration and development works, access shafts, adits and declines are made safe. The licensee must ensure that on completion of underground exploration and development works, access shafts, adits or declines no longer required are permanently closed off and the site made safe for the public and wildlife.

27. (**Rehabilitation**) The licensee must ensure that disturbed areas are rehabilitated as soon as possible after the completion of exploration works. The licensee must ensure that indigenous species used in rehabilitation are sourced from the local area, of local provenance and appropriate to the site's Ecological Vegetation Class (EVC).

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28. (**Environmental Reporting, monitoring and auditing**) The licensee must implement a program for monitoring environmental impacts and rehabilitation. The licensee must submit an Annual Report that includes:

(a) A report about the environmental management of exploration activities including the result of any environmental audits conducted.

(b) Quantity, area and type of native vegetation removed.

(c) Details of current progressive rehabilitation activities.

(d) A rehabilitation report detailing completed rehabilitation activities over that year.

The licensee must notify the Department of Jobs, Precincts and Regions as soon as practical of any environmental incident which results in:

(e) An emission not authorised by licence, work authority or work plan.

(f) Any deviations from conditions or environmental standards outlined for the site.

Within seven (7) days of an environmental incident, the licensee must prepare and forward a report to the Department of Jobs, Precincts and Regions detailing the following information:

(g) The cause, time and duration of the incident.

(h) The native vegetation or threatened flora/fauna affected by the incident (if applicable).

(i) The type, volume and concentration of every pollutant discharged as a result of the incident.

(j) Action taken by the licensee in relation to the incident.

(k) Action taken to prevent any recurrence of the incident.

29. (**Documentation and records**) The licensee must record activities undertaken and results arising from the environmental and rehabilitation monitoring program, any auditing undertaken and any complaints received. The licensee must ensure that documentation generated through

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the environmental and rehabilitation monitoring program, auditing and any complaints received is appropriately stored and accessible to relevant personnel and is available upon request by an ERR Inspector.

Annexure D

Independent Limited Assurance Report

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F +61 (02) 8226 4501
rsm.com.au

21 November 2022

The Board of Directors
VHM Limited
Suite 8, 110 Hay Street
Subiaco, WA, 6008

Dear Directors,

INVESTIGATING ACCOUNTANT'S REPORT

Independent Limited Assurance Report on the VHM Limited statutory and pro forma historical financial information

We have been engaged by VHM Limited ("VHM" or "the Company") to report on certain statutory and pro forma historical financial information for inclusion in a Prospectus dated on or about 21 November 2022.

The Prospectus relates to the Company's proposed listing of ordinary shares on the Australian Securities Exchange ("ASX") via an Initial Public Offering, and the offer of 14,814,815 Shares to be issued at a price of $1.35 per Share to raise $20,000,000 (before costs) (the Broker Offer, the Institutional Offer, the Priority Offer, and the Public Offer (together the 'IPO Offer'). The Company will also accept oversubscriptions of an additional $10,000,000 (before costs).

Expressions and terms defined in the Prospectus have the same meaning in this report, except as otherwise indicated.

Scope

Statutory Historical Financial Information

You have requested RSM Corporate Australia Pty Ltd ("RSM") to review the Statutory Historical Financial Information of VHM Limited ("VHM") included in Section 5 of the Prospectus, comprising:

- VHM's audited statutory historical statement of profit and loss and other comprehensive income for the financial years ended 30 June 2020 ("FY20"), 30 June 2021 ("FY21") and 30 June 2022 ("FY22");
- VHM's audited statutory historical statement of cash flows for FY20, FY21 and FY22; and
- VHM's audited historical statement of financial position as at 30 June 2022,

collectively "the Statutory Historical Financial Information".

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AUDIT | TAX | CONSULTING

RSM Corporate Australia Pty Ltd is beneficially owned by the Directors of RSM Australia Pty Ltd. RSM Australia Pty Ltd is a member of the RSM network and trades as RSM. RSM is the trading name used by the members of the RSM network. Each member of the RSM network is an independent accounting and consulting firm which practices. The RSM network is not itself a separate legal entity in any jurisdiction.

RSM Corporate Australia Pty Ltd ABN 82 050 508 024 Australian Financial Services Licence No. 255847

Liability limited by a scheme approved under Professional Standards Legislation (other than for the acts or omissions of Australian Financial Services Licensees)

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The Statutory Historical Financial Information has been prepared in accordance with the stated basis of preparation, being the recognition and measurement principles contained in the Australian equivalents to the International Financial Reporting Standards ("AIFRS") and VHM's adopted accounting policies.

The Statutory Historical Financial Information has been extracted from the audited (FY20, FY21 and FY22) general purpose financial statements of VHM which were audited by HBL Mann Judd.

The FY20, FY21 and FY22 financial statements were audited by HBL Mann Judd, who issued a modified audit opinion which included a material uncertainty related to going concern.

The Statutory Historical Financial Information is presented in the Prospectus in an abbreviated form, insofar as it does not include all the presentation and disclosures required by Australian Accounting Standards applicable to general purpose financial reports prepared in accordance with the *Corporations Act 2001*.

Pro Forma Historical Financial Information

You have requested RSM to review the Pro Forma Historical Financial Information of VHM included in Section 5 of the Prospectus and comprising:

- the unaudited pro forma historical statement of financial position of VHM as at 30 June 2022; and
- the subsequent events and pro forma adjustments as described in Section 5 of the Prospectus.

collectively referred to as "the Pro Forma Historical Financial Information".

The Pro Forma Historical Financial Information has been derived from the Statutory Historical Financial Information of VHM, adjusted for the transactions / adjustments summarised in Section 5 of the Prospectus. The stated basis of preparation is the recognition and measurement requirements of Australian Accounting Standards Board ("AASB") and IFRS and VHM's adopted accounting policies applied to the Statutory Historical Financial Information and the events or transactions to which the subsequent events and pro forma adjustments relate, as described in Section 5.5 of the Prospectus, as if those events or transactions had occurred as at the date of the Statutory Historical Financial Information.

Due to its nature, the Pro Forma Historical Financial Information does not represent VHM's actual or prospective financial position.

The Pro Forma Historical Financial Information is presented in the Prospectus in an abbreviated form, insofar as it does not include all the presentation and disclosures required by Australian Accounting Standards applicable to general purpose financial reports prepared in accordance with the *Corporations Act 2001*.

Directors' responsibility

The directors of VHM are responsible for:

- the preparation and presentation of the Statutory Historical Financial Information; and
- the preparation and presentation of the Pro Forma Historical Financial Information, including the selection and determination of the subsequent events and pro forma adjustments made to the Statutory Historical Financial Information and included in the Pro Forma Historical Financial Information.

This includes responsibility for such internal controls as the directors determine are necessary to enable the preparation of the Statutory and Pro Forma Historical Financial Information that are free from material misstatement, whether due to fraud or error.

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Our responsibility

Our responsibility is to express a limited assurance conclusion on the Statutory and Pro Forma Historical Financial Information based on the procedures performed and the evidence we have obtained. We have conducted our engagement in accordance with the Standard on Assurance Engagement ASAE 3450: "*Assurance Engagements involving Corporate Fundraisings and/or Prospective Financial Information*".

We made such enquiries, primarily of persons responsible for financial and accounting matters, and performed such procedures as we, in our professional judgment, considered reasonable in the circumstances including:

- a consistency check of the application of the stated basis of preparation to the Statutory and Pro Forma Historical Financial Information;
- a review of the VHM work papers, accounting records and other supporting documents;
- enquiry of directors, management personnel and advisors; and
- the performance of analytical procedures applied to the Statutory and Pro Forma Historical Financial Information.

A review is substantially less in scope than an audit conducted in accordance with Australian Auditing Standards and consequently does not enable us to obtain reasonable assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Our engagement did not involve updating or re-issuing any previously issued audit report on any financial information used as a source of the financial information.

Conclusions

Statutory Historical Financial Information

Based on our review, which is not an audit, nothing has come to our attention that causes us to believe that the Historical Financial Information of VHM, as described in Section 5 of the Prospectus, and comprising:

- VHM's audited statutory historical statement of profit and loss and other comprehensive income for FY20, FY21 and FY22;
- VHM's audited statutory historical statement of cash flows for FY20, FY21 and FY22; and
- VHM's audited historical statement of financial position as at 30 June 2022,

is not presented fairly, in all material respects, in accordance with the stated basis of preparation, as described in Section 5 of the Prospectus.

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Pro Forma Historical Financial Information

Based on our review, which is not an audit, nothing has come to our attention that causes us to believe that the Pro Forma Historical Financial Information of VHM, as set out in Section 5 of the Prospectus, and comprising:

- VHM's unaudited pro forma statement of financial position as at 30 June 2022; and
- the subsequent events and pro forma adjustments as described in Section 5 of the Prospectus,

is not presented fairly in all material aspects, in accordance with the stated basis of preparation, as described in Section 5 of the Prospectus.

Restriction on use

Without modifying our conclusions, we draw attention to Section 5, which describes the purpose of the financial information, being for inclusion in the Prospectus. As a result, the financial information may not be suitable for use for another purpose.

Declaration of interest

RSM Corporate Australia Pty Ltd does not have any interest in the outcome of this transaction other than the preparation of this report for which normal professional fees will be received.

Yours faithfully,

T Goodman

RSM CORPORATE AUSTRALIA PTY LTD
Tim Goodman
Director

Annexure E

Key Accounting Policies

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Historical cost convention

This financial information has been prepared on an accrual's basis under the historical cost convention. Cost is based on the fair values of the consideration given in exchange for assets. All amounts are presented in Australian dollars, unless otherwise noted.

Significant accounting judgements, estimates and assumptions

The application of accounting policies requires the use of judgements, estimates and assumptions about carrying values of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates. The estimates and underlying assumptions are reviewed on an ongoing basis.

Revisions are recognised in the period in which the estimate is revised if it affects only that period or in the period of the revision and future periods if the revision affects both current and future periods. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the financial statements are:

Exploration and evaluation expenditure

The Board of Directors determines when an area of interest should be abandoned. When a decision is made that an area of interest is not commercially viable, all costs that have been capitalised in respect of that area of interest are written off. The Directors' decision is made after considering the likelihood of finding commercially viable reserves.

Share-based payment expense

The Company measures the cost of equity-settled transactions with employees and consultants by reference to the fair value of the equity instruments at the date at which they are granted. The fair value of these equity instruments is determined using a Black-Scholes model, using various assumptions detailed in the notes to the financial statements.

Exploration, evaluation, and development expenditure

Exploration and evaluation expenditures in relation to each separate area of interest are recognised as an exploration and evaluation asset in the year in which they are incurred where the following conditions are satisfied:

(i) the rights to tenure of the area of interest are current; and

(ii) at least one of the following conditions is also met:

  (A) the exploration and evaluation expenditures are expected to be recouped through successful development and exploration of the area of interest, or alternatively, by its sale; or

  (B) exploration and evaluation activities in the area of interest have not at the reporting date reached a stage which permits a reasonable assessment of the existence or otherwise of economically recoverable reserves, and active and significant operations in, or in relation to, the area of interest are continuing.

Exploration and evaluation assets are initially measured at cost and include acquisition of rights to explore, studies, exploratory drilling, trenching, and sampling and associated activities and an allocation of depreciation and amortisation of assets used in exploration and evaluation activities. General and administrative costs are only included in the measurement of exploration and evaluation costs where they are related directly to operational activities in a particular area of interest.

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Exploration and evaluation assets are assessed for impairment when facts and circumstances suggest that the carrying amount of an exploration and evaluation asset may exceed its recoverable amount. The recoverable amount of the exploration and evaluation asset (for the cash generating unit(s) to which it has been allocated being no larger than the relevant area of interest) is estimated to determine the extent of the impairment loss (if any). Where an impairment loss subsequently reverses, the carrying amount of the asset is increased to the revised estimate of its recoverable amount, but only to the extent that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset in previous years.

Revenue and other income

Interest income is recognised on a proportional basis considering the interest rates applicable to the financial assets.

The Company was eligible for the JobKeeper payment and cash flow boost from the Australian Taxation Office, the revenue is recognised to the extent that the Group will receive the payments to which it will be entitled for the period.

Cash and cash equivalents

Cash reserves in the statement of financial position comprise cash at bank and in hand.

Goods and services tax (GST)

Revenues, expenses, and assets are recognised net of the amount of associated GST, unless the GST incurred is not recoverable from the taxation authority. In this case it is recognised as part of the cost of acquisition of the net asset or part of the expense.

Receivables and payables are stated inclusive of the amount of GST receivable or payable. The net amount of GST recoverable from, or payable to, the taxation authority is included with other receivables or payables in the Statement of Financial Position.

Cash flows are presented on a gross basis. The GST component of cash flows arising from investing or financing activities which are recoverable from, or payable to, the taxation authority, are presented as operating cash flows.

Trade and other payables

Trade and other payables are carried at cost and represent liabilities for goods and services provided to the Group prior to the end of the financial year that are unpaid and arise when the Group becomes obliged to make future payments in respect of the purchase of these goods and services.

Borrowings

Recognition and measurement

Borrowings are initially recognised at fair value, net of transaction costs incurred. Borrowings are subsequently stated at amortised cost using the effective interest rate method. Any difference between the proceeds and the redemption value is recognised in the Consolidated Statement of Comprehensive Income over the period of borrowings using the effective interest rate.

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after the end of the reporting period.

Trade and other receivables

Trade receivables, which generally have 30 to 90 day terms, are recognised, and carried at original invoice amount less an allowance for any uncollectible amounts. An allowance for expected credit losses is made when collection of the full amount is no longer probable. Bad debts are written off when identified.

Contributed equity

Ordinary Shares and options are classified as contributed equity. Incremental costs directly attributable to the issue of new Shares or options are shown in equity as a deduction, net of tax, from the proceeds.

Share based payment expense

The Group measures the cost of equity settled transactions with employees and consultants by reference to the fair value of the equity instruments at the date at which they are granted. The fair value of options is determined using a Black-Scholes model.

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Research and Development Tax Concession

To the extent that research and development costs are eligible activities under the "Research and development tax incentive" programme, a refundable tax offset is available for companies with annual turnover of less than $20 million. The Group recognises refundable tax offsets received in the financial year directly against capitalised exploration expenditure, in the statement of financial position, resulting from the monetisation of available tax losses that otherwise would have been carried forward. These amounts are recognised at their fair value only to the extent that there is reasonable assurance that the incentive will be received.

Property, plant, and equipment

Items of property, plant and equipment are carried at cost less accumulated depreciation and impairment losses (see accounting policy "Impairment").

Land

Land is initially recognised at cost. After initial recognition at cost, the Group will continue to carry the land, which is acquired primarily for its mineral resources, at its cost less any accumulated impairment losses.

Plant and equipment

Plant and equipment, including fixture and fittings acquired are initially recorded at their cost of acquisition at the date of acquisition, being the fair value of the consideration provided plus incidental costs directly attributable to the acquisition.

Motor Vehicles

Motor Vehicles are recorded at cost of acquisition at the date of acquisition, being the fair value of the consideration provided plus incidental costs directly attributable to the acquisition.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. All other repairs and maintenance are charged to the statement of comprehensive income during the financial period in which they are incurred.

Depreciation

All assets have limited useful lives and are depreciated using the straight line method over their estimated useful lives commencing from the time the asset is held ready for use.

Depreciation and amortisation rates and methods are reviewed annually for appropriateness. When changes are made, adjustments are reflected prospectively in current and future periods only. The estimated useful lives used in the calculation of depreciation for plant and equipment for the current and corresponding period is three years.

Gains and losses on disposals are determined by comparing proceeds with the carrying amount. These gains and losses are included in the statement of comprehensive income. When revalued assets are sold, amounts included in the revaluation reserve relating to that asset are transferred to accumulated losses.

Impairment

The carrying amount of the Group's assets, other than deferred tax assets, are reviewed at each reporting date to determine whether there is any indication of impairment. Where such an indication exists, a formal assessment of recoverable amount is then made and where this is in excess of carrying amount, the asset is written down to its recoverable amount.

Recoverable amount is the greater of fair value less costs to sell and value in use. Value in use is the present value of the future cash flows expected to be derived from the asset or cash generating unit. In estimating value in use, a pre-tax discount rate is used which reflects current market assessments of the time value of money and the risks specific to the asset. Any resulting impairment loss is recognised immediately in the statement of comprehensive income.

Impairment losses are reversed when there is an indication that the impairment loss may no longer exist and there has been a change in the estimate used to determine the recoverable amount. An impairment loss is reversed only to the extent that the carrying amount of the asset(s) does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

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Employee benefits

Wages, salaries, and annual leave

Liabilities for wages and salaries, including non-monetary benefits and annual leave expected to be settled wholly within 12 months of the reporting date are recognised in provisions in respect of employees' services up to the reporting date. They are measured at the (undiscounted) amounts expected to be paid when the liabilities are settled.

Contributions are made by the Group to superannuation funds as stipulated by statutory requirements and are charged as expenses when incurred.

Financial instruments

Financial instruments, incorporating financial assets and liabilities, are recognised when the entity becomes a party to the contractual provisions of the instrument. Trade data accounting is adopted for financial assets that are delivered within timeframes established by marketplace convention.

Financial instruments are initially recognised at fair value plus transaction costs where the instrument is not classified at fair value through profit and loss. Transaction costs related to instruments classified as at fair value through profit and loss are expensed to profit and loss immediately. Financial instruments are classified and measured as set out below.

Derecognition

Financial assets are derecognised where the contractual rights to receipt of cash flows expires, or the asset is transferred to another party whereby the entity no longer has any significant continuing involvement in the risks and benefits associated with the asset. Financial liabilities are derecognised where the related obligations are either discharged, cancelled, or expire. The difference between the carrying value of the financial liability extinguished or transferred to another party and their fair value of consideration paid, including the transfer of non-cash assets or liabilities assumed, is recognised in profit or loss.

Classification and subsequent measurement

Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market and are subsequently measured at amortised cost using the effective interest rate method.

Financial liabilities

Non-derivative financial liabilities (excluding financial guarantees) are subsequently measured at amortised cost using the effective interest rate method.

Impairment of financial assets

The consolidated entity assesses at the end of each reporting period whether there is any objective evidence that a financial asset or group of financial assets is impaired. Objective evidence includes significant financial difficulty of the issuer or obligor; a breach of contract such as default or delinquency in payments; the lender granting to a borrower concessions due to economic or legal reasons that the lender would not otherwise do; it becomes probable that the borrower will enter bankruptcy or other financial reorganisation; the disappearance of an active market for the financial asset; or observable data indicating that there is a measurable decrease in estimated future cash flows.

The amount of the impairment allowance for financial assets carried at cost is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the current market rate of return for similar financial assets.

Fair value

When an asset or liability, financial or non-financial, is measured at fair value for recognition or disclosure purposes, the fair value is based on the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date; and assumes that the transaction will take place either: in the principle market; or in the absence of a principal market, in the most advantageous market.

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Fair value is measured using the assumptions that market participants would use when pricing the asset or liability, assuming they act in their economic best interest. For non-financial assets, the fair value measurement is based on its highest and best use. Valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, are used, maximising the use of relevant observable inputs, and minimising the use of unobservable inputs.

Assets and liabilities measured at fair value are classified, into three levels, using a fair value hierarchy that reflects the significance of the inputs used in making the measurements. Classifications are reviewed each reporting date and transfers between levels are determined based on a reassessment of the lowest level input that is significant to the fair value measurement.

For recurring and non-recurring fair value measurements, external valuers may be used when internal expertise is either not available or when the valuation is deemed to be significant. External valuers are selected based on market knowledge and reputation. Where there is a significant change in fair value of an asset or liability from one period to another, an analysis is undertaken, which includes a verification of the major inputs applied in the latest valuation and a comparison, where applicable, with external sources of data.

Annexure F

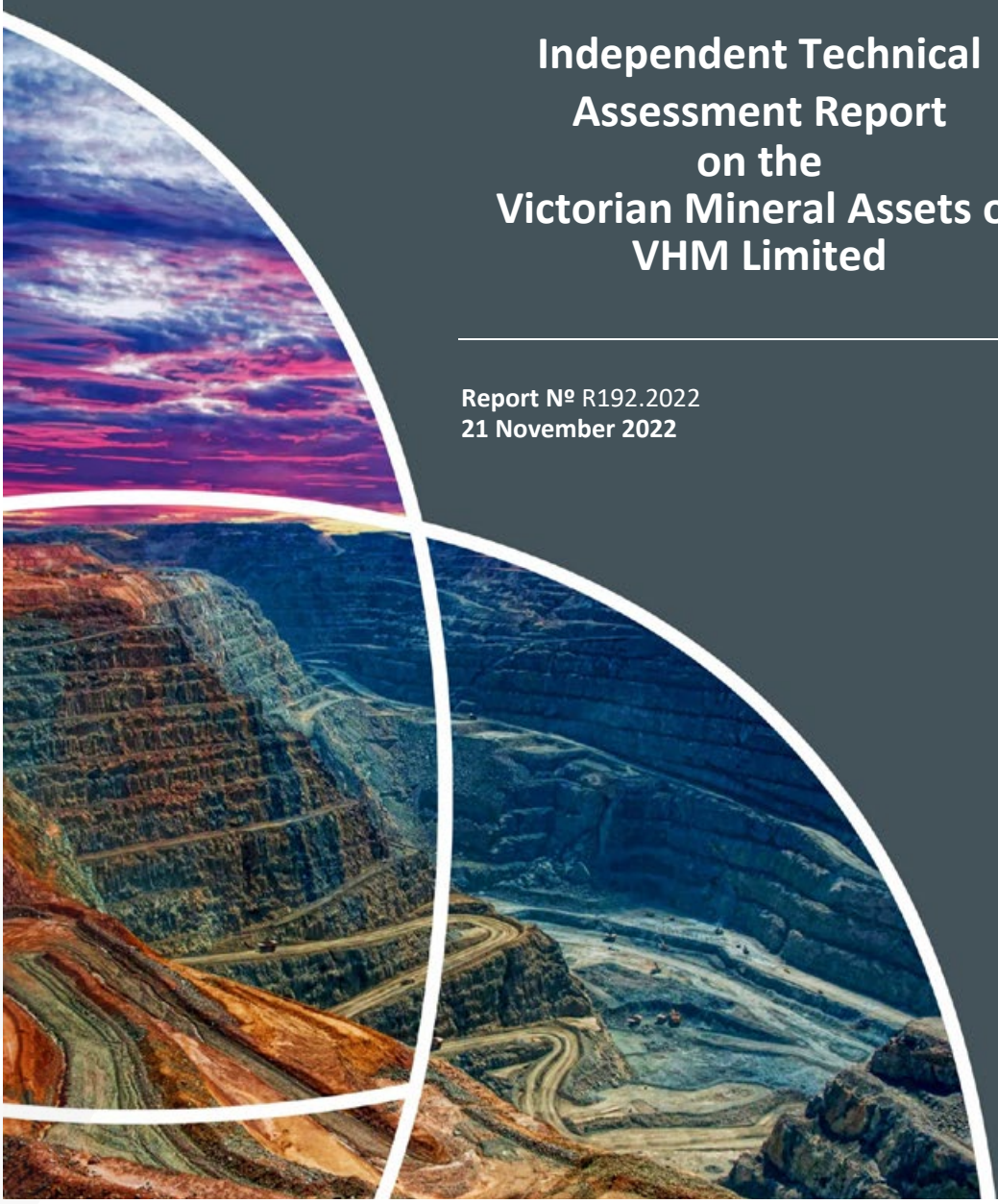
Independent Technical Assessment Report

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CSA Global
Mining Industry Consultants
an ERM Group company

Independent Technical Assessment Report on the Victorian Mineral Assets of VHM Limited

Report № R192.2022
21 November 2022



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Report prepared for

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Project Name/Job Code	VHMPRJ01_Variation 2
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Executive Summary

CSA Global Pty Ltd, an ERM Group company, have been engaged to provide an independent technical report for inclusion in a prospectus to be issued by VHM Limited (**VHML**) on or around November 2022 to raise funds to enable it to carry out further work to get the company to the point of making a Final Investment Decision (FID) to proceed with the Goschen Project. This Report has been prepared for inclusion in that prospectus and for provision to prospective investors.

VHML is an Australian-owned and operated, unlisted public company that was established in 2014. The Company holds 2,860 km^2 of mostly contiguous tenements located within the Loddon Mallee region in the Murray Basin in north-eastern Victoria. Within the tenements are the Goschen, Nowie, Cygnus and Cannie heavy mineral sand (**HMS**) deposits. The Company's flagship project is the development of the Goschen Mineral Sands and Rare Earth Deposit (**Goschen** or **the Project**). The development of Goschen forms the main focus of this Independent Technical Assessment Report (**ITAR**).

The Company completed a definitive Feasibility Study (**DFS**) in March 2022, having completed a Prefeasibility Study (**PFS**) in February 2019. The DFS has defined an execution strategy for the development of Goschen to deliver a fully integrated mining and treatment operation that achieves a nameplate feed rate to the process plant of 5 Mtpa to produce and market two products – a valuable heavy minerals concentrate (**VHMC**) containing zircon and titania, and a rare earths mineral concentrate (**REMC**) containing monazite and xenotime. A staged development is planned, with the first phase consisting of a mining unit plant (**MUP**), feed preparation plant (**FPP**), wet concentrator plant (**WCP**), and rare earth minerals flotation circuit (**REMFC**).

A subsequent phase is planned to build a hydrometallurgical circuit utilising the REMC to produce a mixed rare earths carbonate. A further phase will see the construction of a mineral separation plant (**MSP**) to produce upgraded zircon and titanium minerals products.

Testwork and pilot activities in respect of these subsequent phases will be undertaken in parallel with front-end engineering and design (**FEED**) and detailed design activities for the first phase of the Project. The forecast timing for **FID** for the first phase of development is H2 2023.

Work has been completed by a number of consultants: IHC Robbins (**IHCR**), TZ Minerals International (**TZMI**), Mineral Technologies Pty Ltd (**MTPL**), Auralia Mining Consultants (**Auralia**), Met-Chem Consulting Pty Ltd, Pitt & Sherry Pty Ltd (**P&S**), Right Solutions Australia (**RSA**), and AECOM Infrastructure (**AECOM**). Other consultants include Adamas Intelligence, Coffey International, various legal and economic consultancy firms, and others whose work CSA Global Pty Ltd (**CSA Global**) has not specifically reviewed but is aware that the Company has relied on the services and information provided by these consultants. Additional to the work of these consultants, internal work by the Company was also reviewed for the ITAR.

VHML also intends to undertake exploration-oriented work to convert Exploration Licences (**ELs**) that cover the Cannie and Nowie deposits to Retention Licences (**RLs**)**.** For the preparation of this ITAR, CSA Global was tasked with completing a technical review of the work completed by the Company and its consultants to the extent necessary to validate information to support the Competent Persons' Reports on findings of quality, suitable for consideration in a due diligence process of discovery.

Mineral Resources

In May 2017, total heavy mineral (**THM**) content was estimated for both sheet-style and strandline mineralisation at the Area 1, Area 2 West, Area 3 and Area 4 zones at Goschen. Over time, portions of the 2017 Goschen North Mineral Resource estimate (**MRE**) were replaced by updated estimates of the Mineral Resource inventory which now comprises Mineral Resources in Area 1 (East and West), Area 2 West, Area 3 Extended, and Area 4. Updated MREs were prepared in 2020 and 2021 for Area 3 Extended and for Area 1 East and West deposits. Goschen Areas 1 and Area 3 are the initial focus of development, and hence are the subject of the Company's initial Ore Reserve Estimate (**ORE**).

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The Goschen MREs and OREs are summarised in Table 4, Table 5, Table 6, and Table 7. The consolidated MREs for all areas are summarised in Table 4 and Table 5.

Due to the extended exploration and project development path for the Project, the MREs have been through several iterations, often based on different sampling and sample preparation methods. The earlier estimates were based on samples screened between a top size of 2 mm and a minimum size of 38 microns (**µm**). Metallurgical testwork subsequently indicated that it was possible to recover a finer fraction, and the most recent Mineral Resource model is based on samples screened to -1 mm, +20 µm. A significant majority of the Area 1 and Area 3 Extended models are now based on assaying of the -1 mm, +20 µm sand fraction. The remaining estimates in Area 4 are being progressively upgraded to the same basis.

In CSA Global's professional opinion:

- The mixed -2 mm, +38 µm and -1 mm, +20 µm datasets have been sufficiently investigated and have been appropriately considered in the confidence levels applied to the MREs and reported in accordance with the JORC Code.
- Within Area 1 East, the average THM grade of the -1 mm, +20 µm samples from within the metallurgical domain is significantly higher than the average THM grades of the -1 mm, +20 µm samples for the remaining portions of Area 1 East, Domain 2, and Domain 3. The weighted average grade within the metallurgical domain is 4.01% THM, a doubling of the grade for the remaining portion of Area 1 East which was estimated from the samples to be 2.01% THM. Grade uplift resulting from the metallurgical testwork increases the grade from 4.01% THM to 5.72% THM. This difference has been noted by the Company, and alignment of the sampling and assaying processes with the metallurgical processes is now in place.
- The estimation by the ordinary kriging methods applied in the current MREs in Area 1 and Area 3 Extended has updated the previous use of inverse distance weighting methods for THM, slimes, and oversize. A nearest neighbour interpolator was used for the mineral assemblages and this is appropriate given that mineral assemblage data were derived from composited samples, each being representative of a specific spatial area.
- The current approach by the Company to estimate bulk density has been tested over time and provides an acceptable global estimate of bulk density, and a reasonable basis for all tonnages stated in the MREs. In-situ density measurements will be collected as the Project development progresses to continue refining estimates of tonnage as mining operations commence.
- The appropriate level of laboratory testwork has been completed by MTPL to support the ORE and subsequent updates.
- The Company's focus is on the continuing development of Goschen, whilst maintaining ongoing resource development studies at the Nowie, Cygnus and Cannie projects. CSA Global has reviewed the proposed exploration and is satisfied that it is appropriate.

CSA Global has found the global MREs to be appropriate to the current levels of study and project development. The JORC category classifications have been appropriately applied, and the Company has a reasonable basis for all declared MREs.

Potential Additions to Mineral Resources

Mineralised sands underlie significant areas of the remainder of the Company's tenements. No Mineral Resources are reported outside Area 1 East and West, Area 2 West, Area 3 Extended, and Area 4. Until recently, VHML had reported an Inferred MRE in the Goschen North area, which was based on historical data. VHML has elected to downgrade the confidence it is able to place in this historical data, which in the view of the Competent Person(s), is of insufficient quality to support MREs reportable in accordance with the JORC Code.

The Company intends to consider the Goschen North mineralisation as a focus for exploration as the project is developed, regarding the previous estimate as a sound basis for defining an exploration target in

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accordance with Clause 17 of the JORC Code. While the Company values the previous Goschen North MRE completed in 2017, it is now referred to as the Goschen Exploration Target 2022.

VHML does not consider the mineralisation which occurs outside the four Resource Areas to be material in the short term, relative to the Company's overall assets. These areas are at a relatively early stage of exploration and the Company plans to replace the existing historical drilling data with newly acquired data meeting the requirements of the JORC Code for reporting of Mineral Resources. These areas remain relevant targets for future exploration and development. CSA Global concurs with this opinion.

Ongoing development of VHML's assets will include infill drilling for confidence upgrade of Inferred Mineral Resources to Indicated or higher confidence in Area 1, Area 3 Extended, and Area 4.

Resource extensional drilling, as well as further exploration and definition of Mineral Resources that can be reported in accordance with the JORC Code is planned in the Nowie, Cygnus and Cannie exploration projects.

CSA Global has reviewed the proposed exploration and considers the overall strategy to be justified and appropriate to the current levels of project maturity.

Metallurgy and Processing

The Goschen HMS deposits are characterised by fine-grained heavy mineral particles which often present challenges for separation of saleable products in conventional heavy mineral concentrators in terms of recovery, quality, and production rate.

VHML has demonstrated that conventional equipment is capable of recovering fine minerals following testwork utilising full-sized equipment in the laboratory. This has reduced scale-up risk significantly, but nevertheless will remain a key focus for the Project.

In CSA Global's opinion, a positive differentiator for the Goschen Project from a metallurgical perspective is the Company's expected recovery in the +20, -38 µm size fraction where 4–5% of the valuable heavy minerals (VHM) occur.

This relatively high recovery in the fine size fraction is a feature of the metallurgical flowsheet validation and is discussed in detail within Section 8 of this report.

Further testing of the ore is currently planned with a focus on the metallurgical interpretation of open streams with some supplementary analysis carried out to validate simulated modelling.

With respect to financial sensitivity to recovery, this has been tested by VHML and has been demonstrated to have only a modest impact on project revenues.

It is not expected that recovery targets will be challenged to a great extent, and in CSA Global's opinion a 2% reduction in overall THM recovery to that targeted remains within the probability of assumptions and methodology used in the metallurgical interpretation of the deposit.

In reference to the geometallurgical investigations to date, discussions with the Company indicate that investigations have been completed in terms of the variability of particle size distribution (**PSD**) and the VHM deportment across the mining areas. Ongoing investigations continue to refine the geometallurgical model to minimise any additional risk to production outcomes than modelled due to ore variability. CSA Global concurs with MTPL's opinion that simulation and modelling indicate that the plant has adequate latent facility to handle variability in PSD, including high slimes and high coarse fraction ores.

The flowsheet proposed by MTPL does not include any novel processing units, hence the technology risk is limited. Reduction of the technology risk to very low levels is considered achievable during the detailed design phase, and it is recommended that this objective be aggressively pursued.

CSA Global notes that additional drilling is underway by the Company to generate samples (110 tonnes) to validate the proposed concentrator flowsheet. It is understood that the flowsheet verification testwork will

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be conducted over the next few months. A key objective will be to maintain the proportion of stranded recycles to <10% by weight of the feed.

The follow-up work that the Company is presently undertaking includes:

- A FEED optimisation study, and rare earth hydrometallurgical circuit engineering study to bring this aspect up to DFS standard.
- Verification testwork, bulk sample testwork, etc., to provide sample for the hydrometallurgical circuit testwork campaign and further validate the testing carried out earlier. This will include further analysis of open stream accounting.
- Increasing the volume of REMC marketing samples as the basis for project revenue projections in the financial model.
- Identifying a reputable engineering, procurement and construction (**EPC**) contractor with a track record of processing plant delivery in Victoria for the next FEED phases of work, and into the implementation phase.

On an overall basis, the level of project development for the concentrator was assessed against the Project Development Readiness Index criteria that is based on the AACE[1] international recommended practice no. 18R-97 (AACE18R-97). For a DFS, the required level of project definition and engineering completion is typically 10–40% and CSA Global's review confirms that the work completed by the Company is within the expected range.

REMC Testwork and Marketing Assessments

The REMC may contribute significantly to project revenues. Initial characterisation testwork on composite samples from mining Areas 2, 3 and 4 was followed by detailed characterisation on samples from Area 1 (this includes what was formerly Area 2 South). The currently proposed development only mines Areas 1 and 3. The characterisation testwork was followed by testwork on a bulk composite sample from Area 3.

The Area 3 sample was processed through equipment designed to emulate a full-scale FPP, WCP and REMFC. Testwork was completed in batch mode and concluded that standard flotation techniques were suitable to recover a REMC from the HMC and defined a suitable reagent scheme which would float rare earth minerals (**REM**) with very high selectivity. A second round of flotation testwork included batch tests to confirm the stability of the results from the first program. The grade and rare earth element (**REE**) composition of the REMC from both areas were comparable, demonstrating similarity in material sourced from different project areas and the robustness of the circuit.

The main contaminants in the REMC were aluminium silicates which it was shown can be readily removed by gravity to produce a premium product. Recovery of monazite to final REMC was 95.5%, and for xenotime, 91.1% relative across both flotation and gravity upgrade circuits. The final REMC assayed 58.9% total rare earth oxide (REO). Mineralogy indicated 83% monazite and 11% xenotime (i.e. ~94% REM).

CSA Global believes that the flowsheet is straightforward, with flotation shown to be highly selective at separating REMs from the other VHM. The REMC is amenable to clean-up using gravity separation. A high degree of flexibility has been built into the plant flowsheet with three gravity separation stages included to fine tune the final quality of the REMC. There will also be a high degree of flexibility to respond to variations in feed grade and market requirements.

VHML has conducted several meetings with principal manufacturing corporations in Europe and North America, and with concentrate processors in Asia. The Company is presently in negotiations to progress non-binding offtake arrangements (subject to customary conditions) with a major Asian-based processor. Samples have also been sent to several Chinese processing facilities which have successfully extracted the REM from the HMC through their facilities.

[1] Association for the Advancement of Cost Engineering, an international organisation providing standards and best practice guidance on completing projects to meet time, cost, investment and operational goals through the application of cost engineering and cost management principles, proven methodologies, and the latest technology in support of the management process.

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Mining Study and Ore Reserves – Area 1 and Area 3

A strip-mining method is proposed, with ore and waste mined by truck and excavator. Mining dilution of 5% and a mining recovery of 98% of diluted ore were assumed for the mining schedule; these factors were also applied to the pit optimisation and cash flow model.

CSA Global considers that the selected mining method is appropriate, and that the allowances for dilution and mining recovery are reasonable. More reliable information will be available once actual production data is available.

Constraints to mining imposed by land access and cultural considerations were recognised for the OREs and mine plan, however, they were not recognised by the MREs, resulting in Mineral Resources extending into the exclusion zones. The exclusion zones are primarily defined by retention of trees etc., however, these areas could be mined in the future, provided that VHML agreed to offset the trees that were removed for mining. VHML is confident that any access issues will be resolved, in which event, the JORC Code Section 1.5.1 requirement for "reasonable prospects for economic development" is satisfied.

The proposed in-pit co-disposal of mining waste and process tailings is normal practice for much of the mineral sands mining industry, both within Australia and overseas. VHML has developed, a relatively risk-free mine waste/process tailings co-disposal system. The FEED and detailed design phases will include an overall risk assessment that will encompass the full lifecycle from design, construction, implementation, operations, closure, and closure liabilities. CSA Global endorses this approach to risk minimisation.

In estimating Ore Reserves, Auralia applied capital and operating costs provided by MTPL and Majesso Consulting Pty Ltd (**Majesso**), and those derived internally. Reference prices for commodities were provided by TZMI and Adamas Intelligence. Prices applied in the optimisation and cash flow modelling took into account transport and logistics costs, and quality adjustments. Commodity prices were noted as having the greatest impact on the potential economic performance of the Ore Reserve.

CSA Global has reviewed the parameters applied in the Ore Reserve estimation and considers them appropriate. CSA Global considers the key parameters adopted for the OREs provide a ±15% level of confidence and meet the standards required of a DFS.

Project Implementation and Delivery

The Company has an advanced delivery strategy and is taking forward an EPC model. It is in advanced negotiations with MTPL as the initial lead consultant for the EPC. MTPL in undertaking the testwork and study engineering enables development of process guarantees as part of the FEED program, with MTPL supplying engineering and procurement as part of the FEED program. VHML is also progressing early contractor involvement in the EPC process as part of the FEED program. The EPC contractor's engagement is planned for 2023.

The FEED program will deliver capital and operating estimates with an accuracy of +/-5% to 10%. The Company is progressing an outsourcing model to deliver the key elements of the project, with MTPL initially managing all activities relating to the development of the process plant and balance of plant infrastructure.

Exclusions to MTPL's services include site management, exploration, mineral resource and tenement management, all of which will be managed by RSA. Mining services will be provided by a mining contractor selected by a commercial tender process. Mining engineering services will continue with Auralia, and human resources and industrial relations will be provided through Mapien Workplace Strategists and BDO Australia.

CSA Global is satisfied that the Project Implementation and Delivery proposals are sound and will mitigate risk in most areas.

DFS Capital Costs, Operating Costs and Production Estimates

The DFS is based on a 20-year mine life with a process plant throughput rate of 5 Mtpa. Ore Reserves are, however, sufficient to support a 40-year mine life, with the likely conversion of known Mineral Resources to

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Ore Reserves, and further additions to Ore Reserves from exploration success, almost certain to extend mine life well beyond 40 years.

The DFS estimate of pre-production and implementation capital costs is A$439 million, which is summarised below. The costs are current as of fourth quarter 2021.

Table 1: Goschen DFS Stage 1 pre-production capital cost estimate

Facility area	Total (A$)
Mining unit plant (MUP)	$18,916,379
Wet concentrator plant (WCP)	$85,500,207
Rare earth minerals flotation circuit (REMFC)	$44,192,436
Non-process infrastructure (NPI)	$189,121,559
Pre-implementation - Land, approvals, drilling	$47,604,457
Pre-implementation – Study and project development	$32,396,679
Mining contractors pre-production	$21,500,000
Total CAPEX	**$439,231,717**

Capital for the FPP is included within that for the WCP. The implementation capital excludes sustaining and deferred capital of A$12.9 million and A$49.1 million respectively, which are not expected to be drawn upon until two years after the commencement of operations.

The capital cost for the MSP is estimated at A$148 million and it has not been included in the currently proposed development so as to limit the capital requirement. Although the MSP will be further advanced as a part of the FEED studies, its development will be deferred unless necessitated by external or other factors, and it will now form the basis for the second stage of development.

The DFS estimate of annual operating costs is summarised below, which indicates an average operating cost of A$21.47/t run-of-mine (**ROM**) ore processed.

Table 2: Goschen annual operating cost estimate

Area	Annual cost (A$)	%
Mining contractor	$50,799,000	42%
Tailings contractor	$3,000,000	3%
Site services	$11,489,402	10%
Site management	$6,419,000	5%
Process plant	$20,694,836	17%
Power station	$12,533,874	10%
Water pump station	$3,303,504	3%
Product transport and logistics	$12,604,360	10%
Total	**$120,843,976**	**100%**

Table 3: Goschen DFS life-of-mine production estimates

Life-of-mine totals	Value	Unit	%
Waste mined	260,217,000	tonnes	
Ore mined	98,683,000	tonnes	
Ore grade THM	3.97%		
THM in mined ore	3,915,000	Tonnes	
HM in mined ore			
Zircon	918,500	Tonnes	23.5%
Rutile	390,700	Tonnes	10.0%
Leucoxine	333,900	Tonnes	8.5%
Ilmenite	986,600	Tonnes	25.2%
Monazite	143,300	Tonnes	3.7%
Xenotime	26,600	Tonnes	0.7%
Other HM	1,115,400	Tonnes	28.5%
Total	3,915,000	Tonnes	100.0%
Final products recovered from ore feed			
P-Float concentrate containing:			
Zircon	813,800	Tonnes	88.6% recovery
Titanium minerals	1,178,000	Tonnes	68.8% recover
Rare Earth Minerals concentrate containing			
Rare earth minerals	150,000	Tonnes	88.1% recover
Total final products recovered from ore feed	**2,141,800**	Tonnes	**76.5% Overall VHM recovery**

There are a number of comments and observations throughout this Report to the effect that further work, testing and optimisation is recommended to better refine costs estimates and the certainty of other inputs into the Goschen Project. This is in line with the particular stage of development work being undertaken by VHML. It is acknowledged that VHML's stated intentions in its Prospectus are to raise funds to conduct this additional work, including FEED studies, FEED and other optimisation work, preparatory to, and to enable, a Final Investment Decision to proceed.

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Table 4: Company Mineral Resource inventory – THM assemblage (as of 30 June 2021)

Area	Mineral Resource category	Material (Mt)	In situ THM (Mt)	Bulk density (gcm^3)	THM (%)	Slimes (%)	Oversize material >2 mm (%)	THM assemblage [2]					
								Zircon (%)	Rutile (%)	Leucoxene (%)	Ilmenite (%)	Monazite (%)	Xenotime (%)
Area 1	Measured	30.7	1.8	1.76	5.72	15	5	29.9	10.8	9.0	24.7	4.3	0.8
	Indicated	62.2	1.4	1.72	2.31	18	2	26.6	11.5	9.2	25.0	4.6	0.9
	Total [1]	**92.9**	**3.2**	**1.73**	**3.44**	**17**	**3**	**27.7**	**11.2**	**9.1**	**24.9**	**4.5**	**0.8**
Area 2 West	Indicated	26.0	0.7	1.72	2.80	20	8	22.0	16.0	12.0	25.0	3.0	1.0
	Total [1]	**26.0**	**0.7**	**1.72**	**2.80**	**20**	**8**	**22.0**	**16.0**	**12.0**	**25.0**	**3.0**	**1.0**
Area 3	Indicated	204.1	6.9	1.73	3.38	19	3	19.2	9.0	8.0	25.0	3.2	0.6
	Inferred	287.7	6.7	1.72	2.32	18	3	17.2	8.7	7.5	22.7	2.9	0.5
	Total [1]	**491.8**	**13.6**	**1.73**	**2.76**	**18**	**3**	**18.2**	**8.9**	**7.7**	**23.9**	**3.0**	**0.6**
Area 4	Indicated	18.0	0.8	1.74	4.60	20	5	19.0	11.0	10.0	24.0	3.0	1.0
	Total [1]	**18.0**	**0.8**	**1.74**	**4.60**	**20**	**5**	**19.0**	**11.0**	**10.0**	**24.0**	**3.0**	**1.0**
GRAND TOTAL	**Measured**	**30.7**	**1.8**	**1.76**	**5.72**	**15**	**5**	**29.9**	**10.8**	**9.0**	**24.7**	**4.3**	**0.8**
	Indicated	**310.3**	**9.8**	**1.73**	**3.19**	**19**	**3**	**20.5**	**10.1**	**8.6**	**24.9**	**3.4**	**0.7**
	Inferred	**287.7**	**6.7**	**1.72**	**2.32**	**18**	**3**	**17.2**	**8.7**	**7.5**	**22.7**	**2.9**	**0.5**
	TOTAL	**628.7**	**18.3**	**1.73**	**2.92**	**18**	**3**	**20.2**	**9.6**	**8.2**	**24.1**	**3.3**	**0.6**

Notes: Any discrepancies in totals are a function of rounding. [1] Mineral Resources reported at a cut-off grade of 1.0% THM. [2] Mineral assemblage, via QEMSCAN Particle Analysis, is reported as a percentage of in situ THM content.

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Table 5: Company MREs for Area 1, Area 2 West, Area 3 Extended and Area 4 – REO as of 30 June 2021

Area	Mineral Resource category	Material (Mt)	In situ THM (Mt)	Bulk density (g/cm³)	THM (%)	Slimes (%)	Oversize material >2 mm (%)	REO													
								CeO_2 (%)	Dy_2O_3 (%)	Er_2O_3 (%)	Eu_2O_3 (%)	Gd_2O_3 (%)	La_2O_3 (%)	Nd_2O_3 (%)	Pr_6O_{11} (%)	Sm_2O_3 (%)	Tb_4O_7 (%)	Tm_2O_3 (%)	Y_2O_3 (%)	Yb_2O_3 (%)	TREO (%)
Area 1	Measured	30.7	1.8	1.76	5.72	15	5	0.96	0.07	0.05	0.004	0.06	0.48	0.38	0.11	0.07	0.01	0.008	0.47	0.05	2.72
	Indicated	62.2	1.4	1.72	2.31	18	2	1.11	0.07	0.05	0.004	0.07	0.53	0.46	0.12	0.08	0.02	0.007	0.48	0.05	3.04
	Total [1]	**92.9**	**3.2**	**1.73**	**3.44**	**17**	**3**	**1.06**	**0.07**	**0.05**	**0.004**	**0.07**	**0.51**	**0.43**	**0.12**	**0.08**	**0.02**	**0.008**	**0.48**	**0.05**	**2.94**
Area 2 West	Indicated	26.0	0.7	1.72	2.80	20	8	0.66	0.06	0.04	0.003	0.05	0.31	0.28	0.07	0.05	0.01	0.010	0.39	0.04	1.97
	Total [1]	**26.0**	**0.7**	**1.72**	**2.80**	**20**	**8**	**0.66**	**0.06**	**0.04**	**0.003**	**0.05**	**0.31**	**0.28**	**0.07**	**0.05**	**0.01**	**0.010**	**0.39**	**0.04**	**1.97**
Area 3	Indicated	204.1	6.9	1.73	3.38	19	3	0.78	0.05	0.04	0.003	0.05	0.36	0.33	0.09	0.06	0.01	0.010	0.37	0.04	2.19
	Inferred	287.7	6.7	1.72	2.32	18	3	0.76	0.05	0.03	0.003	0.05	0.35	0.31	0.08	0.06	0.01	0.010	0.36	0.03	2.10
	Total [1]	**491.8**	**13.6**	**1.73**	**2.76**	**18**	**3**	**0.77**	**0.05**	**0.03**	**0.003**	**0.05**	**0.36**	**0.32**	**0.09**	**0.06**	**0.01**	**0.010**	**0.36**	**0.04**	**2.14**
Area 4	Indicated	18.0	0.8	1.74	4.60	20	5	0.67	0.05	0.03	0.002	0.05	0.32	0.28	0.07	0.05	0.01	0.006	0.33	0.04	1.90
	Total [1]	**18.0**	**0.8**	**1.74**	**4.60**	**20**	**5**	**0.67**	**0.05**	**0.03**	**0.002**	**0.05**	**0.32**	**0.28**	**0.07**	**0.05**	**0.01**	**0.006**	**0.33**	**0.04**	**1.90**
GRAND TOTAL	**Measured**	**30.7**	**1.8**	**1.76**	**5.72**	**15**	**5**	**0.96**	**0.07**	**0.05**	**0.004**	**0.06**	**0.48**	**0.38**	**0.11**	**0.07**	**0.01**	**0.008**	**0.47**	**0.05**	**2.72**
	Indicated	**310.3**	**9.8**	**1.73**	**3.19**	**19**	**3**	**0.81**	**0.05**	**0.04**	**0.003**	**0.05**	**0.38**	**0.34**	**0.09**	**0.06**	**0.01**	**0.009**	**0.38**	**0.04**	**2.27**
	Inferred	**287.7**	**6.7**	**1.72**	**2.32**	**18**	**3**	**0.76**	**0.05**	**0.03**	**0.003**	**0.05**	**0.35**	**0.31**	**0.08**	**0.06**	**0.01**	**0.010**	**0.36**	**0.03**	**2.10**
	TOTAL	**628.7**	**18.3**	**1.73**	**2.92**	**18**	**3**	**0.81**	**0.05**	**0.04**	**0.003**	**0.05**	**0.38**	**0.33**	**0.09**	**0.06**	**0.01**	**0.009**	**0.38**	**0.04**	**2.25**

Area	Material (t)	In situ TREO grade [2] (%)	In situ TREO (t)
Mineral Resource (Measured, Indicated, and Inferred) for Area 1, Area 2 West, Area 3 and Area 4	628,703,134	0.07	413,107

Notes: Any discrepancies in totals are a function of rounding. [1] Mineral Resources reported at a cut-off grade of 1.0% THM. (2) In-situ TREO grade is calculated by THM grade (2.92%) multiplied by TREO grade (2.24%).

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Table 6: Company Ore Reserves for Area 1 and Area 3 (as of 31 March 2022)

Area	Date	Classification	Ore (Mt)	THM (%)	Zircon (%)	Rutile (%)	Leucoxene (%)	Ilmenite (%)	Monazite (%)	Xenotime (%)
Area 1	Mar 2021	Proved	24.5	5.4	29.9	10.8	9	24.7	4.3	0.8
		Probable	14.6	3.2	29.2	11.7	9.2	25.5	4.5	0.9
Area 3	Feb 2021	Probable	159.6	3.5	20.3	9.4	8.1	25.8	3.4	0.6
Total		**Proved**	**24.5**	**5.4**	**29.9**	**10.8**	**9**	**24.7**	**4.3**	**0.8**
		Probable	**174.2**	**3.5**	**21**	**9.6**	**8.2**	**25.8**	**3.5**	**0.6**
GRAND TOTAL			**198.7**	**3.7**	**21.7**	**9.7**	**8.2**	**25.7**	**3.5**	**0.6**

Area	Date	Classification	CeO_2 (%)	Dy_2O_3 (%)	Er_2O_3 (%)	Eu_2O_3 (%)	Gd_2O_3 (%)	La_2O_3 (%)	Nd_2O_3 (%)	Pr_6O_{11} (%)	Sm_2O_3 (%)	Tb_4O_7 (%)	Tm_2O_3 (%)	Y_2O_3 (%)	Yb_2O_3 (%)	TREO (%)
Area 1	Mar 2021	Proved	0.96	0.07	0.05	0.004	0.06	0.48	0.38	0.11	0.07	0.012	0.008	0.47	0.05	2.72
		Probable	0.971	0.067	0.047	0.004	0.06	0.468	0.4	0.108	0.072	0.011	0.007	0.458	0.05	2.721
Area 3	Feb 2021	Probable	0.805	0.057	0.039	0.003	0.056	0.378	0.339	0.093	0.064	0.009	0.006	0.386	0.04	2.297
Total		**Proved**	**0.96**	**0.07**	**0.05**	**0.004**	**0.06**	**0.48**	**0.38**	**0.11**	**0.07**	**0.012**	**0.008**	**0.47**	**0.05**	**2.72**
		Probable	**0.817**	**0.058**	**0.039**	**0.003**	**0.056**	**0.385**	**0.344**	**0.094**	**0.065**	**0.009**	**0.006**	**0.391**	**0.041**	**2.328**
GRAND TOTAL			**0.844**	**0.06**	**0.041**	**0.003**	**0.057**	**0.402**	**0.351**	**0.097**	**0.066**	**0.01**	**0.006**	**0.406**	**0.043**	**2.401**

Table 7: Goschen Project DFS Ore Reserves as of 31 March 2022 (subset of global Company Ore Reserves)

Area	Date	Classification	Ore (Mt)	THM (%)	Zircon (%)	Rutile (%)	Leucoxene (%)	Ilmenite (%)	Monazite (%)	Xenotime (%)
Area 1	Mar 2021	Proved	25.5	5.6	29.6	10.8	9.1	24.7	4.3	0.8
		Probable	7.6	2.2	27.6	12.7	10.5	25.9	4.3	0.9
Area 3	Feb 2021	Probable	65.7	3.6	19.7	9.1	7.9	25.3	3.3	0.6
Total		**Proved**	**25.5**	**5.6**	**29.6**	**10.8**	**9.1**	**24.7**	**4.3**	**0.8**
		Probable	**73.3**	**3.4**	**20.2**	**9.3**	**8.1**	**25.4**	**3.4**	**0.6**
GRAND TOTAL			**98.8**	**4**	**23.6**	**9.9**	**8.5**	**25.1**	**3.7**	**0.7**

Area	Date	Classification	CeO_2 (%)	Dy_2O_3 (%)	Er_2O_3 (%)	Eu_2O_3 (%)	Gd_2O_3 (%)	La_2O_3 (%)	Nd_2O_3 (%)	Pr_6O_{11} (%)	Sm_2O_3 (%)	Tb_4O_7 (%)	Tm_2O_3 (%)	Y_2O_3 (%)	Yb_2O_3 (%)	TREO (%)
Area 1	Mar 2021	Proved	0.96	0.07	0.05	0.004	0.06	0.48	0.38	0.11	0.07	0.012	0.008	0.47	0.05	2.72
		Probable	0.957	0.065	0.045	0.003	0.059	0.454	0.398	0.104	0.071	0.012	0.007	0.456	0.05	2.682
Area 3	Feb 2021	Probable	0.795	0.056	0.038	0.003	0.055	0.373	0.335	0.091	0.063	0.009	0.006	0.383	0.039	2.271
Total		**Proved**	**0.96**	**0.07**	**0.05**	**0.004**	**0.06**	**0.48**	**0.38**	**0.11**	**0.07**	**0.012**	**0.008**	**0.47**	**0.05**	**2.72**
		Probable	**0.806**	**0.056**	**0.039**	**0.003**	**0.055**	**0.379**	**0.339**	**0.092**	**0.064**	**0.009**	**0.006**	**0.388**	**0.04**	**2.298**
GRAND TOTAL			**0.862**	**0.061**	**0.043**	**0.003**	**0.057**	**0.415**	**0.354**	**0.099**	**0.066**	**0.01**	**0.007**	**0.417**	**0.044**	**2.451**

Note: The Proved Ore Reserves stated in Table 6are larger than those stated in Table 7 due to a reduction in the required offset between the pit crest and vegetation to be conserved around the pit.

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1 Introduction

1.1 Context, Scope, and Terms of Reference

CSA Global Pty Ltd (**CSA Global**), an ERM Group company, has been retained by VHM Limited (**VHML** or **the Company**) to prepare an Independent Technical Assessment Report (**ITAR**) for use in a prospectus for an Initial Public Offering (**IPO**) of14,814,815 fully paid ordinary shares at an issue price of A$1.35 per share to raise A$20 million that will enable the Company to list on the Australian Securities Exchange (**ASX**). The funds raised will be used for the purpose of project advancement, including front-end engineering and design (**FEED**) studies, project development, and exploration and evaluation of the various project areas.

VHML has a large area held under tenements in north-western Victoria. Within these are heavy mineral sands (**HMS**) deposits wherein VHML recognises four main project areas – Goschen, Cannie, Nowie, and Cygnus. The proposed development of part of the Goschen heavy minerals/rare earth minerals (**REM**) deposits form the main focus of this report. A high-level review of the Cannie, Nowie and Cygnus exploration projects has also been completed.

The Company has completed a Prefeasibility level study for a rare earth hydrometallurgical circuit to recover mixed REM carbonates from a rare earths mineral concentrate (**REMC**) that it is intended be separated from the bulk heavy mineral concentrate (**HMC**) that will result from the conventional processing of HMS. The hydrometallurgical circuit requires additional studies to bring it to a Definitive Feasibility (**DFS**) level of confidence and is not included in current proposal for the development at Goschen. For these reasons, it is not discussed in this report.

In preparing this ITAR, CSA Global has:

- Relied on the accuracy and completeness of the data provided to it by VHML, and that the Company has made CSA Global fully aware of all material information in relation to the projects.
- Relied on the Solicitors' Tenement Report prepared by HWL Ebsworth (**HWLE**) in 2022 and the Company's representation that it will hold adequate security of tenure for exploration and assessment of the projects to proceed.
- Required that VHML provide an indemnity to the effect that the Company will compensate CSA Global in respect of preparing the ITAR against any and all losses, claims, damages and liabilities to which CSA Global or its Associates may become subject under any applicable law or otherwise arising from the preparation of the ITAR to the extent that such loss, claim, damage or liability is a direct result of VHML or any of its directors or officers knowingly providing CSA Global with any false or misleading information, or the Company, or its directors or officers knowingly withholding material information.
- Required an indemnity that VHML would compensate CSA Global for any liability relating to any consequential extension of workload through queries, questions, or public hearings arising from this ITAR.

1.2 Compliance with the VALMIN and JORC Codes

This report has been prepared in accordance with the Code for the Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports 2015 (**VALMIN**[2] **Code**), the JORC[3] Code, and the rules and guidelines issued by such bodies as the Australian Securities and Investments Commission (**ASIC**) and ASX that pertain to Independent Expert Reports. Both the VALMIN Code and JORC Code are binding upon Members of the Australian Institute of Geoscientists (**AIG**) and the Australasian Institute of Mining and Metallurgy (**AusIMM**).

[2] Australasian Code for Public Reporting of Technical Assessments and Valuations of Mineral Assets (The VALMIN Code), 2015 Edition, prepared by the VALMIN Committee of the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. <http://www.valmin.org>

[3] Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The JORC Code, 2012 Edition. Prepared by: The Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia (JORC). <http://www.jorc.org>

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1.3 Principal Sources of Information and Reliance on Other Experts

CSA Global has based its review of the Project on information made available to the principal authors by VHML, along with technical reports prepared by consultants, government agencies and previous tenement holders, and other relevant published and unpublished data. CSA Global has also relied upon discussions with The Company's management for information contained within this assessment. This ITAR has been based upon information available up to and including 21 November 2022.

CSA Global has endeavoured, by making all reasonable enquiries, to confirm the authenticity, accuracy, and completeness of the technical data upon which this ITAR is based. Unless otherwise stated, information and data contained in this technical report, or used in its preparation, have been provided by VHML in the form of documentation and digital data.

The Company was provided a final draft of this ITAR and requested to identify any material errors or omissions, errors of fact or interpretation.

VHML has warranted to CSA Global that the information provided for the preparation of this ITAR correctly represents all material information relevant to the Project. Full details on the tenements are provided in the HWLE report prepared in October 2022. CSA Global has relied on this report and makes no other assessment or assertion as to the legal title of the tenements and is not qualified to do so. CSA Global has not independently reviewed or verified any of the underlying agreements, which are described in the HWLE report under Summary of Material Agreements.

This ITAR contains statements attributable to third parties. These statements are made or based upon statements made in previous technical reports that are publicly available from either government sources or the ASX. The authors of these reports have not been asked for consent for their statements being used in this ITAR but are included in accordance with ASIC Corporations (Consent and Statements) Instrument 2016/72.

1.4 Authors of the Report

CSA Global is a privately owned, mining industry consulting company headquartered in Perth, Western Australia (**WA**). CSA Global provides geological, resource, mining, management and corporate consulting services to the international mining sector and has done so for more than 30 years. This ITAR has been prepared by a team of consultants sourced principally from CSA Global's Perth, WA office. The individuals who have provided input to the ITAR have extensive experience in the mining industry and, are members in good standing of appropriate professional institutions.

The following individuals, by virtue of their education, experience and professional association, are considered Competent Persons, as defined in the JORC Code (2012). The Competent Persons' individual areas of responsibility are presented below:

- Coordinating author – Ms Ivy Chen, Principal Consultant with CSA Global in Perth, WA, is responsible for the entire ITAR.
- Principal author – Mr Ray Cary, Principal Associate Consultant with CSA Global in Perth, WA, is responsible for final compilation and editing of the ITAR.
- Contributing author – Mr Anthony Wesson, Principal Resource Evaluation Consultant with CSA Global in Perth, WA, is responsible for reviewing and assessing sampling procedures and quality assurance and controls, and for reviewing the Mineral Resource estimates (**MREs**) and their classification.
- Contributing author – Mr Jemini Bhargava, Principal Mining Engineer with CSA Global in Perth, WA, is responsible for reviewing and assessing the Ore Reserve estimates (**OREs**) and inputs into the ORE process.
- Contributing author – Mr Howard Simpson, Mining Manager, Consulting Director with CSA Global in Brisbane, Queensland, is responsible for reviewing and assessing the mining, ORE estimates and inputs into the ORE process, and for peer review of and co-authorship of the sections of the ITAR assigned to Mr Bhagarva.

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- Contributing author – Mr David Chambers, Manger Projects and Studies for NewPro Engineering & Consulting Services Pty Ltd in Perth, WA, is responsible for reviewing and assessing metallurgy and processing for the concentrator component of the Goschen Project.
- Contributing author – Mr Paul Newling, Principal Project Consultant of NewPro Engineering & Consulting Services Pty Ltd in Perth, WA, is responsible for peer review of and co-authorship the sections of the ITAR assigned to David Chambers.
- Peer reviewer – Mr Graham Jeffress, Manager Corporate of CSA Global in Perth, WA, is responsible for the entire ITAR. Mr Jeffress is also responsible for technical oversight and direct regional knowledge sufficient that a site visit was not deemed necessary.

Ms Ivy Chen is a corporate governance specialist with over 30 years' experience in mining and resource estimation. She served as the national geology and mining adviser for ASIC from 2009 to 2015. Ms Chen's experience in the mining industry in Australia and China as an operations and consulting geologist includes open pit and underground mines for gold, manganese and chromite, and as a consulting geologist she has conducted mineral project evaluation, strategy development and implementation, through to senior corporate management roles. Recent projects completed include listings and other commercial transactions on the Australian, Singapore, Hong Kong and United Kingdom stock exchanges. Ms Chen is a company director and is a member of the VALMIN Committee.

Mr Ray Cary is an independent consultant who frequently works with CSA Global as a Principal Associate Consultant. He has almost 50 years' experience working in all facets of the industry, almost 30 years of which have been as an independent consultant. Mr Cary's specialties include feasibility studies, feasibility study review and gap analysis, due diligence and financial modelling from scoping study level up to banking standards. He has experience in most commodities and has worked extensively both within Australia and overseas.

Mr Anthony Wesson is a mineral resource engineer with over 45 years' experience in operations, planning, consultancy and corporate roles for major mining companies. His strengths include mineral resource estimation and the application of advanced geostatistical methods, reconciliation, sampling theory and implementation, geometallurgy, due diligence, corporate governance and technology research and development. Mr Wesson has global experience across a range of commodities and styles of mineralisation, including minerals sands, titanium, and zircon.

Mr Howard Simpson is an experienced mining professional who has undertaken the delivery of mining engineering, mine planning and economic evaluation for projects, technical studies, and operations. He has delivered projects and studies across multiple geographies and commodities, with responsibilities for design, planning, scheduling of mine operations, and economic evaluation. Howard has had a particular focus on innovation throughout his career including technology solutions, integrated mining systems such as in-pit crushing and conveying, and new and alternative mining methodologies.

Mr Jemini Bhargava is a principal mining engineer with more than 17 years' experience in open pit mining. He has specialised skills encompassing technical studies and project evaluation, continuous improvement and change management, benchmarking and data analytics, technical audits, and risk assessment. Mr Bhargava has demonstrated capabilities regarding technical and economic analyses of various standard open pit methodologies, emerging, and innovative technologies such as pit-to-port optimisation, Trolley Assist, in-pit crushing and conveying, surface miners, and mine automation. Mr Bhargava has also managed the procurement of a new fleet of mining equipment and led the technical and commercial negotiations. He has advanced consultancy expertise across multiple commodities and geographies and various open pit extraction methods.

Mr David Chambers holds a Bachelor of Engineering (Metallurgy) from the University of Queensland in Australia and has overseen numerous feasibility studies including significant rare earths project experience gained through the management of the Canadian Fox Harbour CREE project at scoping and prefeasibility study level (soon to move into the DFS phase) and the Ugandan Makuutu project at scoping study level. He is a Fellow of the Institution of Engineers Australia (FIEAust) and a Chartered Professional Engineer (CPEng)

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as well as a Member (foreign licensee) of the Association of Professional Engineers and Geoscientists of Alberta (Peng). Mr Chambers has over 35 years of project delivery experience in Australia, Canada, South America (Brazil, Chile, Peru, Uruguay), and Africa (Guinea/DRC); working within multinational organisations.

Mr Paul Newling holds a Bachelor of Applied Science (Extractive Metallurgy) from the WA School of Mines and a Master of Business Administration (Technology Management) from Deakin University Vic. He is a Fellow of the AusIMM and a Chartered Professional Metallurgist (Cpmet), as well as a member of the Australian Institute of Project Management. Mr Newling has had significant experience in assessing and developing rare earth projects. He has been leading multi-discipline project delivery teams for over 20 years, including overseeing project management, project services, detailed design, procurement, construction and commissioning, serving in contractor, owner and independent technical engineer (lender ITE) roles. Before this, Mr Newling had operational roles within mining companies.

Mr Graham Jeffress is a geologist with over 30 years' experience in exploration geology and management in Australia, Papua New Guinea, and Indonesia. He has worked in exploration (ranging from grassroots reconnaissance through to brownfields, near-mine, and resource definition), project evaluation and mining in a variety of geological terrains, commodities, and mineralisation styles within Australia and internationally. Mr Jeffress has completed numerous independent technical reports (IGR, CPR, QPR) and valuations of mineral assets.

1.5 Independence

CSA Global is an independent minerals industry consultancy. Neither CSA Global, nor the authors of this ITAR, has or has had previously, any material interest in VHML or the mineral properties in which the Company has an interest. CSA Global's relationship with the Company is solely one of professional association between client and independent consultant. Fees are being charged to VHML at a commercial rate for the preparation of this ITAR, the payment of which is not contingent upon the conclusions of the ITAR. There is no formal agreement between CSA Global and VHML as to the Company engaging CSA Global for further work.

No member or employee of CSA Global is, or is intended to be, a director, officer or other direct employee of VHML. No member or employee of CSA Global has, or has had, any shareholding in the Company.

1.6 Declarations

1.6.1 Purpose of this Document

This ITAR has been prepared by CSA Global for inclusion in a prospectus prepared for the purposes of Chapter 6D.2 of the Corporations Act and for provision to investors. Its purpose is to provide an ITAR of the Company's Goschen Project, and a high-level review of the Company's other projects, including the Goschen Exploration Target, Cannie, Nowie and Cygnus projects.

The statements and opinions contained in this ITAR are given in good faith and in the belief, that they are not false or misleading. The conclusions are based on information available up to 21 November 2022, which could alter over time depending on exploration results, mineral prices, and other relevant market factors.

1.6.2 Practitioner/Competent Persons' Statement

The information in this ITAR (Sections 4, 5, 6, and 14) that relates to technical assessment of the Mineral Assets, Exploration Targets, or Exploration Results is based on, and fairly reflects, information compiled and conclusions derived by Ms Ivy Chen and Mr Anthony Wesson, both fellows of the AusIMM. Both are Competent Persons.

The information in this ITAR (Section 13) that relates to technical assessment of the Ore Reserves is based on, and fairly reflects, information compiled, and conclusions derived by Mr Howard Simpson, a Fellow of the AusIMM and a Competent Person.

The information in this ITAR (Section 8,) that relates to technical assessment of the metallurgy and processing is based on, and fairly reflects, information compiled, and conclusions derived, by Mr David Chambers, a

Fellow of the Institution of Engineers Australia (FIEAust) and a Chartered Professional Engineer (CPEng), Mr Ken Baxter, a Member of the AusIMM, and Mr Paul Newling. Mr Newling is a Fellow of the AusIMM and a Chartered Professional Metallurgist (Cpmet), as well as a member of the Australian Institute of Project Management. All are Competent Persons.

Ms Chen and Messrs Wesson, Simpson and Bhargava are employed by CSA Global, who was engaged to prepare the ITAR. Messrs Chambers, Baxter and Newling are CSA Global associates and employed on a contractual basis directly via VHML. Mr Cary works with CSA Global on an ad-hoc consulting basis for specific assignments.

Ms Chen and Messrs Cary, Wesson, Simpson, Bhargava, Chambers, Baxter and Newling have sufficient experience that is relevant to the Technical Assessment of the Mineral Assets under consideration, the style of mineralisation and types of deposit under consideration and to the activity being undertaken to qualify as Practitioners as defined in the 2015 Edition of the "Australasian Code for the Public Reporting of Technical Assessments and Valuations of Mineral Assets" (**2015 VALMIN Code**), and as Competent Persons as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (**2012 JORC Code**).

Ms Chen and Messrs Wesson, Wesson, Simpson, Bhargava, Chambers, Baxter and Newling consent to the inclusion in this ITAR of the matters based on their information in the form and context in which it appears.

1.6.3 Site Inspection

No site visit was made to the project as CSA Global has sufficient knowledge of the region; and given the stages of project maturity, a site visit is considered to not be required, nor provide any additional material information.

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2 About this Report

VHML is an unlisted Australian public company which holds tenements in north-eastern Victoria, wherein HMS mineralisation has been identified at Goschen, Cannie, Nowie, and Cygnus. A proposed development of Ore Reserves at Goschen forms the main focus of this ITAR.

The Company has completed mining and engineering studies which confirm that Goschen has good potential to be a robust, long-life project with economic assemblages of zircon, and titanium and REMs. The mining and processing studies envisage a sustained production rate of 5 Mtpa, over a minimum 20-year project life. Defined Ore Reserves would allow an extension of mine life to 40 years or more. VHML announced to shareholders the completion of a Prefeasibility Study (**PFS**) in February 2019, followed by a Definitive Feasibility Study (**DFS**) in March 2022. Work on the PFS and DFS has been completed by a number of consultants including IHC Robbins (**IHCR**), AMC Consultants Pty Ltd, TZ Minerals International (**TZMI**), Mineral Technologies Pty Ltd (**MTPL**), Auralia Mining Consultants (**Auralia**), Met-Chem Consulting Pty Ltd, Pitt & Sherry Pty Ltd (**P&S**), Right Solutions Australia (**RSA**), and AECOM Infrastructure (**AECOM**). Other consultants, whose work CSA Global has not specifically reviewed, include Adamas Intelligence, Coffey International, various legal and financial consultants, and others.

CSA Global is aware that VHML has relied on the work of these consultants in preparing the PFS and DFS. CSA Global has been tasked with completing a technical review of the work completed by VHML and its consultants to the extent necessary to validate information to be provided to interested third parties, and to provide a Competent Persons' Report on the findings and quality of the work completed.

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3 Background

VHML holds 2,860 km^2 of tenements in north-eastern Victoria, within which it recognises four main projects:

- The Goschen Rare Earth and Mineral Sands Project (**Goschen** or **the Project**)
- The Cannie Exploration Project (**Cannie**)
- The Nowie Exploration Project (**Nowie**)
- The Cygnus Exploration Project (**Cygnus**).

Goschen forms the main focus of this ITAR. The Project is being progressed toward development with the completion of a DFS in March 2022. The DFS defined a strategy to deliver a fully commissioned mining and treatment operation with a nameplate process plant feed rate of 5Mtpa to produce a valuable heavy minerals concentrate (**VHMC**) and REMC. The Company plans to implement a staged development approach, with the initial implementation phase comprising a mining unit plant (**MUP**), feed preparation plant (**FPP**) and wet concentrator plant (**WCP**) to recover a bulk titania-zircon VHMC, and a rare earth mineral flotation circuit (**REMFC**) to recover a rare earth mineral concentrate (**REMC**) from the VHMC.

PFS level studies have been completed for a hydrometallurgical circuit downstream from the REMFC to recover the REMs monazite and xenotime in a mixed carbonate form; additional work is underway to advance the hydrometallurgical circuit studies to DFS standard. The sum of A$1.4 million has been set aside for further testwork.

DFS-standard studies have been completed to build a mineral separation plant (**MSP**) after the REMFC. Allowances have been made in the FEED budget to progress the MSP; however, the additional capital is estimated to be A$148 million, hence its deferral to reduce the capital intensity of the Stage 1 development. An early decision to construct will not be made unless necessary for external reasons.

Engineering and testwork for these subsequent phases will be undertaken in parallel with the FEED and detailed design activities for the first phase of the Project. The forecast timing for **FID** for the first phase is late 2023.

This ITAR only considers the first phase, i.e. mining, MUP, FPP, WCP, and REMFC.

3.1 Goschen Project Location, Access, and Infrastructure

Goschen is located within Retention Licence (**RL**) 6806 in north-western Victoria, approximately 280 km northwest of Melbourne, 20 km southwest of Swan Hill and 1 km east of Lalbert (Figure 1). The RL was approved in January 2020 by the Victorian Department of Jobs, Precincts and Regions and replaces Exploration Licence (**EL**) 5520[4].

The Project can be accessed via the Murray Valley Highway, and from there via either the Murray Valley Highway or the Donald-Swan Hill Road, both of which lead to the town of Swan Hill. Heading south along the Murray Valley Highway will lead to the town of Kerang. Majority of the Project footprint is located within the Gannawarra Shire with a small portion located in the Rural City of Swan Hill.

Considerable exploration activities have been completed by VHML, including:

- Aircore (**AC**) and sonic drilling.
- Geophysical surveys.
- Upgrading of Inferred Mineral Resources to Indicated Resources.
- Metallurgical testwork programs.
- Geotechnical and environmental studies.

[4] Due to the time of creation of source documents, ITAR images may show either EL5520 or RL6806 over the same area.

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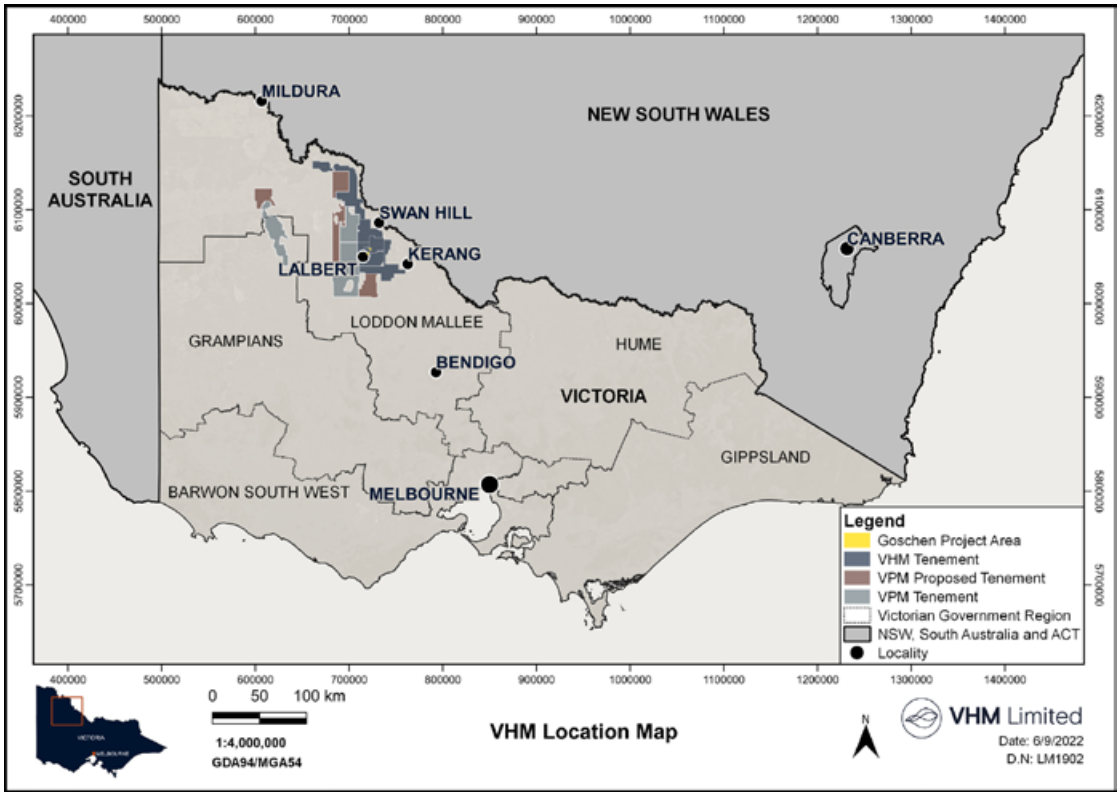


Figure 1: Location map
Source: VHML

3.2 Climate and Topography

The climate in the area is semi-arid, with mean annual rainfall of 300–400 mm. Mean monthly rainfall is fairly consistent across the average year, with winter and late spring typically experiencing higher rainfall than the average. Based on temperature and humidity, the climate is consistent with much of south-eastern Australia, that is, hot dry summers and cold winters.

Research by VHML indicates that temperatures within the Murray Basin have increased since national records began in 1910 by approximately 0.8°C to 2013. The Company cites CSIRO projecting in 2015, with very high confidence, that there will be a continued substantial increase in mean, maximum and minimum temperatures within the Murray Basin region. Within the near future (2030), the mean warming is projected to be around 0.6–1.3°C above temperatures from 1986 to 2005. The region is anticipated to experience less rainfall in the cool seasons, but with no rainfall change in the warmer seasons. By 2030, climate change models are predicting a reduction in cool season rainfall by up to 15% (VHML_a, 2019).

The topography of the area slopes gently from south to north, with the River Murray floodplain represented by the lowest elevations. The most striking topographic feature is the north-south oriented elevated area, 100–125 m above Australian Height Datum, that can be seen transecting RL6806 in Figure 2.

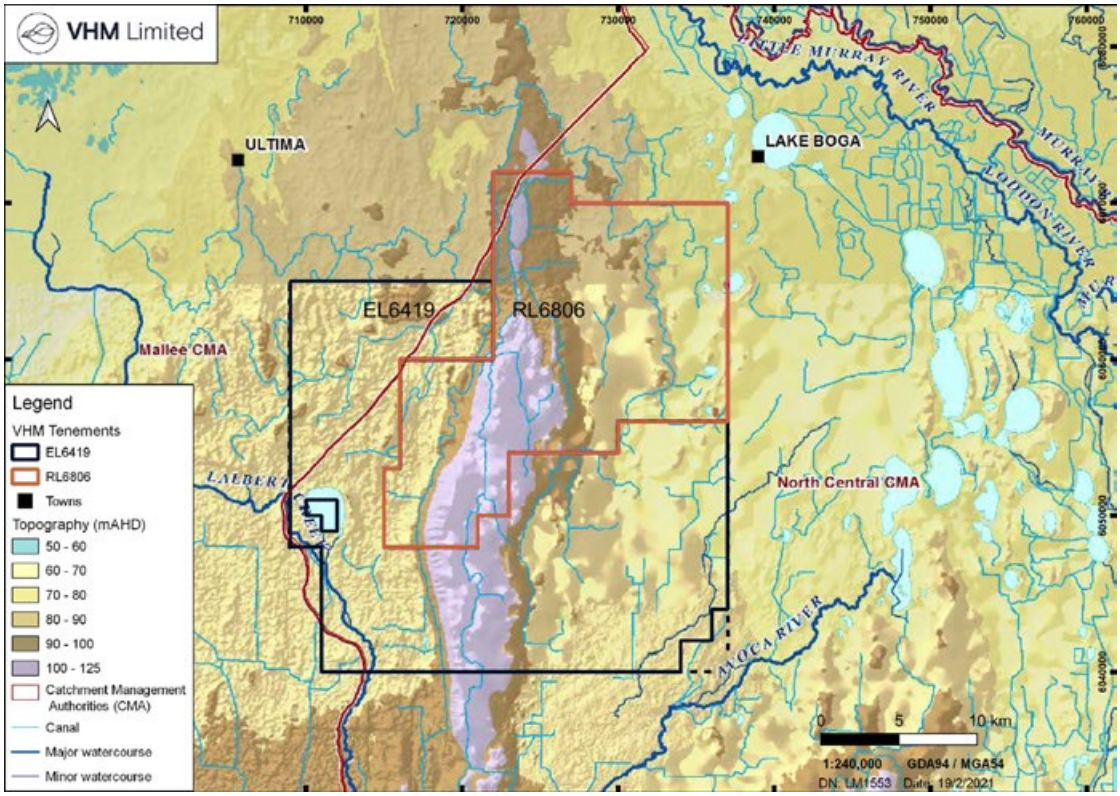


Figure 2: Regional topography
Source: VHML

3.3 Tenure

VHML is the registered holder of RL6806, which covers Goschen. The other exploration licences held by VHML are EL6419, EL6664, EL6666, EL6769 these tenements extend over an area of 2,860km^2. This total excludes recently granted EL 7828, EL 7807, EL 7803 and EL 7810 that are to be transferred to VP Minerals 12 months after the grant date as set out in table 8.

The Company has recently received Ministerial approval to transfer the following exploration licences to VP Minerals Limited[5]: EL6895, EL6923, EL6915, and EL6926.

The Company's granted tenure is summarised in Table 8 and depicted in Figure 3. CSA Global has relied on the independent opinion of HWLE as of 14 October 2022 (HWL Ebsworth, 2022) with regards to the validity, ownership, and standing of the Company's tenements. CSA Global makes no other assessment or assertion as to the legal title of the tenements and is not qualified to do so.

[5] VP Minerals Limited was recently incorporated in November 2021 as a wholly owned subsidiary of the Company. It was demerged in August 2022, following a transfer of certain of the Company's exploration licences (as part of the VPM Demerger) which are considered prospective for gold and base metals

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Table 8: Summary of granted tenure held by the Company as of 14 October 2022

Licence no.	Location	Registered holder	Project	Status	Area (km²)	Grant date	Expiry date
RL6806	North West Victoria	VHM Limited	Goschen	Current	311	10 Jan 2020	9 Jan 2027
EL6419	North West Victoria	VHM Limited	Cannie	Current	443	18 May 2018	17 May 2023
EL6664	North West Victoria	VHM Limited	Cannie	Current	618	18 Jun 2018	17 Jun 2023
EL6666	North West Victoria	VHM Limited	Nowie	Current	447	18 Jun 2018	17 Jun 2023
EL6769	North West Victoria	VHM Limited	Exploration	Current	1,041	27 Aug 2018	26 Aug 2023
EL 7827	*North West Victoria*	*VHM Limited*	*Exploration*	*Current*	*335*	*15 Aug 2022*	*14 Aug 2027*
EL 7807	*North West Victoria*	*VHM Limited*	*Exploration*	*Current*	*421*	*15 Aug 2022*	*14 Aug 2027*
EL7810	*North West Victoria*	*VHM Limited*	*Exploration*	*Current*	*424*	*15 Sep 2022*	*14 Sep 2022*
EL7803	*North West Victoria*	*VHM Limited*	*Exploration*	*Current*	*609*	*11 Oct 2022*	*10 Oct 2027*
EL6895	*North West Victoria*	*VP Minerals*	Cannie	*Current*	*704*	*1 May 2019*	*30 Apr 2024*
EL6923	*North West Victoria*	*VP Minerals*	*Exploration*	*Current*	*636*	*21 May 2019*	*20 May 2024*
EL6926	*North West Victoria*	*VP Minerals*	*Exploration*	*Current*	*818*	*12 Jul 2019*	*11 Jul 2024*
EL6915	*North West Victoria*	*VP Minerals*	*Nowie*	*Current*	*562*	*12 Jul 2019*	*11 Jul 2024*

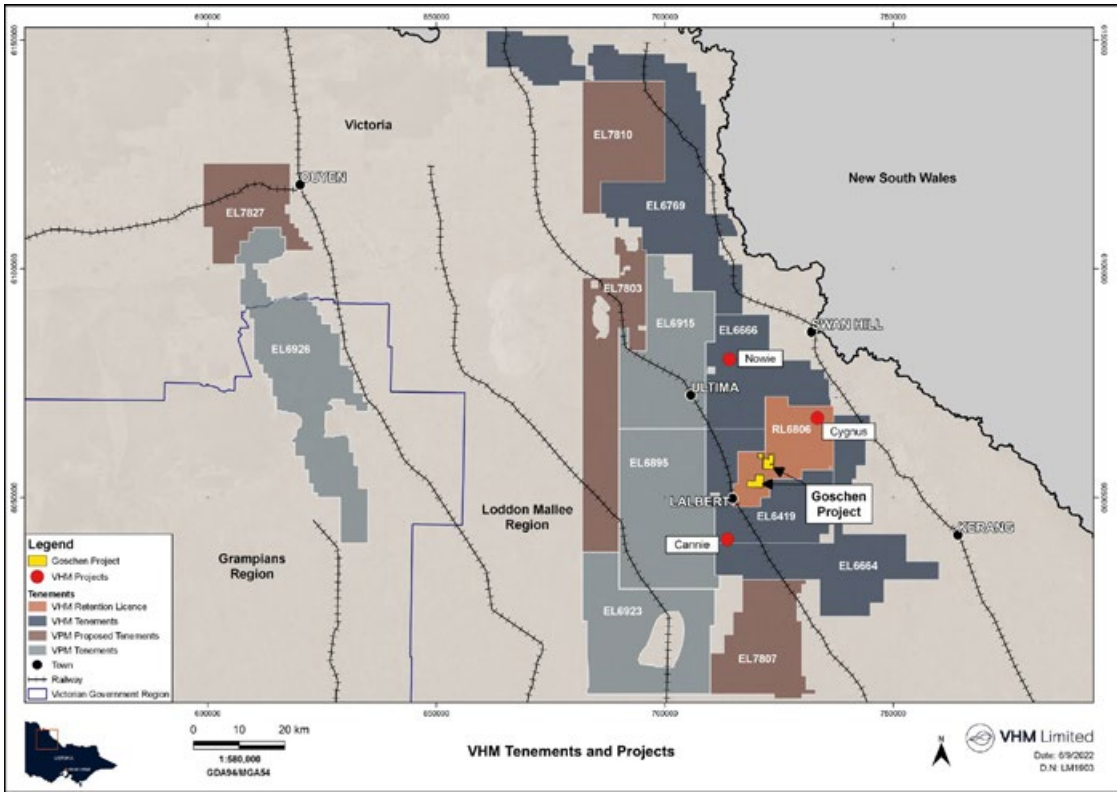


Figure 3: VHML tenements and project areas

Source: VHM Limited

EL6895, EL6923, EL6926, and EL6915 (Figure 3 and shown in italics in Table 8 above) are to be transferred to VP Minerals under a Demerger Asset Sale Agreement that is discussed in the Prospectus. Further information in relation to the Company's tenements is included the HWLE report in the prospectus.

In February 2021, the Company nominated parts of EL6664, EL6666, EL6769, EL6915, EL6923 and EL6926, totalling 792 km^2, for relinquishment in accordance with the requirements of the *Mineral Resources (Sustainable Development) Act 1990.* The area of these licences shown in Table 8 above reflects that relinquishment.

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4 Geology

4.1 Regional Geology

The Murray Basin is a shallow, intra-cratonic, Cenozoic basin covering an area of approximately 300,000 km^2 in south-eastern South Australia, south-western New South Wales and north-western Victoria, flanked by uplands of Proterozoic and Palaeozoic rocks. VHML's tenements are located within the Murray Basin in Victoria.

The Basin sediments are primarily silt, clay, and lime-rich sediments formed in various marine to marginal marine, fluvial, deltaic, and aeolian depositional settings. At the base of the sedimentary sequence, flat-lying Cenozoic sediments unconformably overlie Proterozoic and Palaeozoic basement rocks. The Tertiary sediments are overlain by a thin blanket of Quaternary aeolian and fluvio-lacustrine sediments. The older Cenozoic sequence consists of fluvial, marginal marine and marine sediments (Fabris, 2002).

The HMS deposits resulted from fluvial transport of heavy minerals sourced from weathered and eroded rocks of the Lachlan Orogen, which surround the eastern and southern parts of the Basin. A paleo-coastline formed during a Late Miocene-Early Pliocene marine regression across western Victoria and south-eastern South Australia. Subsequent reworking of coastal sediments by wave action formed mineralised strandlines along northwest-southeast trending dune fields, and sheet deposits associated with shallow near-shore sediments (Keeling et al., 2016).

Widespread deposits of HMS occur in the Cenozoic Loxton-Parilla Sands, Calivil Formation, Shepparton Formation, Coonambidgal Formation and Woorinen Formation. The mineralisation that VHML is evaluating occurs within the Loxton-Parilla Sands unit (Olshina and van Kann, 2012). The valuable fraction of the HMS includes zircon, rutile, leucoxene and ilmenite minerals, with the monazite that is also present containing uranium and thorium.

Moore (1998) discusses the location of the Goschen deposits relative to Palaeozoic basement geology, suggesting that differential weathering of the centre of Devonian granite plutons versus their more resistant hornfels rims created small basins into which early Murray Basin sediments sagged leaving a depression for the Loxton-Parilla Sands and fine-grained HMS to deposit.

There are also two smaller and less significant mineralised zones closer to the surface that are laterally discontinuous across the Project. These two zones are heavily affected by iron oxide induration which grinds up during drilling and reports to sinks fines within total heavy minerals (**THM**).

4.2 Local Geology

The licence areas are located across the Bendigo and Stawell Structural zones which are separated by the Avoca Fault (Figure 4). The Cannie Fault, which extends northeast-southwest across the project area, has been used as an approximate boundary that splits Area 1 (East) and Area 2 (West) – see Section 6.2. This fault has a "draping" effect on the mineralogical horizons, with a 25 m vertical offset on the western extents of the fault resulting in thicker overburden in Area 2 compared to Area 1 in the east.

There are also two smaller, laterally discontinuous and less significant mineralised zones that have been identified closer to surface. These zones are also heavily affected by iron oxide induration which grinds up during drilling and reports to sinks as fines in THM.

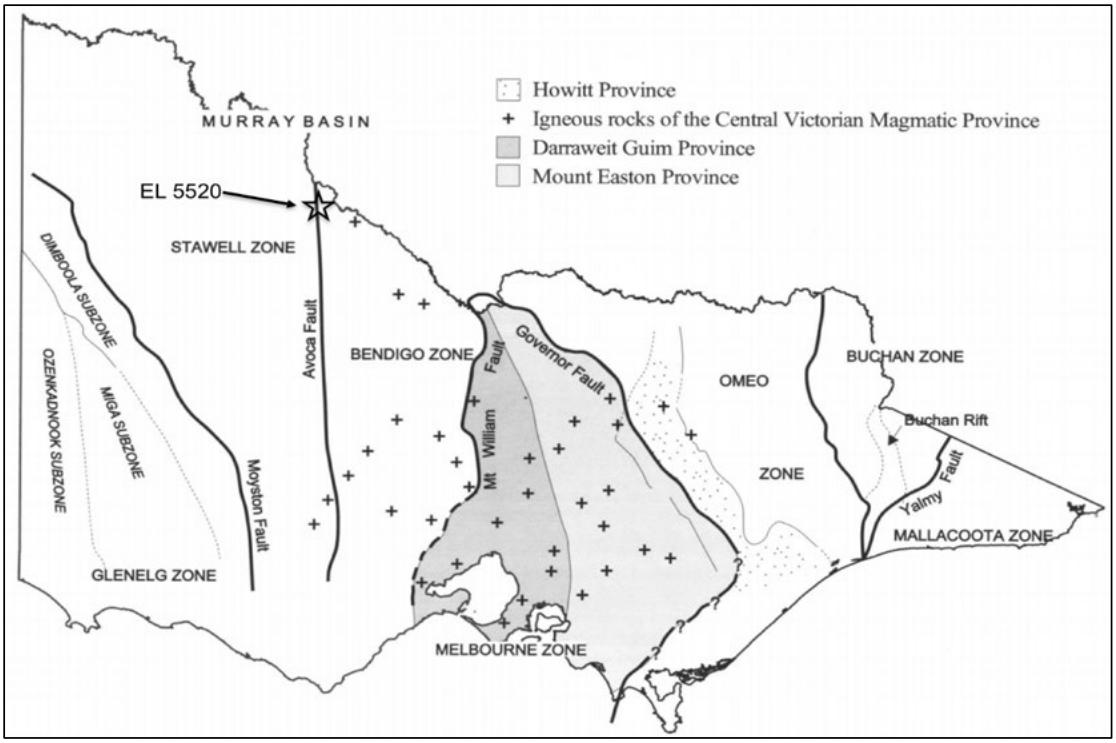


Figure 4: Regional structural zones of Victoria
Note: Diagram only for illustrative purpose, not to scale, north to top of page.
Source: VHML

4.3 Mineralisation

The Goschen HMS deposits occur within the Pliocene Loxton-Parilla Sands in the southern Murray Basin. The deposits contain rutile, zircon, and ilmenite. Two distinct styles of mineralisation occur: sheet and strandline. The sheet-style deposits contain relatively fine-grained (sub 100 µm) heavy minerals, with some of the recovered heavy minerals in the 20–40 µm range. The sheet deposits are also known as "WIM-style" deposits. The strandline deposits, or beach placer deposits, can be variable and contain some coarse-grained heavy minerals. The strandline deposits are formed in high-energy surf zone settings and commonly attain strike lengths of 5–40 km. Sheet deposits occur in nearby shallow marine settings as irregular accumulations, in lower shore and inner shelf environments (VHML_b, 2019).

Strandline deposits are the target of much mineral sand exploration as they are well understood as having higher-grade and coarser-grained heavy minerals than contemporary sheet-style deposits. Globally, numerous mineral sand mining operations are based on strandline-type deposits.

In the south-eastern part of the Murray Basin, where the Project is located, the littoral marine sand units of the Loxton-Parilla Sands have been variously eroded and few coarse-grained, strandline-style deposits remain. Deposits associated with lower energy depositional environments such as WIM-style deposits, and also shore-parallel, deeper water, intermediate-grain sized deposits, occur in the finer-grained sediment of the Loxton-Parilla Sands. These deposits tend to be less well-defined than coarse-grained strandline-style deposits; however, they represent large-tonnage, low-grade accumulations of heavy minerals (VHML_b, 2019).

The Company's most recent resource drilling programs have defined a series of higher-grade (typically >5% THM based on Area 1 and Area 3 metallurgical testwork programs), sub-horizontal, sheet-like deposits which are surrounded by a series of halo HMS >1% THM or >0.5% THM mineralisation. The halo mineralisation contains potentially economic mineral assemblages of zircon, titania, and REM. Multiple contemporaneous

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strandline HMS deposits are also hosted within the Loxton Parilla Sand. These placer-style deposits are typically 100–600 m wide and strike in a north-northwest direction. The strike extent of some of these systems has been defined over 30 km.

4.4 Exploration History

The Goschen area has had a substantial exploration history, with multiple owners and joint ventures. CSA Global acknowledges that all the data relating to historical exploration may not have been located, and therefore there may be pieces of the history absent.

Exploration within the Project area from the 1970s to 2009 was undertaken by CRA Exploration (**CRA**), Austiex, RGC Exploration Pty Ltd (**RGC**), RZM, Warren Jay Holdings Pty Ltd, Providence Gold and Minerals Pty Ltd (**Providence**), Basin Minerals NL (**Basin Minerals**) and Iluka Resources Ltd (**Iluka**). Table 9 provides a summary of previous drilling undertaken, as extracted from exploration statutory reports.

Table 9: Summary of historical drilling within EL5520 (now RL6806)

Company	Year	No. of drillholes	Total metres
Austiex	1977	85	208
CRA	1981 to 1987	159	6,377
Renison Exploration	1980 to 1991	516	9,072.5
Warren Jay Holdings Pty Ltd	1998	66	1,521.9
RZM	1999	10	256
Basin Minerals	2001	90	2,001
Providence	2004 to 2005	46	1,023
Iluka	2009	28	1,050
VHML	2017	109	4,376.6
	2018	470	16,968.6
	2019	427	1,5421.3
Total		**2,006**	**58,275.9**

Previous exploration within EL6419(Figure 3) was by Murray Basin Titanium Pty Ltd (**MBT**), Providence, RGC and Iluka between 1990 and 2008. Both strand-style and sheet-style mineralisation had been identified by previous explorers such as CRA and RGC. MBT completed three drilling programs for a total of 18,925.5 in 605 holes, and then relinquished the tenement due to lack of success.

Prior exploration within EL6666 (Figure 3) was undertaken by Basin Minerals, MBT, and RGC. Their work included data review, multiple drilling programs, mineralogical testing, and digital elevation mapping surveys.

Within EL6664, previous exploration was by Iluka and MBT. Iluka completed a regional drilling program consisting of 51 holes for a total of 2,992.5 m between June 2008 and May 2009. Drilling targeted airborne magnetic features that were processed using proprietary TargetMap™ software which identified six priority targets. Noteworthy is traverse VT143 which intersected the "Quarry East Strand" interpreted as striking west off Iluka's tenure. The strand was initially of interest to Iluka; however, it contained abundant trash heavy minerals and relatively low VHM. This strand extends into the Company's tenements and is considered worthy of follow up.

BHP explored the area from 1987 to 1990 as part of a wider exploration effort in the Murray Basin for economic VHM accumulations mainly focusing on titanium (rutile) mineralisation. BHP drilled 70 holes between 1987 and 1989 totalling 1,355 m, with assay results returning low concentrations of THM. Typically, the mineral assemblage was considered to be relatively poor, using a rutile equivalent to assess mineralogy. The central portions of EL6769 were identified as prospective by BHP and are slated for follow-up work by VHML as projects are developed in the long term.

CSA Global notes that subsequent drilling and detailed study work by VHML has superseded all previous exploration data, with no historical data used in the MREs undertaken by the Company.

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5 Data

5.1 Assessment of Historical Data

Using the historical data, VHML selected four areas at Goschen for detailed exploration and resource definition drilling, namely:

- Area 1 (East and West)
- Area 2 West
- Area 3 and Area 3 South (now included within Area 3 Extended)
- Area 4.

These areas are collectively termed "Resource Areas" and are shown in Figure 5.

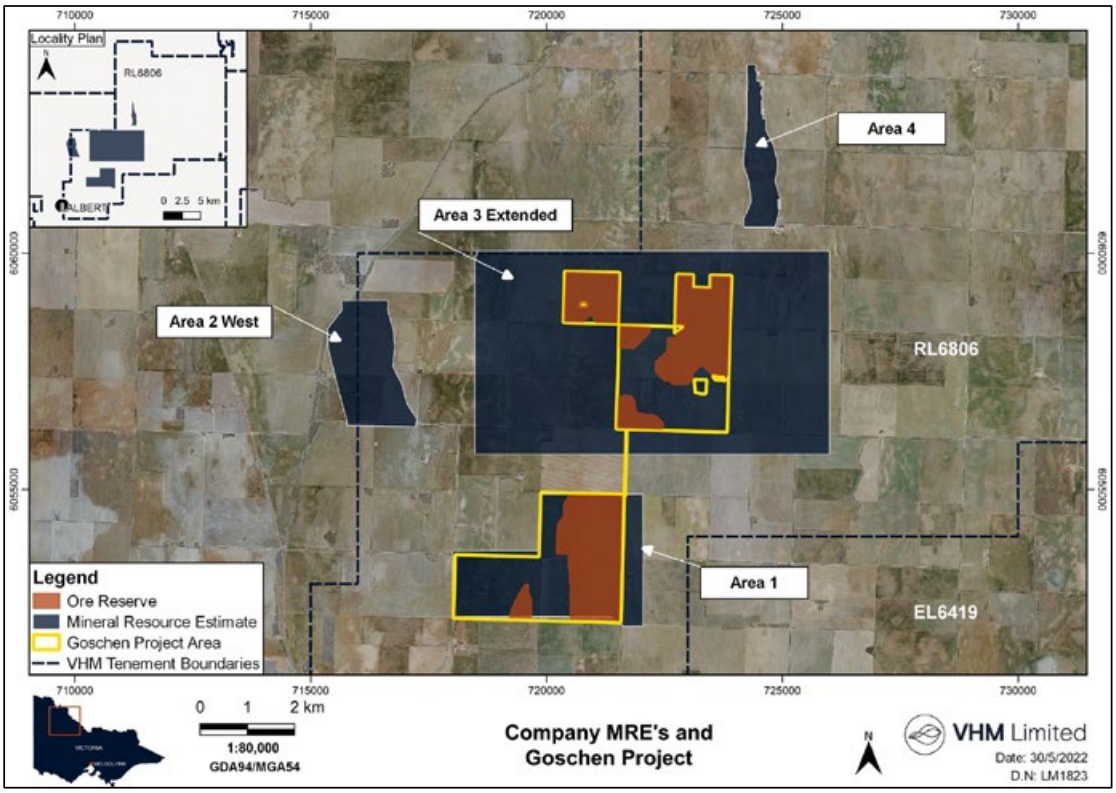


Figure 5: Location of the Company's Resource Areas – Area 1 (East and West), Area 2 West, Area 3 Extended, and Area 4

Source: VHML

As noted above, CSA Global has established that no historical data has been used in the MREs and detailed study work undertaken by VHML. That is, data from VHML's drilling supersedes all previous exploration data.

5.2 VHML Drilling

Reverse circulation (**RC**) drilling using AC methods was used to evaluate the Goschen deposits. AC is considered a standard mineral sands industry technique for evaluating heavy mineral mineralisation whereby the sample is collected at the drill bit face and returned inside an inner tube. The AC drill rods were 76 mm in diameter (NQ) and 3 m in length. Drilling was carried out by Wallis Drilling using a Mantis 80 drill rig mounted on a custom Land Cruiser six-wheel drive. All holes were drilled vertically with majority of the samples downhole taken at 1 m intervals, which generated approximately 8 kg of drill spoil. This was split

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down to 1.2–2.5 kg using a rotary splitter underneath the sample collection cyclone. The sample splits were labelled and bagged for transport to the primary laboratory for processing. IHCR reviewed the sampling process used by VHML and considered it appropriate and reliable based on accepted industry practices and experience (Jones and Cody, 2019).

All drill samples were logged for lithology, colour, grain size, sorting, hardness, sample condition, washability, estimated THM %, estimated slimes %, and any other relevant features noted.

Downhole geophysical gamma logging was undertaken on many AC holes, although details were not reported by IHCR. Gamma logs give quantitative data about the proportion of in situ radioactive elements in the drillhole, with heavy media separation typically yielding higher gamma values. The gamma logging was used in the interpretation of geological units and grade domains.

The AC drilling was completed in a series of campaigns between 2017 and 2019. The drilling coverage for each of the four Resource Areas is described in Sections 6.2.1 and 6.3.1. In Area 1, sonic drilling was also used, and samples from these holes were included in the 9.1-tonne bulk testing composite sample described in Section 8.2.

5.3 Sample Analysis

Samples were dispatched to either ALS Laboratories (ALS) or Diamantina Laboratories (Diamantina), which followed the general assay process flow described below:

- Drill samples were checked in, then oven dried for approximately two hours at 110°C.
- Samples were then rotary split down to two 100 g sub-splits (weighed and captured) with one sample wet screened through a vibrating two deck screen.
- Every 25th sample was submitted to the same process as a laboratory repeat.
- The vibrating screens utilised a top/oversize screen and a bottom/undersize screen.
- Samples from the initial drilling campaigns were sized using a series of coarser screens:
  - 2 mm top screen and 38 µm bottom screen
  - 1 mm top and 38 µm bottom screens.
- Samples from later drilling campaigns were analysed using finer screens:
  - 1 mm top and 20 µm bottom screens.
- Material separated by the oversize and undersize screens (i.e. coarse and intermediate (sand) size fractions) was individually dried and weighed, then submitted for further analysis.
- Material passing through the undersize screen (slimes) was lost to wastewater streams, so slimes material weight was calculated by mass difference.
- The sand fraction was submitted to heavy liquid separation using tetrabromoethane to produce a concentrate of heavy minerals with the proportion of THM determined by dry weight.

These different screening practices resulted in mixed analytical results and consequent differential support issues during grade modelling and resource estimation.

Bulk sample composites were prepared from the concentrates of heavy minerals obtained from the sand fraction to characterise the mineralogy of the deposits. The samples selected for each composite were determined by completing a geological and stratigraphic interpretation of the primary drillholes, downhole geological logging, detailed sachet logging and assaying in conjunction with downhole geophysical gamma logging. The information was utilised to determine mineral assemblage domain boundaries in three dimensions. Samples from domains with similar geological and mineralogical characteristics were then grouped and weighted on THM grade to ensure that each sample had a proportionate contribution to the overall composite weight. Composites were selected along and across strike within similar domains. Preparing the mineral assemblage composites in this manner allows for composite results to be applied to the resource block model and for those results to then be reported and weighted on THM during Mineral Resource estimation.

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IHCR noted that mineral assemblage composites had been prepared for Area 1 and Area 2 by different methods since the early stages of exploration. Techniques utilising both x-ray fluorescence (**XRF**) and Quantitative Evaluation of Minerals by Scanning Electron Microscopy (**QEMSCAN**) were used to define the mineralogy as a proportion of THM. Bulk sample composites were initially prepared by VHML with guidance from IHCR for further compositing in early 2018 to characterise the mineralogy of the Area 1 and Area 2 deposits. All composites during the late 2018 drilling programs were prepared exclusively by the Company.

VHML has undertaken a program of re-compositing those drillhole samples which were re-assayed using ALS's centrifuge-based assay procedure and 20 µm bottom screen size. This program updated and replaced earlier work reviewed by IHCR in Areas 1 and 2 which was based on the initial 38µm bottom screen assay method carried out to Diamantina's static settlement assay procedure. These samples were selected to replicate the original samples wherever possible. Some samples could not be replicated due to missing drillhole samples, or sample residue being consumed for other testwork.

The focus for the re-compilation and assay has been the high-grade area within Area 1 which corresponds to the Measured Resource area.

The mineral assemblage composites were submitted to ALS for determination of a wide suite of mineral species: zircon, rutile, leucoxene, ilmenite, xenotime, monazite, garnet, tourmaline, sulphides, chromite, and quartz. Minerals with similar properties were grouped to form general buckets such as magnetic VHM (mags), magnetic-others, non-magnetic VHM (non-mags) and non-magnetic-others. The grouping supported simplicity and transparency when including the mineral assemblage composite results in the block models.

XRF and QEMSCAN were used to define the mineralogy as a proportion of THM following the preparation of the bulk sample composites. QEMSCAN was used to determine HM mineralogy and XRF was used to conduct the rare earth element (**REE**) analyses. The results of the XRF analyses are summarised in Table 10.

Table 10: REEs analysed using XRF and typical mineral association

REE	Source mineral(s)
Cerium oxide	Xenotime and monazite
Dysprosium oxide	Xenotime mineral series
Erbium oxide	Monazite and bastnaesite
Europium oxide	Monazite and bastnaesite
Gadolinium oxide	Monazite and bastnaesite
Lanthanum oxide	Monazite
Neodymium oxide	Monazite
Praseodymium oxide	Monazite and bastnaesite
Samarium oxide	Monazite and bastnaesite
Terbium oxide	Monazite and bastnaesite
Thulium oxide	Monazite
Yttrium oxide	Xenotime mineral series
Ytterbium oxide	Xenotime mineral series

QEMSCAN required the samples to be screened into ±150 µm screen fractions before sample compositing to give a quantitative understanding of the elemental composition and mineralogical assemblage.

IHCR reviewed the analytical processes and considered them appropriate and reliable based on accepted industry practices and experience (Jones and Cody, 2019).

5.4 Discussion of Analysis of Results from Using Variable Screen Sizes

In January 2019, VHML submitted residues from a previous program to Diamantina. Screening of the original samples recovered a -2 mm/+38 µm sand fraction. The residues submitted to Diamantina were screened to -1 mm/+20 µm, the same as that eventually used for VHML's drilling samples. Further residues were submitted to ALS for -1 mm/20 µm screening and analysis, this time using centrifuging during the heavy liquid separation process. This work re-evaluated key data for Area 1 and was independently assessed by IHCR in

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August 2019. IHCR concluded that the assay data generated from the -1 mm/+20 µm screened samples was appropriate for use in Mineral Resource estimation.

The focus of the review was the +38 µm static settlement assay method employed by Diamantina versus the centrifuge based +20 µm method used by ALS. The data comparison was broken down into geological domains to appreciate the impact of the different screen sizes within individual domains. Zones 2 and 3, interpreted as the high-grade sand zones, were considered most relevant for the comparative analysis, and were where majority of the samples were re-assayed. Comparative analysis work was also completed reviewing any differences between the +20 µm Diamantina and +20 µm ALS methods, as well as the +38 µm Diamantina and +20 µm Diamantina analytical techniques. The analysis included 452 THM assays, 451 slimes assays and 443 oversize assays from Zone 2, while 468 THM and slimes assays and 425 oversize assays were from Zone 3 within Area 1.

A total of 58 samples were assayed at Diamantina using both the +38 µm method and the +20 µm method. Only eight sample pairs (from Zones 2 and 3) were screened using a 20 µm bottom screen at both Diamantina and ALS laboratories.

A total of 120 composites were used to inform the current Area 1 (East and West). This comprised a mix of 52 of the +20 µm composites and 68 of the +38 µm composites. Figure 6 illustrates the relative positions of the different fractions sampled.

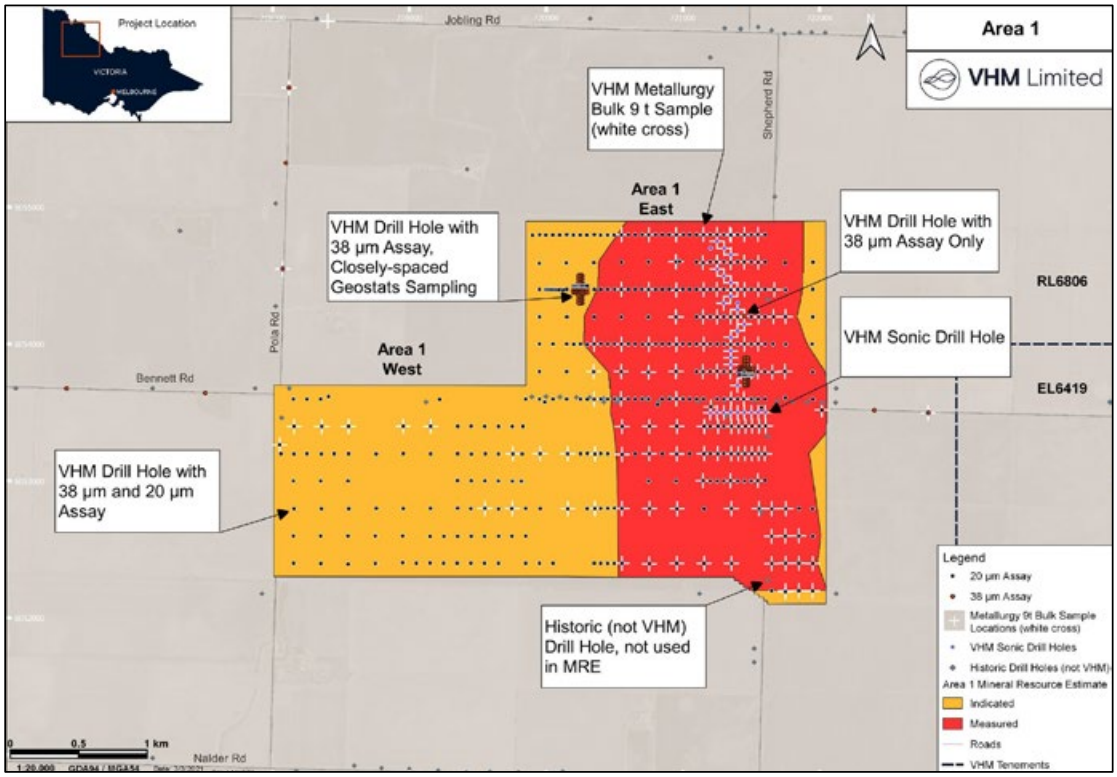


Figure 6: Area 1 East and Area 1 West, 38 µm data and 20 µm data
Source: VHML

The THM, slimes, oversize and mineral assemblage results from the different assay methods were all graphed as log scatter plots and cumulative probability plots and reviewed by IHCR in terms of their statistical characteristics. Based on this review, IHCR concluded that the smaller screen size assays yielded higher THM values in both Zones 2 and 3.

In an MRE prepared in 2018, a total of 158 mineral assemblage composites were prepared across Area 1; however, these were based on the +38 µm assay method. IHCR (IHCR, 2019) reviewed VHML's program of

re-compositing drillhole samples utilising the new +20 µm method and observed that these samples had been selected to replicate the original samples wherever possible. Some drillhole samples were missing, or the sample residue had been consumed for other testwork, and in those cases the samples could not be replicated. The focus for the re-compilation and assay was the high-grade area within Area 1 which corresponded to the areas in the resource model classified as Measured by IHCR.

The two mineral assemblage composite types (+38 µm and +20 µm) were interwoven throughout the model leading to a checkerboard effect on mineralogy, although this was considered by IHCR to also be in part attributable to the domaining control between some of the earlier mineral assemblage composites compared with more recently completed composites. IHCR considered that this checkerboard effect was mitigated in the high-grade region of Area 1 by removing the +38 µm mineral assemblage composites from that region, so only the +20 µm composites influenced the Measured Resource area for Zones 2 and 3.

The mineral assemblage composites that utilised the smaller screen sizing (+20 µm) saw an increase for specific mineralogical species, in particular zircon which saw a significant increase. IHCR concluded that the mineral assemblage composites based on the +20 µm THM assays generally yielded greater percentages of zircon and postulated this was likely due to the zircon generally being finer than the other mineral species and therefore making up a greater proportion of the –38 µm to +20 µm material.

IHCR considered the comparative testwork which saw a screen change during the initial assaying process from -2 mm/+38 µm (Diamantina) to -1 mm/+20 µm (Diamantina); and then to -2 mm/+20 µm (ALS) yielded results that required further investigation and analysis regarding the possible impacts the change in sizing may have on future mine planning studies.

CSA Global is of the view that there is currently no evidence to contradict this assumption but recommends that it be investigated in greater detail as project development continues.

For the 2019 modelling in Area 1 by IHCR, all +38 µm THM assays within the Measured Resource area within Zones 2 and 3 were removed. Majority of the +38 µm assays that were omitted were from the area of close-spaced geostatistical drilling.

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6 Mineral Resources

Drilling completed by other companies before VHML acquired the Project identified several areas of interest. Subsequent drilling and resource definition work in 2020 and 2021 focused on Area 1, Area 2 West, Area 3 and Area 4 to further improve resource classification from Inferred to Indicated and Measured (see Table 4, Table 5 and Figure 4).

Resource definition drilling confirmed Area 1 and Area 3 to be the most prospective. These areas became the focus of development and Ore Reserve studies. The declared Ore Reserves provide the basis for prospects of eventual economic extraction as by definition the Ore Reserve are economic. Area 1 and Area 3 now form the basis of the Goschen development reviewed in this ITAR. Area 2 West, and Area 4 are of a lesser priority, and are not included in the current mine plan.

The Company commissioned the Goschen North MRE in 2017 which was completed by independent consultant, Ms Christine Standing (Standing, 2017). This estimate was based on approximately 21,720 m of drilling completed before the Company owned the Project. The 2017 Goschen North estimate was re-assessed and re-classified in June 2022 and is now known as the Goschen Exploration Target 2022 (Section 14.1.1 – GET, 2022).

VHML does not consider the mineral sand mineralisation which occurs within that portion of its tenements outside of the four Resource Areas to be an immediate priority for development. These areas are at a relatively early stage of exploration and the Company intends to replace all historical data with new data which will meet the requirements for JORC Code reporting of Mineral Resources. These areas remain relevant targets for future exploration and development.

CSA Global concurs with this assessment.

6.1 Data Provided for Mineral Resource Estimation

The Goschen dataset is stored on an AcQuire database maintained by the Company. Data used for the MREs was downloaded from the AcQuire database by VHML and provided to Auralia who undertook the estimates. Data supplied included:

- Comma-separated value files with drillhole collars, lithology, survey data, assays, mineral composites, and downhole geophysical gamma logging results
- Microsoft Excel files with field duplicates and standard reference material
- Microsoft Excel files from Diamantina with raw and calculated assay data and from ALS with QEMSCAN and XRF data
- ALS files containing the downhole geophysical gamma logging for all drillholes within the targeted area
- Raw analysis data files from the laboratory were included for cross-checks
- QEMSCAN data in Microsoft Excel files received from ALS
- A topographical digital terrain model surface in Datamine format, generated using contour data from a light detection and ranging (LiDAR) survey carried out in 2018.

6.2 Goschen Area 1 (1 East and 1 West) Mineral Resource Estimate

The Area 1 Ore Reserves are included in the proposed Goschen development. The deposit is a multiple, stacked, sheet-like accumulation of heavy minerals hosted by very fine-grained sand that was deposited in what is interpreted to have been a relatively deep, low-energy marine environment.

6.2.1 Drilling Data

A summary of the drilling, sampling and assay data by the Area 1 sub-areas Area 1 East and Area 1 West is shown in Table 11.

Table 11: Area 1 summary of drilling and assays

Area	No of holes	Minimum depth (m)	Maximum depth (m)	Average depth (m)	Total metres	Total assays
1 East	412	21	57	37	14,276	9,059
1 West	53	36	63	48	2,510	1,677
Total	**465**	**21**	**63**	**38**	**16,786**	**10,736**

Assaying was completed in a series of distinct phases. During 2017 and 2018, a total of 4,388 samples (47.5% of the total) were assayed for THM, slimes and oversize by the method that produced a sand fraction between 2 mm and 38 µm. Between January 2018 and January 2019, a further 4,847 samples (52.5% of the total) used a sample preparation method that produced a sand fraction between -1 mm and 20 µm. This change to the bottom screen size was premised by the outcomes of metallurgical testwork which used a bulk sample of 9.1 tonnes passed through a wet concentrator.

The wet concentrator used a screw classifier fitted with a 20µm screen and it was shown that by using this smaller bottom screen, a significant upgrade to the contained THM could be achieved. Assaying of the wet concentrator feed produced a THM grade of 5.72%, slimes content of 15.3% and oversize of 5.38%.

VHML created an envelope that encapsulated the samples used to create the bulk sample and the AC samples around them and used the assay results from the wet concentrator to inform the MRE within the envelope. The envelope included parts of the mineral resource of Area 1 East, Domains 2 and 3. The remaining mineral resources outside the area of influence of the metallurgical testwork were informed by interpolation of grades.

6.2.2 Interpretation and Modelling

Geological boundaries were interpreted using a 0.8% THM cut-off grade with that value deemed more suitable for domaining due to the significant amount of "background" mineralisation occurring at 0.5% THM. Strings were digitised using Datamine and three-dimensional (3D) "surfaces" or solids were generated to define the mineralised domains.

Area 1 East

The Area 1 East mineralisation occurs as a sheet-like deposit, is located east of the Cannie Fault and comprises six domains. The characteristics of the respective domains are described below:

- Domain 1 is background material.
- Domain 2 is high THM with relatively good continuity along strike with grades varying across strike, and a general increase to the east.
- Domain 3 also has high THM grades which are relatively continuous along strike. However, unlike Domain 2, Domain 3 grades increase to the west. Domains 2 and 3 occur together as sheet-like mineralisation in the lithological sequence, separated in places by a discontinuous low-grade waste zone classified as Domain 1.
- Domain 5 is a lower-grade zone that occurs stratigraphically above the sheet-style mineralisation, relatively close to the surface, and is known as the Gemini deposit.
- Domain 6 occurs along the eastern border of the deposit and is positioned stratigraphically above Domain 5. It is a coarse-grained, low-grade, iron oxide-rich layer. Both Zone 5 and Zone 6 and have been constrained by an enclosed wireframe to limit their influence on the surrounding material.
- Domain 200 is basement.

Area 1 West

The Area 1 West deposit is located west of the Cannie Fault and comprises five domains including the basement.

- Domain 1 is a discontinuous low-grade waste zone that sometimes separates Domains 2 and 3.

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- Domain 2 is a high-THM domain that has relatively good continuity along strike; however, grades vary across strike (primarily increasing to the west).
- Domain 3 also demonstrates high THM grades with reasonable continuity along strike but is relatively variable across strike. Both Domains 2 and 3 occur together as sheet-like deposits in the lithological sequence, separated in places by a discontinuous low-grade waste zone which has been classified as Domain 1.
- Domain 5 is a low-grade zone positioned within the background (Zone 1) material as an enclosed mineralised envelope that is topographically above Domains 2 and 3. Domain 5 comprises the Gemini deposit.
- Domain 200 is basement.

Figure 7 is a typical section through Area 1 and shows the domains and downhole gamma responses.

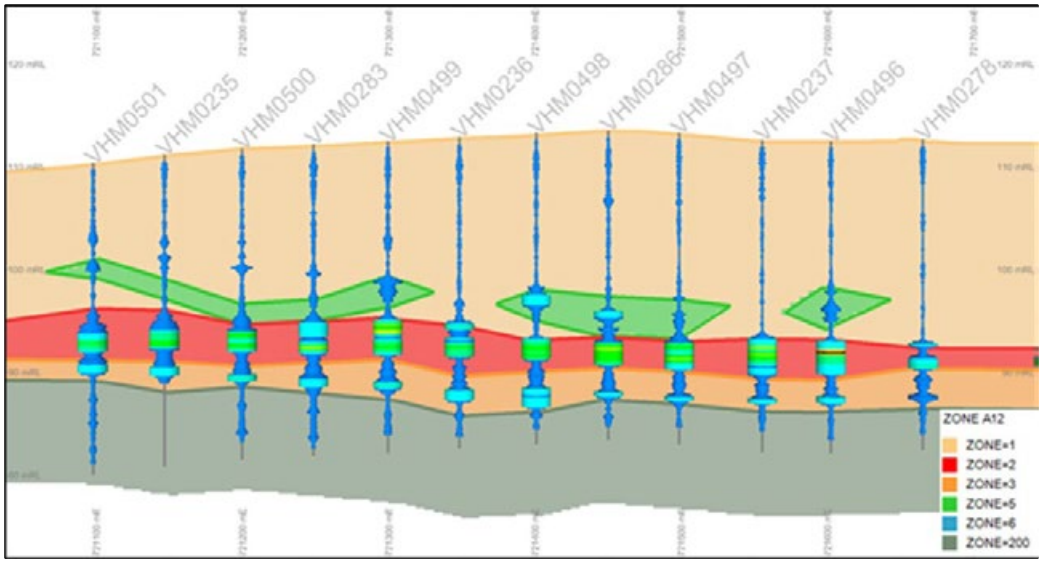


Figure 7: A typical section through Area 1 showing the domains (zones) and downhole gamma responses
Source: VHM Limited

For both Area 1 East and Area 1 West, boundary strings were digitised and snapped to the corresponding downhole mineralisation interval which was aligned with the downhole geophysical data. Intervals of relatively contiguous low grade within the mineralised domains were also digitised and defined as "waste". Domains were treated as having hard boundaries and therefore do not share sample data.

CSA Global is of the opinion that the domaining applied to Area 1, East and West, is appropriate.

Mineral Resources with assigned grades, and Mineral Resources which had grades estimated, have been reported separately for Area 1 East and have been re-combined in the Mineral Resources statement to reflect the total Area 1 East tonnes and grades above a 1% THM cut-off. Area 1 East, Domain 2 and Domain 3 estimates used the samples collected from the -1 mm/+ 20µm fraction and Domain 5 was estimated using the samples collected from the -2 mm/+38 µm fraction.

Resource modelling completed in November 2020 by VHML within Area 1 East indicated that the average THM grade of the -1 mm +20 µm samples from within the area from which the metallurgical testwork samples were taken for compositing (metallurgical domain) was significantly higher than the average THM grades for the -1 mm +20 µm samples for the remaining portions of Area 1 East, Domain 2, and Domain 3. The weighted average grade from drillhole samples within the metallurgical domain was 4.01% THM, whereas it was 2.01% THM, half the grade, for the remaining portion of Area 1 East estimated from the drillhole samples. This difference has been attributed to the respective grade estimates having been derived from non-coincident areas of the resource.

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When comparing the resource grades indicated by the metallurgical testwork with those from the drillhole samples within the metallurgical domain, there is a grade uplift indicated by the metallurgical testwork of about 40%, from 4.01% THM in the drillhole samples to 5.72% THM from the metallurgical testwork. This difference in THM grade has been attributed to differences between the drillhole sampling and assaying methods with the metallurgical process flowsheet. This misalignment will likely result in a similar disparity in other areas where sampling and assaying have been done using the current methods.

This difference has been noted by VHML, and better alignment of the sampling and assaying processes with the metallurgical flowsheet is underway.

In Domains 2 and 3 of Area 1 East, Ordinary Kriging was initially undertaken using the samples from the +20 µm fraction. Once the Ordinary Kriging had been completed, the mineralogical envelope was used to assign THM, slimes, oversize, and mineral assemblage to model cells that fell within the envelope, thereby overwriting the values assigned to those blocks during the Ordinary Kriging interpolation. The remaining portion of Area 1 East retained the Ordinary Kriging estimates.

In Area 1 West, Ordinary Kriging was undertaken but using the sample/assays that had been collected from the +38 µm fraction. There is a significant difference between the East and West grades, which is a function of the different fraction sizes sampled, assayed, and extrapolated.

Once the Ordinary Kriging interpolation was completed, the mineralogical envelope was used to assign THM, slimes, oversize and mineral assemblage to model cells that fell within the envelope, thereby overwriting the values assigned to those blocks during the Ordinary Kriging interpolation.

All Area 1 West Mineral Resources were interpolated from samples collected from the +38 µm fraction and those Mineral Resources are reported separately from Area 1 East.

The major portion of Area 1 East was assigned the grades which were measured from the metallurgical testwork. The bulk sample was subjected to a series of processing stages, with products from each stage measured, and the product yields and chemistry calculated. The final head grade and assemblage of the bulk sample were back-calculated to produce data representing the entire bulk sample.

Bulk density was applied to the model using a standard linear formula originally described by Baxter (1977). This approach was refined in a practical application using first principles calculations. The resultant graph is shown in Figure 8 with the regression formula shown on the plot. This regression formula was then used to calculate the conversion of tonnes from each cell volume and from there the calculation of material, THM and slimes tonnes.

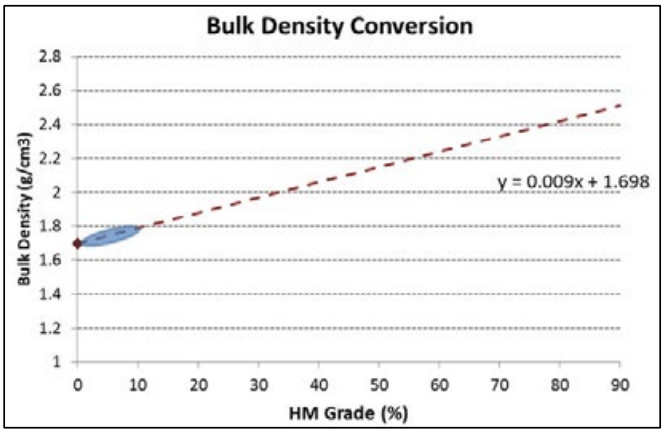


Figure 8: Derivation of formula for bulk density conversion factor

The steps integrating the two end points (for 0 and 100% THM) were:

- Assuming a packing factor of 58.25% (ref. AusIMM Monograph 9) and an average of silt to coarse fraction material

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- Assuming an average clay component of 10% with an average bulk density of 1.544 g/cm³
- Assuming a solids specific gravity (SG) for THM of 4.2 g/cm³ (average based on the mineral assemblage)
- Assuming a solids SG for quartz of 2.65 g/cm³.

The following calculations were made.

- For zero % THM (i.e. 100% quartz sand) the bulk density would be:

  $2.65 * 0.5825 = 1.544\ g/cm^3.$

- and for 100% THM the bulk density would be:

  $4.2 * 0.5825 = 2.447\ g/cm^3.$

VHML assumed the clay content was fixed for the deposit (which was acknowledged as not fully reflecting the true complexity but adopted as a conservative average slimes grade overall within the mineralised domains and taken as the average). This clay was added in as mass which filled the void space without changing the packing factor or bulk density. Therefore, the two THM end members had a bulk density of:

- [0% THM] 1.544 + (10% * 1.544) = 1.698 g/cm^3
- [100% THM] 2.447 + (10% * 1.544) = 2.601 g/cm^3.

The resultant points were plotted, and the regression formula was the bulk density conversion formula, which was:

- Bulk density = (0.009 * THM) + 1.698 (see Figure 8).

CSA Global recognises that as no bulk density measurement program had been completed at any of the Goschen deposits at the time that the MREs were prepared, the bulk density used throughout is a calculated value. In June 2022, the Company commenced bulk density measurements on sonic and diamond drill core from Area 1 and Area 3. The analysis of the bulk density measurements is nearing completion.

CSA Global endorses the strategy to collect bulk density data to improve the confidence that can be attributed to the MRE.

6.2.3 Block Model Validation and Classification

Validation of the estimates was undertaken visually, statistically and using swath plots. Cross-sectional slices of model blocks and drillhole traces and assays were viewed and demonstrated that model cells honoured the drillhole data (Figure 9).

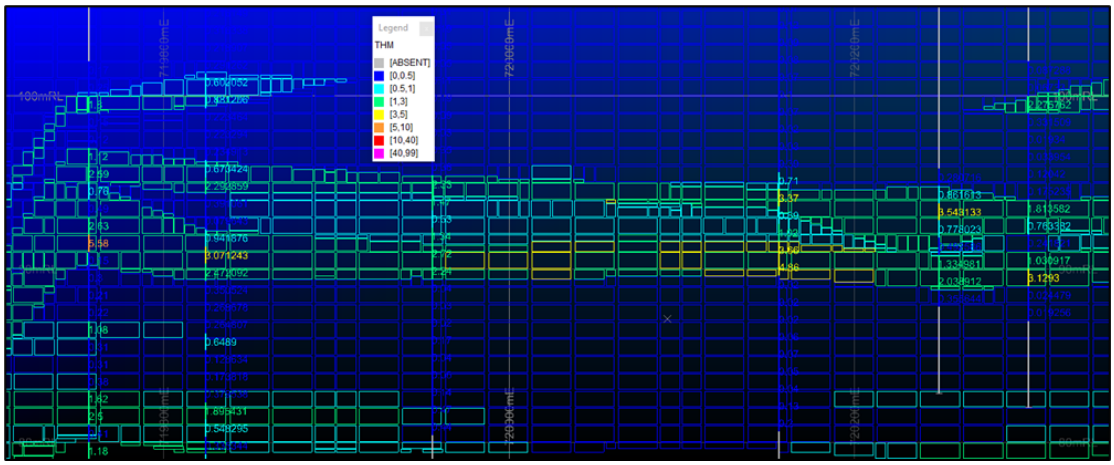


Figure 9: Area 1 East (Section 6053200mN) showing the correlation between drillhole assay grades and interpolated block model grades
Source: VHML

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For each of the reported mineralised domains, the input data composite mean was compared to the mean of the estimate. The two means were sufficiently close to allow the Competent Person to classify the MRE as a combination of Measured and Indicated Mineral Resources, with an acknowledgement that there was a degree of uncertainty due to the current assaying method likely understating the grades in all the estimated mineralisation domains.

Swath plots representing slices through the block model along the three main axes were reviewed as part of the validation process. The plotted averages of each slice together with the count of samples and blocks within each slice allowed a visual assessment of the agreement between sample and averages; and also indicates the amount of smoothing that has resulted from interpolation. Figure 10 illustrates an example of this validation.

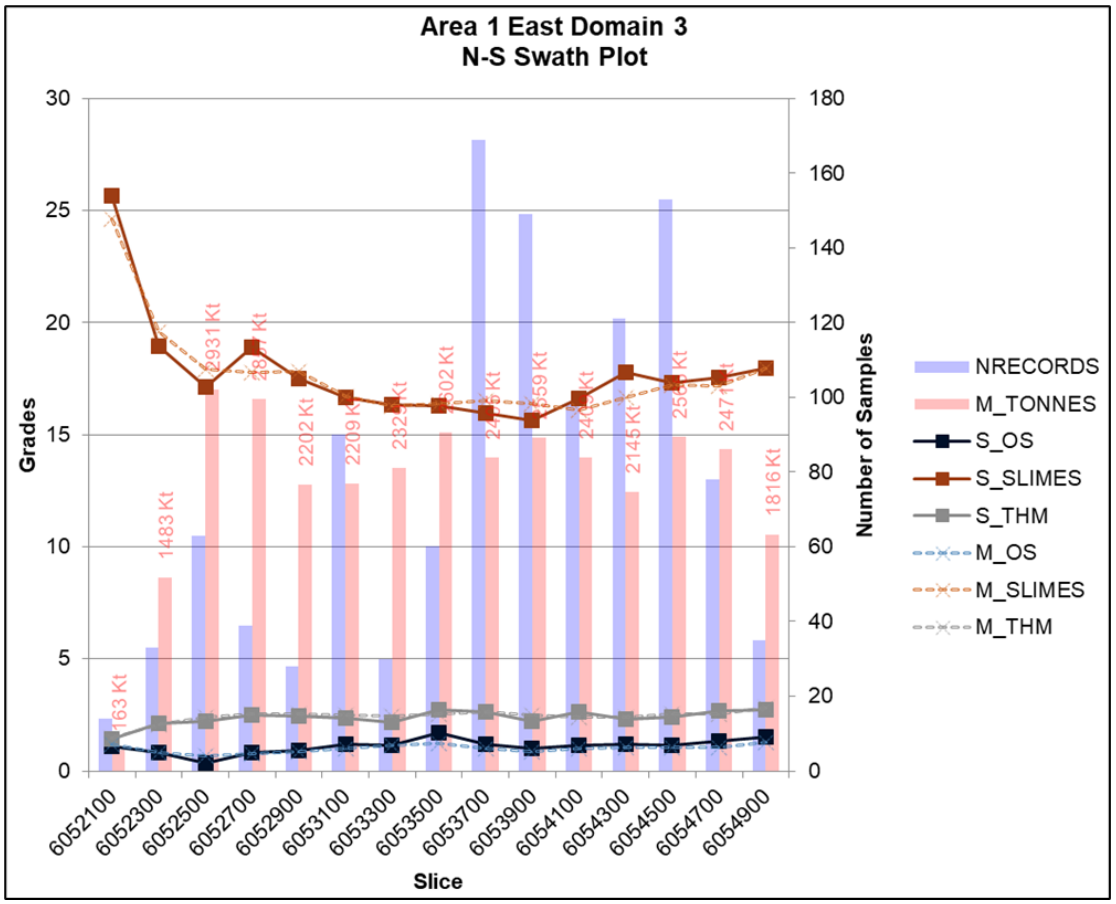


Figure 10: Area 1 typical example of a swath plot along the northing for THM, slimes, and oversize

It is CSA Global's opinion that the Area 1 East and West MREs for THM, slimes, oversize, and mineral assemblage across the three mineralised domains reported, have been successfully validated against the input data.

The main mineralised domains were Domains 2 and 3. Domain 5 was also considered of economic interest; therefore classification was focused on these three domains. Drillhole spacing was considered one of the important parameters for Mineral Resource classification and CSA Global is of the opinion that this consideration is entirely appropriate, however, the information derived from these drilling grids could also be used quantitatively for resource classification, together with the reliability of assaying, variography and interpolation parameters and outputs.

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Results from Quantitative Kriging Neighbourhood Analysis (QKNA) are typically used in conjunction with qualitative assessments such as geological and metallurgical characteristics or assumptions. The QKNA output parameters can be used to assess how accurate and unbiased the estimates are, or whether they measure up to all being Measured and Indicated Mineral Resources. In this instance, the Competent Person elected not to use QKNA as one of the classification criteria. Ultimately, the call is that of the Competent Person, and while CSA Global may not entirely agree with the classification rationale applied by the VHM CP, what the VHM CP has elected to do is appropriate, and correctly and transparently disclosed as per the requirements of the JORC Code.

Ultimately, the call is that of the Competent Person, and while CSA Global may not entirely with the classification rationale applied by the VHM CP, what the VHM CP has elected to do is appropriate, and correctly and transparently disclosed as per the requirements of the JORC Code.

In Area 1 East, Domains 2 and 3, the metallurgical domain grades for THM, slimes and oversize have overwritten the estimated grades. VHML considers that "*the additional data acquired during the bulk sample testwork represents data that is superior to the simple assay values*" and better reflects the grades which will be recovered by the minerals processing plant. The Mineral Resource over the metallurgical domain has been classified as a Measured.

All domains which have Mineral Resources estimated by Ordinary Kriging, have been classified as Indicated Mineral Resources. They include portions of Area 1 East Domains 2 and 3 and all of Domain 5. All Area 1 West Mineral Resources were estimated using +38 µm data and have been classified as Indicated Mineral Resources.

The Goschen Area 1 deposit is estimated to contain a Mineral Resource of 96 Mt at 3.5% THM, which is classified as Measured and Indicated as detailed in Table 4 and Table 5. The estimates and associated statements were compiled and prepared by Messrs Graham Howard and David Bushell as the Competent Persons.

CSA Global is of the opinion that irrespective of whether the +38 µm or +20 µm data were used for estimation, it is appropriate, given the grade uplift that was shown by the metallurgical testwork, to classify these resources as a combination of Measured and Indicated Mineral Resources. CSA Global also is of the opinion that the Mineral Resource statement for THM, slimes and oversize materials appropriately reflects the classified in-situ tonnages and grades for Area 1 East and West, based on the currently available information.

In preparing the MREs, Auralia flagged the material that is currently considered unavailable for mining due to community and environmental considerations. These are largely areas in which there are trees which are to be preserved.

The pit optimisations used to estimate Ore Reserves used only the Mineral Resource blocks that had been flagged in this manner.

6.3 Goschen Area 3 Extended Mineral Resource Estimate

Area 3 Extended comprises a mix of near-surface high-grade strandlines and multiple stacked sheet-like deposits of HMS. The Area 3 Extended resource estimate includes and supersedes the MREs previously referred to as Area 3 and Area 3 South. A block model was created to encompass the three mineralised zones containing the valuable minerals. A process of interpolation of drillhole sample grades and assigning metallurgy testwork head grades and metallurgical testwork outcomes to various zones was used to populate blocks within the model.

The total resource comprises 492 Mt at an average of 2.76% THM. The resource contains 13.6 Mt of HM (Bushell, 2020).

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Table 12: Area 3 Extended Mineral Resource statement

Zone	Resource category	Tonnes (Mt)	THM (%)	Slimes (%)	Oversize (%)	Zircon (%)	Rutile (%)	Leucoxene (%)	Ilmenite (%)	Monazite (%)	Xenotime (%)
1	Indicated	95.0	5.42	19	3	19.7	9.1	8.1	25.7	3.3	0.6
	Inferred	106.4	3.60	17	3	19.7	9.1	8.1	25.7	3.3	0.6
2	Indicated	69.6	1.68	20	3	19.7	9.1	8.1	25.7	3.3	0.6
	Inferred	52.9	1.66	19	3	19.7	9.1	8.1	25.7	3.3	0.6
3	Indicated	39.5	1.47	18	3	14.1	8.5	6.5	17.6	2.2	0.5
	Inferred	128.4	1.53	18	4	11.1	7.7	6	15.6	1.8	0.4
Total	**Indicated**	**204.1**	**3.38**	**19**	**3**	**19.2**	**9**	**8**	**25**	**3.2**	**0.6**
	Inferred	**287.7**	**2.32**	**18**	**3**	**17.2**	**8.7**	**7.5**	**22.7**	**2.9**	**0.5**
GRAND TOTAL		**491.8**	**2.76**	**18**	**3**	**18.2**	**8.9**	**7.7**	**23.9**	**3**	**0.6**

Table 13: Area 3 Extended REO content of whole rock analysis of the THM fraction

Zone	Resource category	Material (Mt)	CeO_2	Dy_2O_3	Er_2O_3	Eu_2O_3	Gd_2O_3	La_2O_3	Nd_2O_3	Pr_6O_{11}	Sm_2O_3	Tb_4O_7	Tm_2O_3	Y_2O_3	Yb_2O_3	TREO
1	Indicated	95.0	0.81	0.06	0.04	0.003	0.06	0.38	0.34	0.09	0.07	0.01	0.01	0.39	0.041	2.33
	Inferred	106.4	0.81	0.06	0.04	0.003	0.06	0.38	0.34	0.09	0.07	0.01	0.01	0.39	0.041	2.33
2	Indicated	69.6	0.81	0.06	0.04	0.003	0.06	0.38	0.34	0.09	0.07	0.01	0.01	0.39	0.041	2.33
	Inferred	52.9	0.81	0.06	0.04	0.003	0.06	0.38	0.34	0.09	0.07	0.01	0.01	0.39	0.041	2.33
3	Indicated	39.5	0.63	0.04	0.03	0.003	0.04	0.28	0.25	0.07	0.04	0.01	0.00	0.30	0.025	1.71
	Inferred	128.4	0.68	0.04	0.02	0.003	0.04	0.31	0.27	0.07	0.05	0.01	0.00	0.32	0.025	1.84
Total	**Indicated**	**204.1**	**0.78**	**0.05**	**0.04**	**0.00**	**0.05**	**0.36**	**0.33**	**0.09**	**0.06**	**0.01**	**0.01**	**0.37**	**0.038**	**2.19**
	Inferred	**287.7**	**0.76**	**0.05**	**0.03**	**0.003**	**0.05**	**0.35**	**0.31**	**0.08**	**0.06**	**0.01**	**0.01**	**0.36**	**0.034**	**2.10**
GRAND TOTAL		**491.8**	**0.77**	**0.05**	**0.03**	**0.003**	**0.05**	**0.36**	**0.32**	**0.09**	**0.06**	**0.01**	**0.01**	**0.36**	**0.035**	**2.14**

6.3.1 Drilling Data and Bulk Samples

A total of 7,260m of AC holes produced 7,408 samples that were used in the estimation process.

In 2017, 66 mineralogy composites were compiled for mineral assemblage determination by QEMSCAN. Subsequently, it was found that many of the samples which make up the composite samples contained zones of high trash and iron oxide materials. In 2020, these samples were re-analysed and excluded, and new composites formed from the remnant samples. The composites with the high trash and iron oxides were removed, filtered, and used to calculate the mineral assemblage and REE/REO for the areas which were not informed by the bulk sample collected in 2018 and which are discussed below. Six new composites in Area 3 South, and 170 samples from five lines augmented the QEMSCAN data. Figure 11 shows the positions of the drillholes which contributed samples to the composites which were analysed by QEMSCAN for mineral assemblage and REE grades and used to estimate THM, slimes and oversize grades. Mineral assemblage and REE grades from these composites were estimated into Zone 3 only.

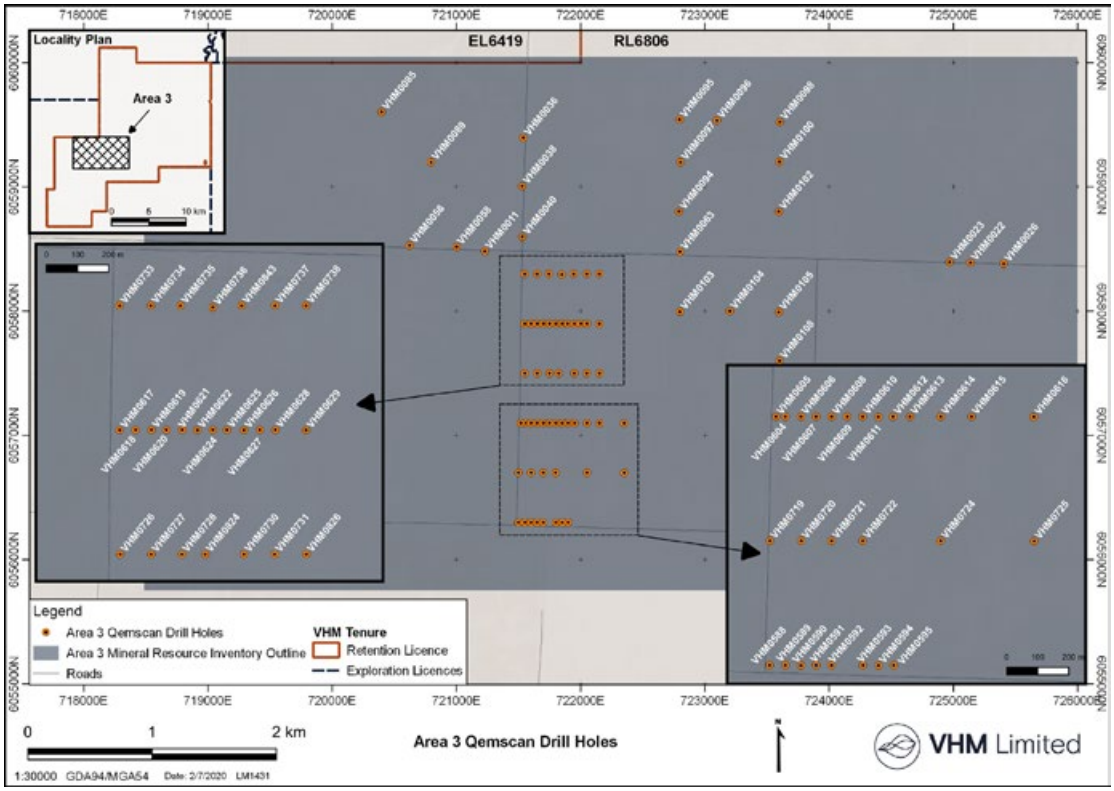


Figure 11: Plan showing the location of holes used to create the composite samples used for mineral assemblage determination

Figure 12 shows the location of drillholes used for the Area 3 Extended MRE for estimation of THM, slimes and oversize grades.

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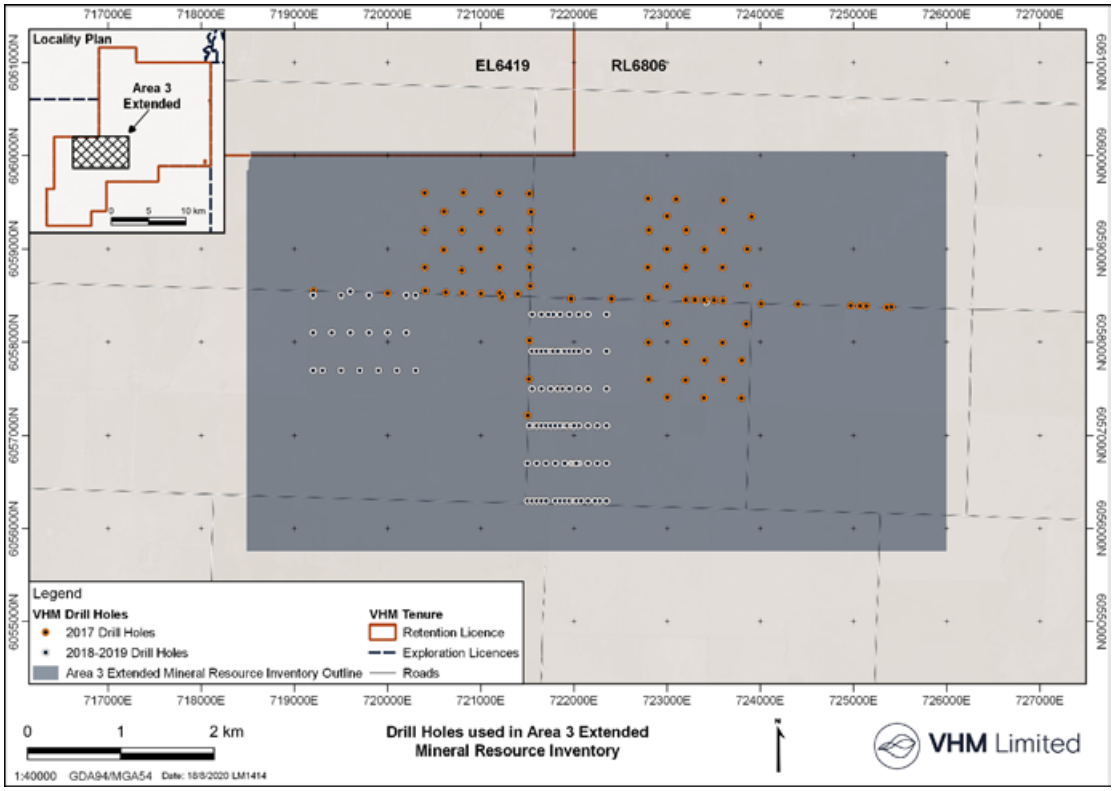


Figure 12: Plan showing the locations of drillholes used for THM, slimes and oversize estimation in Area 3 Extended

In 2018, a 1.8-tonne bulk sample was created by compositing the residues of the individual 1 m drill samples of approximately 6–7 kg each. The bulk sample used 238 samples from 64 of the 76 holes in the 2017 Area 3 resource area. The bulk of these samples were taken from the high-grade domain. The metallurgical testwork used a lower screen size of 20 µm to deslime the sample and showed a considerable uplift in recovery of heavy minerals compared to the individual sample grades of the "as drilled" samples, which used a lower screen size of 38 µm. The mineral assemblage and REE results from the bulk sample metallurgical testwork were assigned to Zone 1 and Zone 2 Indicated and Inferred Mineral Resources and the THM, slimes and oversize head grades were assigned to Zone 1 Indicated Mineral Resources. All other Zone 1 and Zone 2 mineral resource grades for THM, slimes and oversize were estimated into the block model from drillhole samples.

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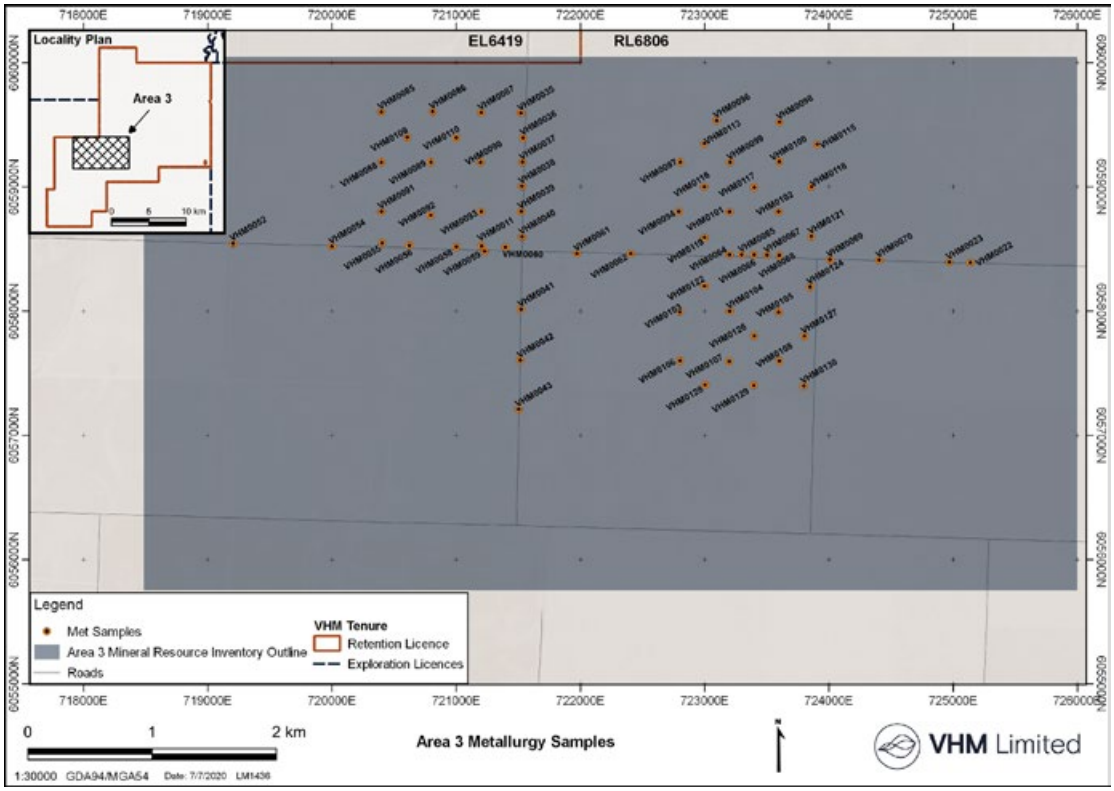


Figure 13: Plan showing the location of drillholes that contributed sample to the 1.8-tonne bulk sample used in the metallurgical testwork program

6.3.2 Interpretation and Modelling

In 2019, VHML collected downhole gamma values at 0.1 m intervals which were used in conjunction with THM grades to define zones of elevated zircon content. Sachets containing THM material were checked visually to distinguish valuable from waste material and a composite was made from the valuable material, often comprising as many as 30 samples that were collected along the section. This area of higher zircon content is Domain 1.

A second domain, Domain 2, was created in a similar manner by eliminating waste material after scanning the sachets. Typically, one sample per drill hole contained valuable THM material and a single composite was formed across Area 3 South.

In 2020, VHML re-interpreted the Area 3 Extended mineral resource by manually creating 282 sections of the deposit and defined three zones as follows:

- Zone 1 represents “high-grade” deposits of sheet-like zones of mineralisation that are continuous, along and across-strike. The high-grade (typically >2% THM) zone was interpreted to extend from the Orion deposit in the east to the Area 2 boundary in the west. The high-grade domains are open along all boundaries.
- Zone 2 represents a medium grade THM domain typically >1% THM and occurs as a stratigraphic sequence above and below the high-grade domain.
- Zone 3 represents an across-strike continuous, low-grade, THM sequence with local zones of >1% THM.

Density was calculated using the following equation, but it is understood that further work is required to make more reliable density estimates.

$$Density = (0.009 * THM) + 1.698$$

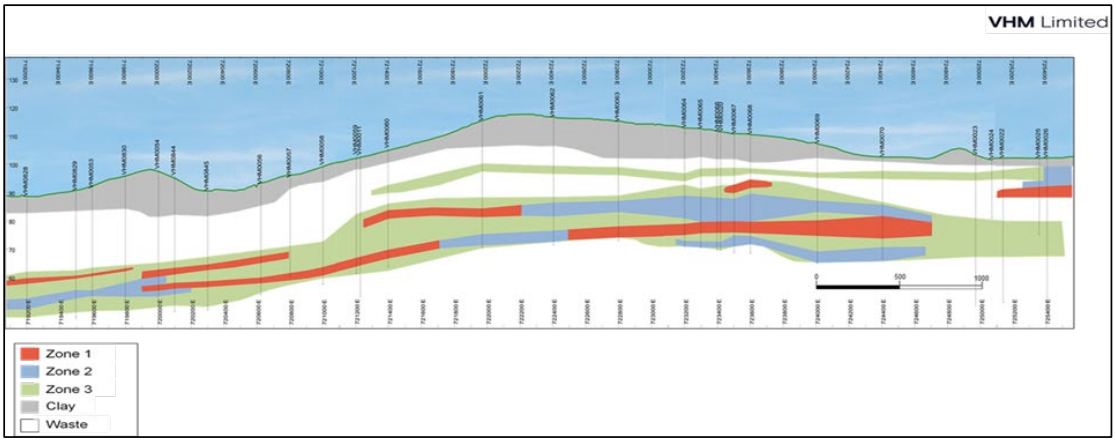


Figure 14: Representation of a west-east cross section through the Area 3 Extended Resource Area, showing the relative location of the three mineralised zones (vertical exaggeration applied)

The estimation block size is 25 m (X) x 100 m (Y) x 1 m (Z) and sub-celling was allowed with the Z dimension to 0.2m which is 20% of the composite length.

Inverse distance weighting squared (ID^2) was used for interpolation of THM, slimes and oversize, undertaken in three passes each time extending the search neighbourhood. Passes 1 and 2 used a minimum of two samples and a maximum of six, whereas for pass 3 the minimum was set to one sample.

Table 14: Summary of input data applied, and method used to populate the block model

	Zone 1 Indicated	Zone 1 Inferred	Zone 2 Indicated	Zone 2 Inferred	Zone 3 Indicated	Zone 3 Inferred
THM, slimes, oversize	Assigned bulk sample data	Interpolated ID^2 drill assay	Interpolated ID^2 drill assay	Interpolated ID^2 drill assay	Interpolated ID^2 drill assay	Interpolated ID^2 drill assay
Mineral assemblage	Assigned bulk sample data	Assigned bulk sample data	Assigned bulk sample data	Assigned bulk sample data	Nearest neighbour Drill sample composites	Nearest neighbour Drill sample composites

6.3.3 Block Model Validation and Classification

THM, slimes and oversize were estimated using ID^2 for Zones 1 to 3, except for Zone 1 Indicated Mineral Resources which were assigned grades from the bulk sample. Estimates were validated by swath plots and the results appear acceptable, although it is recommended that future estimation should be quantified by undertaking kriging neighbourhood analysis to define optimal estimation parameters. Zone 3 represents a work in progress, in that the selection of samples to be used for estimation of THM and mineral assemblage requires refinement.

In 2019, a program of work to re-assay samples from the Area 4 deposit was undertaken to understand the impact of using a 20 µm bottom screen compared to the conventional 38 µm bottom screen during the THM, slimes and oversize assay process. The results of the study showed an increase in THM content in all domains. Further, mineralised model domains that had been characterised as being sub-1% THM, based on the 38 µm bottom screen assay process, became domains dominated by samples that were greater than 1% THM, thereby providing a significant uplift in tonnes above a 1% cut-off-grade.

A similar program was conducted on samples from the Area 1 deposit. A total of 452 paired samples were analysed, and the results showed similar outcomes, a significant grade uplift, to those observed at Area 4.

As a result of these test results and as the bulk sample had been analysed using the 20 µm bottom screen size, mineral assemblage grades (mass%) for Zones 1 and 2 Indicated and Inferred Mineral Resources were assigned from the bulk sample; the assigned values are shown in Table 15. Also shown in Table 15 are the

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average grades determined by QEMSCAN analyses from composites collected from the Area 3 South drillholes; these are shown for comparative purposes.

Table 15: Bulk sample mineral assemblage grades and Area 3 South QEMSCAN mineral assemblage grades

Mineral	2018 Bulk sample metallurgical testwork mass (%)	2019 Area 3 South composite mass (%)
Zircon	19.7	22.3
Rutile	9.1	13.6
Leucoxene	8.1	8.5
Ilmenite	25.7	34.6
Monazite	3.3	2.6
Xenotime	0.6	0.7
Others	33.4	16.7
Total	**100.0**	**99.2**

An outcome of assigning grades or mass % from the bulk sample is that every block has the same grade or mass %, and this may not fully represent the spatial distribution of the THM or mineral assemblage properties in a localised context. The relationship between the elements which make up the mineral assemblage is constant which in turn implies that the VHM percentage is constant for every block. This implication is acceptable in a global sense, particularly given the proposed bulk mining approach adopted in the mine plan.

Figure 15 and Figure 16 illustrate the spatial variability of THM and zircon. These two figures were generated from the estimates of THM and zircon rather than using information from the bulk sample metallurgical testwork. This is a more realistic representation of the spatial variability of THM and mineral assemblage elements, and this variability is what can be expected when mining takes place.

In Table 15, the bulk sample mineral assemblage mass % are compared to the QEMSCAN data from Area 3 South and, although the sample support size is different, the Area 3 South data values are in general significantly higher than the bulk sample values. At this stage, it is unclear whether the differences are a function of the sample sizes or because of the non-stationary nature of the distribution of the mineralisation. If it is the latter, then future bulk sampling will have to consider the variable nature when defining representative areas for sample collection.

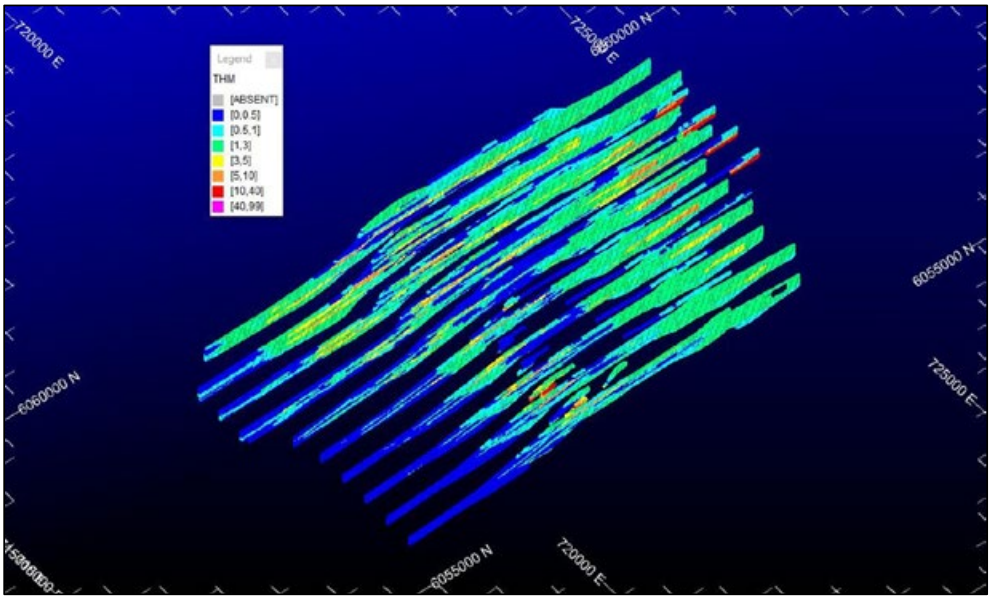


Figure 15: Area 3 block model coloured by lab assay THM grade and sliced at 400 m northings (Zones 1, 2 and 3 shown)

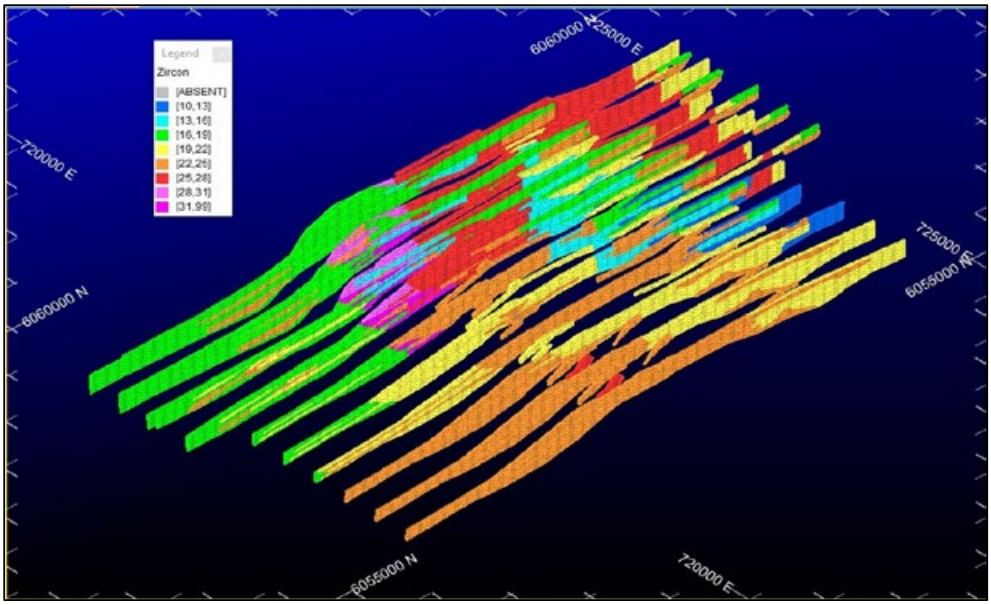


Figure 16: Area 3 block model coloured by QEMSCAN zircon grade and sliced at 400 m northings (Zones 1, 2 and 3 shown)

All three zones have areas that have been classified as Indicated or Inferred Mineral Resources. The Indicated portion is relatively well informed by drillholes as well as by the bulk sample, although Zone 1 and Zone 2 are not well covered in the southern portion by the bulk sample. Zone 3 is informed by drillholes and the QEMSCAN data which, although not as densely drilled, covers the portion previously referred to as Area 3 South more fully. Figure 13 shows the coverage of drillholes and QEMSCAN data.

CSA Global initially had concerns that assigning grades or mass %, and therefore the same values to every block, may not have provided a sufficient representation of variability to fully support mine planning and economic valuation of the deposit as might be expected with the categorisation of parts of the estimate as Indicated Mineral Resources. However, following clarification by the nominated Competent Persons for Mineral Resources and Ore Reserves, CSA Global is of the opinion that the mining schedule is not sensitive to localised grade or mass percent variations, particularly given the bulk mining approach selected for Ore Reserve estimation.

CSA Global considers that the Mineral Resource classification as presented in the summary of Mineral Resources tables (Table 12 and Table 13) is appropriate.

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7 Mining

7.1 Mining Operations

Complete extraction of ore is planned using open pit strip mining down to the top of the water table, and currently only within the areas that the Company has sought to secure land access and environmental approvals which are still pending. All waste material (including overburden and clay) will be used to create in-pit bunds to contain tailings, and to cap tailings after drying to bring the landform back to its original state. Minor additional earthworks may be required in each "tailings cell" to assist in water recovery and drying/consolidation time.

Mining will be undertaken as a block/strip-mining operation, with progressive backfilling of the pit as the mine progresses. Each block will have a final floor footprint of approximately 500 m x 150 m. Waste material (overburden, interburden, clay and topsoil) will be stockpiled on surface at the commencement of mining operations until there is sufficient capacity and suitable conditions in the mined void to allow direct deposition into the mined areas. Stockpiled material on the surface will ultimately be rehandled to the final mine void to remove the visual effects of mining upon closure and to return the area to its original use.

The proposals for in-pit disposal and long-term storage of process tailings and mine waste, and the proposed safety protocols are discussed in Section 7.4.

Mining will be by conventional truck and excavator methods. The mining fleet will be used to transport the majority of overburden from its in-situ location to the ex-pit and in-pit waste dumps and for transporting ore to the MUP). Two hundred tonne class excavators (Cat 5120B, Komatsu PC2000 or similar) will be used for waste mining, 110-tonne class excavators (Komatsu PC1250 or similar) for ore mining and 130-tonne rigid body trucks (Cat 785 or similar) for ore transport to the MUP. The load and haul fleet will be supported by scrapers, dozers, front-end loaders, graders, and water carts.

Pit slope parameters are detailed in Table 16. These parameters are for dry conditions only; a detailed slope stability assessment has been completed for various groundwater conditions and bench heights, taking into account light and heavy vehicle movements.

Table 16: Proposed slope design angles

Condition	Material	Bench height	Berm width	Bench slope angle	Overall slope angle
Dry, short-term slopes – overall pit depth = 32 m	Topsoil / silty clay / clayey sand	Up to 10 m	6 m	40°	~32°
	Cemented sand / silty sand	Up to 22 m		34°	
Dry, short-term slopes – overall pit depth >32 m	Topsoil / silty clay / clayey sand	Up to 10 m	6 m	40°	~31°
	Cemented sand / silty sand	>22 m		32°	

An overall slope of 30° was assumed from pit toe to crest for the optimisation, however, the parameters in Table 16 were used for the pit designs.

Auralia proposed a mine recovery of 98% for ore, and dilution of 5%, which CSA Global considers reasonable for this stage of study. A more detailed study can be conducted in future should it become necessary once actual production data is available.

After reviewing the outputs from the Whittle optimisation used to estimate Ore Reserves (see Section 13 below) from the Resource Block Model (Section 6) a general mining sequence was determined to target higher grade (cashflow) areas of the pit, while also creating a logical block/strip-mining operation. A high-grade zone on the eastern side of Area 1 was considered the best place to commence operations, however, a combination of economic and community factors led to the decision to schedule the commencement of mining at the south-eastern corner of the north paddock. Interim pit designs were completed using the same

geotechnical parameters as the main pit. The final pit was subdivided into blocks of approximately 500 m x 150 m and each block numbered according to the extraction sequence, shown in Figure 17 below. Area 1 is on the left and Area 3 is on the right.

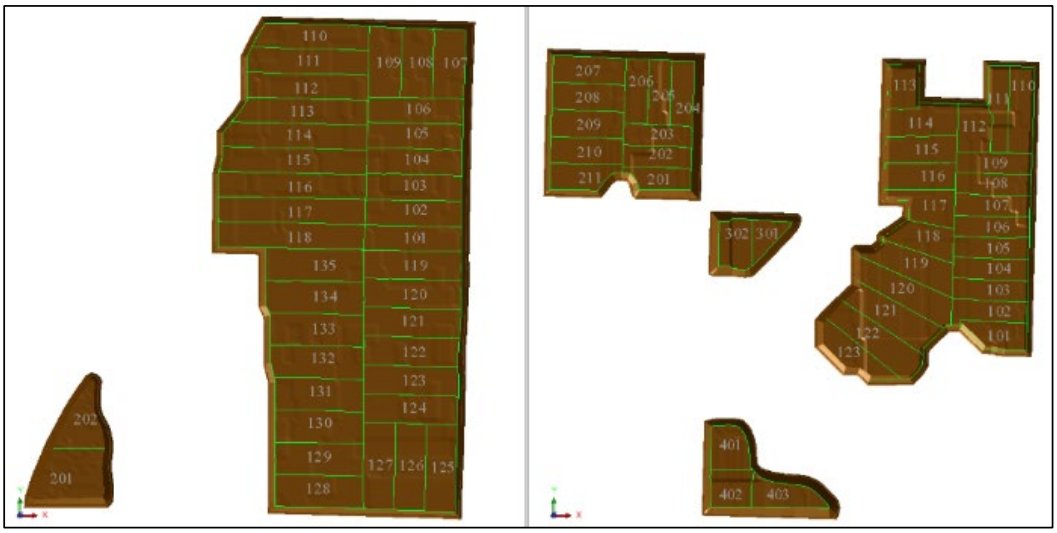


Figure 17: Mining block outlines for Area 1 (left) and Area 3 (the two areas are not shown to scale)

As the overall pit designs have not significantly changed from the PFS Mining Study work, the infrastructure locations of Area 1 and Area 3 that were used for the 2021 Ore Reserves are still valid and are shown in Figure 18 and Figure 19 respectively. Land access issues may impact the size, shape and location of the surface mining infrastructure once mining commences.

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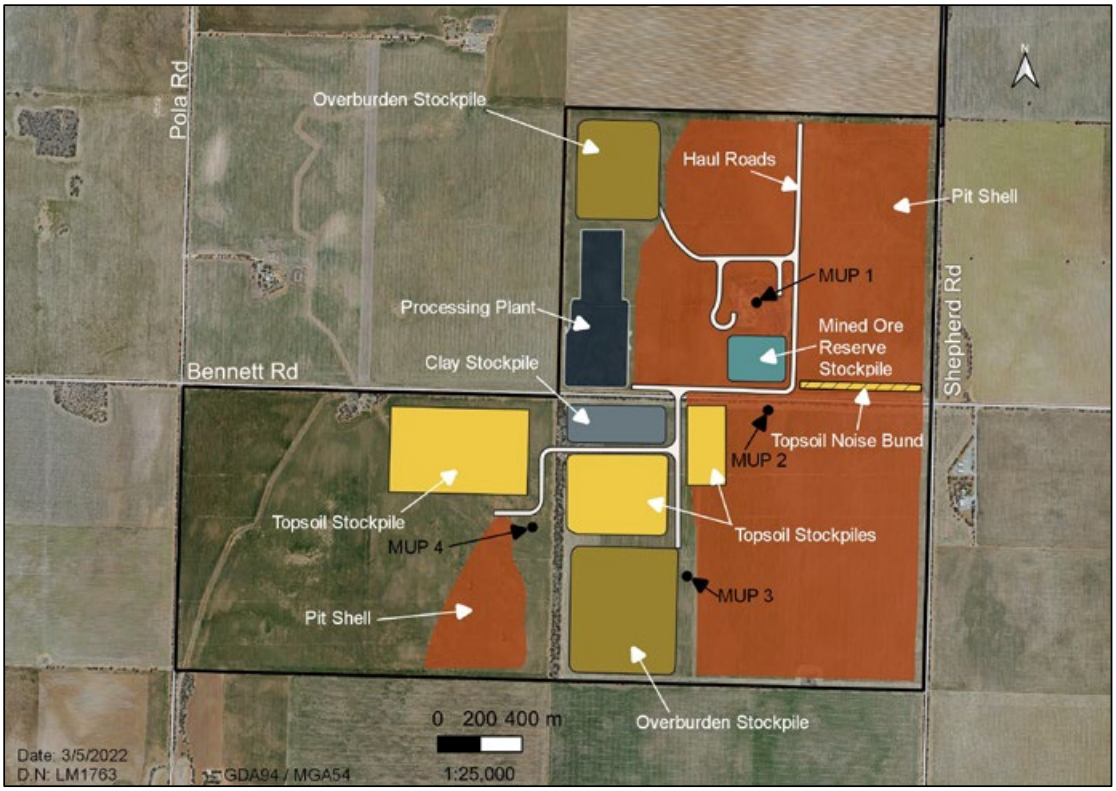


Figure 18: Area 1 surface infrastructure

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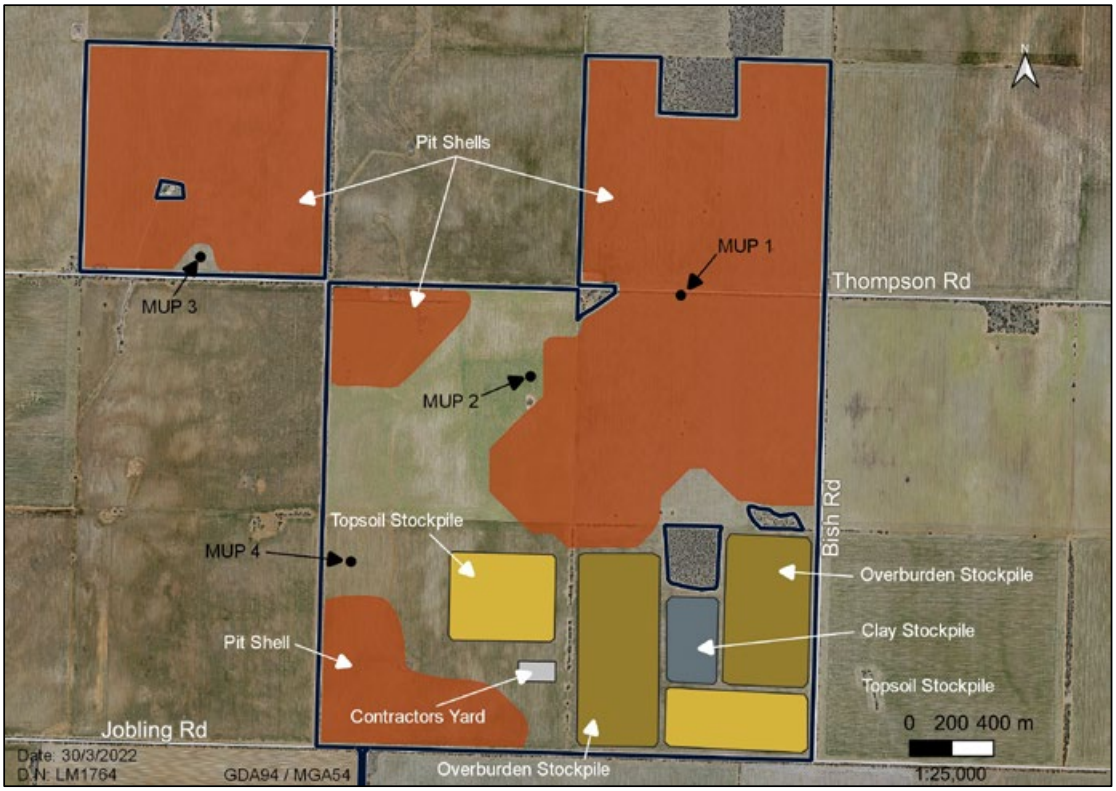


Figure 19: Area 3 surface infrastructure

7.2 Mining Schedule

A mining schedule has been developed to maintain a 5 Mtpa MUP feed rate. This required an annualised production rate varying from 10 Mtpa to 25 Mtpa total movement, ore, and waste. Rather than use the results obtained from the Whittle pit optimisation studies used for estimation of Ore Reserves (Section 13), a simplified means was used to discriminate between ore and waste for the purpose of deriving the mining schedule.

A block value calculation was undertaken to classify each block as ore or waste. The ore/waste classification was performed in three steps:

1) Calculating the revenue of each block.
2) Calculating the processing cost of each block.
3) Calculating the cashflow of each block.

If the block revenue was greater than the processing cost, the block was treated as ore, otherwise it was treated as waste. The difference between ore and waste mining costs (e.g. run-of-mine (ROM) rehandle) were included in the "processing cost".

The optimisation process determined the pit limits, and the block value calculation then used to determine what within the pit should be classified as ore or waste. Anything flagged as cash flow positive was sent to the MUP and classified as an Ore Reserve. This was considered the best method to replicate the results from the Whittle pit optimisation.

Table 17 shows the life of mine (**LOM**) material movement.

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Table 17: Combined mining production schedule

	Year 0–5	Year 6–10	Year 11–15	Year 16–21	LOM
Waste mining (kt)	64,275	60,474	59,489	75,979	**260,217**
Ore mining (kt)	24,667	25,131	25,021	23,864	**98,683**
Waste stockpile rehandle (kt)	-	9,226	-	30,411	**39,637**
Total heavy minerals	4.9%	3.4%	3.3%	4.3%	**4.0%**
Zircon	29.1%	23.5%	19.3%	20.1%	**23.5%**
Rutile	11.3%	9.9%	9.0%	9.3%	**10.0%**
High-grade leucoxene	9.4%	8.5%	8.0%	7.9%	**8.5%**
Ilmenite	25.0%	25.1%	25.2%	25.5%	**25.2%**
Monazite	4.2%	3.7%	3.2%	3.3%	**3.7%**
Xenotime	0.8%	0.7%	0.6%	0.6%	**0.7%**
Other heavy minerals	20.2%	28.6%	34.7%	33.3%	**28.5%**
Slimes	15.0%	16.7%	20.5%	16.0%	**17.4%**
Oversize	4.6%	3.6%	2.7%	3.0%	**3.4%**

7.3 CSA Global Review Comments

The mining studies completed by Auralia recommended excavator and truck mining as best suited for mining. The proposed mining method is common for this kind of operation. As all mining will be above the water table, the in-pit road conditions will provide good trafficability for large, rigid body dump trucks. In CSA Global's opinion, the selected equipment should be well suited to mining flitch heights of 2–4 m. Note that flitch heights are not bench heights in Table 16. Flitch heights are the height of ore benches that are to be extracted.

A trucking study was completed for the DFS, based on quarterly production rates, haulage distances from the mining block to the MUP and an average truck speed of 15 km per hour. The total truck requirement fluctuates between eight and 14 over the LOM. In CSA Global's opinion, the calculation method and the frequency of truck numbers changing are reasonable and sufficient for the DFS.

Auralia's suggested ore mining strategy is reasonable for this deposit. Auralia suggests positioning the MUP on the surface, in close proximity to the mining face at suitable locations to optimise the haulage and pumping distances. A detailed MUP location strategy is included in Auralia's report, with eight locations provided in and adjacent to the mining area. In CSA Global's opinion, the number of MUP locations, and their positions relative to mining, provide a reasonable balance between minimising haulage distance and minimising relocation costs for the MUP.

The soil profiles have been updated since the 2021 Ore Reserves, with updated geotechnical parameters provided. Auralia's pit designs follow these new recommendations, with all mining using 32° batter angles for the lower bench, 6 m wide berms roughly 10 m from the surface, and 40° batter angles for the upper bench. In CSA Global's opinion, taking into account the size, width and depth of the planned pit, the overall slope angles may not have a significant impact on the cash flow. The selected slope angle is based on dry conditions.

7.4 Mining Waste and Process Tailings Disposal

Auralia's mining schedule includes surface stockpiling of overburden until sufficient void is available in the pit for placement of the waste therein. Plans are to rehandle the initial waste back to the final mine void once the ore mining and tailings deposition have been completed in each pit. A detailed overburden mining and dumping strategy are included in Auralia's report. CSA Global deems this a suitable strategy and effective for minimising waste haulage distances and rehabilitation/closure rework.

A detailed tailings strategy has been included in the DFS, based on recommendations from a SciDev Limited report from 2021, and prepared by P&S. This strategy includes initially stockpiling ROM material until the first tailings cell is constructed, to remove any requirement for a surface tailings storage facility. In-pit bunds

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constructed primarily of clay will separate the mining activities from the tailings area, with sub-cell bunds constructed to provide additional support for unexpected additional water.

Backfilling of waste over the tailings is assumed to occur as soon as the tailings deposition has been completed. The Tailings Management section of the DFS outlines the timeframe for tailings cells to reach a suitable factor of safety that indicates the backfilling of a cell may be delayed if the required consolidation has not occurred. In CSA Global's opinion, the scheduling assumptions are suitable for this study, however, CSA Global recommends ensuring that sufficient waste storage capacity is available in the initial stages of the schedule.

With respect to the DFS proposals for in-pit co-disposal of waste and tailings, CSA Global recommends an update of this section of the DFS with particular consideration of the operational safety, management and risk aspects of the proposal.

In response to this recommendation, VHML recently retained a tailings specialist to provide commentary as to whether the tailings/waste management philosophy is consistent with that applied elsewhere, and the reasonableness of the proposed testwork program to mitigate risks associated with the DFS tailings storage plan.

The specialist completed a high-level review of the DFS tailings management plans and noted that mining and tailings deposition is planned entirely above the water table, and that only in-pit disposal and storage is being considered. The pit base will range between 30 m and 40 m below the natural ground surface in some areas, and each tailings cell is expected to have a life of eight to 12 months. The active tailings cell will be separated from the downstream mining area by intermediate and main tailings cross-pit bunding, with inter-cell spillways included to control water release. Progressive rehabilitation will be implemented. A tailings cell consequence category of "Significant" has been adopted in the DFS which the specialist considers appropriate as an operational strategy.

The specialist commented that flocculated co-disposal of a sand-slimes mix is not novel and that this, or similar approaches have, and are being used at several active mineral sands mining operations across Australia. However, these do not have a separation cell between the active tailings cell and the active mining area. In the specialist's opinion, the separation cell will provide additional safety for personnel operating downstream of the active tailings cell.

The specialist also noted that brine and any other by-products from the processing operation will be reintroduced into the tailings stream prior to deposition. The specialist proposed geochemical testing of tailings material and in-situ foundation material to identify if these materials might contain any trace elements that exceed regulatory thresholds. The specialist also commented that it is known that the Geera clays are prone to oxidation which produces acid sulphate, so it will be best to avoid this material. The specialist noted that based on the DFS design, the base of the proposed works will be several metres above the Geera clay interface. The outcomes of the geochemical testing may influence design requirements and hence the specialist recommended that the necessary testing be completed to present the outcomes to regulators.

The specialist concurs with the recommendation by CSA Global to undertake a detailed risk assessment from the design phase through to closure as this will aid in identifying any additional considerations and concerns that can be investigated further as part of the FEED. Auralia presented a detailed FEED forward works program in the DFS, and upon review of this documentation and the advice of the specialist above, CSA Global is satisfied that the Company is cognitive of the importance of undertaking a detailed risk assessment from the design phase through to closure as part of the FEED, as well as the necessity for geochemical characterisation of the tailings material and in situ foundation material to determine how these might influence design requirements. CSA Global concurs with the specialist's recommendation that the outcomes of the geochemical studies be presented to regulators as this should minimise risk related to regulatory approval.

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7.5 Mining Costs

Mining costs were provided by Majesso Consulting Pty Ltd (**Majesso**), based on a contractor operation. Although not a mining contractor themselves, Majesso undertakes cost estimation for contractors to complete quotations and proposals for clients.

Auralia provided Majesso with a production schedule from preliminary work undertaken in 2019 based on a 5 Mtpa processing throughput and a 3.5:1 strip ratio. Unit mining costs were requested for three haulage distances for ore (500 m, 1,000 m, 1,800 m) and waste (400 m, 1,000 m, 1,800 m) to cover the expected material movement over the life of the Project. An updated set of unit mining costs was requested in November 2021 using the original DFS data.

Small changes to the proposed mining sequence resulted in the proportion of material for each haulage distance changing slightly, however, the unit mining costs were still considered appropriate. It was concluded that two average LOM unit mining costs, ore and waste, would be applicable to mining each material from its in-situ location to final destination. The unit waste mining cost was applied to all material in the optimisations, with the additional ore mining cost treated as a processing cost; individual ore and waste mining costs were applied in the cash flow model. A waste rehandling unit cost (from stockpiles to final pit void at the conclusion of mining) and tailings bund construction unit cost were estimated based on the operating costs provided by Majesso and proposed construction plans for tailings bunds.

Unit costs for waste rehandling and tailings cell construction were assigned directly to the specific materials in the cash flow model. LOM costs for material handling were calculated from preliminary work and distributed across all mined material in the final pit optimisations. Unit mining costs include all contractor fixed monthly/annual costs (equipment charges, staffing costs), but exclude mobilisation and demobilisation. Additional costs for ROM rehandle and contractor dayworks were assigned to ore material only and included as a processing cost/ore handling cost during optimisation work and cash flow modelling.

Table 18: Mining operating costs applied in optimisations

		Applied to
Waste mining cost	A$2.15/t	All in-situ mined material
Tailings bund construction	A$0.41/t	All in-situ mined material
Waste rehandle	A$0.22/t	All in-situ mined material
Additional ore mining cost	A$0.08/t	Processed ore (as processing cost)
ROM rehandle and dayworks	A$0.65/t	Processed ore (as processing cost)

Table 19: Mining operating costs applied in cash flow model

		Applied to
Waste mining cost	A$2.15/t	In-situ mined waste
Ore mining cost	A$2.24/t	In-situ mined ore
Tailings bund construction	A$2.71/t	Tailings bund material
Waste rehandle	A$1.45/t	Rehandled waste
ROM rehandle and dayworks	A$0.65/t	Ore mined

7.6 CSA Global Questions re Mining Proposals

The key review items to address are detailed in Table 20, together with the supporting FEED forward works program elements.

Table 20: CSA Global review questions and Auralia responses

Item	CSA Global questions	Auralia and P&S response
1	Construction and implementation plan to determine and detail the method of bund construction to achieve engineering design outcomes.	The Forward Work Program includes the development of the bund construction methodology.

Item	CSA Global questions	Auralia and P&S response
2	Recommendation for geotechnical sampling and analysis to support the Area 3 ground model.	Five geotechnical diamond drillholes have been drilled with another five to go. P&S to provide testwork analysis and final report in September 2022.
3	Flocculated co-disposal mix tailings engineering properties determinations are required.	The Forward Work Program includes a scope of work for specialist laboratory testing which is to be conducted by the University of Queensland.
4	Confirmation of the actual tailing strength through sampling and analysis for re-input into the engineering evaluation and models.	The determination of shear strength by cone penetration will be undertaken during the Forward Works Program and this will be used to inform the FEED design.
5	Confirmation through analysis of Young's modulus for the tailings.	The Young's modulus will be extrapolated from the oedometer and slurry consolidometer tests and this information will be used to inform the FEED design.
6	Detailing the tailing bund construction process to comply with a referenced and appropriate engineering standard.	The Forward Work Program includes the requirement for the development of the bund construction methodology.
7	Confirm the tailing properties through engineering analysis to ensure that once the tailings have consolidated under their weight, and pore pressures reduced, and before backfilling with overburden, the tailings should no longer be susceptible to liquefaction.	Permeability and consolidation rates versus times will be determined through laboratory testing conducted by the University of Queensland. This testwork will assist the FEED process to ensure that 80% or greater consolidation can be achieved.
8	Confirm the actual tails saturated permeability values through engineering analysis. This data is required as input for tailings modelling to calculate elastic-plastic consolidation due to the saturated nature of the material.	The Forward Work Program will undertake slurry consolidometer tests to determine the values for saturated permeability under different in-situ stress.
9	Mitigate through engineering analysis the high-level estimate for tailings flow from a breached the main bund made using empirical data and the concept level geometry.	Auralia's approach is to manage dam break risks with bund construction, isolation, and monitoring. A risk assessment including Planning, Audit & Risk(PAR) will be undertaken, and bund construction mitigation measures will be incorporated as part of the FEED.
10	Mitigate the concept design approach in the consequence category assessment against ANCOLD Guidelines on the Consequence Categories for Dams (ANCOLD 2012), through the application of FEED designs.	The Forward Work Program will include slope stability assessment against the ANCOLD requirements, and take into account updated seepage models, and tailings parameters from the University of Queensland testing regime.
11	Management plan of action to address hazards and risks associated with the mining the method implementation, operability, and mine management.	The Forward Work Program will include risk and mitigation for bund construction, tailing and water management, pit stability management, and stormwater management.
12	Current project and operational risks register.	The Forward Work Program encompasses the requirement for construction, operational, and decommissioning impact assessments.
13	Management plan to address safety aspects considering heightened global concern concerning tailings dam failures.	The Forward Works Program incorporates in-pit tailings civil design and documentation and the associated project operational risk assessment. These outputs will be incorporated into the high-level Management Plan as part of the FEED.
14	More details on the variability of the weather and assessment of operability concerning peak rainfall and flood events planning.	The Forward Work Program incorporates hydrology, and stormwater management requirements concerning bulk earthworks, drainage, and haul roads.
15	Factor of Safety considerations and description.	The Factor of Safety for the in-pit storage designs will be based on ANCOLD recommendations.

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8 Metallurgy and Processing

The metallurgical and processing aspects of the DFS are a combined effort using inputs from various parties. For the concentrator, the bulk of the study work and supporting test work has been completed by MTPL, a recognised leader in the supply of mineral processing equipment for the mineral sands industry. CSA Global does not see this as a significant risk as VHML has established an ongoing four-year working relationship with MTPL which is expected to continue.

The Company has engaged TZMI to provide technical support and input to the project development. TZMI is a global, independent consulting company that specialises in all aspects of the mineral sands and titanium dioxide industries. The process testwork and outcomes have been reviewed independently by TZMI on behalf of VHML.

8.1 Process Overview

From a number of alternatives, VHML has selected the processing flowsheet shown in Figure 20 as the basis for the DFS. This depicts a MUP, FPP, WCP and REMFC, which produces a HMC from the WCP and a mixed rare earth minerals concentrate, the latter separated from the HMC by a flotation circuit. Apart from being a saleable product, the separation of the REMC reduces the radioactive component of the HMC by removing monazite and xenotime.

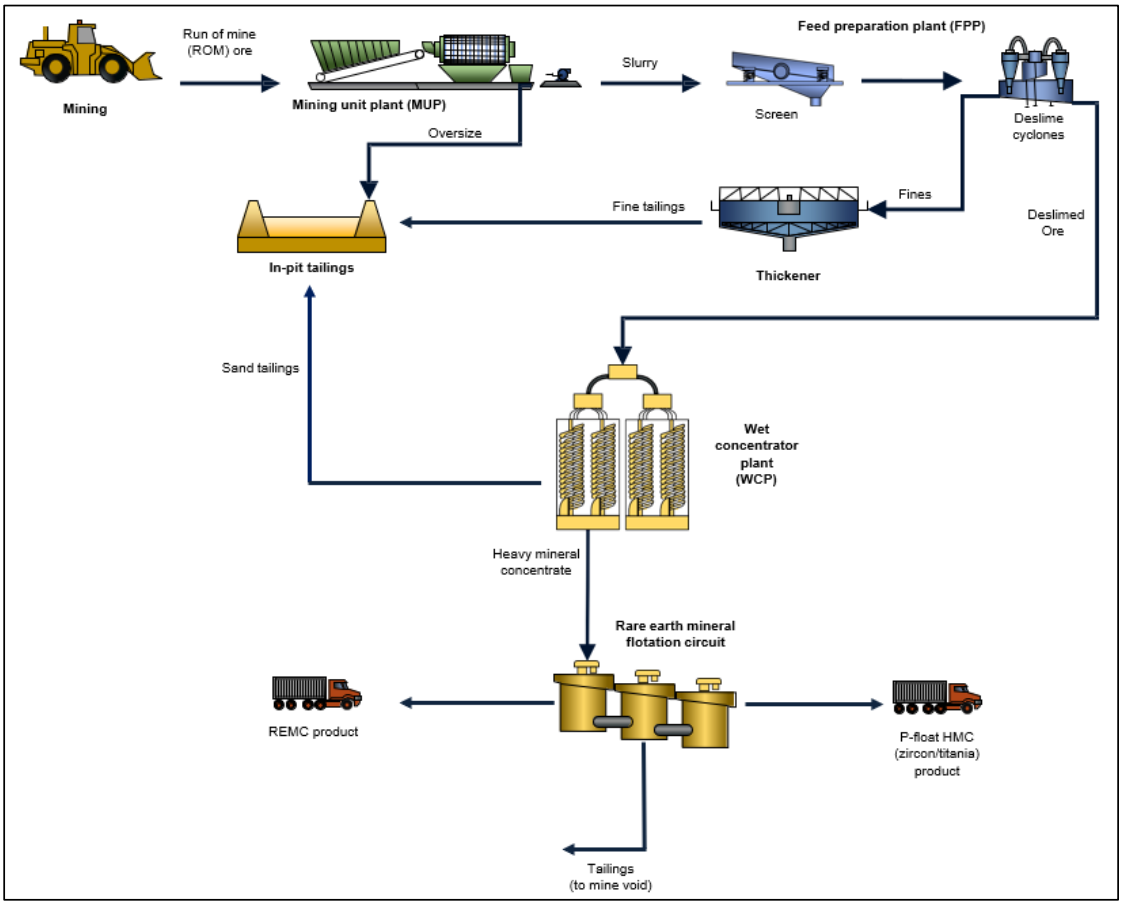


Figure 20: High-level flowsheet

The main elements of the process flowsheet are described below.

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- **MUP:** ROM ore will be fed into the MUP, where it will be scrubbed to liberate mineral particles by deagglomeration, screened to remove trash oversize (+40 mm) and slurried for overland pumping to the FPP. This is conventional practice, and no material issues are considered likely in this area.
- **FPP:** The FPP includes coarse (2 mm) and fine screening (350 µm) to remove oversize. Slimes (-20 µm) will be removed by desliming cyclones in readiness for gravity separation of the resulting sand fraction in the WCP. A scavenger circuit on the fine screen oversize will recover misreporting fine heavy minerals. The operation of the WCP is heavily dependent on the successful performance of the FPP with respect to the elimination of the coarse and slimes fractions as this is critical to achieving efficient separation of heavy minerals in the spiral circuit. The oversize is reported to be essentially barren and the heavy minerals in slimes is considered economically unrecoverable using available separation techniques. Slimes and oversize distribution are well understood and included in the mine schedule.
- **WCP:** Feed to the WCP will be controlled by a mass flow surge bin. Primary mineral separation will be accomplished in multiple stages of spiral separators to produce HMC at a target grade of >90% THM. The re-cleaner spiral concentrate is to be screened at 250 µm as the target value minerals are reported to exist in the -106 µm size fraction (based on testwork). The recovery assumptions are supported by testwork using full-scale equipment. MTPL has conducted testwork on many similar fine-grained mineral sands deposits, as well as pilot plant trials where bulk quantities have been tested. This, to a large extent, provides confidence that the flowsheet/testwork recoveries are robust and sustainable. Recovery of fine particles on spirals is usually a challenge, however, MTPL has fine-tuned the operating conditions and made appropriate equipment selection to maximise the recovery of this material. Recoveries of ZrO2 and REM are in line with typical gravity separation plants when the revised operating conditions from the testwork are utilised.
- **REMFC:** The HMC will be further processed in a flotation circuit to produce a REMC from the float material and a P-Float HMC from the sink material. Flotation is possible at ambient temperature due to low iron concentrations. The flotation processes are also well understood and considered conventional.

The proposed concentrator has been assessed against the Project Development Readiness Index criteria that are based on the Association for the Advancement of Cost Estimation (**AACE**) international recommended practice no. 18R-97. For a DFS, the required level of project definition and engineering completion is typically 10–40%, which is in line with the level of development achieved in the DFS.

8.2 Metallurgical Testwork

The main metallurgical testwork campaigns were conducted in 2018–2019 to a DFS level up to the WCP and REMFC. Initial characterisation testwork was completed on AC drill samples from mining areas 2, 3 and 4 followed by detailed characterisation on samples from Areas 1 and 2. The currently proposed development only mines Areas 1 and 3.

The characterisation testwork was followed by testwork on a 1.8-tonne bulk composite sample made up of selected AC drill samples from Area 3. The sample comprised bulk rejects (each 5–7 kg) from 1 m drilling samples from which the primary/duplicate (2 kg) geological laboratory samples were split. The bulk sample was processed at MTPL's pilot-scale testwork laboratory, Gold Coast, Queensland, through equipment designed to emulate a full-scale FPP, WCP, REMFC and Wet High Intensity Magnetic Separator (which is the initial stage of an MSP, which is not included in the current project proposal). The testwork was conducted on a staged basis. Auralia has stated that "*The combination of drillhole and sample source locations provides a high level of confidence that the sample is representative of the mineralised zone*" (Keers, 2021,35) and provided bulk sample correlation to mine plan and resource model, thereby confirming the representativity of the bulk composite sample.

A second round of testing was undertaken using a composite sample of approximately 9.1 tonnes from selected AC and sonic core drill intervals from Area 1 (Table 21). This sample was subject to the processes listed above, with additional processing through a Non-Magnetics Upgrade Circuit and a Flotation Circuit to final titanium, zirconium, and REMC product. The latter processes may be included in the proposed process

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plant; however, the currently proposed flowsheet only goes through to REMC and a zircon titania concentrate. The intent of the composite sample was to provide a design basis that is more robust to cope with variability.

Table 21: Area 1 metallurgical composite

Zone	Method	Length (m)	Mass (kg)	% by mass
1	AC	49	260	3%
2	AC	252	1,284	14%
3	AC	128	694	8%
Multiple	Sonic core	214	6,843	75%
Total		**643**	**9,081**	**100%**

Source: Keers, 2021, 32

The WCP spirals were first run in closed circuit with a varying mass taken to concentrate for each stage before bulk open circuit tests to develop stage release curves. This is standard testwork practice. The performance achieved in the laboratory was on full-scale equipment and as such is an indication of expected performance within the limits of single-stage testing. Plant operation would incorporate fully integrated circuitry including recirculating streams which cannot be fully tested in a laboratory environment. Selected streams were therefore re-processed to:

- Evaluate the impact of stream recirculation.
- Maximise quantity of final HMC.

The laboratory testwork was augmented by simulation work conducted by MTPL using models developed and refined over many years of designing and installing plants. Process recoveries are thus largely based on test work results augmented by simulation modelling on open streams. The expected performance of the processing plant has been benchmarked against other ores with characteristics similar to the Goschen resource and takes into account results from both Goschen ore mineralogical analysis (QEMSCAN) and metallurgical testwork results from testwork programs completed by MTPL.

The basis for the simulation model factors is understood to be the intellectual property of MTPL. The simulation for THM, TiO_2, ZrO_2 and CeO_2 was run with each stage mass yield adjusted as per the design target (production of an HMC with >90% THM) and to suit circuit configuration taking recirculating streams into account, rather than mimicking testwork conditions. CSA Global recommends that these optimised conditions form the basis of the next bulk run to validate the simulation. Modelling is supported by recoveries and mass flows determined from testwork results from individual tests using material sourced from Area 1. Work has also been done on Area 3, which behaved similarly to Area 1 and was used to guide plant design windows.

Area 1 bulk sample laboratory processing recoveries were determined to be 57.1% heavy minerals, including 48.2% for TiO_2, 86.7% for ZrO_2 and 86.6% for CeO_2 which occurs in the REMs. A high proportion of TiO_2, ZrO_2 and CeO_2 was contained in the recycle streams which increased recoveries to 71.5% for heavy minerals, 62.1% for TiO_2, 92.3% for ZrO_2 and 92.1% for CeO_2 at an HMC grade of 90.6%.

While the particle size distribution (**PSD**) and VHM assay results were similar, the characterisation testwork showed a slight, but distinctly different density profile and THM assay result for the Area 3 bulk sample composite. The difference in grade and mineral assemblage is not expected to materially impact the flowsheet design or equipment selection as the Area 3 material responded better in the WCP relative to Area 1 which was used as the basis for the WCP design. It is understood that a sonic drilling program has commenced to provide further metallurgical samples for validation testing. CSA Global notes that the expected sample locations and drill profile cross-section logs are well documented.

The ALS and Diamantina general assay process discards the slimes. Hence there is no measurement of fine-grained target minerals reporting to the slimes as this material is lost to wastewater during the wet screening process. Mineral assemblage composites that utilized a smaller screen sizing (20 µm) generally

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yielded higher heavy minerals and the conclusion was that fine-grained heavy minerals are present within the slimes. IHCR attributed this to fine-grained zircon.

Subsequent testwork demonstrated that there are VHMs in the 20–45 µm size range, and that an elevated recovery of VHM in the 20–38 µm size fraction contains 4–5% of the VHM. The successful recovery of fine-grained heavy minerals under laboratory conditions compares well with results reported on similar ore sources from the same region, with very similar PSD. The material risk is that the MTPL model and testwork results may overstate the performance of the cleaner circuit relative to the full-scale plant. Anecdotally, it is understood that MTPL has piloted similar material from the same region and realised equal or better results; hence discounting recovery for scale-up is not recommended at this stage. It is, however, recommended that the circuit be more closely analysed during the current bulk campaign to provide interpretive data to support the split factors.

The mix of screen sizes used for desliming (i.e. 38 µm and 20 µm) introduces the risk of error in reporting the ore particle deportment to slimes and the THM deportment to slimes within the resource estimate model. CSA Global recommends that this be investigated in greater detail during the FEED stage, and that the sampling and assay processes continue to be fully aligned with the metallurgical flowsheet.

With respect to ore and recovered product characteristics, the Company/MTPL has reported that:

- The most valuable minerals are relatively clean and have a high density (higher than most of the titanium minerals).
- The WCP feed PSD indicates a natural mass concentration in the +63/-106 µm size fraction as well as low residual slimes and oversize.
- 46% of the THM are present as VHM of SG >4.05 and these VHM contain most of the target economic minerals. Although VHML is targeting 60–70% recovery from the finer recoverable fractions (below 38 µm), the relative quantity of these particles is low (~5%) and the bulk of the mineral particles can be found in coarser fractions.
- The remaining 54% of heavy minerals in the -4.05+2.85 SG fraction contains a high proportion of weathered titania minerals of which about 50% are recovered to the WCP spiral concentrate.
- The zircon does not appear to be stained like that found in deposits to the south, which is also a positive for the Project.

In order to assist with an assessment of material balance, MTPL provided a spreadsheet of stream flows that incorporates solids SG assumptions/calculations but does not incorporate HMC or major component grades. As the component grade and recovery data are not included in this information, reconstruction is the only way to fully appreciate the component mass flows. In mineral sands projects, given the multiplicity of elements under consideration, a mineral sands mass balance diagram is normally limited to solids mass, HMC content, water mass, % solids, stream Dry Solids Specific Gravity and volumetric flow.

CSA Global understands that a steady-state mass balance model including component mass and showing THM deportment has been prepared for the WCP with three scenarios investigated (base case, high grade, high recovery) as part of the process design.

VHML has additional testwork planned to assess several criteria. Specific areas to be considered in the variability and verification testwork include:

- Confirmation of the ROM ore material flow properties for detailed design
- Confirmation of the de-slimed ore material flow properties for detailed design
- Confirmation of the thickener performance using site water (Kangaroo Lake)
- Confirmation of the feed preparation circuit using hydraulic de-sliming cyclones
- Processing of the WCP feed through the same processing flowsheet described above
- Confirmation of the REMFC performance using site water
- Confirmation of recoveries through the FPP and WCP.

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CSA Global recommends that this test work also includes a fully integrated plant mass balance including component mass and showing THM and the main proxy compounds (TiO_2, ZrO_2 and CeO_2) be developed as part of the current bulk sample program, or during the FEED phase.

8.3 REMC Testwork and Marketing Assessments

8.3.1 REMC Testwork

The REMC contributes significantly to project revenues, hence the testwork to produce the REMC and the results therefrom warrant more detailed discussion. Two separate testwork programs were conducted using material sourced from Area 3 (a 1.8 tonne ROM sample) and from Area 1 (a 9 tonne ROM sample):

- Initial characterisation testwork was completed on composited AC drill samples from mining areas 2, 3 and 4 followed by detailed characterisation on samples from Areas 1 (this includes what was formerly Area 2 South). The currently proposed development only mines Areas 1 and 3. The characterisation testwork was followed by testwork on a 1.8-tonne bulk composite sample made up of selected AC drill samples from Area 3. The sample comprised bulk rejects (each 5–7 kg) from 1 m drilling samples from which the primary/duplicate (2 kg) geological laboratory samples were split. As noted above, Auralia has stated that *"The combination of drillhole and sample source locations provides a high level of confidence that the sample is representative of the mineralised zone"* (Keers, 2021,35) and provided bulk sample correlation to mine plan and resource model, thereby confirming the representativity of the bulk composite sample.
- The Area 3 bulk sample was processed at MTPL pilot-scale testwork laboratory, Gold Coast, Queensland, through equipment designed to emulate a full-scale FPP, WCP, REMFC and Wet High Intensity Magnetic Separator (which is the initial stage of an MSP, which is not included in the current project proposal). This work had the objective of "fast tracking" production of REMC for downstream hydrometallurgical testwork at ANSTO Minerals, which was reported in July 2018 (MS-1279067). The testwork was completed in batch mode using a 20 kg sample of Area 3 HMC which was passed over a shaking table and concluded that standard flotation techniques were suitable to recover a REMC from the HMC. A suitable reagent scheme which would float REM with a very high selectivity was defined. Approximately 1.2 kg of REMC was produced from the Area 3 flotation testwork.
- A second round of testwork utilised 200 kg of Area 1 HMC. Approximately 12 kg of REMC was produced. This work was reported in April 2019 (MS-1372520 4 and 5). The flotation testwork included batch tests to confirm the stability of the results from the first testwork program, and standard locked testwork to assess the impact of recycles on performance and reagents. In both cases, the parent-HMC feed to the flotation circuit was freshly attritioned and de-slimed gravity concentrate. The grade and REE composition of the REMC from both areas were comparable, demonstrating similarity in material sourced from the different project areas and the robustness of the circuit.

Sufficient REMC was produced during both the Area 3 and Area 1 trials to allow for complete characterisation of the REMC product with the results from Area 1 used to establish a product specification including XRF assay, mineralogy by QEMSCAN and PSD. The main minor contaminants were aluminium-silicates (e.g. tourmaline, staurolite and minor garnet), which are planned to be removed by gravity using wet shaking tables to produce a premium product. The flotation feed contained 90.8% THM and assayed 29.9% TiO_2, 23.6% ZrO_2 and 1.28% CeO_2. Mineralogy indicated 5.2% monazite and 1.1% xenotime. Recovery of monazite to final REMC was 95.5%, and for xenotime, 91.1% relative across both flotation and gravity upgrade circuits.

The final REMC assayed 58.9% total REO, with minor oxides including TiO_2 (<1%), Fe_2O_3 (<1%), $Zr(Hf)O_2$+SiO_2. Mineralogy indicated 83% monazite and 11% xenotime (i.e. ~94% REM); non-REMs included zircon (1.7%) and titanium-minerals (0.5%).

CSA Global believes that the flowsheet is straightforward with flotation shown to be highly selective at separating REMs from the other VHM, with the REMC undergoing a clean-up using gravity separation. A high degree of flexibility has been built into the plant flowsheet with three gravity separation stages (shaking

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tables) included to fine tune the final quality of the REMC. There will be a high degree of flexibility to respond to variations in feed grade and market requirements.

8.3.2 Market Acceptance of Product

Based on the successful production of HMC and REMC, the Company has conducted several meetings with principal manufacturing corporations in Europe, North America, and concentrate processors in Asia. This has resulted in offers for offtake for both valuable heavy mineral concentrate (zircon and titania) and rare earth minerals from Goschen. The Company is presently in negotiations to progress a non-binding offtake with a major Asian-based processor.

The Company has also sent samples to several Chinese processing facilities who have successfully processed the samples through their facilities.

MTPL has commented that it understands that there are operations around the world that sell REM-rich stocks with grades starting at 50% REM. The typical industry standard is >85% REM and premium stocks generally assay >92% REM.

8.4 Process Plant Design Criteria

The process design criteria (**PDC**) are based on the material received for the testwork. Equipment specifications have been assessed by MTPL over a significant range of operating parameters. During the FEED optimisation stage, the PDC will be expanded to include the expected ore characteristics that will be experienced. The steady-state mass balance included with the process flow diagrams does not fully balance but this is not considered material to the overall result. Supplementary mass balance data has been provided and CSA Global recommends that process flow diagrams be updated in the FEED program for consistency.

The plant design has been based on a nominal operating envelope using the Area 1 DFS testwork results with some allowance for variation. Area 1 will be mined and treated in the first five to eight years of the Project and has a characteristic closest to the average design basis, hence there will be an opportunity through Phase 2 expansion and sustaining capital to reconfigure the plant over time if feed characteristics significantly vary in the latter years of the Project's operating schedule.

The developed PDC are used as the basis for specifying the equipment to be used in the plant. Likely variations in feed grade are a design factor that has been included to ensure that the plant has considerable latent capacity to handle this. A similar analysis has been completed for low grade; however, this is not detailed in the DFS, but has been demonstrated in data provided by MTPL. MTPL has run mass balances on feed quality ranges to ensure that grade and throughput ranges are understood, while the plant performance against the LOM grade is presented as the nominal.

In terms of mineralogical interpretation, MTPL has taken into account the PSD, heavy liquid analysis, chemical analysis and mineralogical work. The flowsheet balancing is based on an iterative calculation of the recovery functions for solids, water and mineral flows through the circuit. The method, therefore, relies on an accurate definition of the recovery function for each stage in the flowsheet, using specification of the solids flow (i.e. mass take to product), per cent solids by weight of the flow (slurry density) and per cent assay. The slurry density and assay information are then converted to water and mineral flows.

The feed grade to every stage of the processing circuit is calculated as a result of all the streams entering the stage. The performance curve of the stage is automatically mathematically normalised using proprietary algorithms based on the change in the feed grade and other flow information. The outputs from the stage are then calculated, which may, in turn, change various stage feeds in the circuit. The process iterates until a steady state is achieved. The basis of the normalising technique employed by MTPL is the conservation of separation efficiency. The assumptions that have been made to generate the recovery estimates and the basis of the calculations include:

- For Phase 1 design study and flowsheet modelling purposes, the characteristics of the ore are based on the Area 1 mining inventory from the March 2021 ORE which indicated a grade of 4.7% THM in the

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ROM. The flowsheet model assumes that the mineral composition of the THM is consistent with Area 1 test sample.

- Recovery of "High-Grade Leucoxene" is based upon recovery of the HG Leuc. Particles as per QEMSCAN particle classification rules.
- Recovery of "ilmenite" is based upon recovery of the cumulated LG Leuc., altered Ilmenite and Ilmenite particles as per QEMSCAN particle classification rules.
- The lower recovery of ilmenite compared to rutile may be due to the classification of the titanium particles for "ilmenite", which would include some low SG particles that have a lower recovery rate through the WCP. Typical "ilmenite" recovery would be expected to be similar to that of zircon and other high SG minerals.
- Quartz content for the circuit output is based on the flowsheet model data.

MTPL have interpreted the MRE grade to mean 4.73% THM in ROM ore. Mining dilution is only 2% so the difference between Resource grade (MRE) and Ore grade (ROM) is not material. The THM grade used in the mass balance was 4.7% for the Area 1 Mining inventory, which was based on the Project Description from August 2021 (RPP960). The slimes content (12.8%) and oversize (5.7%) were based on the bulk sample for which the back calculated THM grade was approximately 5.7%. The recovery curves adopted for process design were based on the testwork. There have been multiple mass balances completed as part of the next phase of work, which includes high-grade (7%) ROM feed and high slimes (23%) to assess ore variability.

The MTPL mass balance assumes that the grade of the coarse reject is the same as the overall feed grade (4.7%). The coarse reject is the oversize (+40 mm) from the scrubber trommel and the reason it has the same grade as the overall feed grade is that the oversize generated at the scrubber is potentially non-liberated material, and as such would be the same grade as the feed material. Currently, this is 0.5% of the feed material (3.3 tph) but with proper design for the scrubber (and retention time) these losses should be minimal. The mass balance shows that the expected grade of the rejects stream from the screens and cyclones is expected to be much lower.

THM into the WCP is 31.6 tph, and recovered HMC is 25.3 tph, i.e. a mass yield to HMC through the WCP of 80.0%. The grade of the HMC is approximately 90%, which confirms an overall recovery of about 72% of feed heavy minerals to heavy minerals in WCP concentrate. This confirms statements made above in Section 8.2 and below in Section 8.5.

The Area 1 ore slimes content from testwork is nominally 13%, whereas for Area 3 a range of 15–20.5% slimes occurs after Year 10. The equipment specifications allow for significant feed variations, with automated valves on cyclones to increase or decrease the number of cyclones in operation depending on the slimes content. Blending is also available through stockpiling to smooth out variations.

The WCP feed grade (6.3% THM as stated in the MTPL PDC data) results from the removal of slimes in the MUP and FPP. The FPP losses have been based on vendor modelling (cyclones) and minimum efficiency requirements specified to vendors for screens. This is standard mineral sands practice in that the WCP feed grade excludes slimes and oversize. The estimate of WCP feed grade has been determined as accurate from the mass balance spreadsheet provided by MTPL.

The expected performance of the processing plant has been benchmarked against other ores with characteristics similar to those at Goschen, and includes metallurgical testwork results at scoping, PFS and DFS levels completed by MTPL. Material flow has been based on testwork results derived from a 9-tonne bulk trial. Process recoveries are largely based on simulation modelling and data that has been derived from full-scale pilot plant data on similar ore bodies.

The basis for the simulation model factors has been described by VHML in document 514-PM0002 RevD. The MTPL benchmarking suggests that:

- The mineral characteristics are consistent with other deposits MTPL has analysed in the Murray Basin.
- The slimes levels are well within the range encountered in other operations.

- Although considered relatively fine-grained, the VHML fraction responds well to treatment using industry-standard gravity spiral technologies. Optimisation of the operating envelope of the spirals and removal of interfering coarse particles by screening is key to ensuring high recoveries are achieved.

It is recommended that the basis for the recoveries for each stream be tabulated once the latest bulk testing program is complete and the flowsheet/mass balance validated.

The level of project development for the concentrator has been assessed against the Project Development Readiness Index criteria that are based on the AACE international recommended practice no. 18R-97. For a DFS, the required level of project definition and engineering completion is typically 10–40% and this review confirms that the work is within the expected range. MTPL has provided data to CSA Global that describes how the underlying 3D model was developed, and the subsequent extraction of material take-off for bulk materials estimated, which supports the level of accuracy reported in the study.

MTPL has developed an extensive model, created Space Gass models for structures and has also produced basic concrete drawings. In discussions with MTPL, some of these drawings have been sampled, and CSA Global is satisfied that there are adequate engineering and material take-offs to support a DFS. A demonstration provided by MTPL as to the basis of material take-off that supports deterministic estimating has provided confidence that the work is rigorous. A review of the MTPL study and presentation of the methodology has provided CSA Global with confidence that the methodology deployed was adequate and to the expected principles. As such, it is assessed that the estimate could be considered a Class 3 level of estimate (AACE 18R-97) in most areas.

The process plant design is based on test work results which included closed-circuit stage testing to develop release analysis curves which could then be used to assess the stage response to different mass pull or changes in grade. CSA Global recommends that a similar exercise be performed against variable or domained MRE blocks to ensure that a consistent approach is applied to production modelling.

CSA Global is of the opinion that the process plant flowsheet and design and the metallurgical testing undertaken are of good quality and generally meet the standard expected of a DFS.

8.5 Plant feed parameters

Annual production rates for HMC are based on the expected feed grade and composition from the Ore Reserve. Table 22 summarise the Ore Reserves. Table 22 shows a LOM THM grade of 4.00% compared to a THM grade of 4.9% for the first five years. A nominal production rate was used for the PDC with ranges applied to ensure adequate stream capacity.

The MTPL PDC are derived from the testwork whereas the DFS production schedule is a subset of global Ore Reserves, representing the mine areas that are accessible and included in the approvals process. Differences in the metallurgical sample that is tested in the laboratory and the final process feed in terms of grade and other properties are not unusual. As long as the representativity of the sample is not fundamentally different to the Ore Reserves, then it can be deemed suitable for testing. The production model used for financial modelling uses the expected feed quality from the mine schedule.

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Table 22: Summary of Ore Reserves

Year	0 - 5	6 - 10	11 - 15	16 - 21	Life of Mine	MTL PDC
Waste mining (kt)	64,275	60,474	59,489	75,979	260,217	
Ore mining (kt)	24,667	25,131	25,021	23,864	98,683	105,000
Ore mining (kt/a)	4,933	5,026	5,004	4,773		5,000
Waste stockpile rehandle (kt)	-	9,226	-	30,411	39,637	
Total heavy minerals (THM)	4.90%	3.40%	3.30%	4.30%	3.97%	4.70%
THM (kt)	1,209	854	826	1,026	3,915	4,935
THM (kt/a)	241,737	170,891	165,139	205,230	186,428	235,000
Zircon	29.10%	23.50%	19.30%	20.10%	23.50%	29.80%
Rutile	11.30%	9.90%	9.00%	9.30%	10.00%	11.20%
HGLX	9.40%	8.50%	8.00%	7.90%	8.50%	
Ilmenite	25.00%	25.10%	25.20%	25.50%	25.20%	25.00%
Monazite	4.20%	3.70%	3.20%	3.30%	3.70%	5.20%
Xenotime	0.80%	0.70%	0.60%	0.60%	0.70%	
Other heavy minerals	20.20%	28.60%	34.70%	33.30%	28.50%	28.80%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Slimes	15.00%	16.70%	20.50%	16.00%	17.07%	13.00%
Slimes (kt)	3,700	4,197	5,139	3,818	16,844	13,650
Slimes (t/a)	740,010	839,375	1,025,861	636,373	802,118	650
Slimes (t/h)	96	109	133	83		70 - 110
Oversize	4.00%	3.60%	2.70%	3.00%	3.48%	18.00%
Oversize (kt)	1,135	905	676	716	3,431	18,778
Oversize (t/a)	226,936	180,943	135,113	119,320	163,375	894,188
Oversize (t/h)	29	23	18	15		120

Note: The above is indicative only and subject to adjustment up to the point of FID, and to the Project proceeding. It is provided to demonstrate the capability and capacity based on the Goschen DFS and current plans. Further, once the initial production schedules are confirmed, (and as is customary in the industry) they will be subject to ongoing review and adjustment to respond to prevailing operational and economic conditions.

Table 23: DFS Ore Reserves – a subset of Goschen global Ore Reserves

Area	Classification	Ore (Mt)	THM (%)	ZIR (%)	RUT (%)	LX (%)	ILM (%)	MON (%)	XEN (%)
1	Proven	25.5	5.6	29.6	10.8	9.1	24.7	4.3	0.8
	Probable	7.6	2.2	27.6	12.7	10.5	25.9	4.3	0.9
3	Probable	65.7	3.6	19.7	9.1	7.9	25.3	3.3	0.6
Total	**Proven**	**25.5**	**5.6**	**29.6**	**10.8**	**9.1**	**24.7**	**4.3**	**0.8**
	Probable	**73.3**	**3.4**	**20.2**	**9.3**	**8.1**	**25.4**	**3.4**	**0.6**
GRAND TOTAL		**98.8**	**4.0**	**23.6**	**9.9**	**8.5**	**25.1**	**3.7**	**0.7**

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Table 24: Goschen DFS life-of-mine production estimates

Life-of-mine totals	Value	Unit	%
Waste mined	260,217,000	tonnes	
Ore mined	98,683,000	tonnes	
Ore grade THM	3.97%		
THM in mined ore	3,915,000	Tonnes	
HM in mined ore			
Zircon	918,500	Tonnes	23.5%
Rutile	390,700	Tonnes	10.0%
Leucoxine	333,900	Tonnes	8.5%
Ilmenite	986,600	Tonnes	25.2%
Monazite	143,300	Tonnes	3.7%
Xenotime	26,600	Tonnes	0.7%
Other HM	1,115,400	Tonnes	28.5%
Total	3,915,000	Tonnes	100.0%
Final products recovered from ore feed			
P-Float concentrate containing:			
Zircon	813,800	Tonnes	88.6% recovery
Titanium minerals	1,178,000	Tonnes	68.8% recover
Rare Earth Minerals concentrate containing			
Rare earth minerals	150,000	Tonnes	88.1% recover
Total final products recovered from ore feed	**2,141,800**	Tonnes	**76.5% Overall VHM recovery**

8.6 Process Equipment Selection

The equipment selected in the process flowsheet is conventional, and to a large extent, so is the flowsheet. The feed is considered fine-grained, which necessitates a tight wet concentrator feed PSD. The feed preparation step is important, and spiral selection and low feed rates per start reflect this. Testwork has demonstrated that high recoveries should be achievable. MTPL has made available to CSA Global presentations that demonstrate that vendors for equipment not provided by MTPL have assessed the testwork as a basis for their budgetary offerings, other than thickening and filtration. These areas are to be further evaluated during the bulk testwork and FEED optimisation program.

MTPL has advised that equipment sizing is based on Area 1 parameters representing an average for the first 10 years of mining and that the equipment sizing was assessed against the base case, high-grade and low-grade stream mass balances. This is not an unreasonable approach, particularly if there is a sustaining capital allowance to modify the plant when feed properties change over time. It is understood that the FPP equipment design capacity has been reviewed for a higher slimes content. This mainly applies to the primary desliming cyclone, slimes thickener capacities and screen sizing, but should be revisited when FEED optimisation parameters are re-evaluated. Slimes underestimation is considered a moderate design risk and this exercise will provide a basis for sustaining capital budgeting.

HMC production as stated in the DFS documentation ranges from 246,000 tpa (Sedgewick & Ross, 2022,17) to 188,380 (DFS Section 11, 2022,6) depending on which operating assumptions are used (i.e. the MTPL Process Design Basis or the VHML DFS Section – 11). VHML has advised that the 188 ktpa rate is based on an average production of 25.3 tph over 7,446 hours of operation (85%) per year, whilst the 246 ktpa rate is a maximum case based on the first five years' production and is used for spiral loadings, pump and pipe calculations to ensure the throughput does not have to be decreased if the WCP feed grade is higher than the LOM average. Conversely, it is understood that there is sufficient adjustment available if the grade is lower to avoid issues associated with insufficient stream load.

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8.7 Key Conclusions

Although the resource is much larger, a mine life of 20 years was selected to ensure that the Project is not over-capitalised. CSA Global recognises that some sustaining capital or recapitalisation may be required to extend the life of the operation if economic conditions at the time justify this.

The proposed flowsheet does not include any novel processing units; hence the technology risk is limited. Reduction of the technology risk to very low levels is considered achievable during the detailed design phase.

The material balances provided by MTPL are sufficient to understand what is being proposed. As per the testwork reports, it is obvious that different grade options have been tested in simulations that have flow-on effects on mass and water balances, hence it is believed that the designers have understood the necessary design envelope.

The base case MTPL simulation model for the circuit predicts an output final HMC grade of 90.6% THM with a yield of 5.7% to the concentrate mass for an overall HM recovery of 71.5%.

MTPL have stated that the density profile coupled with fine particle sizing means that the ore could be considered a difficult material for spiral separation of the TiO_2 minerals and moderately difficult for separation of the ZrO_2 and CeO_2. However, operational tweaks have been developed that successfully recover fine-grained heavy minerals.

The material risk is that the MTPL model and testwork results may overstate the performance of the cleaner circuit relative to the full-scale plant, however, anecdotally, it is understood that MTPL has piloted similar material from the same region and realised equal or better results, hence discounting recovery for scale-up is not recommended at this stage.

CSA Global is of the opinion that the level and quality of metallurgical testing, the process plant flowsheet and design, process equipment sizing and estimates of production rates and recoveries provide a reasonable basis to support the Ore Reserves, and generally meet the standard expected of a DFS.

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9 Infrastructure

The Company has engaged several parties to look at the various components of infrastructure that will be necessary to support the Project. The most significant include:

- Power supply
- Water supply
- Site buildings and roads
- General infrastructure.

9.1 Power Supply

Based on previous assessments by VHML, the proposed power supply assumes on-site dual fuel generators with provision for future connection to alternative power sources. VHML has proposed that due to the current high cost of liquefied natural gas (**LNG**), the power station will initially be operated using diesel fuel only. The operating cost estimates are based on using only diesel fuel, which CSA Global considers to be a worst-case scenario. The Company engaged AECOM to seek pricing for build-own-operate power stations. Prices were obtained from Aggreko and Pacific Energy, both of whom are leaders in supplying remote power station solutions in Australia.

The work that has been completed is based on electrical load estimates by MTPL which has calculated an average electrical energy demand for the MUP, FPP, WCP and REMFC of 3.3 MW for the initial implementation phase, which is inclusive of some non-process infrastructure (**NPI**). Further demand will be created with the addition of extra pump capacity when mining commences in Area 3. Possible additional demand from water supply and other peripheral loads is considered small.

The capital and operating costs in the DFS have been estimated against a December 2021 baseline. Where more recent information has been received or information qualified since the DFS, this has been incorporated into this ITAR. The biggest risk to operating costs is that of fuel price. The nearest gas pipeline is at Horsham and it is unclear whether this has the capacity to supply the power station, hence the DFS has assumed road transport of LNG and diesel. The assumed diesel price of A$0.77/L was correct at the time of publication of the DFS; however, the contemporary context suggests that the power cost contribution to the operating expenditure (**OPEX**) cost estimate will double. CSA Global notes recent highs of A$44.57/GJ for natural gas, however, the Australian Competition and Consumer Commission is forecasting a long-term natural gas price of A$28.59/GJ compared with the DFS assumption of A$22.01/GJ in December 2021. The capital expenditure (**CAPEX**) cost estimate will also be subject to escalation, but this is unlikely to be more than 15% since prices were obtained.

In CSA Global's opinion, the power supply concept is sound; it is consistent with the expected range of a DFS and provides a reasonable basis to support the Ore Reserves. However, given the current volatility in the market, it is recommended that this issue be revisited before the FID.

9.2 Water Supply

Goshen will have a significant water demand and will require a secure source of water to meet it. The water requirement has been estimated to match the needs of processing activities at a steady year-round demand of 12,880 m^3 per day, equivalent to 4.7 GL per annum. The water demand calculations for all forecast future plant configurations indicate the water demand will only increase by 0.08 L per annum, which is within the contingency allowance of the water pumpstation, delivery line and intended water licence requirement.

Irrespective of any increase in overall demand, the availability of an off-site water resource was assessed by RMCG (2021) based on the maximum requirement of 4.7 GL per annum. The assessment found that the maximum total annual water requirements of the project would typically represent less than 1% of the total annual water use in the southern connected Murray Darling Basin, and that it would not be difficult to secure

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the necessary volume from the water authority (GMW). Further, the assessment found that an offtake from Kangaroo Lake would be a secure and reliable supply of water from the regulated Murray River supply system as it forms an active part of the mainly gravity fed supply infrastructure for the Torrumbarry Irrigation Area operated by GMW.

In addition, the Project will be able to capture and store any significant incident rainfall within the active mine footprint. This opportunistic harvesting of water would be used to reduce what is delivered from the off-site source.

AECOM also completed investigations into this area and reported that *"at this DFS development stage, the design criteria are high-level only. Once optioneering is complete (post-DFS) more specific design criteria, including materials selection, selected pump station configuration, power source, etc. can be detailed accordingly*". CSA Global is of the opinion that the capital and operating cost contributions for water supply are quite modest, and the quality of the work done by AECOM is reasonable.

The concept is for an intake pump station at Kangaroo Lake and a 38 km pipeline along road corridors to the process water dam at the mine. The concept design anticipates two bank-mounted, skid-mounted 400kW horizontal pumps each with an electric motor. Each 400-volt motor will be controlled by a variable speed drive with power drawn from a common switchboard. The switchboard will be connected to the Powercor electricity grid but will also be able to be powered by a 1.5 MVA diesel-powered generator. These are large pumps, and the assumption is for genset supply, hence the power operating cost of A$500,000 per annum is potentially low based on contemporary fuel pricing (recognising a full excise rebate). The capital cost proposed benchmarks well. The risks are mainly around alignments and interaction with third-party assets, which will need to be dealt with in due course.

In CSA Global's opinion, the assessment of water supply has been completed to an acceptable level of detail to provide a reasonable basis to support the Ore Reserves. However, given the current volatility in the market it is recommended that the impact of fuel cost on pump operating costs be reviewed before FID.

9.3 Site Buildings and Roads

Roadworks have been addressed in the geotechnical section of the DFS. The road designs are robust and suitable, but it is unclear as to which roads specifically will be sealed and thus the estimate cannot be verified. Similarly, the planning and strategy for the site's non-process buildings appear to be adequate but the estimate cannot be verified with the data provided in the DFS report.

9.4 General Infrastructure

The DFS provides a fairly robust account of what is necessary to build and operate the project, hence the comments provided here are by exception. The strategy to accommodate the workforce in local hotels and similar accommodation is not supported by a review of what is available and could be used. It is assumed that most of the workforce could be accommodated in Swan Hill or Kerang, however, if accommodation facilities normally used by tourists are assumed to be used by construction workers, this could be met with reluctance to make the facilities available. Further, transient construction workforces often create community and social issues. It is unclear whether the productivity impost of bus in/out from those locations has been adsorbed into the labour component of the capital cost estimate. Workers will expect to be paid door to door and it may prove to be more practical and cost-effective to build a construction camp. It is suggested that this issue be investigated in detail during the FEED optimisation program.

Similarly, it is assumed that the operational workforce will be residential, which will likely create the same social issues as above. The commute from Kerang to site is only 30 minutes, although the risk of a road fatality during commute may need to be considered against fatigue management protocols. The DFS assumes that during operations Kerang will remain a staging post for bus-in/out arrangements, however, a 30-minute commute effectively becomes a 45-minute commute each way when time taken to commence a shift is taken into account. Again, workers will expect to be paid door-to-door which may give rise to a requirement for 8-hour shifts in some areas to maintain productivity which may impact operating cost assumptions. The

preferred alternative for all of productivity, cost, social and safety considerations may well be an on-site accommodation camp, which is CSA Global's recommendation.

In CSA Global's opinion, the assessment of general infrastructure costs in the DFS is robust and has been completed to an acceptable level of detail for a DFS. However, given the current volatility in labour availability and construction costs, it is recommended that this aspect be reviewed before FID.

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10 Capital Costs

The CAPEX estimates have been consolidated in-house by VHML based on detailed information provided principally by MTPL, as well as other consultants who contributed to various NPI requirements. The CAPEX line-by-line details including material take-offs and unit rates were provided for the MTPL scope of work (12.2.3.5.10 514-PM2004 Basis of Estimate Report Rev B and 12.2.3.5.7 514-PM1009 Pricing Schedule Estimate Reports Rev C).

The VHML estimate is based on an Engineering, Procurement and Construction (**EPC**) strategy while the MTPL estimate basis is "turn-key" (Lang & Ross,2022,5). While the selection of a construction contracting strategy, Lump Sum Turnkey (**LSTK**) EPC or Engineering, Procurement and Construction Management (**EPCM**), will not impact the overall Study CAPEX, it will impact where different costs are allocated and the final structure of the estimate. Care needs to be taken in the interpretation of MTPL's "turn-key" offering for repricing on an EPCM basis.

MTPL noted volatility in steel prices has inflated the pricing for steelwork, plate work and carbon steel piping, commenting that the validity of the prices adopted for all steel products is only thirty days, Steel price volatility is seen by CSA Global as a material risk to the capital estimates.

Table 25: Total Project CAPEX estimate summary by facility areas inclusive of all contingencies and all expected EPC contractors' costs

Facility area	Total (A$)
Mining unit plant (MUP)	$18,916,379
Wet Concentrator plant (WCP)	$85,500,207
Rare earth minerals flotation circuit	$44,192,436
Non-process infrastructure (NPI)	$189,121,559
Pre-implementation – Land, approvals, drilling	$47,604,457
Pre-implementation – Study and project development	32,396,679
Mining contractors' pre-production	$21,500,000
TOTAL CAPEX	**$439,231,717**

CAPEX for the FPP is included within that for the WCP. The CAPEX estimates were current as of fourth quarter 2021.The VHML implementation capital excludes sustaining and deferred capital of A$12.9 million and A$49.1 million respectively. The requirement for sustaining and deferred capital will commence in Year 2 and beyond after the commencement of operations.

Line-item contingency is normally applied to the derived supply, erection and transport costs for each CAPEX line item. The contingency allowance is typically selected based on the level of maturity of the engineering quantities and the source of the pricing. Contingency is meant to cover the normal inadequacies that are inherent in design definition, execution definition and estimating omissions.

The contingency allowance by line item was not reviewed by CSA Global, but the overall line-item contingency aligns with that expected of a DFS level study.

Project contingency is a provision of funds for unforeseeable capital costs within the project scope and specifically excludes scope changes. Unknown unknowns include change driven by external factors such as unusual weather events, national industrial action, insurable events, or unforeseen cost escalation due to demand or foreign exchange variation. A sum for this is normally determined by a Monte Carlo simulation rather than parametric line-item estimation such as used in the determination of line-item contingency. It is understood that VHM has elected to evaluate this based on the experience of the Board.

CSA Global's observations/recommendations with respect to the CAPEX estimate follow:

- The WCP area costs overall compare reasonably well against the proposed Thunderbird and completed Keysbrook projects. However, compared with the Douglas project in Victoria, the overall capital costs appear slightly low, as the final price for a project of similar size was not much different 15 years ago.

Conversely, the CAPEX estimates are high against the current Strandline project in Western Australia, however, that project is still in the process of execution and VHML should regularly review the outcomes there to take contemporary learnings.

- Based on estimates for similar installations, the earthworks and civil/concrete costs appear to be high against benchmark factors. However, the VHML earthworks cost includes mining pre-production and MTPL included the detailed foundation excavation earthworks in the Civil/Concrete cost build-up and excluded all clear and grub site preparation (Lang, Ross & Allen, 2022, Tab 3 "Direct Costs – Details").
- It appears that NPI items are included in the flocculant plant, reagent mixing and storage systems and utilities systems such as compressed air, fire systems, fire water and potable water services. Utilities and reagents systems for the concentrator are normally not designated as NPI (DFS Section 23, 2022,7).
- It is recommended that in the FEED optimisation program freight costs be broken out as separate line items and calculated based on the estimated transport quantity (mass, volume, or quantity) and put against indicative freight rates for each line item (i.e. by container volume requirement for smaller items and break bulk/specialised load rates for larger items).
- A line-item contingency is normally applied to the derived supply, erection and transport costs for each CAPEX line item. The contingency allowance is typically selected based on the level of maturity of the engineering quantities and the source of the pricing. Contingency is meant to cover the normal inadequacies that are inherent in design definition, execution definition and estimating omissions. Whilst the estimate line item contingencies were not presented by VHML for review, the overall value allowed for line-item contingencies is aligned with that expected of a DFS level study.
- Project contingency is a provision of funds for unforeseeable capital costs within the project scope and specifically excludes scope changes. Unknowns include change driven by external factors such as unusual weather events, national industrial action, insurable events, or unforeseen cost escalation due to demand or foreign exchange variation. It is understood that VHML has elected to evaluate this based on the experience of the Board. Project scope change should be tightly held and only approved at the board level.

CSA Global considers 7.5% to be appropriate.

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11 Project Delivery

The Company's current strategy is for an EPC contractor to be identified during the FEED optimisation period, and confidential commercial enquiries have commenced. The selected contractor will be engaged during the FEED process and will contribute to the FEED as part of gaining project familiarity and assisting in providing structure and planning for the implementation phase. MTPL is expected to continue to provide engineering services and will complete the detailed engineering.

It is understood that MTPL will supply a significant amount of equipment, paid for directly by VHML and then potentially novated to the EPC contractor which will remove a layer of contractor's mark-up without losing the backing from MTPL.

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12 Operating Costs

The latest estimate for the process plant's annual costs (for labour, maintenance, reagents and consumables) are A$20.7 million, comprising A$2.54 million for the MUP, A$9.42 million for the WCP (inclusive of the FPP), A$4.1 million for the REMC, and A$4.68 million for process plant specific product packaging and miscellaneous items. A further A$15.8 million for collective NPI services such as power station and water pumpstation is estimated. Product transport and logistics to shipping port is estimated to be A$12.6 million. All estimates are based on processing 5 Mtpa ROM ore.

The concentrator OPEX is principally labour, electricity, consumables, and equipment maintenance.

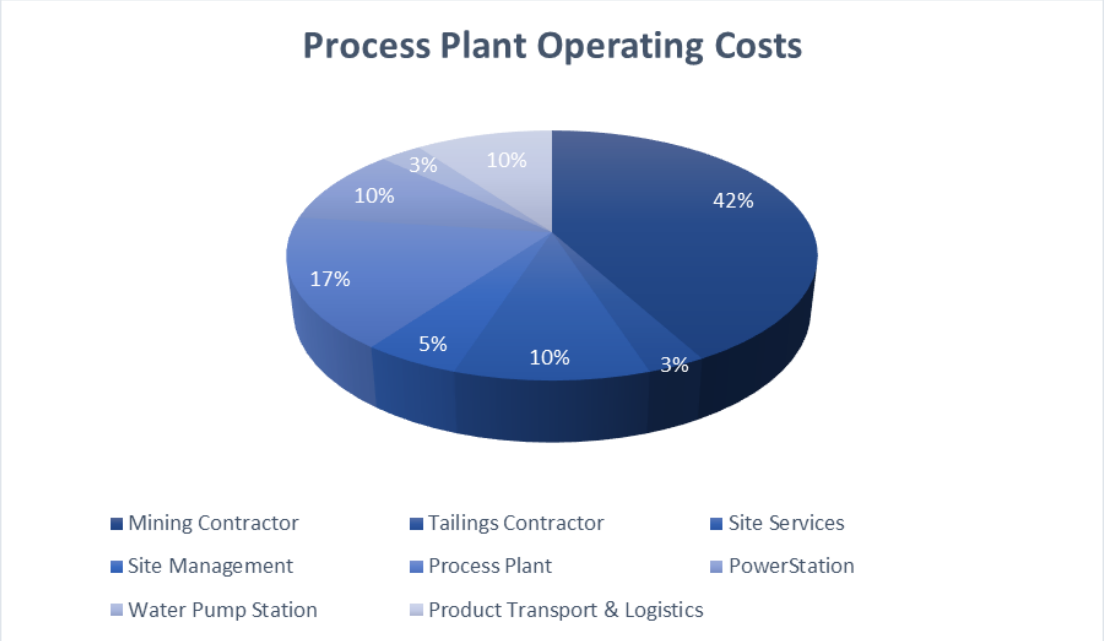


Figure 21: Breakdown of process plant operating costs

The Company has added other project operating costs as shown in Table 25 (DFS Section 24, 2022,4) to estimate a total operating cost of A$21.47/t ROM ore processed.

Table 26: OPEX Estimate Summary by Category

Area	Annual cost (A$)	%
Mining contractor	$50,799,000	42%
Tailings contractor	$3,000,000	3%
Site services	$11,489,402	10%
Site management	$6,419,000	5%
Process plant	$20,694,836	17%
Power station	$12,533,874	10%
Water pump station	$3,303,504	3%
Product transport and logistics	$12,604,360	10%
Total	**$120,843,976**	**100%**

Costs generally have been estimated from yearly averages, however, variable costs do not appear to be based on the production schedule throughput and product forecast. While the feed production schedule for the plant is relatively fixed, there is high grading during the first five to 10 years that influences the concentrate and final product tonnages. This results in a level of uncertainty for the yearly variation of OPEX that is forecast to be greater in the first eight to 10 years of the mine life. It is understood that VHML intends to implement a blending strategy that will help manage feed quality, but this detail will only be formulated during the pre-operations period. In CSA Globa's opinion variable costs as they relate to tonnages of concentrate and final product tonnages are unlikely to be a material consideration in the overall context of variable costs.

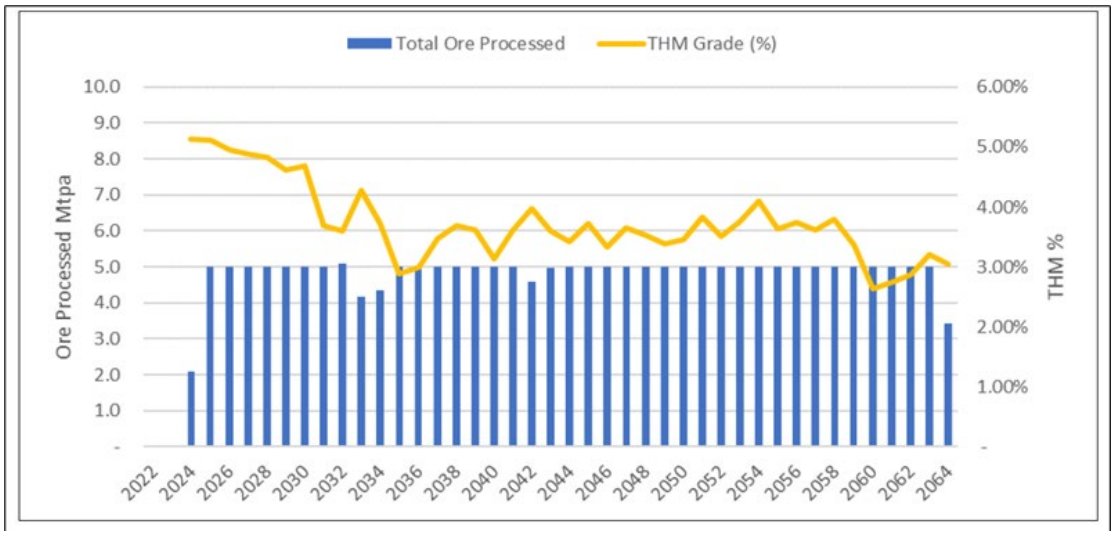


Figure 22: Ore processed annually

In CSA Global's opinion:

- More attention should be paid to the division of fixed and variable operating costs and the alignment of variable costs to the actual production schedule.
- Major inputs into the operating cost estimate (e.g. electricity, water, transport) are sole-sourced and in CSA Global's opinion this could represent a major risk to the project. Desirably, these should be developed to a contractual stage of "in-principle" agreements although it is acknowledged that in the case of VHML this is not possible to achieve until after the FID.
- It is not clear from the DFS documentation that ramp-up and pre-operations costs have been considered and the transition milestones from pre-operations to commissioning to operations are not clear from a funding perspective. The Company has since advised that all costs for pre-operations and commissioning are included in CAPEX. These costs are not considered operating costs until plant hand over at the completion of commissioning which in CSA Global's opinion is the correct approach.

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13 Ore Reserves Area 1 and Area 3

An ORE and mining study were completed at a PFS level by Auralia in March 2021 on each of Areas 1 and 3, with an ITAR review completed by CSA Global at the time. Further work was completed to a DFS level in March 2022, with a combined Ore Reserve and mining study completed by Auralia on the footprint within the Project that has access approvals granted or pending. Majority of the input data, including block models, haven't changed materially, with the input assumptions refined and modifying factors fleshed out, such as mining and backfilling sequence, tailings storage and truck numbers required.

Rare earths and zircon are the major revenue generators for the Project. Product quality was largely confirmed and reportedly not materially different from previous trials. It is understood that VHML will conduct a market study that will be updated with new pricing during the FEED optimisation. HMC and REMC pricing are based on independent reports from Adamas and TZMI.

13.1.1 Pit Optimisation Inputs

The DFS optimisation input parameters are detailed below in Table 27.

Table 27: Ore Reserve optimisation parameters

DFS section	Details	Units	Unit/Remarks	Comments
9.6.3.1.1	Exclusion zones	-	Material below water table and surface exclusion zones	-
9.6.3.1.2	Exchange rate	US$/A$	0.725 to 1.00	-
9.6.3.1.3	Study base case	-	February 2022	-
9.6.3.1.3	Nominal mining start	-	1 October 2023	-
9.6.3.1.4	Slope	°	30	-
9.6.3.1.4	Re-blocking	m	From 25 x 100 x 1 to 25 x 25 x 1	-
9.6.3.1.5	Mining cost	A$/t	2.778 – Ore and waste	Contractor operation
9.6.3.1.6	Mining recovery	%	98	-
9.6.3.1.7	Mining dilution	%	5	-
9.6.3.1.8	Processing cost	A$/t	6.894	Fixed annual costs converted to A$/t MUP feed
		A$/t	0.734 – Ore mining/rehandle	Applies to total ore feed to MUP
		A$/t	1.177 – MUP/WCP	Applies to total ore feed to MUP
		A$/t	9.001 – RE float	Applies to 70% of THM
		A$/t	18.395 – MSP	Applies to 65% of THM
		A$/t	64.13 – Land freight	Applies to 50% of THM
9.6.3.1.9	Processing recovery	%	76.5 – Zircon	-
		%	56.6 – Rutile	-
		%	26.7 – Leucoxene	-
		%	62.6 – Ilmenite	-
		%	89.6 – Monazite	-
		%	80.2 – Xenotime	-
9.6.3.1.10	Cut-off grades	%	Non applied	Whittle outcome
9.6.3.1.11	Commodity price	A$/t	2180.16– Zircon	-
		A$/t	1078.94 – Rutile	-
		A$/t	857.88 – Leucoxene	-
		A$/t	286.10 – Ilmenite	-
		A$/t	10,744.83 – Monazite	-
		A$/t	10,744.83 – Xenotime	-
9.6.3.1.12	Selling cost	%	2.75 – Revenue	-

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DFS section	Details	Units	Unit/Remarks	Comments
9.6.3.1.13	Initial capital	A$	No initial capital costs were included	-
9.6.3.1.14	Discount rate	%	10	-
9.6.3.1.15	Fixed cost	A$/pa	5.3 million – Management and administration costs	Applied as direct processing costs at 5 Mtpa of ore feed A$6.894/t (listed previously in this table) applied in optimisation
		A$/pa	2.5 million – Mining technical staff	
		A$/pa	11.81 million – Processing labour	
		A$/pa	0.90 million – Office and administration consumables	
		A$/pa	10.74 million – Power supply	
		A$/pa	2.33 million – Water supply	
		A$/pa	1.00 million – Capital sinking fund	
9.6.3.1.15	Total fixed cost	A$/pa	34.47 million	
9.6.3.1.16	Mining limit	Mtpa	25 million	-
9.6.3.1.17	Processing limit	Mtpa	5 million	-

The Area 1 Model contains Indicated and Measured material only, with no Inferred material classified. The Measured and Indicated material in the block model is shown in Figure 23.

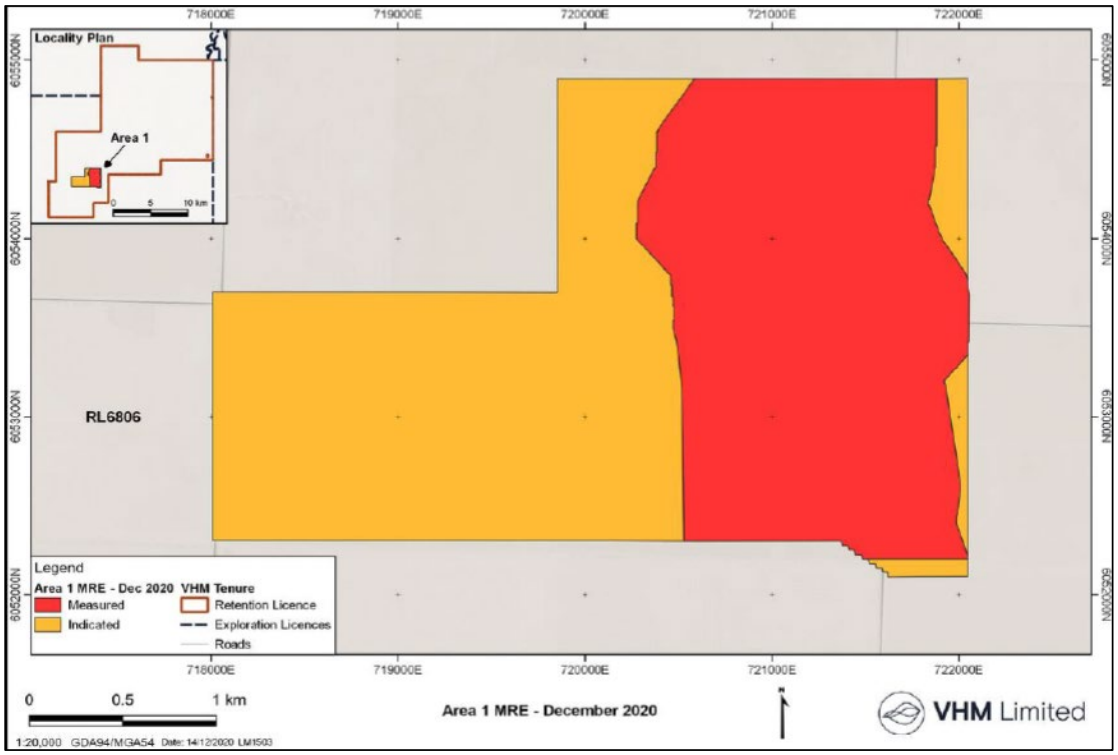


Figure 23: Goschen Area 1 JORC Resource classification
Source: Auralia (Keers, 2020)

The Area 3 model contains Indicated and Inferred material only with no Measured material classified. The Inferred material was excluded from the estimation of Ore Reserve per JORC Code requirements. Only Probable Reserves were declared for the ORE. Figure 24 shows the Resource classification for Area 3.



Figure 24: Goschen Area 3 JORC classification
Source: Auralia (Keers, 2021)

CSA Global is of the opinion that Auralia has used a valid process to bring the Resource Model into a new software package (SGMP) to undertake the mine planning analysis and has based the ORE for Area 1 and Area 3 on the mining model discussed in Section 13.

CSA Global noted that the 1% THM mineral resource cut-off grade was not applied when calculating the Ore Reserves. However, the Ore Reserve is considered reliable as Auralia has used a block value method which, in Area 1, has resulted in approximately 0.4%, and in Area 3, approximately 4.5% of Ore Reserve tonnes below the 1% resource cut-off grade.

CSA Global considers the preparation and application of the Whittle optimisation parameters appropriate, being based on technical analysis and estimates from various technical specialists. Auralia flagged the resource blocks that are currently unavailable for mining due to community and environmental considerations but did not apply these constraints for the pit optimisations. This will have resulted in Ore Reserves being estimated between the optimisation pit rim (which will be within the exclusion zones) and the pit rim constrained by the exclusion zones. The end result will be a slight, but probably not material, over-statement of Ore Reserves. CSA Global has not assessed the impact the exclusion zones might have had on the OREs. The exclusion zones were however recognised in the pit design stages.

CSA Global recommends the use of the exclusion zones in all stages of the reserve estimation process.

CSA Global considers that the unit mining costs are reasonable but noted that mining costs have been applied to in-situ tonnes instead of diluted tonnes. However, the ore haulage cost has a negligible impact on the cashflow model. Considering that the mining costs are approximately 50% of total operating costs, a more detailed mine costing study specific to the deposit should be done to obtain more refined costs.

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CSA Global notes that Auralia used an exchange rate of A$1.00 = US$0.725 for the Ore Reserves study, based on long-term forecasts provided by VHML. In light of current global economic trends the exchange rate assumptions should be updated for future Ore Reserve studies.

Notwithstanding, whilst a lower US$:A$ exchange rate will increase the value of the resource blocks, it is unlikely to materially change the ORE given the constraints of land access and the shallow depth to the base of the resource, that is to say, there is no "room" for a larger/deeper pit to accommodate an increase in the extent of "economic" resource blocks.

Auralia used a royalty of 2.75% and a 10% discount rate in the optimisation and cash flow model. The processing limit is set at 5 Mtpa, as adopted in the DFS. CSA Global endorses these parameters.

13.2 Resource Model and Pit Optimisation

The Mineral Resource models "mgos1ewok_met.dm" and "mgoa3b.dm" were provided to Auralia by VHML. These models were used as the basis for pit optimisations and pit designs, scheduling, cash flow calculation and ultimately the Ore Reserve statement. A 1.0% THM cut-off grade was selected for reporting purposes. Area 1 has a total resource of 92.9 Mt at an average of 3.44% THM, containing 3.2 Mt of THM. The Area 3 resource comprises 492 Mt at an average of 2.76% THM, containing 13.6 Mt of THM.

The initial Mineral Resource block model was manipulated within Surpac's graphical mining package (**SGMP**) for use in optimisation and pit design works. The models were subsequently renamed "eng_mgos1ewok_met5.fbm" and "eng_mgoa3b.fbm". These block models were used as the basis for all work, with minor edits applied during optimisation, design and scheduling.

In preparing the block models in SGMP for use in the optimisation and schedule works, Auralia removed the unnecessary attributes. The material that was appropriate for use in the optimisation and LOM schedule was flagged, and coded block values used to calculate the ore and waste. Cross-checks were performed throughout the process and confirmed that the supplied Mineral Resource models, mining model and Whittle model quantities were consistent for each model.

13.2.1 Processing and Product Suite

A thorough review of the metallurgy and processing components of the project is described in Section 8 of this report. Therefore, this discussion will focus on the Basis of Design and Modifying Factors from a processing and product perspective.

For the processing path selected for the proposed development, only two products will be generated; REMC recovered from the WCP HMC by flotation, and a mixed zircon-titania VHM concentrate.

A MSP was included in the DFS, and testwork is underway to upgrade PFS-level studies to DFS standard for a hydrometallurgical plant to upgrade the REMC to higher-value rare earth products. Zircon and titanium minerals (rutile, leucoxene, ilmenite) will report to a bulk VHM concentrate for which, payment will be received for the individual components, the most valuable of which is zircon.

The pit optimisations were based on the revenue expected from mineral products recovered to the REMC and the products generated from the MSP using the available test work results. The processing recovery to each individual product was calculated for each mineral. The overall recovery of zircon was calculated to the premium zircon and zircon concentrate products, overall recoveries of rutile, leucoxene and ilmenite were calculated to the titanium products (HiTi rutile, low chrome ilmenite and titanium concentrate). The recovery of rare earth minerals was calculated to the REMC only. The overall processing recoveries applied for the pit optimisations are shown in Table 28.

Table 28: Process recoveries applied in the pit optimisations

Mineral	Area 1 and Area 3 overall mineral recovery
Zircon	76.5%
Rutile	56.6%
Leucoxene (high grade)	26.7%
Ilmenite	62.6%
Monazite	89.6%
Xenotime	80.2%

Commodity prices were provided by TZMI. Given the variations in mineral assemblage over the 20-year production period, underlying mineral prices were used to derive an expected product price for the P-Float HMC (which is the HMC remaining after the recovery of REMC by the REMFC), rather than a notionally derived P-Float HMC price based on a constant assemblage. In deriving the volume weighted forecast price, TZMI drew from its detailed year-on-year forecasts.

Base case prices were used for REMC revenues. Auralia adopted the recommendations from MTPL in the "514-PM0002 Goschen Project Mineral Recovery Estimates, Mineral Technologies Pty Ltd", and applied the process recoveries accordingly detailed in "514-PM0001 Goschen Project Design Basis, Mineral Technologies Pty Ltd". The LOM schedule and cash flow model have used the recoveries recommended by MTPL. Auralia has applied the end-to-end recoveries in the optimisation.

CSA Global notes that Auralia has used a valid method to apply recoveries in each stage of the study.

13.2.2 Optimisation Methodology

The optimisation was done without applying a specific fixed cut-off grade, allowing the optimisation software to determine the economic cut-off based on revenue, processing costs and selling costs parameters. This method of variable cut-off grade is standard for pit optimisation studies. The commodity prices used for the pit optimisations are sourced from different market studies. The Company commissioned market studies from TZMI and Adamas Intelligence in 2021 which form the basis for this study. CSA Global has noted that there is some difference in price application between the optimisation and cash flow models, especially for monazite and xenotime.

Auralia state that the transport and logistics cost and quality adjustment factors in the optimisation and cashflow model have been applied appropriately. The cash flow model has used a staged price increase for REEs and peaked the price around A$8,100/t in 2030. The optimisation has used a flat price of A$8,100/t. CSA Global recommends that the price adopted for monazite and xenotime should be the average price as indicated by the studies. The Project is most sensitive to commodity price and process recovery. This is generally the situation with all resource project evaluations as for a viable project, revenues must exceed costs.

13.3 Ore Reserve Statement

The Ore Reserves were estimated by Auralia in accordance with the requirements of the JORC Code. The DFS Ore Reserves, shown in Table 30, are a subset of larger Ore Reserves, shown in Table 29. Only the Ore Reserves included in the current approvals process are included in Table 22.

The Ore Reserve estimate relates specifically to the conversion of Measured and Indicated Resources only within the Area 1 and Area 3 pit design and includes consideration of the modifying factors.

In Area 1, material with a Measured Resource classification was converted to Proved Ore Reserves within the three paddocks over which the Company has land access agreements with the current landholders. All Indicated Resources were converted to Probable Ore Reserves. In Area 3, there is no Measured Resource available. The material classified as Indicated Resources was converted to Probable Ore Reserves after applying the modifying factors.

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Table 29: Goschen Combined Ore Reserves as of December 2021

Area	Date	Ore Reserve category	Ore (Mt)	THM (%)	THM assemblage					
					Zircon (%)	Rutile (%)	Leucoxene (%)	Ilmenite (%)	Monazite (%)	Xenotime (%)
1	Mar 2021	Proven	24.5	5.4	29.9	10.8	9.0	24.7	4.3	0.8
	Mar 2021	Probable	14.6	3.2	29.2	11.7	9.2	25.5	4.5	0.9
3	Feb 2021	Probable	159.6	3.5	20.3	9.4	8.1	25.8	3.4	0.6
Total		**Proven**	**24.5**	**5.4**	**29.9**	**10.8**	**9.0**	**24.7**	**4.3**	**0.8**
		Probable	**174.2**	**3.5**	**21.0**	**9.6**	**8.2**	**25.8**	**3.5**	**0.6**
GRAND TOTAL			**198.7**	**3.7**	**21.7**	**9.7**	**8.2**	**25.7**	**3.5**	**0.6**

Table 30: Goschen Combined DFS Ore Reserves

Area	Ore Reserve category	Ore (Mt)	THM (%)	THM assemblage					
				Zircon (%)	Rutile (%)	Leucoxene (%)	Ilmenite (%)	Monazite (%)	Xenotime (%)
1	Proven	25.5	5.6	29.6	10.8	9.1	24.7	4.3	0.8
	Probable	7.6	2.2	27.6	12.7	10.5	25.9	4.3	0.9:
3	Probable	65.7	3.6	19.7	9.1	7.9	25.3	3.3	0.6
Total	**Proven**	**25.5**	**5.6**	**29.6**	**10.8**	**9.1**	**24.7**	**4.3**	**0.8**
	Probable	**73.3**	**3.4**	**20.2**	**9.3**	**8.1**	**25.4**	**3.4**	**0.6**
GRAND TOTAL		**98.8**	**4**	**23.6**	**9.9**	**8.5**	**25.1**	**3.7**	**0.7**

Note: The proven Ore Reserves stated in Table 30 are less than stated in Table 29 due to a reduction in the required offset between the pit crest and vegetation to be conserved around the pit.

13.4 Summary of Review of Ore Reserves Estimation

Auralia considered only Measured and Indicated Resources for the ORE. No Inferred material has been included.

Check reporting of the Area 1 Reserve model by CSA Global returned slightly different reserve numbers than those reported by Auralia. However, this difference is considered negligible as the difference is only around 1.1%.

Regularisation of the block model used for optimisation and scheduling has incorporated mining dilution and ore loss into each block, with additional ore loss and dilution added in the optimisation process to account for isolated blocks.

CSA Global also noted that a 1% resource cut-off grade is not applied in the ORE. CSA Global considers this as reasonable as Auralia used the block value method.

CSA Global recommends detailed studies during the FEED phase to reduce the margin of error in recovery, realised prices and product specifications.

CSA Global has reviewed the parameters applied in the mine planning process and ORE and considers them to be of DFS standard.

CSA Global recommends the following regarding future OREs as the project progresses:

- Use the latest resource block model for optimisation, pit design, LOM schedule and cash flow modelling
- Application of mining dilution and recovery when calculating the block value to determine ore and waste, which CSA Global understands has been completed in the DFS but remains to be incorporated in an Ore Reserve update
- Review of long-term outlook on US$:A$ exchange rates
- Further refinement of operating costs

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- Detailed metallurgical testwork to update the recoveries used in the reserve calculation
- Inclusion of the REMC product value in OREs
- Inclusion of land access limitations in the optimisation process.

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14 Future Exploration and Project Development

14.1 Resource Extension and Upgrade Adjacent to Mining Areas

VHML's focus has been on the development at Goschen, a significant accumulation of HMS and REM primarily located on RL6806. The estimated Ore Reserves have the potential to underpin a long-life mine; the current Ore Reserves estimated in Area 1 and Area 3 combined (about 200 Mt) are sufficient for a project life of up to 40 years at a throughput rate of 5 Mtpa. The DFS considers a mine life of only half this. Ore Reserves are expected to increase as the existing Mineral Resources are drilled to sufficient levels of confidence to sustain upgrading to Ore Reserves, and further mineralisation is defined by extensional and exploratory drilling.

The objective of VHML's exploration has been to discover and delineate further HMS comprising zircon and titanium oxide minerals (rutile, leucoxene and ilmenite) and REMs (monazite and xenotime) associated with the sheet-style and strandline deposits that are common throughout the Murray Basin.

14.1.1 Goschen Exploration Target

The Goschen Exploration Target 2022 (**GET 2022**) is based on information compiled by Ms Emily Henry, under the direction and supervision of Mr Graham Howard. The accompanying JORC Table 1 is in Appendix A.

Mr Howard was a full-time employee of VHML at the time of the Exploration Target estimation. Ms Emily Henry is a full-time employee of Right Solutions Australia Pty Ltd and works for VHML on a contract basis. Both Ms Henry and Mr Howard have sufficient experience relevant to the style of mineralisation and type of deposit under consideration to qualify as Competent Persons as defined in the JORC Code. Ms Henry and Mr Howard consent to the disclosure of information in this report in the form and context in which it appears.

Please note that the potential quantity and grade of this target are conceptual in nature, that there has been insufficient exploration to estimate a Mineral Resource and that it is uncertain if further exploration will allow the estimation of a Mineral Resource.

CSA Global has reviewed the report "Goschen Exploration Target 2022 Summary Report" (Henry and Howard, 2022) which provides the rationale and basis for the Exploration Target, and is of the opinion that the basis for the Exploration Target rationale is reasonable.

Background

VHML had previously released an Inferred MRE for Goschen North, documented in an internal company report (Standing and Froud, 2017) and referred to as the 2017 Goschen North MRE (**2017 MRE**). The estimate was based on 1,000 AC drillholes totalling 21,509 m drilled by various companies before VHML acquired the Project. The more recent estimates discussed in this ITAR are based entirely on data acquired by the Company.

As there was very limited mineral assemblage data available for the 2017 MRE, an assumed mineral assemblage for VHM was applied to some of the data set greater than 1% THM. This approach clearly impacted the confidence in the distribution of the potential economic mineralisation. Notwithstanding, the 2017 MRE was considered to have been appropriately classified as a low confidence Inferred estimate.

In the second quarter of 2022, the Company completed a review of the 2017 MRE. Comparison of the Area 2 West MRE, which covered part of the 2017 Goschen North MRE, indicated materially higher grades for THM, VHM and REM assemblages compared to the earlier estimate. On the basis of these findings, as well as conclusions drawn from the Goschen DFS, VHML decided to downgrade the Inferred classification for the 2017 MRE.

Exploration by VHML

Between 2017 and 2019, VHML completed resource definition AC drilling in an area referred to as Area 2 East, which occurs between Area 2 West and Area 3 East, and extends south of Area 3 Extended (Figure 5). The Company has now replaced a significant portion of the historical drilling in the Goschen North area.

LiDAR surveying completed in 2018 indicated that the spatial geometry of the HMS in these areas was both closer to the surface and vertically thicker when compared to the mineralisation horizons interpreted as part of the 2017 MRE. The cause of this discrepancy was attributed to errors in survey measurements by previous exploration companies which did not have the benefit of both global positioning system (GPS) and LiDAR survey data.

The discrepancies in collar coordinates and elevation data associated with the pre-VHML drilling is understood to have formed part of the justification for considering the historical data to have a low confidence level, which was reflected in the Inferred status of the 2017 MRE. The Company has since resurveyed the collar coordinates for each historical drillhole, which confirmed a significant change in the spatial RL position of the mineralised horizons, resulting in a downgrading of confidence in the 2017 MRE.

The Company has also reviewed the assay methodology which was used in the drilling data supporting the 2017 MRE, finding that 85% of drillhole assays were completed using screens to separate the -2 mm/+38 µm fraction, with the remaining 15% of the dataset based on a -2 mm/+45 µm fraction. The work did not include assaying for rare earth minerals. The data was therefore considered to be inadequate to allow an assessment of the potential for future expansion at Goschen.

As part of the resource definition campaigns, the Company completed reconnaissance drilling along road verges as part of drilling across RL6806. In the June quarter of 2022, the Company commenced submission of samples from one in four holes drilled in Area 2 East to test the THM grade and associated valuable VHM and REM content. Figure 25 summarises the drilling underpinning the rationale for the Exploration Target rationale, and Figure 26 presents typical cross- and long-sections used to conceptualise the Exploration Target.

The Company has re-assessed Goschen North using both the verified historical and Company data. This estimate is now considered to be an Exploration Target and is referred to as the Goschen Exploration Target 2022. The Company notes that the potential quantity and grade of this target is conceptual in nature, that there has been insufficient exploration to estimate a Mineral Resource and that it is uncertain if further exploration will result in the estimation of a Mineral Resource.

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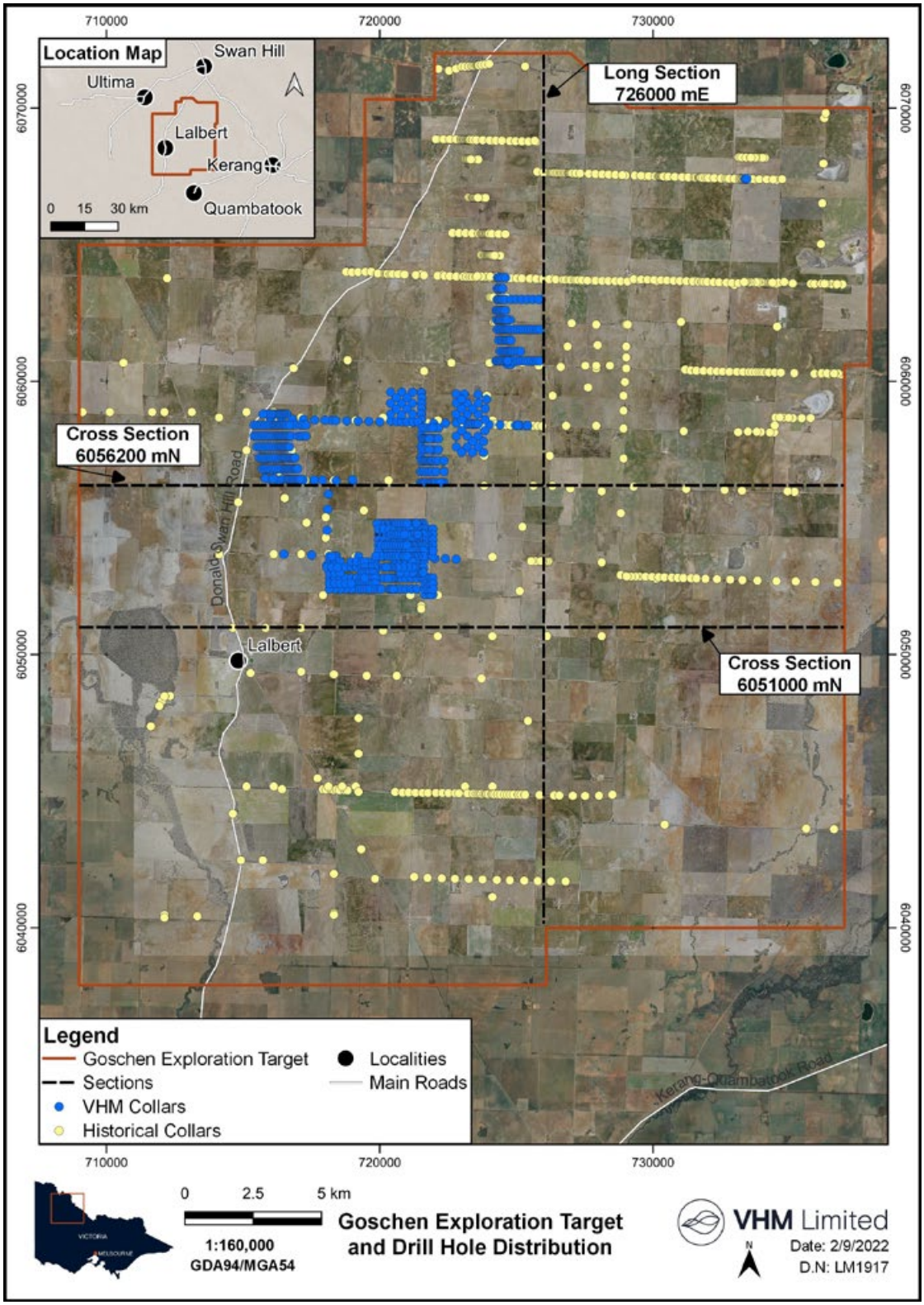
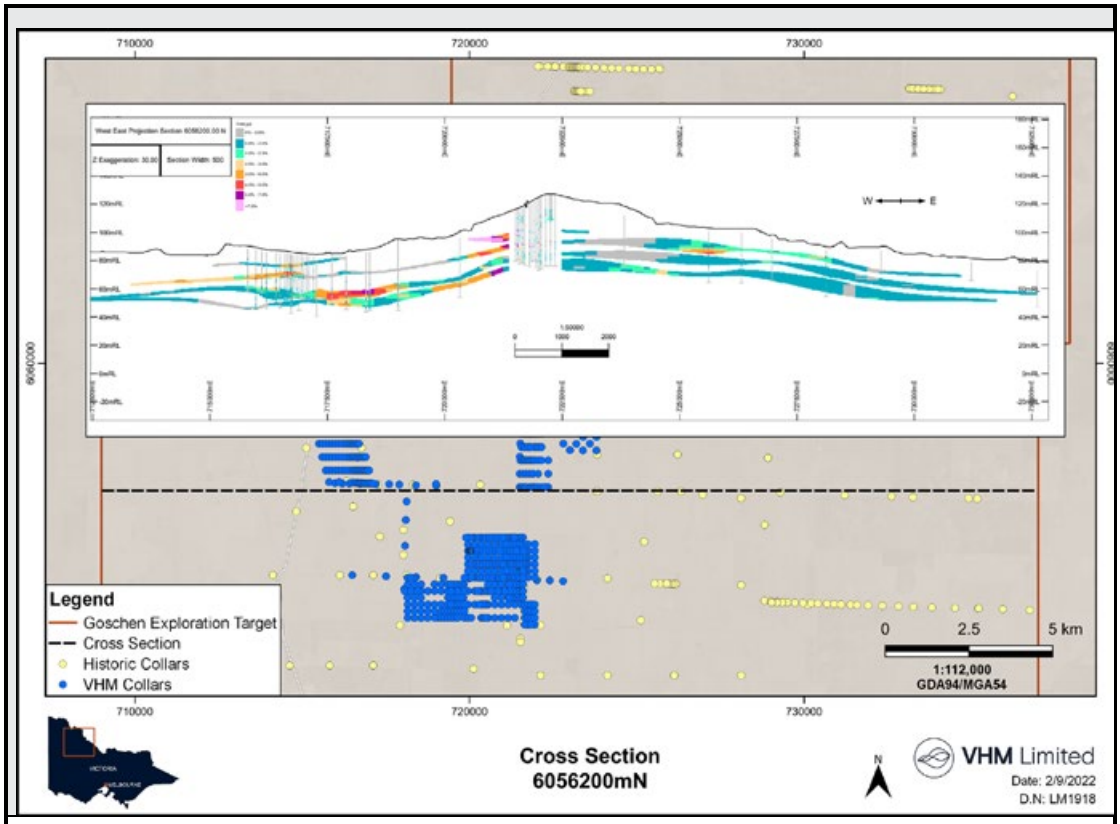
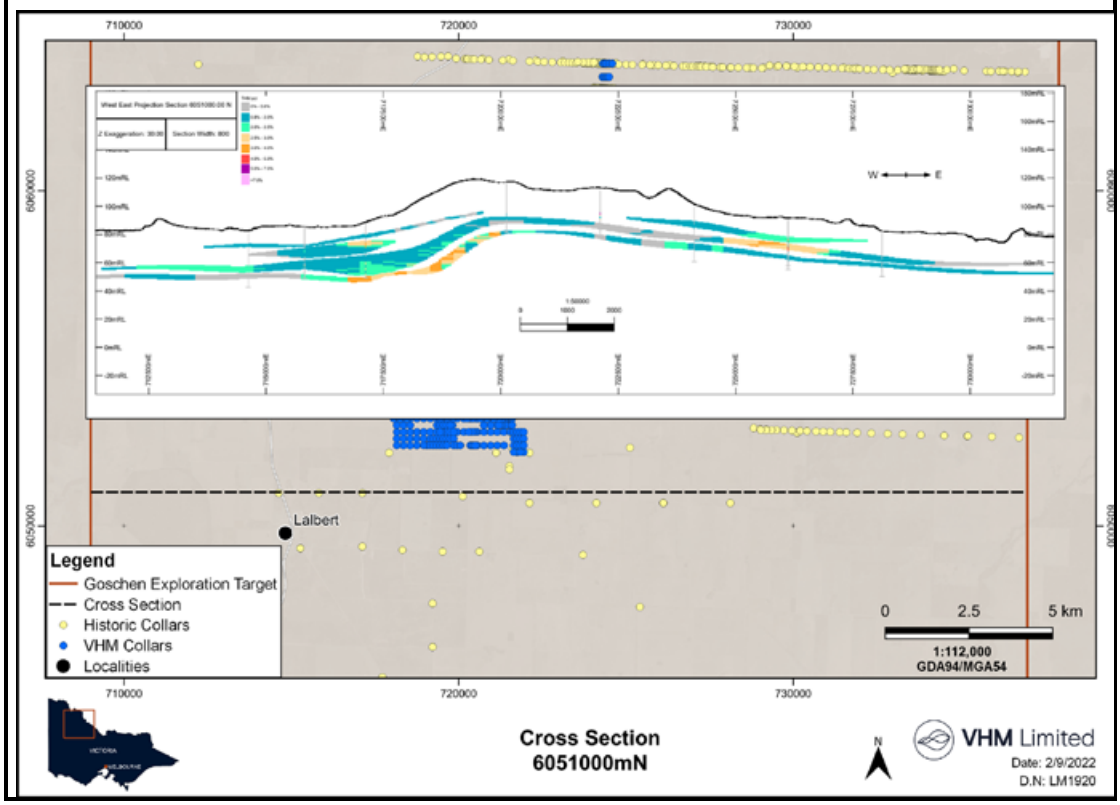


Figure 25: Goschen Exploration Target – material drill hole collars
Source: VHML

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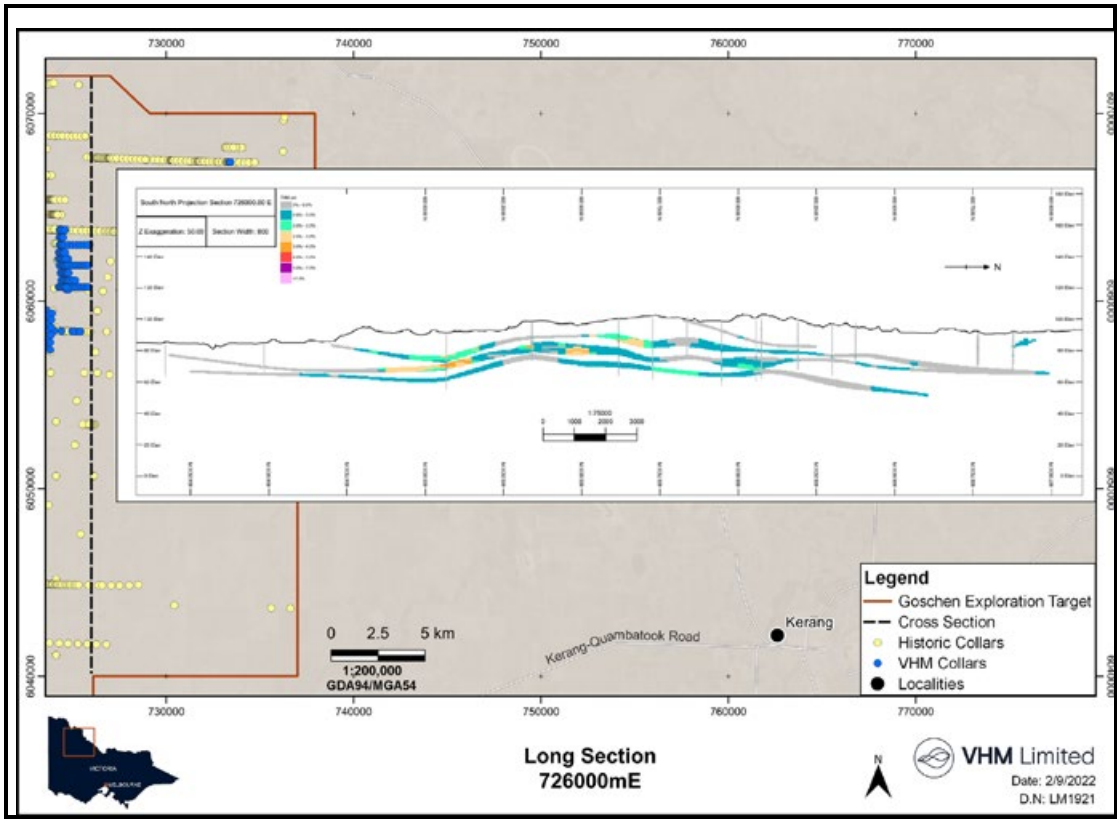


Figure 26: Cross-sections and long section illustrating rationale of the Goschen Exploration Target
Source: VHML

Derivation of Exploration Target

A total of 1,465 drillholes were used to inform the GET 2022; 572 historical drillholes and 893 drilled by VHML. In areas covered by AC holes drilled by VHML, the sheet horizons were defined at a 0.8% THM cut-off grade and also used downhole gamma logging to assist in the definition of contacts. The sheet horizons are laterally extensive and can be traced over several kilometres in both north-south and east-west directions. Depending on location, the Goschen deposit hosts between three to five spatially extensive horizons. Localised strandline deposits have been intersected by close-spaced AC drilling (200 m x 25 m and 200 m x 50 m).

The Company completed airborne geophysical surveys at a flying height of 25 m above surface, and 100 m line spacing in 2021. This work improved the definition of the strike extent of the strandline deposits associated with the Goschen deposit and confirmed trends observed in the analysis of both Company and third-party exploration drillhole data. VHML has now included several additional strand deposits in the GET 2022 based on the 2021 geophysical survey data and evaluation of Company and third-party drilling data. The 2022 geological interpretation now includes a group of strandlines associated with the Cygnus strandlines, located on the eastern tenement margin.

The interpretation of the mineralisation horizons in the GET 2022 now includes four sheet-style and eight strandline mineralisation horizons. Implicit modelling was completed for sheet-style mineralisation horizons and explicit modelling was completed for strandline mineralisation horizons. Mineralised horizons were defined by a 0.8% THM cut-off grade. Existing interpretations within the Area 1, Area 2 West, Area 3 Extended and Area 4 which utilised downhole gamma logging were used to estimate the north-south and east-west extents of the interpreted Exploration Target.

The strandlines are typically finer particle diameter to the west of the Goschen deposit and become coarser towards the east. The inclusion of additional Company exploration data and that of the verified pre-VHML

historical exploration data has enabled a significant extension of the sheet style system to the north, south and west of the previous 2017 MRE. The mineral assemblage in the GET 2022 is limited to VHM and monazite and xenotime.

The proportion of historical analytical data which includes information for monazite and xenotime within the mineralised horizons is less than 8%. This had a direct bearing on the estimate of monazite and xenotime in GET 2022 and as a consequence to determine a range of outcomes the Company has also considered the outcomes of resource estimation in Areas 1 to 4.

The interpretation was completed on drill sections stepping through the project area at 100 m intervals, with a 200 m section width stepping north-south. Data was viewed with a vertical exaggeration of 50:1 to assist in visually determining continuity across east-west drill spacing and along north-south sections.

VHML elected to use Ordinary Kriging to estimate a base block model, which was then factored to derive the lower and upper ranges of tonnes and grades in the GET 2022. The previous 2017 estimate provides sufficient certainty to support the use of a block model approach to derive a base case for the GET.

CSA Global has reviewed the rationale for, and derivation of the GET 2022, and is satisfied that there is an appropriate and reasonable basis to support the derivation; noting of course that the potential quantity and grade of the target remain conceptual in nature, that there has been insufficient exploration to estimate a Mineral Resource and that it is uncertain if further exploration will result in the estimation of a Mineral Resource.

Table 31: Goschen Exploration Target (GET 2022)

Tonnage		**THM grade**		**In situ THM**	
Low Case	**Upper Case**	**Low Case**	**Upper Case**	**Low Case**	**Upper Case**
2,622 Mt	4,071 Mt	2.05%	2.16%	54 Mt	88 Mt
In situ THM		**Zircon grade**		**In situ zircon**	
Low Case	**Upper Case**	**Low Case**	**Upper Case**	**Low Case**	**Upper Case**
54 Mt	88 Mt	5.31%	6.03%	3 Mt	5 Mt
In situ THM		**Rutile grade**		**In situ rutile**	
Low Case	**Upper Case**	**Low Case**	**Upper Case**	**Low Case**	**Upper Case**
54 Mt	88 Mt	2.03%	2.34%	1 Mt	2 Mt
In situ THM		**Leucoxene grade**		**In situ leucoxene**	
Low Case	**Upper Case**	**Low Case**	**Upper Case**	**Low Case**	**Upper Case**
54 Mt	88 Mt	3.08%	3.46%	2 Mt	3 Mt
In situ THM		**Ilmenite grade**		**In situ ilmenite**	
Low Case	**Upper Case**	**Low Case**	**Upper Case**	**Low Case**	**Upper Case**
54 Mt	88 Mt	7.13%	8.2%	4 Mt	7 Mt
In situ THM		**Monazite grade**		**In situ monazite**	
Low Case	**Upper Case**	**Low Case**	**Upper Case**	**Low Case**	**Upper Case**
54 Mt	88 Mt	0.68%	0.76%	0.4 Mt	0.7 Mt
In situ THM		**Xenotime grade**		**In situ xenotime**	
Low Case	**Upper Case**	**Low Case**	**Upper Case**	**Low Case**	**Upper Case**
54 Mt	88 Mt	0.07%	0.07%	0.04 Mt	0.06 Mt

14.2 Future Exploration

14.2.1 Current Status

Considerable exploration has been conducted on EL5520/RL6806, including:

- AC and sonic drilling programs
- Geophysical surveys

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- The upgrade of MREs from Inferred to Indicated
- Metallurgical testwork programs
- Geotechnical and environmental studies.

VHML completed a PFS in February 2019 wherein potential high-grade THM zones were identified during assessments of historical geological data. The Company designed drilling programs to target these high-value mineralisation zones and has plans for further drilling, assaying and metallurgical testwork. Work has continued on the *Environment Effects Act 1978* approvals process, with referral formally submitted on 31 August 2018. VHML received notification on 10 October 2018 that the Project would require an Environment Effects Statement (**EES**). Environmental assessments to inform the EES are now in progress.

Community consultation has commenced, exploration activities and environmental studies on EL6664, EL6666 and EL6769 (see Figure 3), including the compilation of available data such as regional topographic and geological maps and datasets is in progress, and previous exploration maps and drill hole locations (and results where available) are being reviewed. The interpretation of geological and geophysical data has been completed. Field surveys for flora and vegetation have been completed for planned AC drilling programs. VHML has compared historical data across the licences and concluded that the data correlates with the Company's drilling results. The combined dataset has allowed VHML to identify target areas for future drilling campaigns.

14.2.2 Future Exploration Plans

The Company is required as part of its tenement expenditure commitment to advance resource definition programs. In addition to the planned development at Goschen, VHML intends to continue exploration over its tenements to expand the current Proved and Probable Ore Reserves, and to identify areas of high-grade mineralisation that may be incorporated preferentially within the LOM plan.

Resource definition will be prioritised in areas that are proximal to the currently defined Goschen Mineral Resources. Drilling programs will be designed to expand the project footprint and investigate extensions of known HMS and REE mineralisation, in addition to undertaking desktop studies and geological mapping. VHML considers the surrounds of the Goschen development areas offers further opportunities and is highly prospective for the discovery of additional sheet and strandline style deposits.

Further exploration is planned in Area 2 East and adjacent to the Goschen mining area, and at Cannie and Nowie. The Company has allocated existing funds for further evaluation of Area 2 East over the next 12 months.

Area 2 East (RL6806) 2022

Area 2 East is located between the Goschen development footprint and Area 2 West. Area 2 East is approximately 5 km northeast of Lalbert; Area 2 East was drilled and sampled during the February 2019 drilling campaign. The resource definition program comprised 3,819 m of AC drilling in 104 holes. Samples collected from the drillholes are currently being assayed and will inform future Mineral Resource upgrades.

Planned work comprises:

- Assay drillholes completed in previous drilling programs
- Geological interpretation of results
- Mineral Resource estimation
- Determine if appropriate to estimate Ore Reserve
- Ancillary tasks.

14.2.3 Statutory Obligations

The exploration activities will be undertaken as Low Impact Exploration as defined in the *Mineral Resources (Sustainable Development) Act 1990*. Low Impact Exploration requires the notification to Earth Resources

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Regulation of the works program seven days prior to commencement of works. No other permits are required to conduct the proposed program of exploration set out immediately above.

14.3 Cannie

14.3.1 Overview

In 2021, a geophysical survey confirmed that historic drilling had discovered a significant deposit of HMS south of the Goschen. This deposit is referred to as Cannie.

Cannie is located approximately 50 km southwest of Swan Hill and 10 km south of Lalbert, within EL6664 and EL6419. Cannie is divided into southern (Cannie Towaninny) and northern (Cannie Lalbert) target areas. These are just 10–20 km from Goschen.

14.3.2 Historical Exploration

Previous explorers at Cannie include CRA, MBT, and Corvette Resources. Drillhole intersections of significance identified during an assessment of the work completed by these companies identified an area of potential interest extending 15 km in a north-south direction and 6 km in an east-west direction, illustrated in Figure 27.

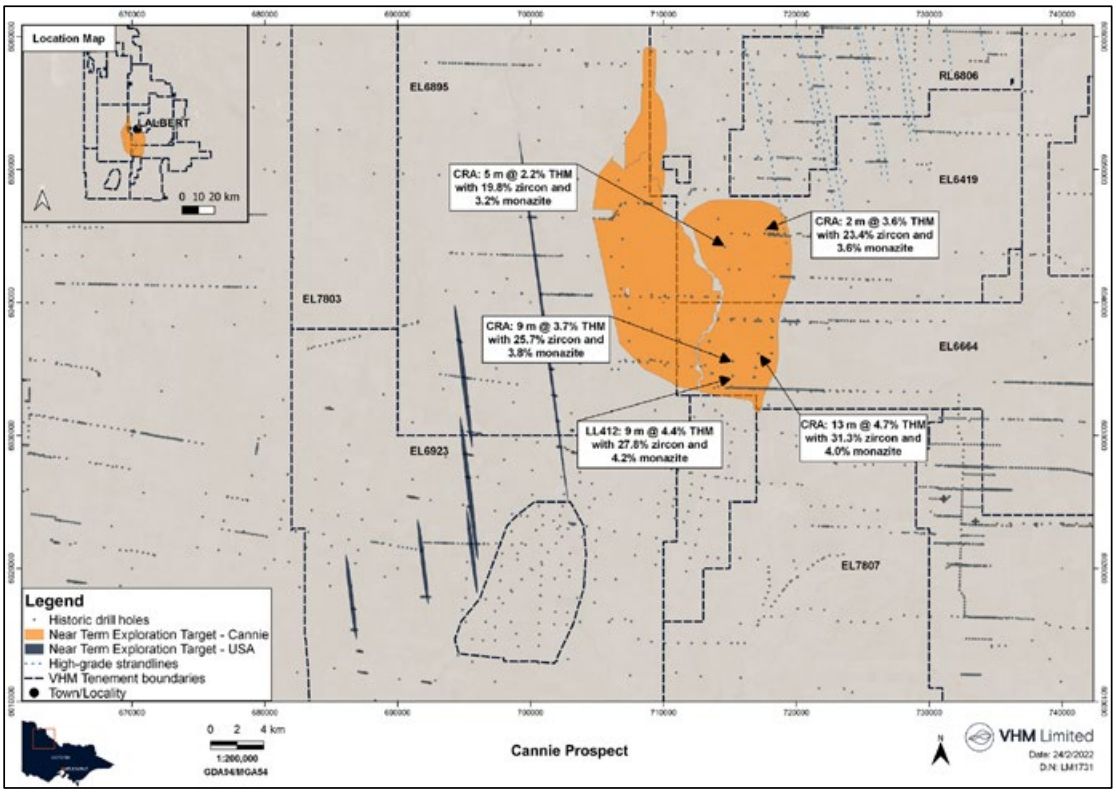


Figure 27: Cannie Project – historical basis for targeting
Source: VHML

14.3.3 Planned Exploration

VHML is required (pursuant to conditions attached to the grant of its exploration licences) to undertake further exploration drilling and associated activities to meet tenement expenditure commitments. Additionally, the Company plans to generate an Indicated MRE for the purposes of securing a RL.

The Company has allocated A$800,000 for that purpose over the next 12-month period.

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The exploration work program planned on private land includes:

- Drill program to test historic intersections and evaluate Cannie at closer drill spacings where it is warranted
- Drillholes will target areas where historic drilling has intersected significant intervals of HMS with significant endowments of zircon, and REM oxides

The program will also include downhole, and airborne geophysical surveys to improve targeting of drilling. There are currently no defined Mineral Resources at Cannie.

No further permits are required to enable the Company to conduct this program of work. Sufficient land access rights have been obtained to support the planned activities.

14.4 Nowie

14.4.1 Overview

Nowie is located north-northwest of Goschen and includes tenements EL6419 and EL6666 (Figure 3). VHML has defined a series of high-grade strandline deposits as well as established an aerially extensive sub-horizontal sheet deposit using geophysical data acquired in 2021, historical drilling data and data from drilling completed by the Company.

14.4.2 Historical Exploration

Exploration has been conducted since 1985 and includes work by BHP, Basin Minerals, and RGC. Their exploration searched for zircon and titanium deposits and overlooked the Nowie Sheet deposit as a major-scale REM endowment target. A geophysical survey completed by VHML in 2021 confirmed significant deposits of HMS. There are, however, currently no defined Mineral Resources.

14.4.3 Planned Exploration

The Company is required (pursuant to conditions attached to the grant of its ELs) to undertake further exploration drilling and associated activities to meet tenement expenditure commitments. The Company has allocated A$300,000 in H2 2022 for that purpose.

The planned exploration work program planned on private land includes:

- Drilling to evaluate the extent of the known mineralised zones

Early phase metallurgical testwork targeting REM and zircon extraction. No further permits are required to enable the Company to conduct this program of work. Sufficient land access rights have been obtained to support the planned activities.

14.5 Cygnus

14.5.1 Overview

Cygnus is located northeast of Goschen and falls within RL6806 (Figure 3).

The Company has completed preliminary exploration drilling on a series of medium to coarse HMS deposits. This work was completed between 2017 and 2020 and identified a series of high-grade accumulations of REM, which, based on wide-spaced drilling, appear to be materially higher in total heavy mineral grade than at Goschen.

Drilling completed by previous explorers has been evaluated and supports the tenor of VHML's drillhole intersections. The Company has completed geological interpretation of both its own and historical drill data and identified two high-grade HMS strandlines trending north-northwest that are up to 250 m wide, and within 4 m of surface.

There are, however, currently no defined Mineral Resources at Cygnus.

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15 Risks

The interpretations and conclusions reached in this ITAR are based on CSA Global's review of current information and the best evidence available at the time of writing. CSA Global makes no guarantee of certainty as to the presence of economic mineralisation of any commodity within VHML's tenements.

Any mineral project comprises multiple stages of advancement from early exploration through prospect to advanced prospect and development. Risk is reduced at each stage. Exploration is an intrinsically risky process, particularly at an early stage.

15.1 Mineral Resource Estimation

The mixed 38 µm and 20 µm datasets are not ideal but have been sufficiently investigated and have been appropriately considered in the confidence levels applied to the classified MREs and which have been reported in accordance with the JORC Code. The further work recommended by IHCR and now commenced by the Company is endorsed by CSA Global.

The initial MRE methods applied, inverse distance cubed sample weighting and nearest neighbour, have been replaced with ordinary kriging, an estimation method that provides an improved quantitative account for anisotropy within the spatial correlations between data points. It potentially minimises bias in an estimate. This change is better suited to detailed mine planning and scheduling during the final study stages.

The Company's current approach to estimating bulk density has been tested over time and provides an acceptable global estimate. However, *in situ* density measurements are recommended as project development progresses to refine estimates of tonnage for detailed mine planning and scheduling.

Close-spaced drilling has been completed in Area 1 to investigate local variability. This is good practice and recommended in all other areas as project evaluation progresses.

15.2 Mineral Processing and Metallurgical Testing

Although the engineering design has been undertaken by a reputable engineer experienced in mineral sands plant design, and the proposed flowsheet does not include any novel processing units, it is recommended that further testwork and analysis be completed before FID. In discussions with VHML, the initiatives recommended in this report will be largely addressed in the current FEED program. Further definition of mineral recovery by size and analysis of open streams will provide additional comfort that recovery targets will be achieved, however, this remains a risk area that is being explored in further detail in this program. Matching geometallurgical characteristics and process criteria to the production schedule is also a recommended initiative before plant commissioning. The key processing risks as identified in the DFS are reproduced in Table 32.

Table 32: Key processing risks, as reproduced from the DFS (Table 4.4 of Section 4)

14	Processing plant throughout may be less than DFS expectation.	• Undertake regular monitoring, sampling and evaluation with qualified on-site technical support to commission and maintain process operations to design specification. • Review desirability of using feed blending during operations. • Undertake variability trial on bulk sample to assess impact of changed feed quality (grade and assemblage) on mineral recovery. • Conduct specialist studies on pumping characteristics (pipe loop tests) and define energy requirements for pumping. • Undertake independent review of pumping calculations. • Conduct closed-loop testing prior to detailed design of flotation circuit. • Conduct batch testwork to confirm scrubber dimensions.

15	Processing plant recovery may be below level defined within DFS.	• Undertake regular monitoring, sampling and evaluation with qualified on-site technical support to commission and maintain process operations to design specification. • Review desirability of using feed blending during operations. • Undertake variability trial on bulk sample to assess impact of changed feed quality (grade and assemblage) on mineral recovery. • Conduct closed-loop testing prior to detailed design of flotation circuit. • Complete validation testwork on separate ore samples. • Undertake grade control drilling.
53	Project costs estimate may be exceeded.	• Confirm permitting obligations. • Award EPC/EPCM contract. • Develop of contingency allowance that reflects actual risks and uncertainties in the capital cost estimate and potential for increase in costs due to increases in rates for materials labour and shipping. • Undertake independent review of capital and operating cost estimates and schedule. • Implement project controls (careful control of commitments and costs). • Assess/finalise funding strategies – shareholder funds, secure loan finance.

Ideally, the testwork described above would have occurred in parallel to a DFS level study, however, there are always constraints on sample availability and budget that impact this work.

In CSA Global's professional opinion, the testwork was undertaken by a reputable laboratory with significant experience in mineral sands flowsheet development. CSA Global considers the processing flowsheet will be suitable for the recovery of the intended products. A brief review of the process plant design has confirmed that it essentially mirrors the metallurgical testwork results. It is CSA Global's opinion that the testwork undertaken is sufficient to support the processing flowsheet selected. Similarly, the testwork indicates that the anticipated product quality should be reflected in the selected processing flowsheet when processing similar ores.

The engineering design has been undertaken by a reputable engineer experienced in mineral sands plant design, and the proposed flowsheet does not include any novel processing units. The process plant flowsheet and design and the level of metallurgical testing undertaken meet the standard expected of a DFS for this type and scale of project and are appropriate to mitigate the associated risk. CSA Global concurs with the risk control measure of an independent detailed review of capital and operating cost estimates and schedule as proposed by MTPL and has made comment on the contingency allowance in the body of this report.

The project delivery strategy whereby MTPL as the engineer is to be integrated as a subcontractor into another organisation will have some unique aspects to commercial closure of an EPC contract that may come at an unknown premium. As market enquiries are ongoing in terms of this aspect, it is not possible to gauge the appetite or availability of organisations that VHML may be approaching. However, it is clear that VHML understands the risks and challenges with this aspect of the project and that they hope to engage the EPC contractor as soon as possible.

The lack of an overview of mass balance, including grades and recoveries, creates some difficulty in assessing where losses of valuable TiO_2, ZrO_2 and CeO_2 occurred during the metallurgical testwork. However, CSA Global does not consider this to be significant to this stage of project development but recommends that the issue be investigated in more detail as development progress.

The metallurgical testwork was undertaken on a 1.8-tonne bulk sample consolidated from drillholes for Area 3 and a 9.1-tonne bulk sample from Area 1. The heavy mineral grade of the bulk samples was given in the testwork report and cross-correlation studies with the resource model are in progress. The process design flowsheet in the February 2019 PFS will need updating to reflect metallurgical testwork results delivered in April 2019.

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In CSA Global's opinion, the recoveries applied are typical/appropriate given the results of the testwork and the stage of project development.

15.3 Mine Planning and Ore Reserves

Auralia considered Measured and Indicated material within the Resource Model for the ORE and applied modifying factors in the ORE. CSA Global recommends future detailed studies to reduce the margin of error in recovery, realised prices and product specifications as the Project progresses.

CSA Global has reviewed the parameters applied in the mine planning process and Ore Reserve estimation, and recommends the following considerations as the Project progresses:

- Addressing operational safety and risk aspects of in-pit tailings management
- Consideration of additional price discounting for the Area 3 minerals in concentrates
- Application of mining dilution and recovery when calculating the block value to determine ore and waste, as per standard industry practice
- Ensure consistency of parameters such as unit costs, mining dilution, mining recovery, metallurgical recovery, pricing etc. throughout the optimisation, block value calculation, design, schedule and cash flow model
- Review the long-term pricing forecasts for foreign exchange as the reserve was run adopting a long-term forecast of A$1:00 = US$0.70 compared to the current exchange rate
- Ensure that the latest resource block models are used for optimisation, pit design, LOM schedule, and cash flow model
- Further refinement of capital and operating cost estimates.

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16 Use of Funds

A minimum amount of A$20 million will be raised (with the potential for oversubscriptions of a further A$10 million), and it is anticipated that the Company will have cash on hand of A$11.1 million as at 1 October 2022, giving a total of A$31.1 million to sustain operations in the initial 12 months post-listing (Table 33). The commentary herein is based on the minimum subscription amount of A$20 million being raised. Should additional capital be raised by way of oversubscriptions of up to A$30 million, the Company will apply such funding to additional engineering and exploration activities as outlined in Table 33.

Table 33: Use of funds

Sources of funds	**A$20M Case A$**	**A$30M Case A$**
Cash on hand as of 1 September 2022	11,100,000	11,100,000
IPO proceeds	20,000,000	30,000,000
TOTAL AVAILABLE FUNDS	**31,100,000**	**41,100,000**
Use of funds		
Goschen Project		
Metallurgical and hydromet circuit testwork	1,400,000	4,700,000
FEED	1,800,000	5,700,000
Approvals	7,700,000	7,700,000
Land acquisition and community	11,300,000	11,300,000
Exploration and appraisal		
Cannie Program	800,000	2,300,000
Nowie Program	300,000	1,100,000
Licence fees/other exploration	800,000	800,000
Corporate (general and administration)	2,200,000	2,200,000
Interest costs and costs of the Offer	3,800,000	4,300,000
Working capital and liquidity buffer	1,000,000	1,000,000
TOTAL USE OF FUNDS	**31,100,000**	**41,100,000**

CSA Global has reviewed the Company's proposed used of funds for the HMS and REE exploration and appraisal activities, and finds the expenditure to be reasonable.

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18 Abbreviations and Units of Measurement

°	degrees
°C	degrees Celsius
µm	micron(s)
2017 MRE	2017 Goschen North Mineral Resource estimate
3D	three-dimensional
AACE	Advancement of Cost Estimation
AC	aircore
AECOM	AECOM Infrastructure
AIG	Australian Institute of Geoscientists
ALS	ALS Laboratories
ASIC	Australian Securities and Investments Commission
ASX	Australian Securities Exchange
Auralia	Auralia Mining Consultants
AusIMM	Australasian Institute of Mining and Metallurgy
Basin	Basin Minerals NL
CAPEX	capital expenditure
cm	centimetres
CRA	CRA Exploration
CSA Global	CSA Global Pty Ltd
DFS	definitive feasibility study
Diamantina	Diamantina Laboratories
EES	Environment Effects Statement
EL	Exploration Licence
EPC	engineering, procurement and construction
EPCM	engineering, procurement and construction management
FEED	front-end engineering and design
FID	final investment decision
FPP	feed preparation plant
g	grams
g/cm^3	grams per cubic centimetre
GET 2022	Goschen Exploration Target 2022
GJ	gigajoules
GL	gigalitres
GPS	global positioning system
HMC	heavy mineral concentrate
HMS	heavy mineral sand(s)
HWLE	HWL Ebsworth

ID^2	inverse distance weighting squared
IHCR	IHC Robbins
Iluka	Iluka Resources Ltd
IPO	Initial Public Offering
ITAR	Independent Technical Assessment Report
kg	kilograms
km	kilometre(s)
km^2	square kilometres
ktpa	thousand tonnes per annum
L	litre(s)
LiDAR	light detection and ranging (survey)
LNG	liquefied natural gas
LOM	life of mine
m	metre(s)
M	million(s)
m^2	square metres
m^3	cubic metres
Majesso	Majesso Consulting Pty Ltd
MBT	Murray Basin Titanium Pty Ltd
mm	millimetres
MRE	Mineral Resource estimate
MSP	mineral separation plant
Mt	million tonnes
Mtpa	million tonnes per annum
MTPL	Mineral Technologies Pty Ltd
MUP	mining unit plant
MVA	megavolt ampere
MW	megawatts
NPI	non-process infrastructure
OPEX	operating expenditure
ORE	Ore Reserve estimate
P&S	Pit & Sherry Pty Ltd
pa	per annum
PDC	process design criteria
PFS	prefeasibility study
Providence	Providence Gold and Minerals Pty Ltd
PSD	particle size distribution
QEMSCAN	Quantitative Evaluation of Minerals by Scanning Electron Microscopy
RC	reverse circulation

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REE	rare earth element(s)
REM	rare earth mineral(s)
REMC	rare earths mineral concentrate
REMFC	rare earths mineral flotation circuit
REO	rare earth oxide(s)
RGC	RGC Exploration Pty Ltd
RL	Retention Licence
ROM	run of mine
RSA	Right Solutions Australia
SG	specific gravity
SGMP	Surpac graphical mining package
THM	total heavy minerals
tpa	tonnes per annum
tph	tonnes per hour
TREO	total rare earth oxide(s)
TZMI	TZ Minerals International
VHM	valuable heavy minerals
VHMC	valuable heavy minerals concentrate
VHML	VHM Limited
WA	Western Australia
WCP	wet concentrator plant
XRF	x-ray fluorescence

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Appendix A Compilation – JORC Code (2012 Edition) Table 1 for Area 1, Area 2W, Area 3 Extended, Area 4 and the Goschen Exploration Target

Area 1 – JORC Table 1 (JORC Code, 2012 Edition)

Competent Person:	Graham Howard (JORC Table 1 Sections 1, 2, 3)
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Section 1: Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	*Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.* *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* *Aspects of the determination of mineralisation that are Material to the Public Report.* *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	Aircore (AC) drilling was used to obtain samples at 1 m intervals. The following information covers the sampling process: • The full 1 m drill samples were split down to approximately ~1,000 g to ~2,500 g by rotary splitter mounted on the drilling rig. • Each 1 m composite subsample was homogenised by manually mixing the sample within the sample bag. • Bulk sample reject for each metre was retained. The 2018 bulk rejects were included in the Area 1 metallurgy sampling program. • A sample of sand of approximately 20 g is scooped from the sample bag for visual estimation of heavy mineral and slimes content and also sample description. The same mass of sample is consistently used for each panned sample to ensure calibration is maintained for consistency in visual estimation. • Sample logging software is used at the drill rig for recording sample intervals and descriptions. • The sample bag is sealed and dispatched to a commercial laboratory for analysis. • The laboratory sample was oven dried at 105°C for a minimum of 2 hours (and then re-dried for up to 12 hours if required), and split down to 100 g subsamples via a rotating splitter fed by a vibrating screen. A laboratory repeat was taken at ~1:25 samples. • All drillhole subsamples were screened using vibrating screens with a top screen of either 1 mm or 2 mm mesh and a bottom screen of either 20 µm or 38 µm. Oversize (+1 mm or 2 mm fraction) was removed and the -20 µm or -38 µm fraction (SLIMES) discarded. The sand fraction (1 mm or 2 mm to +20 µm or 38 µm) was then submitted for heavy liquid separation (HLS) using TBE to determine total heavy mineral (THM) content. Samples screened at the bottom screen of 20 micron at ALS Laboratories employed the use of a centrifuge-assisted separation. All other HLS samples used static-fall gravity separation. • Duplicates were taken at the drill rig by hanging sample bags side-by-side on the rotary splitter at a rate of ~1:20. • Duplicates were taken within mineralisation zones as the waste material was excluded from sampling.

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		• Commercially obtained standards were inserted by the laboratory at a rate of ~1:40.
Drilling techniques	*Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).*	Wallis Drilling was the contractor used for the 2017 and 2018 AC drilling and sampling program upon which the Goschen Area 1 Mineral Resource estimate (MRE) was based. AC drilling, which is a standard technique for the heavy mineral sand industry, was used. AC drilling is a form of reverse circulation drilling where the sample is collected at the face and returned inside the inner tube. All drillholes were vertical and were drilled using NQ-sized drill string and bits. Drill rods were 3 m long.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.* *Measures taken to maximise sample recovery and ensure representative nature of the samples.* *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	Drill sample recovery is monitored by recording sample condition from "dry good" to "wet poor". While initially collaring the hole, limited sample recovery can occur in the initial 0–1 m sample interval owing to sample and air loss into the surrounding loose soil. The initial 0–1 m sample interval is drilled very slowly in order to achieve optimum sample recovery. Each entire 1 m sample apart from the subsample taken for logging and analysis) is collected at the drill rig in large, numbered plastic bags for dispatch to the initial split preparation facility. At the end of each drill rod, the drill string is cleaned by blowing down with air to remove any clay and silt potentially built up in the sample tubes. The twin-tube AC drilling technique is known to provide high-quality samples from the face of the drillhole (in ideal conditions).
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* *The total length and percentage of the relevant intersections logged.*	Each AC sample was qualitatively logged into a field-validated data capture software package, and later uploaded to the AcQuire database. The samples were logged for lithology, colour, grain size, sorting, hardness, sample condition, washability, estimated heavy mineral content, estimated slimes content and any relevant comments such as slope, vegetation, or cultural activity. Every drillhole was logged in full. Logging is undertaken with reference to a Drilling Guideline with codes prescribed and guidance on description to ensure consistent and systematic data collection. Downhole gamma probe logging was completed in 2018 program. This technique provided spatial indication of valuable heavy minerals (VHM) mineral concentrations based on occurrence of radioactive minerals associated with VHM deposits.
Subsampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.* *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* *Quality control procedures adopted for all subsampling stages to maximise representivity of samples.*	The 1 m sample interval is rotary split at the drill rig. A total of ~1.2 kg to ~2.5 kg of each sample was placed into calico sample bags and exported to either Diamantina or ALS Laboratory for THM analysis. The water table depth, if intersected, was noted in all geological logs and when water injection was required to aid sample recovery the sample was logged as "wet poor". Almost all the samples are silty sand, sand, sandy clay, clayey sand, or clay and this sample preparation method is considered appropriate. The sample sizes were deemed suitable to reliably capture THM, slime, and oversize characteristics, based on industry experience of the geologists involved and consultation with laboratory staff.

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	Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling. *Whether sample sizes are appropriate to the grain size of the material being sampled.*	Field duplicates of the samples were completed at a frequency of 1:20 primary samples. Bulk sample rejects (5–8 kg) retained for further testwork.
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	Both the 2017 and 2018 programs undertook the following sample logging process: • The wet panning at the drill site provides an estimate of the THM % which is sufficient for the purpose of determining approximate concentrations of THM in the first instance. AC sample: • The individual 1 m AC subsamples were assayed by either Diamantina Laboratories or ALS Global in Perth, Western Australia. Samples were initially oven dried at 105°C for two hours (and then up to 12 hours for very wet samples) then reduced on a rotary splitter by 15%. Samples were then riffle split to 100 g sub-splits (weighed and captured) and then left to soak overnight. • All samples were then wet washed and sieved on vibrating screens using a top screen of +1 mm or +2 mm to remove the very coarse sand, pebbles, or grits. The bottom screen used either a 20 µm or 38 µm mesh for removal and determination of the -SLIMES fraction. The remaining sand fraction was then submitted to HLS process using either centrifuge assisted separation (ALS-20 micron), or static-gravity drop. (Diamantina – all). • The laboratories used TBE as the heavy liquid medium – with density range between 2.92 g/ml and 2.96 g/ml. The density of the heavy liquid was checked every day. • This is an industry standard technique. • Field duplicates of the samples were collected and submitted for assay at a frequency of 1 per 20 primary samples. • Both laboratories completed their own internal quality assurance and quality control (QAQC) checks that included laboratory standards every 40th sample and a Laboratory repeat every 25th sample prior to the results being released. • Analysis of QAQC samples show the laboratory data to be of acceptable accuracy and precision. • The adopted QAQC protocols are acceptable for this stage of test work. • Assay methodology research and development was completed in parallel using samples from various areas of the Goschen deposit using different THM assaying and mineral assemblage analytical methods. This included round robin submissions to different assay laboratories. Testwork included analysis of different analytical methods to determine appropriate THM analytical method.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.* *The use of twinned holes.* *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* *Discuss any adjustment to assay data.*	All results were checked by the Company's Geology Manager. The Company's Geology Manager and an independent Resource Geologist made periodic visits to the laboratories to observe sample processing and procedure. A process of laboratory data validation using mass balance is undertaken to identify entry errors or questionable data. Field and laboratory duplicate data pairs (THM/OS/SLIME) of each batch are plotted to identify potential quality control issues.

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		Standard Reference Material sample results are checked from each sample batch to ensure they are within tolerance (<3SD) and that there is no bias. The field and laboratory data were exported from the VHM Limited (VHML) AcQuire database and imported into Datamine by a geologist contracted to VHML, which is appropriate for this stage in the program. Data validation criteria are included to check for overlapping sample intervals, end of hole match between "Lithology", "Sample", "Survey" files and other common errors.
Location of data points	*Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* *Specification of the grid system used.* *Quality and adequacy of topographic control.*	Drillhole collar locations were surveyed by an independent surveyor using industry standard equipment. Three permanent survey marks in the area provided survey control, allowing for repeatable and accurate survey readings across the project area. The datum used is GDA 94 and coordinates are projected as MGA Zone 54. A digital topographic surface was generated by VHML from data collected during a light detection and ranging (LiDAR) survey commissioned by VHML. The accuracy of the locations is sufficient for this stage of exploration.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.* *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* *Whether sample compositing has been applied.*	454 drillholes were used to inform the resource estimate. All holes were completed in drilling campaigns conducted in 2018 or 2019. Drillholes are spaced on a grid of lines spaced at 200 m in the north-south direction and typically between 100 m and 200 m in the east-west direction with some close-spaced drilling as close as 50 m along traverses. The collar spacing is sufficient to provide a high degree of confidence in geological model and grade continuity within the holes at this stage. Each AC drill sample is a single 1 m sample of sediment intersected down the hole. 16,446 samples were used to inform the MRE. No downhole compositing has been applied to models for values of THM, slime, and oversize. Compositing of samples was undertaken on THM concentrates for mineral assemblage determination. Composite samples were determined by geological domains.
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	The mineralisation at the Goschen Area 1 project is a largely flat-lying (with some soft sediment deformation across a basement fault) sedimentary package which does not display a strong orientation of mineralisation at the current sample spacing.
Sample security	*The measures taken to ensure sample security.*	AC samples were stored on site (at a dedicated warehouse in Kerang). The samples were then dispatched to Perth using Swan Hill Freight agents and delivered directly to the laboratories. The laboratory inspected the packages and did not report tampering of the samples
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	Internal reviews were undertaken during the geological interpretation and throughout the modelling process.

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Section 2: Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	*Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	The exploration work was completed on tenements that are 100% owned by VHML in Victoria, Australia. The drill samples for this MRE were drilled and collected from Exploration Licence 5520. The Exploration Licence original date of grant was 10 October 2014 with an expiry date of 9 October 2019. A Retention Licence to replace the Exploration Licence was granted by Earth Resources Regulation, which is the responsible statutory body and part of Victorian Department of Jobs, Precincts and Regions, in January 2020.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	Historical exploration work was completed by previous exploration companies including Austiex (1977–1978), CRA Exploration (1981–1987), Renison Goldfields Consolidated (1980–1991), WJ Holdings (1998), RZM Group (1999), Basin Minerals (2001), Providence Gold and Minerals (2004–2005), and Iluka (2009). The Company has obtained the hardcopy reports and maps in relation to this information as part of its historical review in preparation for their current work program. The historical data comprises surface sampling, limited AC drilling and mapping. The current resource estimate is based solely on work conducted by VHML.
Geology	*Deposit type, geological setting and style of mineralisation.*	The heavy mineral sands at the Goschen Project is a fine-grained deposit hosted within the offshore depositional paleo-environment of the Loxton Parilla Sands. The Loxton-Parilla Sand is common within the Murray Basin and hosts all known mineral sand deposits in the Basin. Alluvial sediments of the Shepparton Formation have been deposited over the Loxton-Parilla Sand and the Bookpurnong Formation consisting of shallow marine clays and marls is positioned below within the lithological sequence.
Drillhole information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:* • *easting and northing of the drillhole collar* • *elevation or RL (Reduced Level - elevation above sea level in metres) of the drillhole collar* • *dip and azimuth of the hole* • *downhole length and interception depth* • *hole length.* *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	Company completed LiDAR survey of the Area 1 Mineral Resource area. All drillholes collar RL adjusted to LiDAR surface. Hole collar surveyed both by global positioning system and surveyor. Holes were vertical. All drillholes were surveyed by downhole gamma probe. Drillhole depth cross verified with drilling reports and geologist log for each hole. The field and laboratory data were exported into the VHML's AcQuire database. Drill data verified by light table evaluation during interpretation of 2020 Mineral Resource domains.
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.*	No data aggregation methods were utilised, no top cuts were employed, and all cut-off grades have been reported.

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	Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.* *If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.* *If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g. 'downhole length, true width not known').*	The nature of the mineralisation is horizontal, thus vertical AC holes represent the true thicknesses of the mineralisation. Downhole widths are reported.
Diagrams	*Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.*	Plan view and typical cross sections provided in shareholder announcement and resource report.
Balanced reporting	*Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	Exploration Results have been reported at THM >1% to indicate a range of potential tonnes and grade.
Other substantive exploration data	*Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	Detailed mineral assemblage work was undertaken on composite samples for the Project by ALS Metallurgy Services, Perth and by Bureau Veritas in Adelaide. ALS applied an integrated mineralogical approach using both x-ray fluorescence (XRF) analysis and Quantitative Evaluation of Minerals by Scanning Electron Microscopy (QEMSCAN). Bureau Veritas also use QEMSCAN for mineralogical determinations but use a combination of XRF and laser ablation techniques for chemical assay. These techniques were used to gain a quantitative understanding of the elemental composition and mineralogical assemblage. The XRF and laser ablation techniques provide measurements of relative elemental abundances (down to limits of a few parts per million) which allows for a quantifiable basis for determination of mineralogy, provenance, depositional environment, and diagenetic history. The XRF analysis was utilised to apply assay data to the geological model for grade interpretation. The QEMSCAN method of analysis required the samples to be screened into +150 µm and -150 µm screen fraction prior to sample preparation and QEMSCAN analysis.

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		Sample preparation required each subsample was mixed with size-graded, high-purity graphite to ensure particle separation and discourage density segregation. These sample-graphite mixtures were then set into moulds using a two-part epoxy resin, producing a representative sub-sample of randomly orientated particles. Once cured, the resin blocks were then cut to expose a fresh surface which is then gradually ground and polished. Once QAQC checks are completed, the sections are then carbon coated for electron beam conductivity and presented to QEMSCAN for analysis. The samples were analysed using QEMSCAN technology in Field Scan mode and Particle Mineralogical Analysis mode. Detailed sachet scanning of heavy mineral sinks from the drill assay process was carried out to determine regions of gross mineralogy as well as an overall consideration of VHM content. Other considerations undertaken during this sachet logging were the presence of iron oxide coatings on THM, and any gross composition of trash heavy minerals. Sachet logging then had partial input into the geological/mineralogical/THM grade interpretation which then assisted with domain control for modelling, as well as providing guidance for the allocation of mineral assemblage composites where it was not possible to get gamma data due to hole collapse. Early composite samples were generated solely on heavy mineral grades, which were used to generate geological domain boundaries. These composite samples frequently cross later interpretations of domain boundaries. As a result, many of the early composites are not representative of the interpreted mineralised domains. Many of these sample were, therefore, omitted from the dataset used to inform the resource estimate. Once the sample compositing was completed, the sample identification and mineral assemblage composite number was submitted to the labs listed above for mineralogical determination. In mid-2018, a 9.1-tonne bulk sample was created by compositing 429 excess drill sample cuttings (6,843 kg) from the mineralised zones of 107 holes which were drilled in 2018. The bulk of the sample was also complimented with 214 samples (2,238 kg) the mineralised drill-core from 35 holes that were generated by a specifically targeted sonic drilling program across the Area 1 deposit. The bulk sample was treated to a program of work to remove oversize and de-slime the parent sample in preparation for metallurgical testwork. The testwork was undertaken by Mineral Technologies. In addition to a THM head-grade, and slimes and oversize content details, the testwork produced a concentrate whose mineral assemblage was determined by ALS using QEMSCAN as described above. Details of summary drillhole composite is presented in the appendices of the MRE report.
Further work	*The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	Additional work is required to provide further detailed information on the mineral assemblage of the THM. Further drilling may be planned if an economic analysis of the resource provides justification for such work.

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Section 3: Estimation and Reporting of Mineral Resources

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

Criteria	JORC Code explanation	Commentary
Database integrity	*Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* *Data validation procedures used.*	Exploration data is collected in the field using a data collection software package that uses validation routines to ensure no incorrect codes can be used during logging. That field data is uploaded the Company's AcQuire database using validation routines. Laboratory assay files are also uploaded to the VHML database via routines the check the validity of the data. All data used in the resource estimate was downloaded directly from the VHML database in the form of csv files and then converted to Datamine files. Checks of data by visually inspecting on screen to identify translation of samples. Visual and statistical comparison was undertaken to check the validity of results.
Site visits	*Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* *If no site visits have been undertaken indicate why this is the case.*	An extended site visit during the 2018 resource drilling phase in EL5220 was undertaken by Competent Person (Geology Manager) to observe the drilling data collection and sampling activities. No deficiencies were identified during the visit.
Geological interpretation	*Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* *Nature of the data used and of any assumptions made.* *The effect, if any, of alternative interpretations on Mineral Resource estimation.* *The use of geology in guiding and controlling Mineral Resource estimation.* *The factors affecting continuity both of grade and geology.*	The geological interpretation was undertaken by VHML's Geologists using all logging, downhole gamma responses, and sampling data and observations. Current data spacing and quality is sufficient to indicate grade continuity. Interpretation of modelling domains was restricted to the main mineralised envelopes utilising THM, oversize, slimes, and geology logging. The interpretation of the domains was also aided by the utilisation of downhole gamma signatures produced by the geophysical logging which assisted with distinguishing domain boundaries in the Area 1 area. The Area 1 West resource area is defined by data generated using a 38 µm lower screen only. The Area 1 East Resource area incorporates data generated using both 38 µm and 20 µm lower screen sizes. To remove the possibility of mixed data populations, the 38 µm data was excluded from the Area 1 East MRE. Sachet logging was also undertaken by the company in relation to specific areas within the project to provide greater understanding of mineralogical domain (e.g. where it was not possible to obtain gamma signatures below the water table due to hole collapse). The MRE was controlled by the topographic surface and a series of wireframed surfaces delineating the mineralised domain. The mineralisation is apparently open to the north, south, east, and west.
Dimensions	*The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	The current resource has been defined as being approximately 2,000 m (north-south) on average, and 4,000 m wide east-west). It is approximately 10–12 m thick and is buried by an average of 16 m of overburden.

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Estimation and modelling techniques	*The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* *The assumptions made regarding recovery of by-products.* *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).* *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* *Any assumptions behind modelling of selective mining units.* *Any assumptions about correlation between variables.* *Description of how the geological interpretation was used to control the resource estimates.* *Discussion of basis for using or not using grade cutting or capping.* *The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.*	The MRE was conducted using Datamine Studio RM. Ordinary Kriging was used to interpolate assay grades from drillhole samples into most of the block model. A metallurgical bulk sample was created from drillhole samples (as described below). An envelope, that encapsulated the samples used to create the bulk sample and also the aircore samples around them, was created as a "3D solid" (wireframe) in Datamine and used to constrain the application of the metallurgical testwork data in the MRE. THM grades of model cells within the envelope from where the samples used to create the 9.1-tonne bulk sample were taken were set to a fixed grade of 5.72% THM, which was determined during the metallurgical testwork that was conducted using the 9.1-tonne bulk sample. This was appropriate as the bulk sample is representative of that envelope. The metallurgical testwork used a screen size of 20 µm and showed considerable uplift in recovery of heavy mineral compared to the individual sample grades of the "as-drilled" samples. Nearest neighbour techniques were used to interpolate mineral assemblage, index values and non-numeric sample identification into the block model. As with the THM, slimes and oversize values, the mineral assemblage which was derived by the bulk sample testwork, was used to overwrite and inform the model cells within the bulk sample envelope. The mostly regular dimensions of the drill grid and the isotropy of the drilling and sampling grid allowed for the use of Ordinary Kriging. A Kriging Neighbourhood Analysis was undertaken to guide the selection of model parent block size, discretisation point arrays, required sample population information etc. The parent cell size used for the interpolation was approximately half the standard drillhole width and half the standard drillhole section line spacing. Variography was used to develop search directions and extents. Appropriate search ellipses were used to search for data for the interpolation and suitable limitations on the number of samples and the impact of those samples was maintained. Hard domain boundaries were used, and these were defined by the geological outlines that were interpreted. No assumptions were made during the resource estimation as to the recovery of by-products. Slimes and oversize contents are estimated at the same time as estimating the THM grade. Further detailed geochemistry is required to ascertain deleterious elements that may affect the marketability of the heavy mineral products. No assumptions were made regarding the modelling of selective mining units; however, it is assumed that a form of dry mining will be undertaken, and the cell size and the sub-cell splitting will allow for an appropriate dry mining preliminary reserve to be prepared. Any other mining methodology will be more than adequately catered for with the parent cell size that was selected for the modelling exercise. No assumptions were made about correlation between variables. Grade cutting or capping was not used during the interpolation because of the regular nature of sample spacing and the fact that samples were not clustered nor wide spaced to an extent where elevated samples could have a deleterious impact on the resource estimation.

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		Sample distributions were reviewed, and no extreme outliers were identified either high or low that necessitated any grade cutting or capping. The sample length of 1 m does result in a degree of grade smoothing also negating the requirement for grade cutting or capping. Validation of grade interpolations were done visually in Datamine software by loading model and drillhole files and annotating and colouring and using filtering to check for the appropriateness of interpolations. Statistical distributions were prepared for model zones from drillhole and model files to compare the effectiveness of the interpolation for each mineralised domain. Along-strike distributions of section line averages (swath plots) for drillholes and models were also prepared for comparison purposes.
Moisture	*Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	Tonnages were estimated on an assumed dry basis as the mineralisation is located above the current water table.
Cut-off parameters	*The basis of the adopted cut-off grade(s) or quality parameters applied.*	Cut-off grade for THM was used to prepare the reported resource estimates. A 1.0% cut-off grade was used at the suggestion of VHML's Geology Manager.
Mining factors or assumptions	*Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	No specific mining method is assumed other than potentially the use of dry mining methods.
Metallurgical factors or assumptions	*The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	A metallurgical testwork program was undertaken on a 9.1-tonne bulk sample by Mineral Technologies. The processing of a 9.1-tonne bulk sample of Area 1 ore through a feed preparation circuit used a combination of scrubbing, screening and de-sliming to prepare feed suitable for subsequent beneficiation. The data showed: • The calculated FPC feed assayed 2.7% TiO_2, 1.3% ZrO_2 and 0.08% CeO_2 and agreed with the characterisation testwork grade. • The prepared sample after scrubbing, screening and de-sliming accounted for 80% by weight of the feed; with 5.7% by weight of the feed sample reporting to the oversize stream and 14.3% by weight of the feed sample reporting to the slimes. • Testwork recovery of -1.0+0.020 mm TiO_2 to the de-slimed and screened sample was 90.7% relative to the FPC feed. • Testwork recovery of -1.0+0.020 mm ZrO_2 to the de-slimed and screened sample was 96.9% relative to the FPC feed. • Testwork recovery of -1.0+0.020 mm CeO_2 to the de-slimed and screened sample was 93.6% relative to the FPC feed.

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		• The very high recovery of +20?m TiO_2, ZrO_2 and CeO_2 validated the suitability of the FPC to produce feed for beneficiation with minimal loss of valuable to slimes or oversize. No recoveries were used or accounted for in the reporting of the MRE.
Environmental factors or assumptions	*Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and 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.*	No assumptions have been made regarding possible waste and process residue; however, disposal of by products such as SLIMES, sand and oversize are normally part of capture and disposal back into the mining void for eventual rehabilitation. This also applies to gangue mineral products recovered and waste products recovered from metallurgical processing of heavy mineral.
Bulk density	*Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.* *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	A bulk density algorithm was prepared using first principles techniques coupled with industry experience. It is believed that the bulk density formula is conservative and fit for purpose at this level of confidence for the MREs and based on our experience however bulk density testwork should be undertaken going forward. A bulk density was applied to the model using a standard linear formula originally described by Baxter (1977). This regression formula was then used to calculate the conversion of tonnes from each cell volume and from there the calculation of material, THM and SLIMES tonnes. The bulk density formula is described as: Bulk Density = (0.009 * THM) + 1.698.
Classification	*The basis for the classification of the Mineral Resources into varying confidence categories.* *Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* *Whether the result appropriately reflects the Competent Person's view of the deposit.*	The resource classification for the Goschen Area 1 deposit was based on the following criteria: drillhole spacing, geological and grade continuity, variography of primary assay grades and the distribution of composited assemblage data. The classification of the Measured and Indicated Mineral Resources was supported by all the criteria as noted above. The Company used both Snowden's 2017 recommendations for classification of mineral resource and VHML's internal geostatistical evaluation as input to classification process Competent Persons reviewed geological data from cross sections and associated plan view maps as part of the classification process. Combinations of geological data were viewed both on light table and as 3D models on screen. The Company considers that the use of metallurgical data complied with JORC 2012 clause 49 and ensures resource aligns with metallurgy outcomes.
Audits or reviews	*The results of any audits or reviews of Mineral Resource estimates.*	CSA Global has undertaken a preliminary review of the draft MRE Report and raised issues with the quality of aspects of the variography (remedied), the methods used to validate the resource estimate (improved statistics) and the inclusion of the metallurgical testwork as part of the MRE. The Company has addressed all the issues raised by CSA Global. A review of the final MRE and associated report by CSA Global is pending.

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Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	*Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	The regular nature of the drillhole spacing means that no local variations were produced or able to be analysed during the mineral resource estimation process. Validation of the model vs drillhole grades by sectional comparisons, statistical evaluation, swathe plot and population distribution analysis were favourable. The statement refers to global estimates for the entire known extent of the Goschen Area 1 deposit. No production data is available for comparison with the deposit.

Competent Person:	Anthony Keers (JORC Table 1 Sections 4)
Report Title:	Area 1 Mineral Resource Estimate Report
Report Reference:	Goschen Project Area 1 Ore Reserve Study
Date Reported:	March 2021

Section 4: Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	*Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	Please see Table 4 and Table 5 of this report for the Mineral Resource estimates that were used as the basis for the Ore Reserves. Mineral Resources are reported inclusive of the Ore Reserves. The Company's total Ore Reserves are presented in Table 6, and Table 7 presents the Area 1 and 3 Ore Reserves as defined by the terms of the DFS for the Goschen Project. This Ore Reserve represents a subset of the above Ore Reserves and cover only the area over which VHM are seeking mining approvals as of March 2022.
Site visits	*A site visit is to be carried out by the competent person(s) signing off on the Ore Reserve.*	Mr Anthony Keers carried out a site visit in August 2019.
Study status	*The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.*	This work was undertaken at Definitive Feasibility Study level, the Ore Reserve portion of which was carried out on supplied Mineral Resource models. Any material classified as an Inferred Mineral Resource was not included in the Ore Reserve calculations.

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Criteria	JORC Code explanation	Commentary
	The Code requires that a study to at least Prefeasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	
Cut-off parameters	*The basis of the cut-off grade(s) or quality parameters applied.*	A single cut-off grade (using THM or TVHM) was found to not accurately reflect the optimisation results, as such a calculation was undertaken to classify each block as ore or waste. The ore/waste classification was performed in three steps: calculating the revenue of each block, calculating the processing cost of each block and ultimately the cashflow of each block. If the block revenue was greater than the processing cost, the block was treated as ore, otherwise the block was treated as waste.
Mining factors or assumptions	*The method and assumptions used as reported in the Prefeasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).* *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* *The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc), grade control and pre-production drilling.* *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).* *The mining dilution factors used.* *The mining recovery factors used.* *Any minimum mining widths used.* *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* *The infrastructure requirements of the selected mining methods.*	Pit optimisations were completed using Whittle software. Complete extraction of ore within pit designs is planned. Exclusion Zones have been determined to minimise the impact of operations on the environment and community. Potentially economic material within the exclusion zone may be included in future Ore Reserve estimates. Ore will be trucked to an MUP ROM on the surface close to the mining face. The Mining Unit Plan (MUP) will be relocated at as required to optimise truck haulage and slurry pumping. Waste material will be used to create in-pit bunds to contain tailings or dump to fill mined voids. No drill and blast operations will be required, cross ripping of cemented sand horizons by dozers may be required. Mining will be undertaken in as a strip/block-mining operation. Each block will be approximately 500 m x 150 m. An overall wall angle of 30° has been proposed based on completed geotechnical studies. A batter angle of 40° was applied to the uppermost bench (in the topsoil/clayey-sand material), with a 6 m wide berm created at the base of the clayey material or 10 m below surface, whichever produces the lower berm level (i.e. a maximum depth of 10 m). Beneath this berm, a single slope was designed to the pit floor; the slope angle used for this bench was either 34° in Area 1 East (overall pit depth generally <= 32 m) and 32° in Area 1 West and Area 3 (overall pit depth generally > 32 m). Mining recovery and dilution were not applied following the block model regularisation process. Inferred material was treated as waste during optimisations, designs and scheduling. External temporary waste dumps and tailings storage facilities will be required during early operations until sufficient mined voids are available to commence backfilling.
Metallurgical factors or assumptions	*The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* *Whether the metallurgical process is well-tested technology or novel in nature.*	Ore material will undergo processing through a MUP, Feed Preparation Plant (FPP), Wet Concentrator Plant (WCP), Rare Earth Flotation circuit, Magnetic Separation Plant (combined MSP). An additional rare earth hydromet process was included in the financial analysis, the economic impact of this circuit is noticeably better than without, however has not been included in the pit optimisation, pit design or Ore Reserve estimation.

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<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td>The nature, amount and representativeness of metallurgical testwork undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.
Any assumptions or allowances made for deleterious elements.
The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.
For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</td><td>Industry standard metallurgical processes and equipment are proposed for the Project.
A representative bulk sample taken from the mining area was used for testwork.
The bulk sample was processed through a pilot scale testwork laboratory.</td></tr>
<tr><td>Environmental</td><td>The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.</td><td>Some saleable products generated through processing may have elevated levels of radioactivity, these products will be taken off site following appropriate regulations.
Waste material remaining on site are not considered to pose any environmental risk.
Ongoing consultation between the company and the State of Victoria is required to determine land clearing allowances/requirements.</td></tr>
<tr><td>Infrastructure</td><td>The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.</td><td>The Project is located in an agricultural area of northern Victoria and is well serviced by road, rail, power and water, with nearby communities able to provide labour and accommodation.
Additional infrastructure or upgrades may be required for the Project.
The Company has engaged with landowners as required to secure access for drilling, environmental surveys, and ultimately project footprints.</td></tr>
<tr><td>Costs</td><td>The derivation of, or assumptions made, regarding projected capital costs in the study.
The methodology used to estimate operating costs.
Allowances made for the content of deleterious elements.
The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products.
The source of exchange rates used in the study.
Derivation of transportation charges.
The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.
The allowances made for royalties payable, both Government and private.</td><td>Capital costs for processing infrastructure was completed by Mineral Technologies Pty Ltd (MTPL) based on testwork undertaken by them for the Company.
Non-process infrastructure capital costs were provided by TZMI based on existing, similar projects.
Processing operating costs were estimated by MTPL based on testwork.
Mining operating costs were estimated by Majesso Consulting assuming a contractor operation.
A long term exchange rate of US$0.725:A$1 was selected and provided by the Company, only commodity reference prices were provided in US$, all capital and operating costs were estimated in A$.
The Company undertook a study to estimate freight and logistics costs for both land and sea transport.
A state royalty of 2.75% of product revenue was applied to the Project.</td></tr>
<tr><td>Revenue factors</td><td>The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.
The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</td><td>Adamas Intelligence (rare earths) and TZMI (zircon and titania minerals) completed independent market reviews and provided long term reference prices in real US$:
<table>
<tr><th></th><th>MREC</th><th>Zircon</th><th>Rutile</th><th>Leucoxene</th><th>Ilmenite</th></tr>
<tr><td>Unit</td><td>USD/kg</td><td>USD/t</td><td>USD/t</td><td>USD/t</td><td>USD/t</td></tr>
<tr><td>2022</td><td>16.22</td><td>1,877</td><td>1,345</td><td>249</td><td>287</td></tr>
<tr><td>2023</td><td>17.26</td><td>2,042</td><td>1,293</td><td>267</td><td>225</td></tr>
</table></td></tr>
</table>

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Criteria	JORC Code explanation	Commentary
		2024 17.87 1,897 1,270 275 225 **2025** 18.34 1,722 1,283 278 229 **2026** 18.87 1,580 1,308 272 228 **2027** 19.14 1,528 1,305 275 227 **2028** 19.39 1,529 1,286 277 223 **2029** 19.65 1,529 1,307 280 214 **2030** 19.9 1,512 1,299 282 205 Commodity prices used for the study made allowances for transport costs and quality adjustments with input from TZMI regarding the quality of Goschen products.
Market assessment	*The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* *A customer and competitor analysis along with the identification of likely market windows for the product.* *Price and volume forecasts and the basis for these forecasts.* *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	A market analysis was conducted by TZMI, which indicated that demand will outweigh supply in the short to medium term and should be at least neutral in the long term. TZMI has endorsed that all products generated from Goschen are potentially marketable subject to successful conclusion of final Feasibility Study testwork and off take agreements. Preliminary discussions with customers have indicated that 100% of products from Goschen will be subject to off take agreements. Further product testing is scheduled to confirm product specifications and realised product prices.
Economic	*The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	A discount rate of 10% was applied to the optimisation works and financial analysis for this study. Inputs to the economic analysis include Modifying Factors as described above. Sensitivity studies were carried out. Standard linear deviations were observed for all tested variables.
Social	*The status of agreements with key stakeholders and matters leading to social licence to operate.*	Substantial consultation with the community and regulatory agencies in relation to the Goschen Project has commenced, involving consultation activities with identified key stakeholders. Regular meetings have been held with a Technical Reference Group and a Stakeholder Reference Group.
Other	*To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* *Any identified material naturally occurring risks.* *The status of material legal agreements and marketing arrangements.* *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	There are no known significant naturally occurring risks to the project. In January 2015, Exploration Licence (EL) 5520 was granted to VHM Exploration Pty Ltd for a period of five years. In January 2020, Retention Licence 6806 was granted to the Company for a period of seven years to replace the expired EL5520.

Criteria	JORC Code explanation	Commentary
Classification	*The basis for the classification of the Ore Reserves into varying confidence categories.* *Whether the result appropriately reflects the Competent Person's view of the deposit.* *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	Measured Resources have been converted to Proven Reserves within three paddocks over which VHM have land access agreements and to Probable Reserves outside these paddocks, Indicated Resources have been converted to Probable Reserves. The estimated Ore Reserves are, in the opinion of the Competent Person, appropriate for this style of deposit.
Audits or reviews	*The results of any audits or reviews of Ore Reserve estimates.*	Auralia Mining Consulting Pty Ltd has completed an internal review of the Ore Reserve estimate resulting from this study.
Discussion of relative accuracy/ confidence	*Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve 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 reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* *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.* *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	The level of study carried out as part of the March 2022 Ore Reserve is to a Definitive-Feasibility Study level. The relative accuracy of the estimate is reflected in the reporting of the Ore Reserves as per the guidelines re: modifying factors, study levels and Competent Persons contained in the JORC 2012 Code. This statement relates to global estimates of tonnes and grade. Sensitivity studies were carried out. Standard linear deviations were observed. Globally, the project is susceptible to fluctuations in commodity price. Further product testing is scheduled to confirm product specifications, this information will be relayed to potential customers to determine realised product prices.

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Area 2W – JORC Table 1 (JORC Code, 2012 Edition)

Competent Person:	Greg Jones
Report Title:	Goshen Project Area 2 West Mineral Resource Estimate
Report Reference:	1711-G-REP-0000-8002 Rev C
Date Reported:	August 2019

Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Comment
Sampling techniques	*Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.* *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* *Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	Aircore (AC) drilling was used to obtain samples at 1 m intervals for 2019 drilling. The following information covers the sampling process: • Each 1 m sample was homogenised within the bag by manually rotating the sample bag. • A sample of sand, approximately 20 g, is scooped from the sample bag for visual total heavy minerals (THM) % and SLIMES % estimation and logging. The same sample mass is used for every pan sample for visual THM % and SLIMES % estimation. • The standard sized sample is to ensure calibration is maintained for consistency in visual estimation. • A sample ledger is kept at the drill rig for recording sample intervals. • The large 1 m AC drill samples were split down to approximately ~1,000 g to ~2,500 g by rotating cone splitter for export to the primary processing laboratory. • The laboratory sample was oven dried at 105°C for a minimum of two hours (and then redried for up to 12 hours if required), and split down to 100 g subsamples via a rotating splitter fed by a vibrating screen. A laboratory repeat was taken at ~1:25 samples. All drillhole subsamples were screened using vibrating screens with a top screen of 2 mm and a bottom screen of 38 μm. Oversize (+2 mm fraction) was removed and -38 μm fraction (SLIMES) discarded. The sand fraction (2 mm to +38 μm) was then submitted for heavy liquid separation (HLS) using TBE to determine THM content. Duplicates were taken at the drill rig from side-by-side sample locations at a rate of ~1:20. Duplicates were taken within mineralisation zones as the waste material was excluded from sampling. Commercially obtained standards were inserted by the laboratory at a rate of ~1:40.
Drilling techniques	*Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).*	Wallis Drilling was the contractor used for the drilling program that supported the Goschen Area 2 West Mineral Resource estimate (MRE). AC drilling with inner tubes for sample return was used. AC is considered a standard industry technique for heavy mineral sands mineralisation. AC drilling is a form of reverse circulation drilling where the sample Is collected at the face and returned inside the inner tube. AC drill rods used were 3 m long. NQ diameter (76 mm) drill bits and rods were used. All drillholes were vertical.

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Criteria	JORC Code explanation	Comment
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.* *Measures taken to maximise sample recovery and ensure representative nature of the samples.* *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	Drill sample recovery is monitored by recording sample condition from "dry good" to "wet poor". While initially collaring the hole, limited sample recovery can occur in the initial 0–1 m sample interval owing to sample and air loss into the surrounding loose soil. The initial 0–1 m sample interval is drilled very slowly in order to achieve optimum sample recovery. The entire 1 m sample is collected at the drill rig in large numbered plastic bags for dispatch to the initial split preparation facility. At the end of each drill rod, the drill string is cleaned by blowing down with air to remove any clay and silt potentially built up in the sample tubes. The twin-tube AC drilling technique is known to provide high-quality samples from the face of the drillhole (in ideal conditions).
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* *The total length and percentage of the relevant intersections logged.*	The 1 m AC samples were each qualitatively logged via digital entry into a Microsoft Excel spreadsheet, and later uploaded to the AcQuire database. The AC samples were logged for lithology, colour, grain size, sorting, hardness, sample condition, washability, estimated THM %, estimated SLIMES % and any relevant comments such as slope, vegetation, or cultural activity. Every drillhole was logged in full. Logging is undertaken with reference to a Drilling Guideline with codes prescribed and guidance on description to ensure consistent and systematic data collection.
Subsampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.* *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* *Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.* *Whether sample sizes are appropriate to the grain size of the material being sampled.*	The 1 m sample interval is rotary split at the drill rig, collected and dispatched to Diamantina Laboratories. The water table depth was noted in all geological logs if intersected whereby sample condition was specified as "wet poor". A total of ~1.2 kg to ~2.5 kg of each sample was placed into calico sample bags and exported to Diamantina Laboratory for THM analysis. Almost all the samples are silty sand, sand, sandy clay, clayey sand, sandy clay or clay and this sample preparation method is considered appropriate. The sample sizes were deemed suitable to reliably capture THM, slime, and oversize characteristics, based on industry experience of the geologists involved and consultation with laboratory staff. Field duplicates of the samples were completed at a frequency of 1:20 primary samples.
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*	The wet panning at the drill site provides an estimate of the THM % which is sufficient for the purpose of determining approximate concentrations of THM in the first instance. AC sample: • The individual 1 m AC subsamples were assayed by Diamantina Laboratories in Perth, Western Australia, which is considered the Primary laboratory.

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Criteria	JORC Code explanation	Comment
	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.	• The AC samples were initially oven dried at 105°C for 2 hours (and then up to 12 hours for very wet samples) then reduced on a rotary splitter by 15%. Samples were then riffle split to 100 g sub-splits (weighed and captured) and then left to soak overnight. • 90% (2,745) of the samples were then wet washed and sieved on vibrating screens using a top screen of+1 mm to remove the very coarse sand, pebbles, or grits. The bottom screen used 38 μm mesh for removal and determination of the -38 μm fraction (SLIMES). The remaining sand fraction (-1 mm +38 μm) was then submitted to HLS. • 10% (322) samples were then wet washed and sieved on vibrating screens using a top screen of +2 mm to remove the very coarse sand, pebbles, or grits. The bottom screen used 38 μm mesh for removal and determination of the -38 μm fraction (SLIMES). The remaining sand fraction (-2 mm +38 μm) was then submitted to HLS. • The laboratory used TBE as the heavy liquid medium – with density range between 2.92 g/ml and 2.96 g/ml. • This is an industry standard technique. • Field duplicates of the samples were collected and submitted at a frequency of 1:21 primary samples. • Diamantina Laboratories completed its own internal quality assurance/quality control (QAQC) checks that included laboratory standards every 46th sample and a Laboratory repeat every 25th sample prior to the results being released. It is recommended that the laboratory increases the rate of standards insertion to industry standards between 1:20 and 1:40. • Analysis of QAQC samples show the laboratory data to be of acceptable accuracy and precision. • The density of the heavy liquid was checked every day. The adopted QAQC protocols are acceptable for this stage of testwork.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.* *The use of twinned holes.* *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* *Discuss any adjustment to assay data.*	All results are checked by the Company's Geology Manager. The Company's Geology Manager and independent Resource Geologist (Greg Jones) have made periodic visits to Diamantina Laboratories to observe sample processing and procedure. A process of laboratory data validation using mass balance is undertaken to identify entry errors or questionable data. Field and laboratory duplicate data pairs (THM/OS/SLIME) of each batch are plotted to identify potential quality control issues. Standard Reference Material sample results are checked from each sample batch to ensure they are within tolerance (<3SD) and that there is no bias. The field and laboratory data was exported from the VHML AcQuire database and imported into Da famine by IHC Robbins which is appropriate for this stage in the program. Data validation criteria are included to check for overlapping sample intervals, end of hole match between "Lithology:, "Sample", "Survey" files and other common errors. 26 samples from the 2019 program were included on sample submission sheet but were not received by Diamantina. The assay values for these samples were assigned a value of 0.005 which is well below the detection limit.

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Criteria	JORC Code explanation	Comment
Location of data points	*Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* *Specification of the grid system used.* *Quality and adequacy of topographic control.*	Downhole geophysical surveys were conducted to utilise gamma signatures for ascertaining mineralisation zones within the lithological sequence. Drillhole collars were surveyed by an independent survey company using industry standard equipment. Three permanent survey marks in the area assisted with the collar pickups, allowing for consistent survey readings across the Project. The datum used is GDA 94 and coordinates are projected as MGA Zone 54. A topographic surface generated by VHML light detection and ranging (LiDAR) survey contours was deemed sufficient for use in Mineral Resource estimation. The accuracy of the locations is sufficient for this stage of exploration.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.* *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* *Whether sample compositing has been applied.*	A regular rectangular grid spacing for the Area 2 West deposit was on a spacing of 400 m in the north-south direction with 50 m and 100 m stations on the east west direction. A drilling program of 135 drillholes was conducted in between January and April 2019 to determine the mineralisation extent of the deposit. 12 holes from previous drilling programs were also included to total 147 holes. The 400 m x 100 m spaced aircore holes and regular grid are sufficient to provide a good degree of confidence in geological models and grade continuity within the holes at this stage. The 50 m spacing on eastern side of the deposit further confirms the continuity across strike. Each aircore drill sample is a single 1 m sample of sand intersected down the hole. No down whole compositing has been applied to models for values of THM, slime and oversize. Compositing of samples was undertaken on THM concentrates for mineral assemblage determination. Composite samples were determined by geological domains.
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	The AC drilling was oriented perpendicular to the strike of mineralisation defined by previous drill data information. The strike of the mineralisation is northwest-southeast. All drillholes were vertical and the orientation of the mineralisation is relatively horizontal. The orientation of the drilling is considered appropriate for testing the lateral and vertical extent of mineralisation without any bias.
Sample security	*The measures taken to ensure sample security.*	AC samples were stored on site (in the paddock on pallets). The samples were then dispatched to Perth using Swan Hill Freight agents and delivered directly to the Diamantina laboratory. The laboratory inspected the packages and did not report tampering of the samples.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	Internal reviews were undertaken during the geological interpretation and throughout the modelling process.

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Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Comment
Mineral tenement and land tenure status	*Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	The exploration work was completed on tenements that are 100% owned by VHM Exploration in Victoria, Australia. The drill samples for this MRE were taken from tenement EL5520. The Exploration License original date of grant was 10 October 2014 with an expiry date of 9 October 2019.
Exploration done by other parties	*Acknowledgement and appraisal of exploration by other parties.*	Historical exploration work was completed by previous exploration companies including Austiex (1977–1978), CRA Exploration (1981–1987), Renison Goldfields Consolidated (1980–1991), WJ Holdings (1998), RZM Group (1999), Basin Minerals (2001), Providence Gold and Minerals (2004–2005), and Iluka (2009). The Company has obtained the hardcopy reports and maps in relation to this information as part of its historical review in preparation for their current work program. The historical data comprises surface sampling, limited AC drilling and mapping. The historical results are not reportable under JORC 2012.
Geology	*Deposit type, geological setting and style of mineralisation.*	The heavy mineral sands at the Goschen Project is a fine-grained deposit hosted within the offshore depositional paleo-environment of the Loxton Parilla Sands. The relatively strong presence of Leucoxene could indicate a reworking process for the deposit or weathering overprint. The Loxton Parilla Sand is prevalent within the Murray Basin for hosting mineral sand deposits. The Shepparton Formation clays are positioned above the Loxton Sands and the Bookpurnong Formation consisting of shallow marine clays and marls is positioned below within the lithological sequence.
Drillhole information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:* • *easting and northing of the drillhole collar* • *elevation or RL (Reduced Level - elevation above sea level in metres) of the drillhole collar* • *dip and azimuth of the hole* • *downhole length and interception depth* • *hole length.* *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	All relevant drillhole data is reported regarding the 2019 drilling programs. A relevant drillhole data is reported associated with the model build.

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Criteria	JORC Code explanation	Comment
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	No data aggregation methods were utilised, no top cuts were employed, and all cut-off grades have been reported. Valuable heavy mineral (VHM >1%) was used to provide cut-off grade.
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.* *If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.* *If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g. 'downhole length, true width not known').*	The nature of the mineralisation is broadly horizontal, thus vertical AC are thought to represent close to true thicknesses of the mineralisation. Downhole widths are reported.
Diagrams	*Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.*	Refer to Appendices 2 and 3 the main body of the report. *Goshen Project Area 2 West Mineral Resource Estimate, 1711-G-REP-0000-8002 Rev C* available from the Company – please note that this ITAR is an assessment and summary of a significant body of work
Balanced reporting	*Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	Exploration Target results have been reported at TVHM >1% to indicate a range of potential tonnes and grade Table 3.1.
Other substantive exploration data	*Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples - size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	Detailed mineral assemblage work was undertaken on composite samples for the Project by ALS Metallurgy Services, Perth. ALS applied an integrated mineralogical approach using both x-ray fluorescence (XRF) analysis and Quantitative Evaluation of Minerals by Scanning Electron Microscopy (QEMSCAN), This was to gain a quantitative understanding of the elemental composition and mineralogical assemblage (refer to Section 3, Tables 3.1, 3.2, and 3.3 and Appendix 4 and 5 of the report. *Goshen Project Area 2 West Mineral Resource Estimate, 1711-G-REP-0000-8002 Rev C* available from the Company – please note that this ITAR is an assessment and summary of a significant body of work). The XRF technique provides measurements of relative elemental abundances (down to limits of a few parts per million) which allows for a quantifiable basis for determination of mineralogy, provenance, depositional environment, and diagenetic history. The XRF analysis was utilised to apply assay data to the geological model for grade interpretation. The QEMSCAN method of analysis required the samples to be screened into +150 pm and -150 pm screen fraction prior to sample preparation and QEMSCAN analysis.

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Criteria	JORC Code explanation	Comment
		Sample preparation required each subsample was mixed with size-graded, high purity graphite to ensure particle separation and discourage density segregation. These sample-graphite mixtures were then set into moulds using a two-part epoxy resin, producing a representative sub-sample of randomly orientated particles. Once cured, the resin blocks were then cut to expose a fresh surface which is then gradually ground and polished. Once QAQC checks are completed, the sections are then carbon coated for electron beam conductivity and presented to QEMSCAN for analysis. The samples were analysed using QEMSCAN technology in Field Scan mode and Particle Mineralogical Analysis mode. Detailed sachet scanning of heavy mineral sinks from the drill assay process was carried out to determine regions of gross mineralogy as well as an overall consideration of VHM content. Other considerations undertaken during this sachet logging were the presence of iron oxide coatings on THM, and any gross composition of trash heavy minerals. Sachet logging then had partial input into the geological/ mineralogical/THM grade interpretation which then assisted with domain control for modelling, as well as providing guidance for the allocation of mineral assemblage composites where it was not possible to get gamma data due to hole collapse. Various individual domains were identified for the Area 2 West deposits for the purpose of guiding the allocation of composites. A total of 23 mineral assemblage composites were used to characterise the mineralogy and chemistry for the deposit. All the mineral assemblage composites were completed by the VHM and supplied to IHC Robbins in the data package. Individual drillhole samples were selected based on whether they fell within a particular domain, and were then proportioned against contained THM grade in order to specify the weight of THM that each sample would contribute to the entire composite. Once all the sample compositing was completed, the sample identification and mineral assemblage composite number was submitted to Dorrit deNooy at ALS in Perth, Australia for sample collation and processing. Preparing the mineral assemblage composites in this manner allows for composite results to be applied to the resource block model and for those results to then be reported and weighted on THM in the final MRE. Details of summary drillhole composites are presented in Appendix 9, mineral assemblage composite IDs and associated results are presented in Appendix 4 and 5. of the report. *Goshen Project Area 2 West Mineral Resource Estimate, 1711-G-REP-0000-8002 Rev C* available from the Company – please note that this ITAR is an assessment and summary of a significant body of work
Further work	*The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	Additional AC drilling is planned to further grow the resource on strike. Continue downhole geophysical logging, detailed sachet logging and further AC drilling. Sample analysis for Zone 1 and Zone 11 to provide more geological information to delineate the domain boundary and for future mining purposes. Additional work is required to provide further detailed information on the mineral assemblage of the THM.

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Section 3: Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Comment
Database integrity	*Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* *Data validation procedures used.*	Exploration data provided by the Company to IHC Robbins in the form CSV and Microsoft Excel files exported from an AcQuire database. The Company provided CSV file for the downhole geophysical data for the 2019 drill program. Checks of data by visually inspecting on screen (to identify translation of samples), duplicate was visually examined to check the reproducibility of assays. Database assay values have been subjected to random reconciliation with laboratory certified value is to ensure agreement. Visual and statistical comparison was undertaken to check the validity of results.
Site visits	*Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* *If no site visits have been undertaken indicate why this is the case.*	An extended site visit during the HI 2018 resource drilling phase in EL5220 was undertaken by Competent Person, Greg Jones, to observe the drilling data collection, and sampling activities. Area 2 West is located within EL5220.
Geological interpretation	*Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* *Nature of the data used and of any assumptions made.* *The effect, if any, of alternative interpretations on Mineral Resource.* *The use of geology in guiding and controlling Mineral Resource estimation.* *The factors affecting continuity both of grade and geology.*	The geological interpretation was undertaken by IHC Robbins in collaboration with the Company's Geology Manager and then validated using all logging and sampling data and observations. Current data spacing and quality is sufficient to indicate grade continuity. Interpretation of modelling domains was restricted to the main mineralised envelopes utilising THM, oversize, slimes, trash mineralogy and geology logging. The interpretation of domains was also aided by the utilisation of downhole gamma signatures produced by the geophysical logging which assisted with distinguishing domain boundaries. 54 drillholes on three of the seven lines contained gamma signatures. Sachet logging was also undertaken by the Company in relation to specific areas within the Project to provide greater understanding of mineralogical domains (e.g. where it was not possible to obtain gamma signatures below the water table due to hole collapse). The MRE was controlled by the geological surfaces, and basement surfaces. There are four main strands and one sheet-like horizon of mineralisation within the Project area which are predominantly zircon-rutile enriched. These zones; 2, 3, and 4 are geologically continuous across the Project. Zone 7 and 9 have been defined by one section of drilling.
Dimensions	*The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	The Mineral Resource field for the Project is approximately 2.8 km in length (at the longest point) and 1.4 km wide (at the widest point).

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Criteria	JORC Code explanation	Comment
Estimation and modelling techniques	*The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* *The assumptions made regarding recovery of by-products.* *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).* *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* *Any assumptions behind modelling of selective mining units.* *Any assumptions about correlation between variables.* *Description of how the geological interpretation was used to control the resource estimates.* *Discussion of basis for using or not using grade cutting or capping.* *The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.*	The MRE was conducted using CAE mining software (also known as Data mine Studio). Inverse distance weighting techniques were used to interpolate assay grades from drillhole samples into the block model and nearest neighbour techniques were used to interpolate index values and nonnumeric sample identification into the block model. The mostly regular dimensions of the drill grid and the anisotropy of the drilling and sampling grid allowed for the use of inverse distance methodologies as no de-clustering of samples was required. Appropriate and industry standard search ellipses were used to search for data for the interpolation and suitable limitations on the number of samples and the impact of those samples was maintained. An inverse distance weighting power of 3 was used so as not to over smooth the grade interpolations. Hard domain boundaries were used, and these were defined by the geological wireframes that were interpreted. No assumptions were made during the resource estimation as to the recovery of by-products. Slimes and oversize contents are estimated at the same time as estimating the THM grade. Further detailed geochemistry is required to ascertain deleterious elements that may affect the marketability of the heavy mineral products. The average parent cell size used for the interpolation was approximately half the standard drillhole width and quarter the standard drillhole section line spacing. No assumptions were made regarding the modelling of selective mining units however it is assumed that a form of dry mining will be undertaken, and the cell size and the sub-cell splitting will allow for an appropriate dry mining preliminary reserve to be prepared. Any other mining methodology will be more than adequately catered for with the parent cell size that was selected for the modelling exercise. No assumptions were made about correlation between variables. The MREs were controlled to an extent by the geological/ mineralisation and basement surfaces. Grade cutting or capping was not used during the interpolation because of the regular nature of sample spacing and the fact that samples were not clustered nor wide spaced to an extent where elevated samples could have a deleterious impact on the resource estimation. Sample distributions were reviewed, and no extreme outliers were identified either high or low that necessitated any grade cutting or capping. The sample length of 1 m does result in a degree of grade smoothing also negating the requirement for grade cutting or capping. Validation of grade interpolations were done visually in CAE Studio (Datamine) software by loading model and drillhole files and annotating and colouring and using filtering to check for the appropriateness of interpolations. Statistical distributions were prepared for model zones from drillhole and model files to compare the effectiveness of the interpolation. Along strike distributions of section line averages (swath plots) for drillholes and models were also prepared for comparison purposes.

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Criteria	JORC Code explanation	Comment
Moisture	*Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	Tonnages were estimated an assumed dry basis.
Cut-off parameters	*The basis of the adopted cut-off grade(s) or quality parameters applied.*	Cut-off grades for THM were used to prepare the reported resource estimates. These cut-off grades were defined by the Competent Person by utilising multiplying THM by VHM to get an in-ground VHM grade (TVHM). This was used to report the block model on material >1% TVHM. Consideration was taken into account for a modest stripping ratio to ensure that deeply buried material with a very low likelihood of eventual economic extraction was not selected for reporting in the MRE. IHC Robbins utilised a value per tonne algorithm as an internal process to validate the TVHM cut-off grade for repeatability. This validation provided a close reconciliation to the 1% TVHM cut-off grade.
Mining factors or assumptions	*Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	No specific mining method is assumed other than potentially the use of dry mining methods.
Metallurgical factors or assumptions	*The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	Metallurgical assumptions were used based on mineral assemblage composites which at this stage only allow for preliminary commentary with no final products being defined from the reported mineral species. Some chemistry in the form of oxides from XRF analysis was available for commentary, however, may not bear exact reconciliation with eventual final products.
Environmental factors or assumptions	*Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and 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.*	No assumptions have been made regarding possible waste and process residue however disposal of by products such as SLIMES, sand and oversize are normally part of capture and disposal back into the mining void for eventual rehabilitation. This also applies to mineral products recovered and waste products recovered from metallurgical processing of heavy mineral.

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Criteria	JORC Code explanation	Comment
Bulk density	*Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	A bulk density algorithm was prepared using first principles techniques coupled with industry experience that is exclusive to IHC Robbins. We believe the bulk density formula to be conservative and fit for purpose at this level of confidence for the MREs and based on our experience and we would also recommend that bulk density testwork be undertaken going forward. A bulk density was applied to the model using a standard linear formula originally described by Baxter (1977). This approach was refined in a practical application by this author using the following first principles calculations to develop a regression formula. This regression formula was then used to calculate the conversion of tonnes from each cell volume and from there the calculation of material, THM and SLIMES tonnes. The bulk density formula is described as: Bulk density = (0.009 * HM) + 1.698.
Classification	*The basis for the classification of the Mineral Resources into varying confidence categories.* *Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* *Whether the result appropriately reflects the Competent Person's view of the deposit.*	The resource classification for the Area 2 West Goschen deposits was based on the following criteria: drillhole spacing, geological and grade continuity, variography of primary assay grades and the distribution of bulk samples. The classification of the Indicated Mineral Resources was supported by all the supporting criteria as noted above. As a Competent Person, Greg Jones considers that the result appropriately reflects a reasonable view of the deposit categorisation.
Audits or reviews	*The results of any audits or reviews of Mineral Resource estimates.*	No audits or reviews of the MRE have been undertaken at this point in time.
Discussion of relative accuracy/ confidence	*Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	Local (nearest neighbour) estimates were undertaken as a preliminary evaluation process. The overall grade interpolation for this method was a fair comparison with inverse distance weighting methodology. Validation of the model us drillhole grades by observation, swathe plot and population distribution analysis was favourable. The statement refers to global estimates for the entire known extent of the Area 2 West Goschen deposits. No production data is available for comparison with the Area 2 West Goschen deposits.

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Area 3 Extended – JORC Table 1 (JORC Code, 2012 Edition)

Competent Person:	Graham Howard
Report Title:	Areas 3 Extended Mineral Resource Estimate Report
Report Reference:	RPP727
Date Reported:	21 August 2020

Section 1: Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	*Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.* *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* *Aspects of the determination of mineralisation that are Material to the Public Report.* *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	Aircore (AC) drilling was used to obtain samples at 1 m intervals for 2019 drilling. The following information covers the sampling process: • The full 1 m drill samples were split down to approximately ~1,000 g to ~2500 g by rotary splitter mounted on the drilling rig. • Each 1 m composite subsample was homogenised by manually mixing the sample within the sample bag. • A sample of sand of approximately 20 g is scooped from the sample bag for visual estimation of heavy mineral and slimes content and also sample description. The same mass of sample is consistently used for each panned sample to ensure calibration is maintained for consistency in visual estimation. • Sample logging software is used at the drill rig for recording sample intervals and descriptions. • The sample bag is sealed and dispatched to a commercial laboratory for analysis. • The laboratory sample was oven dried at 105°C for a minimum of 2 hours (and then re-dried for up to 12 hours if required), and split down to 100 g subsamples via a rotating splitter fed by a vibrating screen. A laboratory repeat was taken at ~1:25 samples. • All drillhole subsamples were screened using vibrating screens with a top screen of either 1 mm or 2 mm mesh and a bottom screen of 38 µm. Oversize (+1 mm or 2 mm fraction) was removed and -38 µm fraction (SLIMES) discarded. The sand fraction (1 mm or 2 mm to +38 µm) was then submitted for heavy liquid separation (HLS) using TBE to determine total heavy mineral (THM) content. • Duplicates were taken at the drill rig by hanging sample bags side-by-side on the rotary splitter at a rate of ~1:20. • Duplicates were taken within mineralisation zones as the waste material was excluded from sampling. • Commercially obtained standards were inserted by the laboratory at a rate of ~1:40.
Drilling techniques	*Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).*	Wallis Drilling was the contractor used for the drilling and sampling program upon which the Goschen Area 3 Extended Mineral Resource estimate (MRE) was based. AC drilling, which is a standard technique for the heavy mineral sand industry, was used. AC drilling is a form of reverse circulation drilling where the sample is collected at the face and returned inside the inner tube. All drillholes were vertical and were drilled using NQ-sized drill string and bits. Drill rods were three metres long.

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Criteria	JORC Code explanation	Commentary
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.* *Measures taken to maximise sample recovery and ensure representative nature of the samples.* *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	Drill sample recovery is monitored by recording sample condition from "dry good" to "wet poor". While initially collaring the hole, limited sample recovery can occur in the initial 0–1 m sample interval owing to sample and air loss into the surrounding loose soil. The initial 0–1 m sample interval is drilled very slowly in order to achieve optimum sample recovery. Each entire 1 m sample apart from the subsample taken for logging and analysis) is collected at the drill rig in large numbered plastic bags for dispatch to the initial split preparation facility. At the end of each drill rod, the drill string is cleaned by blowing down with air to remove any clay and silt potentially built up in the sample tubes. The twin-tube AC drilling technique is known to provide high-quality samples from the face of the drillhole (in ideal conditions).
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* *The total length and percentage of the relevant intersections logged.*	Each AC sample was qualitatively logged into a field-validated data capture software package, and later uploaded to the AcQuire database. The samples were logged for lithology, colour, grain size, sorting, hardness, sample condition, washability, estimated heavy mineral content, estimated slimes content and any relevant comments - such as slope, vegetation, or cultural activity. Every drillhole was logged in full. Logging is undertaken with reference to a Drilling Guideline with codes prescribed and guidance on description to ensure consistent and systematic data collection.
Subsampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.* *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* *Quality control procedures adopted for all subsampling stages to maximise representivity of samples.* *Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.* *Whether sample sizes are appropriate to the grain size of the material being sampled.*	The 1 m sample interval is rotary split at the drill rig. A total of ~1.2 kg to ~2.5 kg of each sample was placed into calico sample bags and exported to Diamantina Laboratory for THM analysis. The water table depth, if intersected, was noted in all geological logs and when water injection was required to aid sample recovery the sample was logged as "wet poor". Almost all the samples are silty sand, sand, sandy clay, clayey sand, or clay and this sample preparation method is considered appropriate. The sample sizes were deemed suitable to reliably capture THM, slime, and oversize characteristics, based on industry experience of the geologists involved and consultation with laboratory staff. Field duplicates of the samples were completed at a frequency of 1:20 primary samples.
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* *For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*	The wet panning at the drill site provides an estimate of the THM % which is sufficient for the purpose of determining approximate concentrations of THM in the first instance. AC sample: • The individual 1 m AC subsamples were assayed by Diamantina Laboratories in Perth, Western Australia, which is considered the Primary laboratory. • The samples were initially oven dried at 105°C for 2 hours (and then up to 12 hours for very wet samples) then reduced on a rotary splitter by 15%. Samples were then riffle split to 100 g sub-splits (weighed and captured) and then left to soak overnight.

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Criteria	JORC Code explanation	Commentary
	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.	• All samples were then wet washed and sieved on vibrating screens using a top screen of +1 or +2 mm to remove the very coarse sand, pebbles, or grits. The bottom screen used 38 µm mesh for removal and determination of the -38 µm fraction (SLIMES). The remaining sand fraction (-2 mm +38 µm) was then submitted to HLS. • The laboratory used TBE as the heavy liquid medium – with density range between 2.92 g/ml and 2.96 g/ml. The density of the heavy liquid was checked every day. • This is an industry standard technique. • Field duplicates of the samples were collected and submitted at a frequency of 1:20 primary samples. • Diamantina Laboratories completed its own internal quality assurance and quality control (QAQC) checks that included laboratory standards every 40th sample and a Laboratory repeat every 25th sample prior to the results being released. • Analysis of QAQC samples show the laboratory data to be of acceptable accuracy and precision. • The adopted QAQC protocols are acceptable for this stage of testwork.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.* *The use of twinned holes.* *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* *Discuss any adjustment to assay data.*	All results were checked by the Company's Geology Manager. The Company's Geology Manager and an independent Resource Geologist made periodic visits to Diamantina Laboratories to observe sample processing and procedure. A process of laboratory data validation using mass balance is undertaken to identify entry errors or questionable data. Field and laboratory duplicate data pairs (THM/OS/SLIME) of each batch are plotted to identify potential quality control issues. Standard Reference Material sample results are checked from each sample batch to ensure they are within tolerance (<3SD) and that there is no bias. The field and laboratory data were exported from the VHM's AcQuire database and imported into Datamine by a geologist contracted to VHM Limited (VHML), which is appropriate for this stage in the program. Data validation criteria are included to check for overlapping sample intervals, end of hole match between "Lithology", "Sample", "Survey" files and other common errors.
Location of data points	*Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* *Specification of the grid system used.* *Quality and adequacy of topographic control.*	Drillhole collar locations were surveyed by an independent surveyor using industry standard equipment. Three permanent survey marks in the area provided survey control, allowing for repeatable and accurate survey readings across the project area. The datum used is GDA 94 and coordinates are projected as MGA Zone 54. A digital topographic surface was generated by VHML from data collected during a light detection and ranging (LiDAR) survey commissioned by VHML. The accuracy of the locations is sufficient for this stage of exploration.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.* *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.*	160 drillholes were used to inform the resource estimate. 91 were drilled in 2017, two were drilled in 2018 and the remaining 67 were completed in January/February 2019. Holes drilled in 2017 were drilled on an offset pattern with spacing between collars of 300–400 m. The program conducted during 2019 comprised holes drilled at 100/50m spacing along east-west traverses which were spaced at 400 m.

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Criteria	JORC Code explanation	Commentary
	Whether sample compositing has been applied.	The collar spacing is sufficient to provide a high degree of confidence in geological model and grade continuity within the holes at this stage. Each AC drill sample is a single 1 m sample of sediment intersected down the hole. No downhole compositing has been applied to models for values of THM, slime and oversize. Compositing of samples was undertaken on THM concentrates for mineral assemblage determination. Composite samples were determined by geological domains
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	The mineralisation at the Goschen Area 3 prospect is a largely flat-lying (with some soft sediment deformation across a basement fault) sedimentary package which does not display a strong orientation of mineralisation at the current sample spacing.
Sample security	*The measures taken to ensure sample security.*	Aircore samples were stored on site (at a dedicated warehouse in Kerang). The samples were then dispatched to Perth using Swan Hill Freight agents and delivered directly to the Diamantina Laboratory. The laboratory inspected the packages and did not report tampering of the samples.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	Internal reviews were undertaken during the geological interpretation and throughout the modelling process.

Section 2: Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	*Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	The exploration work was completed on tenements that are 100% owned by VHML in Victoria, Australia. The drill samples for this MRE were drilled and collected from Exploration Licence 5520. The exploration licence original date of grant was 10 October 2014 with an expiry date of 9 October 2019. A Retention Licence to replace the exploration licence was granted by Earth Resources Regulation, which is the responsible statutory body and part of Victorian Department of Jobs, Precincts and Regions, in January 2020.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	Historic exploration work was completed by previous exploration companies including Austiex (1977–1978), CRA Exploration (1981–1987), Renison Goldfields Consolidated (1980–1991), WJ Holdings (1998), RZM Group (1999), Basin Minerals (2001), Providence Gold and Minerals (2004–2005), and Iluka (2009). The Company has obtained the hardcopy reports and maps in relation to this information as part of its historical review in preparation for their current work program. The historical data comprises surface sampling, limited AC drilling and mapping. The current resource estimate is based solely on work conducted by VHML.

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Criteria	JORC Code explanation	Commentary
Geology	*Deposit type, geological setting and style of mineralisation.*	The heavy mineral sands at the Goschen Project is a fine-grained deposit hosted within the offshore depositional paleo-environment of the Loxton Parilla Sands. The Loxton-Parilla Sand is common within the Murray Basin and hosts all known mineral sand deposits in the Basin. Alluvial sediments of the Shepparton Formation have been deposited over the Loxton-Parilla Sand and the Bookpurnong Formation consisting of shallow marine clays and marls is positioned below within the lithological sequence.
Drillhole information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:* • *easting and northing of the drillhole collar* • *elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar* • *dip and azimuth of the hole* • *downhole length and interception depth* • *hole length.* *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	All relevant drillhole data is reported in the Resource Report describing the resource estimate for the Goschen Area 3 Extended project.
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	No data aggregation methods were utilised, no top cuts were employed, and all cut-off grades have been reported.
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.* *If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.* *If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g. 'downhole length, true width not known').*	The nature of the mineralisation is horizontal, thus vertical AC holes represent the true thicknesses of the mineralisation. Downhole widths are reported.
Diagrams	*Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.*	Refer to the main body of the report.

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Criteria	JORC Code explanation	Commentary
Balanced reporting	*Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	Exploration results have been reported at THM >1% to indicate a range of potential tonnes and grade.
Other substantive exploration data	*Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	Detailed mineral assemblage work was undertaken on composite samples for the Project by ALS Metallurgy Services, Perth and by Bureau Veritas in Adelaide. ALS applied an integrated mineralogical approach using both x-ray fluorescence (XRF) analysis and Quantitative Evaluation of Minerals by Scanning Electron Microscopy (QEMSCAN). Bureau Veritas also use QEMSCAN for mineralogical determinations but use a combination of XRF and laser ablation techniques for chemical assay. These techniques were used to gain a quantitative understanding of the elemental composition and mineralogical assemblage. The XRF and laser ablation techniques provide measurements of relative elemental abundances (down to limits of a few parts per million) which allows for a quantifiable basis for determination of mineralogy, provenance, depositional environment, and diagenetic history. The XRF analysis was utilised to apply assay data to the geological model for grade interpretation. The QEMSCAN method of analysis required the samples to be screened into +150 µm and -150 µm screen fraction prior to sample preparation and QEMSCAN analysis. Sample preparation required each subsample was mixed with size-graded, high purity graphite to ensure particle separation and discourage density segregation. These sample-graphite mixtures were then set into moulds using a two-part epoxy resin, producing a representative subsample of randomly orientated particles. Once cured, the resin blocks were then cut to expose a fresh surface which is then gradually ground and polished. Once QAQC checks are completed the sections are then carbon coated for electron beam conductivity and presented to QEMSCAN for analysis. The samples were analysed using QEMSCAN technology in Field Scan mode and Particle Mineralogical Analysis mode. For the samples acquired in 2019 detailed sachet scanning of heavy mineral sinks from the drill assay process was carried out to determine regions of gross mineralogy as well as an overall consideration of valuable heavy mineral (VHM) content. Other considerations undertaken during this sachet logging were the presence of iron oxide coatings on THM, and any gross composition of trash heavy minerals. Sachet logging then had partial input into the geological/mineralogical/THM grade interpretation which then assisted with domain control for modelling, as well as providing guidance for the allocation of mineral assemblage composites where it was not possible to get gamma data due to hole collapse. Pre-2019 composite samples were generated solely on heavy mineral grades, which were used to generate geological domain boundaries. These composite samples frequently include zones of high gangue content and iron cemented sand. As a result, many of the early composites are not representative of the true mineralised zones and mineralogical results are downgraded by trash and iron oxide. Many of these sample were, therefore, omitted from the dataset used to inform the resource estimate.

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Criteria	JORC Code explanation	Commentary
		Once the sample compositing was completed, the sample identification and mineral assemblage composite number was submitted to the labs listed above for mineralogical determination. In 2018, a 1.8-tonne bulk sample was created by compositing 343, 5–6 kg, excess drill cuttings from the mineralised zones of 86 holes which were drilled in 2017. The bulk sample was treated to a program of work to remove oversize and de-slime the parent sample in preparation for metallurgical testwork. The testwork was undertaken by Mineral Technologies. In addition to a THM head-grade, and slimes and oversize content details, the testwork produced a concentrate whose mineral assemblage was determined by ALS using QEMSCAN as described above. Details of summary drillhole composite is presented in the appendices of the MRE report.
Further work	*The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	Additional work is required to provide further detailed information on the mineral assemblage of the THM. Further drilling may be planned if an economic analysis of the resource provides justification for such work.

Section 3: Estimation and Reporting of Mineral Resources

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

Criteria	JORC Code explanation	Commentary
Database integrity	*Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* *Data validation procedures used.*	Exploration data is collected in the field using a data collection software package that uses validation routines to ensure no incorrect codes can be used during logging. That field data is uploaded the Company's AcQuire database using validation routines. Laboratory assay files are also uploaded to the VHML database via routines the check the validity of the data. All data used in the resource estimate was downloaded directly from the VHML database in the form of csv files and then converted to Datamine files. Checks of data by visually inspecting on screen to identify translation of samples. Visual and statistical comparison was undertaken to check the validity of results.
Site visits	*Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* *If no site visits have been undertaken indicate why this is the case.*	An extended site visit during the 2019 resource drilling phase in EL5220 was undertaken by Competent Person (Geology Manager) to observe the drilling data collection and sampling activities. No deficiencies were identified during the visit.
Geological interpretation	*Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* *Nature of the data used and of any assumptions made.* *The effect, if any, of alternative interpretations on Mineral Resource estimation.*	The geological interpretation was undertaken by VHML's Geologists using all logging, downhole gamma responses, and sampling data and observations. Current data spacing and quality is sufficient to indicate grade continuity.

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Criteria	JORC Code explanation	Commentary
	The use of geology in guiding and controlling Mineral Resource estimation. *The factors affecting continuity both of grade and geology.*	Interpretation of modelling domains was restricted to the main mineralised envelopes utilising THM, oversize, slimes, and geology logging. The interpretation of the domains was also aided by the utilisation of downhole gamma signatures produced by the geophysical logging which assisted with distinguishing domain boundaries in the Area 3 Extended area. Sachet logging was also undertaken by the company in relation to specific areas within the project to provide greater understanding of mineralogical domain (e.g. where it was not possible to obtain gamma signatures below the water table due to hole collapse). The MRE was controlled by the topographic surface and a wireframed solid describing the mineralised domain. The mineralisation is apparently open to the north, south, east, and west.
Dimensions	*The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	The current resource has been defined as being approximately 5,000 m (north-south) and 7,000 m wide (east-west). It is approximately 20 m thick and is buried by an average of 22 m of overburden.
Estimation and modelling techniques	*The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* *The assumptions made regarding recovery of by-products.* *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).* *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* *Any assumptions behind modelling of selective mining units.* *Any assumptions about correlation between variables.* *Description of how the geological interpretation was used to control the resource estimates.* *Discussion of basis for using or not using grade cutting or capping.* *The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.*	The MRE was conducted using Datamine Studio RM. Inverse distance weighting techniques were used to interpolate assay grades from drillhole samples into most of the block model. THM grades within Zone 1 of the Indicated Resource were set to a fixed grade of 5.42% THM, which was determined during the metallurgical testwork that was conducted using the 1.8-tonne bulk sample. This was appropriate as the bulk sample was largely composed of samples from within Zone 1 of the Indicated Resource. The metallurgical testwork used a screen size of 20 micron and showed considerable uplift in recovery of heavy mineral compared to the individual sample grades of the "as-drilled" samples, which used a screen size of 38 micron. Nearest neighbour techniques were used to interpolate mineral assemblage, index values and nonnumeric sample identification into the block model. Due to the poor quality of the mineralogical data (QEMSCAN) related to incorrect composite selection, the mineral assemblage, which was derived by the bulk sample testwork, was used to inform the two main mineralised domains. These data were supported by the more carefully chosen mineral composites created from the 2019 drilling and so, along with the very large number of samples used from the mineralised domains to create the bulk sample, this step is considered as being appropriate. The mostly regular dimensions of the drill grid and the anisotropy of the drilling and sampling grid allowed for the use of inverse distance methodologies as no de-clustering of samples was required. Appropriate and industry standard search ellipses were used to search for data for the interpolation and suitable limitations on the number of samples and the impact of those samples was maintained. An inverse distance weighting power of 2 was used so as not to over smooth the grade interpolations. Hard domain boundaries were used, and these were defined by the geological outlines that were interpreted. No assumptions were made during the resource estimation as to the recovery of by-products. Slimes and oversize contents are estimated at the same time as estimating the THM grade.

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Criteria	JORC Code explanation	Commentary
		Further detailed geochemistry is required to ascertain deleterious elements that may affect the marketability of the heavy mineral products. The average parent cell size used for the interpolation was approximately half the standard drillhole width and half the standard drillhole section line spacing. No assumptions were made regarding the modelling of selective mining units, however, it is assumed that a form of dry mining will be undertaken and the cell size and the sub cell splitting will allow for an appropriate dry mining preliminary reserve to be prepared. Any other mining methodology will be more than adequately catered for with the parent cell size that was selected for the modelling exercise. No assumptions were made about correlation between variables. Grade cutting or capping was not used during the interpolation because of the regular nature of sample spacing and the fact that samples were not clustered nor wide spaced to an extent where elevated samples could have a deleterious impact on the resource estimation. Sample distributions were reviewed, and no extreme outliers were identified either high or low that necessitated any grade cutting or capping. The sample length of 1 m does result in a degree of grade smoothing also negating the requirement for grade cutting or capping. Validation of grade interpolations were done visually in Datamine software by loading model and drillhole files and annotating and colouring and using filtering to check for the appropriateness of interpolations. Statistical distributions were prepared for model zones from drillhole and model files to compare the effectiveness of the interpolation. Along strike distributions of section line averages (swath plots) for drillholes and models were also prepared for comparison purposes.
Moisture	*Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	Tonnages were estimated an assumed dry basis as the mineralisation is located above the current water table.
Cut-off parameters	*The basis of the adopted cut-off grade(s) or quality parameters applied.*	Cut-off grade for THM was used to prepare the reported resource estimates. A 1.0% cut-off grade was used at the suggestion of VHML's Geology Manager.
Mining factors or assumptions	*Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	No specific mining method is assumed other than potentially the use of dry mining methods.

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Criteria	JORC Code explanation	Commentary
Metallurgical factors or assumptions	*The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	A metallurgical testwork program was undertaken on a 1.8-tonne bulk sample by Mineral Technologies. The processing of a 1.8-tonne bulk sample of Area 3 ore through a feed preparation circuit (FPC) used a combination of scrubbing, screening and de-sliming to prepare feed suitable for subsequent beneficiation. The data showed: • The calculated FPC feed assayed 1.4% TiO_2, 0.6% ZrO_2 and 0.05% CeO_2 and agreed with the characterisation testwork grade. • The prepared sample after scrubbing, screening and de-sliming accounted for 79% by weight of the feed; with 7.5% by weight of the feed sample reporting to the oversize stream and 13.6% by weight of the feed sample reporting to the slimes. • The prepared sample assayed 1.7% TiO_2, 0.9% ZrO_2 and 0.06% CeO_2. • Testwork recovery of -1.0+0.020 mm TiO_2 to the de-slimed and screened sample was 98.2% relative to the FPC feed. • Testwork recovery of -1.0+0.020 mm ZrO_2 to the de-slimed and screened sample was 99.5% relative to the FPC feed. • Testwork recovery of -1.0+0.020 mm CeO_2 to the de-slimed and screened sample was 99.3% relative to the FPC feed. • The very high recovery of +20 µm TiO_2, ZrO_2 and CeO_2 validated the suitability of the FPC to produce feed for beneficiation with minimal loss of valuable to slimes or oversize. No recoveries were used or accounted for in the reporting of the MRE.
Environmental factors or assumptions	*Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and 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.*	No assumptions have been made regarding possible waste and process residue, however, disposal of by products such as SLIMES, sand and oversize are normally part of capture and disposal back into the mining void for eventual rehabilitation. This also applies to gangue mineral products recovered and waste products recovered from metallurgical processing of heavy mineral.
Bulk density	*Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	A bulk density algorithm was prepared using first principles techniques coupled with industry experience. It is believed that the bulk density formula is conservative and fit for purpose at this level of confidence for the MREs and based on our experience, however, bulk density testwork should be undertaken going forward. A bulk density was applied to the model using a standard linear formula originally described by Baxter (1977). This regression formula was then used to calculate the conversion of tonnes from each cell volume and from there the calculation of material, THM and SLIMES tonnes. The bulk density formula is described as: Bulk Density = (0.009 * THM) + 1.698.

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Criteria	JORC Code explanation	Commentary
Classification	*The basis for the classification of the Mineral Resources into varying confidence categories.* *Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* *Whether the result appropriately reflects the Competent Person's view of the deposit.*	The resource classification for the Goschen Area 3 Extended deposit was based on the following criteria: drillhole spacing, geological and grade continuity, variography of primary assay grades and the distribution of composited assemblage data. The classification of the Indicated Mineral Resources was supported by all the supporting criteria as noted above. Inferred Mineral Resource classification was conferred on the parts of the resource where drilling spacing was wider yet still supported by variography and geological continuity. As a Competent Person, Graham Howard considers that the result appropriately reflects a reasonable view of the deposit.
Audits or reviews	*The results of any audits or reviews of Mineral Resource estimates.*	No audits or reviews of the MRE have been undertaken at this point in time.
Discussion of relative accuracy/ confidence	*Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	The regular nature of the drillhole spacing means that no local variations were produced or able to be analysed during the mineral resource estimation process. Validation of the model vs drillhole grades by sectional comparisons, swathe plot and population distribution analysis was favourable. The statement refers to global estimates for the entire known extent of the Goschen Area 3 Extended deposit. No production data is available for comparison with the deposit.

Competent Person:	Anthony Keers (JORC Table 1 Sections 4)
Report Title:	Area 1 Mineral Resource Estimate Report
Report Reference:	Goschen Project Area 3 Ore Reserve Study
Date Reported:	March 2021

Section 4: Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	*Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	Please see Table 4 and Table 5 of this report for the Mineral Resource estimates that were used as the basis for the Ore Reserves. Mineral Resources are reported inclusive of the Ore Reserves.

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Criteria	JORC Code explanation	Commentary
		The Company's total Ore Reserves are presented in Table 6, and Table 7 presents the Area 1 and 3 Ore Reserves as defined by the terms of the DFS for the Goschen Project. This Ore Reserve represents a subset of the above Ore Reserves and cover only the area over which VHM are seeking mining approvals as of March 2022.
Site visits	*A site visit is to be carried out by the competent person(s) signing off on the Ore Reserve.*	Mr Anthony Keers carried out a site visit in August 2019.
Study status	*The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* *The Code requires that a study to at least Prefeasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	This work was undertaken at Definitive Feasibility Study level, the Ore Reserve portion of which was carried out on supplied Mineral Resource models. Any material classified as an Inferred Mineral Resource was not included in the Ore Reserve calculations.
Cut-off parameters	*The basis of the cut-off grade(s) or quality parameters applied.*	A single cut-off grade (using THM or TVHM) was found to not accurately reflect the optimisation results, as such a calculation was undertaken to classify each block as ore or waste. The ore/waste classification was performed in three steps: calculating the revenue of each block, calculating the processing cost of each block and ultimately the cashflow of each block. If the block revenue was greater than the processing cost, the block was treated as ore, otherwise the block was treated as waste.
Mining factors or assumptions	*The method and assumptions used as reported in the Prefeasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).* *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* *The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc), grade control and pre-production drilling.* *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).* *The mining dilution factors used.* *The mining recovery factors used.* *Any minimum mining widths used.* *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* *The infrastructure requirements of the selected mining methods.*	Pit optimisations were completed using Whittle software. Complete extraction of ore within pit designs is planned. Exclusion Zones have been determined to minimise the impact of operations on the environment and community. Potentially economic material within the exclusion zone may be included in future Ore Reserve estimates. Ore will be trucked to an MUP ROM on the surface close to the mining face. The Mining Unit Plan (MUP) will be relocated at as required to optimise truck haulage and slurry pumping. Waste material will be used to create in-pit bunds to contain tailings or dump to fill mined voids. No drill and blast operations will be required, cross ripping of cemented sand horizons by dozers may be required. Mining will be undertaken in as a strip/block-mining operation. Each block will be approximately 500 m x 150 m. An overall wall angle of 30° has been proposed based on completed geotechnical studies. A batter angle of 40° was applied to the uppermost bench (in the topsoil/clayey-sand material), with a 6 m wide berm created at the base of the clayey material or 10 m below surface, whichever produces the lower berm level (i.e. a maximum depth of 10 m). Beneath this berm, a single slope was designed to the pit floor; the slope angle used for this bench was either 34° in Area 1 East (overall pit depth generally <= 32 m) and 32° in Area 1 West and Area 3 (overall pit depth generally > 32 m). Mining recovery and dilution were not applied following the block model regularisation process.

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Criteria	JORC Code explanation	Commentary
		Inferred material was treated as waste during optimisations, designs and scheduling. External temporary waste dumps and tailings storage facilities will be required during early operations until sufficient mined voids are available to commence backfilling.
Metallurgical factors or assumptions	*The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* *Whether the metallurgical process is well-tested technology or novel in nature.* *The nature, amount and representativeness of metallurgical testwork undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* *Any assumptions or allowances made for deleterious elements.* *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.* *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	Ore material will undergo processing through a MUP, Feed Preparation Plant (FPP), Wet Concentrator Plant (WCP), Rare Earth Flotation circuit, Magnetic Separation Plant (combined MSP). An additional rare earth hydromet process was included in the financial analysis, the economic impact of this circuit is noticeably better than without, however has not been included in the pit optimisation, pit design or Ore Reserve estimation. Industry standard metallurgical processes and equipment are proposed for the Project. A representative bulk sample taken from the mining area was used for testwork. The bulk sample was processed through a pilot scale testwork laboratory.
Environmental	*The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	Some saleable products generated through processing may have elevated levels of radioactivity, these products will be taken off site following appropriate regulations. Waste material remaining on site are not considered to pose any environmental risk. Ongoing consultation between the company and the State of Victoria is required to determine land clearing allowances/requirements.
Infrastructure	*The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.*	The Project is located in an agricultural area of northern Victoria and is well serviced by road, rail, power and water, with nearby communities able to provide labour and accommodation. Additional infrastructure or upgrades may be required for the Project. The Company has engaged with landowners as required to secure access for drilling, environmental surveys, and ultimately project footprints.
Costs	*The derivation of, or assumptions made, regarding projected capital costs in the study.* *The methodology used to estimate operating costs.* *Allowances made for the content of deleterious elements.* *The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products.* *The source of exchange rates used in the study.* *Derivation of transportation charges.* *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.*	Capital costs for processing infrastructure was completed by Mineral Technologies Pty Ltd (MTPL) based on testwork undertaken by them for the Company. Non-process infrastructure capital costs were provided by TZMI based on existing, similar projects. Processing operating costs were estimated by MTPL based on testwork. Mining operating costs were estimated by Majesso Consulting assuming a contractor operation. A long term exchange rate of US$0.725:A$1 was selected and provided by the Company, only commodity reference prices were provided in US$, all capital and operating costs were estimated in A$. The Company undertook a study to estimate freight and logistics costs for both land and sea transport.

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<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td>The allowances made for royalties payable, both Government and private.</td><td>A state royalty of 2.75% of product revenue was applied to the Project.</td></tr>
<tr><td>Revenue factors</td><td>The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.
The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</td><td>Adamas Intelligence (rare earths) and TZMI (zircon and titania minerals) completed independent market reviews and provided long term reference prices in real US$:
<table>
<tr><th></th><th>MREC</th><th>Zircon</th><th>Rutile</th><th>Leucoxene</th><th>Ilmenite</th></tr>
<tr><td>Unit</td><td>USD/kg</td><td>USD/t</td><td>USD/t</td><td>USD/t</td><td>USD/t</td></tr>
<tr><td>2022</td><td>16.22</td><td>1,877</td><td>1,345</td><td>249</td><td>287</td></tr>
<tr><td>2023</td><td>17.26</td><td>2,042</td><td>1,293</td><td>267</td><td>225</td></tr>
<tr><td>2024</td><td>17.87</td><td>1,897</td><td>1,270</td><td>275</td><td>225</td></tr>
<tr><td>2025</td><td>18.34</td><td>1,722</td><td>1,283</td><td>278</td><td>229</td></tr>
<tr><td>2026</td><td>18.87</td><td>1,580</td><td>1,308</td><td>272</td><td>228</td></tr>
<tr><td>2027</td><td>19.14</td><td>1,528</td><td>1,305</td><td>275</td><td>227</td></tr>
<tr><td>2028</td><td>19.39</td><td>1,529</td><td>1,286</td><td>277</td><td>223</td></tr>
<tr><td>2029</td><td>19.65</td><td>1,529</td><td>1,307</td><td>280</td><td>214</td></tr>
<tr><td>2030</td><td>19.9</td><td>1,512</td><td>1,299</td><td>282</td><td>205</td></tr>
</table>
Commodity prices used for the study made allowances for transport costs and quality adjustments with input from TZMI regarding the quality of Goschen products.</td></tr>
<tr><td>Market assessment</td><td>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.
A customer and competitor analysis along with the identification of likely market windows for the product.
Price and volume forecasts and the basis for these forecasts.
For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</td><td>A market analysis was conducted by TZMI, which indicated that demand will outweigh supply in the short to medium term and should be at least neutral in the long term.
TZMI has endorsed that all products generated from Goschen are potentially marketable subject to successful conclusion of final Feasibility Study testwork and off take agreements.
Preliminary discussions with customers have indicated that 100% of products from Goschen will be subject to off take agreements.
Further product testing is scheduled to confirm product specifications and realised product prices.</td></tr>
<tr><td>Economic</td><td>The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.
NPV ranges and sensitivity to variations in the significant assumptions and inputs.</td><td>A discount rate of 10% was applied to the optimisation works and financial analysis for this study.
Inputs to the economic analysis include Modifying Factors as described above.
Sensitivity studies were carried out. Standard linear deviations were observed for all tested variables.</td></tr>
<tr><td>Social</td><td>The status of agreements with key stakeholders and matters leading to social licence to operate.</td><td>Substantial consultation with the community and regulatory agencies in relation to the Goschen Project has commenced, involving consultation activities with identified key stakeholders.
Regular meetings have been held with a Technical Reference Group and a Stakeholder Reference Group.</td></tr>
<tr><td>Other</td><td>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:
Any identified material naturally occurring risks.
The status of material legal agreements and marketing arrangements.</td><td>There are no known significant naturally occurring risks to the project.
In January 2015, Exploration Licence (EL) 5520 was granted to VHM Exploration Pty Ltd for a period of five years. In January 2020, Retention Licence 6806 was granted to the Company for a period of seven years to replace the expired EL5520.</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
	The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	
Classification	*The basis for the classification of the Ore Reserves into varying confidence categories.* *Whether the result appropriately reflects the Competent Person's view of the deposit.* *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	Measured Resources have been converted to Proven Reserves within three paddocks over which VHM have land access agreements and to Probable Reserves outside these paddocks, Indicated Resources have been converted to Probable Reserves. The estimated Ore Reserves are, in the opinion of the Competent Person, appropriate for this style of deposit.
Audits or reviews	*The results of any audits or reviews of Ore Reserve estimates.*	Auralia Mining Consulting Pty Ltd has completed an internal review of the Ore Reserve estimate resulting from this study.
Discussion of relative accuracy/ confidence	*Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve 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 reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* *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.* *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	The level of study carried out as part of the March 2022 Ore Reserve is to a Definitive-Feasibility Study level. The relative accuracy of the estimate is reflected in the reporting of the Ore Reserves as per the guidelines re: modifying factors, study levels and Competent Persons contained in the JORC 2012 Code. This statement relates to global estimates of tonnes and grade. Sensitivity studies were carried out. Standard linear deviations were observed. Globally, the project is susceptible to fluctuations in commodity price. Further product testing is scheduled to confirm product specifications, this information will be relayed to potential customers to determine realised product prices.

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Area 4 – JORC Table 1 (JORC Code, 2012 Edition)

Competent Person:	Greg Jones
Report Title:	Goschen Project Area 4 Mineral Resource Estimate
Report Reference:	1722-G-REP-0000-8002 Rev D
Date Reported:	September 2019

Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Comment
Sampling techniques	*Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.* *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* *Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	Aircore (AC) drilling was used to obtain samples at 1 m intervals for 2019 drilling. The following information covers the sampling process: • Each 1 m sample was homogenised within the bag by manually rotating the sample bag. • A sample of sand, approximately 20 g, is scooped from the sample bag for visual total heavy minerals (THM) % and SLIMES % estimation and logging. The same sample mass is used for every pan sample for visual THM % and SLIMES % estimation. • The standard sized sample is to ensure calibration is maintained for consistency in visual estimation. • A sample ledger is kept at the drill rig for recording sample intervals. • The large 1 m AC drill samples were split down to approximately ~1,000 g to ~2,500 g by rotating cone splitter for export to the primary processing laboratory. • The laboratory sample was oven dried at 105°C for a minimum of 2 hours (and then redried for up to 12 hours if required), and split down to 100 g subsamples via a rotating splitter fed by a vibrating screen. A laboratory repeat was taken at ~1:25 samples. • All drillhole subsamples were screened using vibrating screens with a top screen of 1 mm and a bottom screen of 38 µm. Oversize (+1 mm fraction) was removed and -38 µm fraction (SLIMES) discarded. The sand fraction (1 mm to +38 µm) was then submitted for heavy liquid separation (HLS) using TBE to determine THM content. • 711 samples selected from Zones 1, 2, 3, 4, 5, 10 and 11 were re-assayed by ALS laboratory using a top screen of 1 mm and a bottom screen of 20 µm. Oversize (+1 mm fraction) was removed and -20 µm fraction (SLIMES) discarded. The sand fraction (1 mm to +20 µm) was then submitted to centrifugal HLS to determine THM content. • Duplicates were taken at the drill rig from side-by-side sample locations at a rate of ~1:20. • Duplicates were taken within mineralisation zones as the waste material was excluded from sampling. • Commercially obtained standards were inserted by the laboratory (Diamantina) at a rate of ~1:40.
Drilling techniques	*Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	Wallis Drilling was the contractor used for the drilling program that supported the Goschen Area 4 Mineral Resource estimate (MRE). AC drilling with inner tubes for sample return was used. AC is considered a standard industry technique for heavy mineral sands mineralisation. AC drilling is a form of reverse circulation drilling where the sample is collected at the face and returned inside the inner tube.

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Criteria	JORC Code explanation	Comment
		AC drill rods used were 3 m long. NQ diameter (76 mm) drill bits and rods were used. All drillholes were vertical.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.* *Measures taken to maximise sample recovery and ensure representative nature of the samples.* *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	Drill sample recovery is monitored by recording sample condition from "dry good" to "wet poor". While initially collaring the hole, limited sample recovery can occur in the initial 0–1 m sample interval owing to sample and air loss into the surrounding loose soil. The initial 0–1 m sample interval is drilled very slowly in order to achieve optimum sample recovery. The entire 1 m sample is collected at the drill rig in large numbered plastic bags for dispatch to the initial split preparation facility. At the end of each drill rod, the drill string is cleaned by blowing down with air to remove any clay and silt potentially built up in the sample tubes. The twin-tube AC drilling technique is known to provide high-quality samples from the face of the drillhole (in ideal conditions).
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* *The total length and percentage of the relevant intersections logged.*	The 1 m AC samples were each qualitatively logged via digital entry into a Microsoft Excel spreadsheet, and later uploaded to the AcQuire database. The AC samples were logged for lithology, colour, grain size, sorting, hardness, sample condition, washability, estimated THM %, estimated SLIMES % and any relevant comments such as slope, vegetation, or cultural activity. Every drillhole was logged in full. Logging is undertaken with reference to a Drilling Guideline with codes prescribed and guidance on description to ensure consistent and systematic data collection.
Subsampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.* *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* *Quality control procedures adopted for all subsampling stages to maximise representivity of samples.* *Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.* *Whether sample sizes are appropriate to the grain size of the material being sampled.*	The 1 m sample interval is rotary split at the drill rig, collected and dispatched to Diamantina Laboratories. The water table depth was noted in all geological logs if intersected whereby sample condition was specified as "wet poor". A total of ~1.2 kg to ~2.5 kg of each sample was placed into calico sample bags and exported to Diamantina Laboratory for THM analysis. Almost all the samples are silty sand, sand, sandy clay, clayey sand, sandy clay or clay and this sample preparation method is considered appropriate. The sample sizes were deemed suitable to reliably capture THM, slime, and oversize characteristics, based on industry experience of the geologists involved and consultation with laboratory staff. Field duplicates of the samples were completed at a frequency of 1:20 primary samples.
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	The wet panning at the drill site provides an estimate of the THM % which is sufficient for the purpose of determining approximate concentrations of THM in the first instance. AC sample: • The individual 1 m AC subsamples were assayed by Diamantina Laboratories in Perth, Western Australia, which is considered the Primary laboratory.

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Criteria	JORC Code explanation	Comment
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• The AC samples were initially oven dried at 105°C for 2 hours (and then up to 12 hours for very wet samples) then reduced on a rotary splitter by 15%. Samples were then riffle split to 100 g sub-splits (weighed and captured) and then left to soak overnight. • All samples were then wet washed and sieved on vibrating screens using a top screen of +1 mm to remove the very coarse sand, pebbles, or grits. The bottom screen used 38 µm mesh for removal and determination of the -38 µm fraction (SLIMES). The remaining sand fraction (-1 mm +38 µm) was then submitted to HLS. • 711 samples of 1 mm- 38 µm selected from Zones 1, 2, 3, 4, 5, 10 and 11 were re-assayed by ALS laboratory using a top screen of 1 mm and a bottom screen of 20 µm. Oversize (+1 mm fraction) was removed and -20 µm fraction (SLIMES) discarded. The sand fraction (1 mm to +20 µm) was then submitted to centrifugal HLS to determine THM content. • The laboratory used TBE as the heavy liquid medium – with density range between 2.92 g/ml and 2.96 g/ml. • This is an industry standard technique. • Field duplicates of the samples were collected and submitted at a frequency of 1:20 primary samples. • Diamantina Laboratories completed its own internal quality assurance and quality control (QAQC) checks that included laboratory standards every 40th sample and a Laboratory repeat every 25th sample prior to the results being released. • ALS Laboratories completed its own internal QAQC checks that included a Laboratory repeat every 25th sample prior to the results being released. • Analysis of QAQC samples show the laboratory data to be of acceptable accuracy and precision. • The density of the heavy liquid was checked every day. • The adopted QAQC protocols are acceptable for this stage of testwork.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.* *The use of twinned holes.* *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* *Discuss any adjustment to assay data.*	All results are checked by the Company's Geology Manager. The Company's Geology Manager and independent Resource geologist (Greg Jones) have made periodic visits to Diamantina Laboratories to observe sample processing and procedure. A process of laboratory data validation using mass balance is undertaken to identify entry errors or questionable data. Field and laboratory duplicate data pairs (THM/OS/SLIME) of each batch are plotted to identify potential quality control issues. Standard Reference Material sample results are checked from each sample batch to ensure they are within tolerance (<3SD) and that there is no bias. The field and laboratory data was exported from the VHM AcQuire database and imported into Datamine by IHC Robbins which is appropriate for this stage in the program. Data validation criteria are included to check for overlapping sample intervals, end of hole match between "Lithology", "Sample", "Survey" files and other common errors. 15 samples from the 2019 program were included on sample submission sheet but were not received by Diamantina. The assay values for these samples were assigned a value of 0.005 which is well below the detection limit. One sample received from ALS with an error in the SLIMES value was excluded from the dataset.

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Criteria	JORC Code explanation	Comment
Location of data points	*Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* *Specification of the grid system used.* *Quality and adequacy of topographic control.*	Downhole geophysical surveys were conducted to utilise gamma signatures for ascertaining mineralisation zones within the lithological sequence. Drillhole collars were surveyed by an independent survey company using industry standard equipment. Three permanent survey marks in the area assisted with the collar pickups, allowing for consistent survey readings across the Project. The datum used is GDA 94 and coordinates are projected as MGA Zone 54. Topographic surface generated by VHML using the light detection and ranging (LiDAR) survey contours was deemed sufficient for use in Mineral Resource estimation. Drill collar pickups provided by the independent survey company were then checked against the LiDAR surface. Any discrepancies in collar position were projected to the local LiDAR topography. The accuracy of the locations is sufficient for this stage of exploration.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.* *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* *Whether sample compositing has been applied.*	A regular rectangular ~400 m x ~50 m grid spacing is dominant at the Goschen Area 4 Project with two of the nine drilling lines on a ~400 m x~ 25 m spacing. A drilling program of 116 drillholes was conducted in February 2019 to determine the mineralisation extent of the deposit. The 400 m x 50 m spaced AC holes and regular grid are sufficient to provide a good degree of confidence in geological models and grade continuity within the holes at this stage. The 25 m spacing on the two lines further confirms the continuity across strike. Each AC drill sample is a single 1 m sample of sand intersected down the hole. No downhole compositing has been applied to models for values of THM, slime and oversize. Compositing of samples was undertaken on THM concentrates for mineral assemblage determination. Composite samples were determined by geological domains.
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	The AC drilling was oriented perpendicular to the strike of mineralisation defined by previous drill data information. The strike of the mineralisation is northwest-southeast. All drillholes were vertical and the orientation of the mineralisation is relatively horizontal. The orientation of the drilling is considered appropriate for testing the lateral and vertical extent of mineralisation without any bias.
Sample security	*The measures taken to ensure sample security.*	AC samples were stored on site (in the paddock on pallets). The samples were then dispatched to Perth using Swan Hill Freight agents and delivered directly to the Diamantina laboratory. The laboratory inspected the packages and did not report tampering of the samples.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	Internal reviews were undertaken during the geological interpretation and throughout the modelling process.

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Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Comment
Mineral tenement and land tenure status	*Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	The exploration work was completed on tenements that are 100% owned by VHM Exploration in Victoria, Australia. The drill samples for this MRE were taken from tenement EL5520. The Exploration Licence original date of grant was 10 October 2014 with an expiry date of 9 October 2019. An application for a Retention Licence has been lodged with Earth Resources, which is the responsible statutory body and part of Victorian Department of Jobs, Precincts and Regions.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	Historical exploration work was completed by previous exploration companies including Austiex (1977–1978), CRA Exploration (1981–1987), Renison Goldfields Consolidated (1980–1991), WJ Holdings (1998), RZM Group (1999), Basin Minerals (2001), Providence Gold and Minerals (2004–2005), and Iluka (2009). The Company has obtained the hardcopy reports and maps in relation to this information as part of its historical review in preparation for their current work program. The historical data comprises surface sampling, limited AC drilling and mapping. The historical results are not reportable under JORC 2012.
Geology	*Deposit type, geological setting and style of mineralisation.*	The heavy mineral sands at the Goschen Project is a fine-grained deposit hosted within the offshore depositional paleo-environment of the Loxton Parilla Sands. The relatively strong presence of Leucoxene could indicate a reworking process for the deposit or weathering overprint. The Loxton Parilla Sand is prevalent within the Murray Basin for hosting mineral sand deposits. The Shepparton Formation clays are positioned above the Loxton Sands and the Bookpurnong Formation consisting of shallow marine clays and marls is positioned below within the lithological sequence.
Drillhole information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:* • *easting and northing of the drillhole collar* • *elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar* • *dip and azimuth of the hole* • *downhole length and interception depth* • *hole length.* *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	All relevant drillhole data is reported regarding the February 2019 drilling programs. A relevant drillhole data is reported associated with the model build.

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Criteria	JORC Code explanation	Comment
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	No data aggregation methods were utilised, no top cuts were employed, and all cut-off grades have been reported. Valuable heavy mineral (VHM >1%) was used to provide cut-off grade.
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.* *If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.* *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'downhole length, true width not known').*	The nature of the mineralisation is broadly horizontal, thus vertical AC holes are thought to represent close to true thicknesses of the mineralisation. Downhole widths are reported.
Diagrams	*Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.*	Refer to Appendices 2 and 3 the main body of the report *Goschen Project Area 4 Mineral Resource Estimate, 1722-G-REP-0000-8002 Rev D* available from the Company – please note that this ITAR is an assessment and summary of a significant body of work
Balanced reporting	*Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	Exploration Target results have been reported at total VHM>1% to indicate a range of potential tonnes and grade Table 3.1. *in Goschen Project Area 4 Mineral Resource Estimate, 1722-G-REP-0000-8002 Rev D* available from the Company – please note that this ITAR is an assessment and summary of a significant body of work
Other substantive exploration data	*Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	Detailed mineral assemblage work was undertaken on composite samples for the Project by ALS Metallurgy Services, Perth. ALS applied an integrated mineralogical approach using both x-ray fluorescence (XRF) analysis and Quantitative Evaluation of Minerals by Scanning Electron Microscopy (QEMSCAN). This was to gain a quantitative understanding of the elemental composition and mineralogical assemblage (refer to Section 3, Tables 3.1, 3.2, and 3.3 and Appendix 4 and 5 in the report *Goschen Project Area 4 Mineral Resource Estimate, 1722-G-REP-0000-8002 Rev D* available from the Company – please note that this ITAR is an assessment and summary of a significant body of work). The XRF technique provides measurements of relative elemental abundances (down to limits of a few parts per million) which allows for a quantifiable basis for determination of mineralogy, provenance, depositional environment, and diagenetic history. The XRF analysis was utilised to apply assay data to the geological model for grade interpretation. The QEMSCAN method of analysis required the samples to be screened into +150 µm and -150 µm screen fraction prior to sample preparation and QEMSCAN analysis.

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Criteria	JORC Code explanation	Comment
		Sample preparation required each subsample was mixed with size-graded, high purity graphite to ensure particle separation and discourage density segregation. These sample-graphite mixtures were then set into moulds using a two-part epoxy resin, producing a representative subsample of randomly orientated particles. Once cured, the resin blocks were then cut to expose a fresh surface which is then gradually ground and polished. Once QAQC checks are completed the sections are then carbon coated for electron beam conductivity and presented to QEMSCAN for analysis. The samples were analysed using QEMSCAN technology in Field Scan mode and Particle Mineralogical Analysis mode. Detailed sachet scanning of heavy mineral sinks from the drill assay process was carried out to determine regions of gross mineralogy as well as an overall consideration of VHM content. Other considerations undertaken during this sachet logging were the presence of iron oxide coatings on THM, and any gross composition of trash HM. Sachet logging then had partial input into the geological/ mineralogical/THM grade interpretation which then assisted with domain control for modelling, as well as providing guidance for the allocation of mineral assemblage composites where it was not possible to get gamma data due to hole collapse. Various individual domains were identified for the Area 4 deposits for the purpose of guiding the allocation of composites. A total of 22 mineral assemblage composites were used to characterise the mineralogy and chemistry for the deposit. All the mineral assemblage composites were completed by the VHM and supplied to IHC Robbins in the data package. Individual drillhole samples were selected based on whether they fell within a particular domain and were then proportioned against contained THM grade in order to specify the weight of THM that each sample would contribute to the entire composite. Once all the sample compositing was completed, the sample identification and mineral assemblage composite number was submitted to Dorrit deNooy at ALS in Perth, Australia for sample collation and processing. Preparing the mineral assemblage composites in this manner allows for composite results to be applied to the resource block model and for those results to then be reported and weighted on THM in the final MRE. Details of summary drillhole composites are presented in Appendix 16, mineral assemblage composite IDs and associated results are presented in Appendix 8 and 9 in the report *Goschen Project Area 4 Mineral Resource Estimate, 1722-G-REP-0000-8002 Rev D* available from the Company – please note that this ITAR is an assessment and summary of a significant body of work
Further work	*The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	Additional AC drilling is planned to further grow the resource on strike. Continued downhole geophysical logging, detailed sachet logging and further AC drilling. More sample analysis for Zone 1 to provide more geological information to delineate the domain boundary and for future mining purposes. Additional work is required to provide further detailed information on the mineral assemblage of the THM.

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Section 3: Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Comment
Database integrity	*Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* *Data validation procedures used.*	Exploration data provided by the company to IHC Robbins in the form CSV and Microsoft Excel files exported from an AcQuire database. The Company provided CSV file for the downhole geophysical data for the 2019 drill program. Checks of data by visually inspecting on screen (to identify translation of samples), duplicate and twin drilling was visually examined to check the reproducibility of assays. Database assay values have been subjected to random reconciliation with laboratory certified value is to ensure agreement. Visual and statistical comparison was undertaken to check the validity of results.
Site visits	*Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* *If no site visits have been undertaken indicate why this is the case.*	An extended site visit during the H1 2018 resource drilling phase in EL5520 was undertaken by Competent Person, Greg Jones, to observe the drilling data collection, and sampling activities. Area 4 is located within EL5520.
Geological interpretation	*Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* *Nature of the data used and of any assumptions made.* *The effect, if any, of alternative interpretations on Mineral Resource.* *The use of geology in guiding and controlling Mineral Resource estimation.* *The factors affecting continuity both of grade and geology.*	The geological interpretation was undertaken by IHC Robbins in collaboration with the Company's Geology Manager and then validated using all logging and sampling data and observations. Current data spacing and quality is sufficient to indicate grade continuity. Interpretation of modelling domains was restricted to the main mineralised envelopes utilising THM, oversize, slimes, trash mineralogy and geology logging. The interpretation of domains was also aided by the utilisation of down hole gamma signatures produced by the geophysical logging which assisted with distinguishing domain boundaries. Sachet logging was also undertaken by the company in relation to specific areas within the Project to provide greater understanding of mineralogical domains (e.g. where it was not possible to obtain gamma signatures below the water table due to hole collapse). The MRE was controlled by the geological surfaces, and basement surfaces. There are three main sheet-like horizons of mineralisation within the Project area which are predominantly zircon-rutile enriched. These zones; 2, 4 and 5 are geologically continuous across the Project. Zone 3 is geologically continuous but low in zircon-rutile and high in tourmaline-kaolinite. All the mineralisation in the upper zones terminates on the eastern contact with the fault. Zones 2, 11 and the basement do not appear to be affected by the fault.
Dimensions	*The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	The Mineral Resource field for the Project is approximately 3.5 km in length (at the longest point) and 400 m wide (at the widest point).

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Criteria	JORC Code explanation	Comment
Estimation and modelling techniques	*The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* *The assumptions made regarding recovery of by-products.* *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).* *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* *Any assumptions behind modelling of selective mining units.* *Any assumptions about correlation between variables.* *Description of how the geological interpretation was used to control the resource estimates.* *Discussion of basis for using or not using grade cutting or capping.* *The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.*	The MRE was conducted using CAE mining software (also known as Datamine Studio). Inverse distance weighting techniques were used to interpolate assay grades from drillhole samples into the block model and nearest neighbour techniques were used to interpolate index values and nonnumeric sample identification into the block model. The mostly regular dimensions of the drill grid and the anisotropy of the drilling and sampling grid allowed for the use of inverse distance methodologies as no de-clustering of samples was required. Appropriate and industry standard search ellipses were used to search for data for the interpolation and suitable limitations on the number of samples and the impact of those samples was maintained. An inverse distance weighting power of 3 was used so as not to over smooth the grade interpolations. Hard domain boundaries were used, and these were defined by the geological wireframes that were interpreted. No assumptions were made during the resource estimation as to the recovery of by-products. Slimes and oversize contents are estimated at the same time as estimating the THM grade. Further detailed geochemistry is required to ascertain deleterious elements that may affect the marketability of the heavy mineral products. The average parent cell size used for the interpolation was approximately half the standard drillhole width and quarter the standard drillhole section line spacing. No assumptions were made regarding the modelling of selective mining units, however, it is assumed that a form of dry mining will be undertaken and the cell size and the sub-cell splitting will allow for an appropriate dry mining preliminary reserve to be prepared. Any other mining methodology will be more than adequately catered for with the parent cell size that was selected for the modelling exercise. No assumptions were made about correlation between variables. The MRE were controlled to an extent by the geological/ mineralisation and basement surfaces. Grade cutting or capping was not used during the interpolation because of the regular nature of sample spacing and the fact that samples were not clustered nor wide spaced to an extent where elevated samples could have a deleterious impact on the resource estimation. Sample distributions were reviewed, and no extreme outliers were identified either high or low that necessitated any grade cutting or capping. The sample length of 1 m does result in a degree of grade smoothing also negating the requirement for grade cutting or capping. Validation of grade interpolations were done visually in CAE Studio (Datamine) software by loading model and drillhole files and annotating and colouring and using filtering to check for the appropriateness of interpolations. Statistical distributions were prepared for model zones from drillhole and model files to compare the effectiveness of the interpolation. Along strike distributions of section line averages (swath plots) for drillholes and models were also prepared for comparison purposes.

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Criteria	JORC Code explanation	Comment
Moisture	*Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	Tonnages were estimated an assumed dry basis.
Cut-off parameters	*The basis of the adopted cut-off grade(s) or quality parameters applied.*	Cut-off grades for THM were used to prepare the reported resource estimates. These cut-off grades were defined by the Competent Person by utilising multiplying THM by VHM to get an in-ground VHM grade (TVHM). This was used to report the block model on material >1% TVHM. Consideration was taken into account for a modest stripping ratio to ensure that deeply buried material with a very low likelihood of eventual economic extraction was not selected for reporting in the MRE. IHC Robbins utilised a value per tonne algorithm as an internal process to validate the TVHM cut-off grade for repeatability. This validation provided a close reconciliation to the 1% TVHM cut-off grade.
Mining factors or assumptions	*Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	No specific mining method is assumed other than potentially the use of dry mining methods.
Metallurgical factors or assumptions	*The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	Metallurgical assumptions were used based on mineral assemblage composites which at this stage only allow for preliminary commentary with no final products being defined from the reported mineral species. Some chemistry in the form of oxides from XRF analysis was available for commentary however may not bear exact reconciliation with eventual final products.
Environmental factors or assumptions	*Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and 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.*	No assumptions have been made regarding possible waste and process residue, however, disposal of by products such as SLIMES, sand and oversize are normally part of capture and disposal back into the mining void for eventual rehabilitation. This also applies to mineral products recovered and waste products recovered from metallurgical processing of heavy mineral.

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Criteria	JORC Code explanation	Comment
Bulk density	*Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	A bulk density algorithm was prepared using first principles techniques coupled with industry experience that is exclusive to IHC Robbins. We believe the bulk density formula to be conservative and fit for purpose at this level of confidence for the MREs and based on our experience and we would also recommend that bulk density test work be undertaken going forward. A bulk density was applied to the model using a standard linear formula originally described by Baxter (1977). This approach was refined in a practical application by this author using the following first principles calculations to develop a regression formula. This regression formula was then used to calculate the conversion of tonnes from each cell volume and from there the calculation of material, THM and SLIMES tonnes. The bulk density formula is described as: Bulk Density = (0.009 * HM) + 1.698.
Classification	*The basis for the classification of the Mineral Resources into varying confidence categories.* *Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* *Whether the result appropriately reflects the Competent Person's view of the deposit.*	The resource classification for the Area 4 Goschen deposits was based on the following criteria: drillhole spacing, geological and grade continuity, variography of primary assay grades and the distribution of bulk samples. The classification of the Indicated Mineral Resources was supported by all the supporting criteria as noted above. As a Competent Person, Greg Jones considers that the result appropriately reflects a reasonable view of the deposit categorisation.
Audits or reviews	*The results of any audits or reviews of Mineral Resource estimates.*	No audits or reviews of the MRE have been undertaken at this point in time.
Discussion of relative accuracy/ confidence	*Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	Local (nearest neighbour) estimates were undertaken as a preliminary evaluation process. The overall grade interpolation for this method was a fair comparison with inverse distance weighting methodology. Validation of the model vs drillhole grades by observation, swathe plot and population distribution analysis was favourable The statement refers to global estimates for the entire known extent of the Area 4 Goschen deposits. No production data is available for comparison with the Area 4 Goschen deposits.

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Goschen Exploration Target – JORC Table 1 (JORC Code, 2012 Edition)

Competent Person:	Graham Howard (JORC Table 1 Sections 1,and 2)
Report Title:	Goschen Exploration Target 2022
Report Reference:	RPEX989
Date Reported:	10 June 20220

Section 1: Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	*Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.* *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* *Aspects of the determination of mineralisation that are Material to the Public Report.* *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	• Exploration target estimate is based on drill data completed by the company, VHM Limited, and on historic data. • Not all sampling techniques are recorded for historic data. • Historic drill samples are variable but majority are over 1 m intervals. • Sample representivity was not recorded in the available logs. • Drillholes are typically vertical and perpendicular to the interpreted flat lying mineralization. • Aircore drilling completed by the VHM Limited was used to obtain samples at one metre intervals for both 2017, 2018 and 2019 drilling. The following information covers the sampling process: • the full one-metre drill samples were split down to approximately ~1000 to ~2500 g by rotary splitter mounted on the drilling rig. • each one-metre composite sub-sample was homogenized by manually mixing the sample within the sample bag; • Bulk sample reject for each meter was retained. • a sample of sand of approximately twenty grams is scooped from the sample bag for visual estimation of heavy mineral and slimes content and also sample description. The same mass of sample is consistently used for each panned sample to ensure calibration is maintained for consistency in visual estimation; • sample logging software is used at the drill rig for recording sample intervals and descriptions. • The sample bag is sealed and dispatched to a commercial laboratory for analysis. • The laboratory sample was oven dried at 105 degrees for a minimum of 2 hours (and then re-dried for up to 12 hours if required),and split down to 100-gram sub samples via a rotating splitter fed by a vibrating screen. A laboratory repeat was taken at ~ 1 in 25 samples. • Two sample preparation mythologies have been utilised across VHM Limited drill data. • The first sample preparation methodology involves the following process: • All drill hole sub-samples were screened using vibrating screens with a top screen of either one or two millimetre mesh and a bottom screen of 38 µm. Oversize (+1 or 2 mm fraction) was removed and -38 µm fraction (SLIMES) discarded. The sand fraction (1 or 2 mm to +38 µm) was then submitted for heavy liquid separation using TBE to determine total heavy mineral content. • The second more recent sample preparation methodology involves the following process:

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Criteria	JORC Code explanation	Commentary
		• All drill hole sub-samples were screened using vibrating screens with a top screen of either one or two millimetre mesh and a bottom screen of 20 µm. Oversize (+1 or 2 mm fraction) was removed and -20 µm fraction (SLIMES) discarded. The sand fraction (1 or 2 mm to +20 µm) was then submitted for heavy liquid separation using TBE to determine total heavy mineral content. • Duplicates were taken at the drill rig by hanging sample bags side-by-side on the rotary splitter at a rate of ~1 in 20. • Duplicates were taken within mineralisation zones as the waste material was excluded from sampling. • Commercially obtained standards were inserted by the laboratory at a rate of ~ 1 in 40.
Drilling techniques	*Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).*	• Historical data used for the resource estimate are from samples obtained by reverse circulation and aircore drilling. • Wallis Drilling was the contractor used for both the 2017, 2018 and 2019 drilling and sampling program upon which the Goschen Exploration Target 2022 estimate was based. • Aircore drilling, which is a standard technique for the heavy mineral sand industry, was used. Aircore drilling is a form of reverse circulation drilling where the sample is collected at the face and returned inside the inner tube. • All drillholes were vertical and were drilled using NQ-sized drill string and bits. • Drill rods were three metres long
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.* *Measures taken to maximise sample recovery and ensure representative nature of the samples.* *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Drill sample recovery of the historical data was not recorded in the available documentation. • For VHM Limited drill holes, drill sample recovery is monitored by recording sample condition from 'dry good' to 'wet poor'. • While initially collaring the hole, limited sample recovery can occur in the initial 0 m to 1 m sample interval owing to sample and air loss into the surrounding loose soil. The initial 0 m to 1 m sample interval is drilled very slowly in order to achieve optimum sample recovery. • Each entire one-metre sample apart from the sub-sample taken for logging and analysis) is collected at the drill rig in large numbered plastic bags for dispatch to the initial split preparation facility. • At the end of each drill rod, the drill string is cleaned by blowing down with air to remove any clay and silt potentially built up in the sample tubes. • The twin-tube aircore drilling technique is known to provide high quality samples from the face of the drill hole (in ideal conditions).
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* *The total length and percentage of the relevant intersections logged.*	**Historical Data** • Drillholes were typically logged on paper logs over 1 m intervals and recorded rock type, colour and visual estimate of heavy minerals. • Logging is quantitative, based on visual field estimates. No photography was undertaken • The majority of drillholes were logged in their entirety. **VHM Data** • Each aircore sample was qualitatively logged into a field-validated data capture software package, and later uploaded to the AcQuire database. • The samples were logged for lithology, colour, grainsize, sorting, hardness, sample condition, washability, estimated heavy mineral content, estimated slimes

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Criteria	JORC Code explanation	Commentary
		• content and any relevant comments - such as slope, vegetation, or cultural activity. • Every drill hole was logged in full. • Logging is undertaken with reference to a Drilling Guideline with codes prescribed and guidance on description to ensure consistent and systematic data collection. • Downhole gamma probe logging was completed in 2019 program. This technique provided spatial occurrence of VHM mineral concentrations based on occurrence of radioactive minerals associated with VHM deposits.
Subsampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.* *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* *Quality control procedures adopted for all subsampling stages to maximise representivity of samples.* *Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.* *Whether sample sizes are appropriate to the grain size of the material being sampled.*	**Historical Data** • No core drilling was completed. • Sub-sampling techniques and sample preparation were appropriate for the time when the samples were collected. • Details of quality control procedures and data are not available for the majority of the historic data. **VHM Data** • The one-metre sample interval is rotary split at the drill rig. A total of ~1.2 kg to ~2.5 kg of each sample was placed into calico sample bags and exported to Diamantina Laboratory or ALS Laboratory for THM analysis. • The water table depth, if intersected, was noted in all geological logs and when water injection was required to aid sample recovery the sample was logged as 'wet poor'. • Almost all of the samples are silty sand, sand, sandy clay, clayey sand, or clay and this sample preparation method is considered appropriate. • The sample sizes were deemed suitable to reliably capture THM, slime, and oversize characteristics, based on industry experience of the geologists involved and consultation with laboratory staff. • Field duplicates of the samples were completed at a frequency of 1 per 20 primary samples. • Bulk sample rejects (5kg to 8kg) retained for further testwork.
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	• Historical Assay and laboratory procedures were appropriate for the time when the samples were collected and analysed. • Details of quality control procedures and data are not available for the majority of the historic data. • The 2017, 2018 and 2019 programs completed the following; • The wet panning at the drill site provides an estimate of the THM% which is sufficient for the purpose of determining approximate concentrations of THM in the first instance. • Aircore sample: • The individual one-metre aircore sub- samples were assayed by Diamantina Laboratories in Perth, Western Australia, which is considered the Primary laboratory; • The samples were initially oven dried at 105 degrees Celsius for 2 hours (and then up to 12 hours for very wet samples) then reduced on a rotary splitter by 15%. Samples were then riffle split to 100 g sub- splits (weighed and captured) and then left to soak overnight.

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Criteria	JORC Code explanation	Commentary
		• All samples were then wet washed and sieved on vibrating screens using a top screen of +1 or +2 mm to remove the very coarse sand, pebbles or grits. The bottom screen used 38 µm or 20 µm mesh for removal and determination of the -38 µm or 20 µm fraction (SLIMES). The remaining sand fraction (-2 mm +38 µm or -2mm +20 µm) was then submitted to heavy liquid separation ('HLS'). • The laboratory used TBE as the heavy liquid medium – with density range between 2.92 and 2.96 g/ml. The density of the heavy liquid was checked every day; • This is an industry standard technique. • Field duplicates of the samples were collected and submitted for assay at a frequency of 1 per 20 primary samples; • Diamantina Laboratories and ALS Laboratories completed its own internal QA/QC checks that included laboratory standards every 40th sample and a Laboratory repeat every 25th sample prior to the results being released; • Analysis of QA/QC samples show the laboratory data to be of acceptable accuracy and precision; • The adopted QA/QC protocols are acceptable for this stage of test work. • Assay methodology research and development was completed in parallel using samples from various areas of the Goschen Deposit using different THM assaying and mineral assemblage analytical methods. This included round robin submissions to different assay laboratories. Testwork included analysis of different analytical methods to determine appropriate THM analytical method.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.* *The use of twinned holes.* *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* *Discuss any adjustment to assay data.*	• The historical drill data has not been verified. • Available historic logs do not record verification of sampling and assaying. • All results were checked by the company's Geology Manager. • The company's representatives including Geology Manager and Information Systems Manager made periodic visits to Diamantina Laboratories to observe sample processing and procedure. • A process of laboratory data validation using mass balance is undertaken to identify entry errors or questionable data. • Field and laboratory duplicate data pairs (THM/OS/SLIME) of each batch are plotted to identify potential quality control issues. • Standard Reference Material sample results are checked from each sample batch to ensure they are within tolerance (<3SD) and that there is no bias. • The field and laboratory data were exported from the VHM's AcQuire database and imported into Datamine by a geologist contracted to VHM Limited, which is appropriate for this stage in the program. Data validation criteria are included to check for overlapping sample intervals, end of hole match between 'Lithology', 'Sample', 'Survey' files and other common errors.
Location of data points	*Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* *Specification of the grid system used.*	• Available historic logs do not record accuracy of quality of surveys • A digital topographic surface was generated by VHM Limited from data collected during a LIDAR survey commissioned by VHM. Historic Drillhole collars were pressed to the LiDAR survey surface for the Exploration Target estimate.

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Criteria	JORC Code explanation	Commentary
	Quality and adequacy of topographic control.	• VHM Limited Drill hole collar locations were surveyed by an independent surveyor using industry standard equipment. Three permanent survey marks in the area provided survey control, allowing for repeatable and accurate survey readings across the project area. • The datum used is GDA 94 and coordinates are projected as MGA zone 54.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.* *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* *Whether sample compositing has been applied.*	• 1,465 drill holes were used to inform the resource estimate. 572 were completed as historic drill holes, 893 were drilled by VHM Limited. • Data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for an Exploration Target. • Mineral assemblage samples were collected over composited intervals representing the mineralised horizon. • For resource estimation the total heavy mineral (THM) and slimes data was composited to 1 m sample intervals.
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• The mineralization in the Goschen North Project area is a largely flat-lying (with some soft sediment deformation across a basement fault) sedimentary package which does not display a strong orientation of mineralisation at the current sample spacing. • Drilling is vertical and is perpendicular to the flat- lying mineralised horizon resulting in unbiased true widths and no bias is anticipated.
Sample security	*The measures taken to ensure sample security.*	• Sample security measures for the historical data are not known. • VHM Ltd Aircore samples were stored on site (at a dedicated warehouse in Kerang). • The samples were then dispatched to Perth using Swan Hill Freight agents and delivered directly to the Diamantina Laboratory and the ALS Laboratory. • The laboratory inspected the packages and did not report tampering of the samples
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	• Audits or reviews of sampling techniques or data have not been completed

Section 2: Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	*Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The exploration work was completed on tenements that are 100% owned by VHM Ltd in Victoria, Australia. • The drill samples for the Exploration Target estimate were drilled and collected from retention licence 6806 which was previously exploration licence 5520. • The exploration license original date of grant was 10/10/2014 with an expiry date of 09/10/2019. A Retention Licence to replace the exploration licence was granted by Earth Resources Regulation, which is the responsible statutory body and part of Victorian Department of Jobs, Precincts and Regions, in January 2020.No agreements are in place that affect the licence. • The licence is in good standing and there are no known impediments.

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Criteria	JORC Code explanation	Commentary
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	• Historic exploration work was completed by previous exploration companies including Austiex (1977 - 1978), CRA • Exploration (1981 - 1987), Renison • Goldfields Consolidated (1980 - 1991), W J Holdings (1998), RZM Group (1999), Basin Minerals (2001), Providence Gold and Minerals (2004 – 2005), and Iluka (2009). • The Company has obtained the hardcopy reports and maps in relation to this information as part of its historical review in preparation for their current work program. • The historic data comprises surface sampling, limited aircore drilling and mapping. • The current resource estimate is based solely on work conducted by VHM Ltd.
Geology	*Deposit type, geological setting and style of mineralisation.*	• The heavy mineral sands at the Goschen Project is a fine-grained deposit hosted within the offshore depositional paleo-environment of the Loxton Sand. The Loxton Sand is common within the Murray Basin and hosts all known mineral sand deposits in the Basin. Alluvial sediments of the Shepparton Formation have been deposited over the Loxton Sand and the Bookpurnong Formation consisting of shallow marine clays and marls is positioned below within the lithological sequence.
Drillhole information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:* • *easting and northing of the drillhole collar* • *elevation or RL (Reduced Level - elevation above sea level in metres) of the drillhole collar* • *dip and azimuth of the hole* • *downhole length and interception depth* • *hole length.* *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• Not applicable – exploration results from the historical drilling are not being reported. • A list of the drillhole locations is included in Appendix A of this report. • Company completed LiDAR survey of the Goschen Exploration Target Area. All historic drill holes collar RL adjusted to Lidar surface • VHM Limited hole collars surveyed both by GPS and surveyor • Holes were vertical • 2019 drill holes were surveyed by downhole Gamma Probe • Drill hole depth cross verified with drilling reports and geologist log for each hole • The field and laboratory data were exported into the VHM's AcQuire database
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* *Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• No data aggregation methods were utilised, no top cuts

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Criteria	JORC Code explanation	Commentary
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.* *If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.* *If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g. 'downhole length, true width not known').*	• Mineralised intercepts are essentially true thicknesses in all cases as the vertical drilling is perpendicular to the flat-lying mineralisation. • Downhole widths are reported
Diagrams	*Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.*	• Plan view and typical cross sections provided in shareholder announcement and report.
Balanced reporting	*Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• Exploration results have been reported at THM>1% to indicate a range of potential tonnes and grade.
Other substantive exploration data	*Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• Detailed mineral assemblage work was undertaken on VHM Ltd composite samples for the Goschen Project by ALS Metallurgy Services, Perth and by Bureau Veritas in Adelaide. ALS applied an integrated mineralogical approach using both XRF Analysis (XRF) and Quantitative Evaluation of Minerals by Scanning Electron Microscopy (QEMSCAN). Bureau Veritas also use QEMSCAN for mineralogical determinations but use a combination of XRF and laser ablation techniques for chemical assay. These techniques were used to gain a quantitative understanding of the elemental composition and mineralogical assemblage • The XRF and Laser ablation techniques provide measurements of relative elemental abundances (down to limits of a few parts per million) which allows for a quantifiable basis for determination of mineralogy, provenance, depositional environment, and diagenetic history. The XRF analysis was utilised to apply assay data to the geological model for grade interpretation. • The QEMScan method of analysis required the samples to be screened into +150 µm and -150 µm screen fraction prior to sample preparation and QEMScan analysis. • Sample preparation required each sup- sample was mixed with size-graded, high purity graphite to ensure particle separation and discourage density segregation. These sample-graphite mixtures were then set into moulds using a two-part epoxy resin, producing a representative sub-sample of randomly orientated particles. Once cured, the resin blocks were then cut to expose a fresh surface which is then gradually ground and polished. Once QA/QC checks are completed the sections are then carbon coated for electron beam conductivity and presented to QEMScan for analysis. • The samples were analysed using QEMScan technology in Field Scan Mode (FS) and Particle Mineralogical Analysis (PMA) mode.

Criteria	JORC Code explanation	Commentary
		• For the samples acquired in 2019 detailed sachet scanning of heavy mineral sinks from the drill assay process was carried out to determine regions of gross mineralogy as well as an overall consideration of valuable heavy mineral (VHM) content. Other considerations undertaken during this sachet logging were the presence of iron oxide coatings on THM, and any gross composition of trash HM. Sachet logging then had partial input into the geological/mineralogical/THM grade interpretation which then assisted with domain control for modelling, as well as providing guidance for the allocation of mineral assemblage composites where it wasn't possible to get gamma data due to hole collapse. • Pre-2019 composite samples were generated solely on heavy mineral grades, which were used to generate geological domain boundaries. These composite samples frequently include zones of high gangue content and iron • cemented sand. As a result, many of the early composites are not representative of the true mineralized zones and mineralogical results are down-graded by trash and iron oxide. Many of these sample were, therefore, omitted from the dataset used to inform the resource estimate. • Once the sample compositing was completed, the sample identification and mineral assemblage composite number was submitted to the labs listed above for mineralogical determination. • In 2018, a 1.8t bulk sample was created by compositing 343, 5-6kg, excess drill cuttings from the mineralised zones of 86 holes which were drilled in 2017. The bulk sample was treated to a program of work to remove oversize and de-slime the parent sample in preparation for metallurgical testwork. The testwork was undertaken by Mineral Technologies. • In addition to a THM head-grade, and slimes and oversize content details, the testwork produced a concentrate whose mineral assemblage was determined by ALS using QEMSCAN as described above
Further work	*The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Additional work is required to provide further detailed information on the mineral assemblage of the THM. • Further drilling may be planned if an economic analysis of the resource provides justification for such work.

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