VHM Limited

# Securing critical minerals for future technologies

2023 IMARC Global **I** Project Spotlight **I Goschen Rare Earths and Mineral Sands Project**

For personal use only

**ASX:VHM**

***Acknowledgement of Country***

*VHM acknowledges the Australian Aboriginal and Torres Strait Islander peoples as the first inhabitants of the nation and the traditional custodians of the lands where we live, learn and work. We pay our respects to past, present and emerging Elders.*

# Disclaimer and forward-looking statements

Important Information

This presentation has been prepared by VHM Limited ACN 601 004 102 (Company). It contains general background information only which is current at the date of this presentation unless otherwise specified. It is not intended to be an investor presentation. It contains selected summary information only and does not purport to be all-inclusive or to contain all the information that may be relevant to a prospective investor or stakeholder.

The Company, its affiliates, officers, directors, employees and agents do not accept responsibility or liability for this Presentation or its contents (except to the extent that such liability cannot be excluded by law). No representation or warranty is made as to the Presentation's accuracy or completeness. Recipients must satisfy themselves as to the accuracy of all such information. The presentation has been prepared based on information available at the time of preparation and is subject to change without notice. In receiving this presentation, each recipient agrees to the terms and conditions stated in this slide, including any modification to them.

This presentation does not constitute investment or financial product advice. it is not intended to be used as the basis for making an investment decision, nor is it intended to constitute legal, tax, accounting or other advice. Any references to or explanations of legislation, regulatory issues, benefits or other legal commentary (if any) are indicative only, do not summarise all relevant issues and are not intended to be a full explanation of a particular matter. The information has been obtained from and based on sources believed by the Company to be reliable. Past performance is not an indication of future performance.

This presentation may contain forward-looking statements, guidance, forecasts, estimates, prospects, projections or statements in relation to future matters that may involve risks or uncertainties and may involve significant items of subjective judgement and assumptions of future events that may or may not eventuate (Forward Statements). Forward Statements can generally be identified by the use of forward-looking words such as "anticipate", "estimates", "will", "should", "could", "may", "expects", "plans", "forecast", "target" or similar expressions. Forward Statements including indications, guidance or outlook on future revenues, distributions or financial position and performance or return or growth in underlying investments are provided as a general guide only and should not be relied upon as an indication or guarantee of future performance. To the extent that certain statements contained in this presentation may constitute 'Forward Statements' or statements about forward looking matters, then the information reflects the Company's (and no other party's) intent, belief or expectations as at the date of this presentation. No independent third party has reviewed the reasonableness of any such statements or assumptions. None of the Company, its related bodies corporate and its officers, directors, employees, advisers, partners, affiliates and agents (together, the VHM Parties) represent or warrant that such Forward Statements will be achieved or will prove to be correct or gives any warranty, express or implied, as to the accuracy, completeness, likelihood of achievement or reasonableness of any Forward Statement contained in this presentation. Except as required by law or regulation, the Company assumes no obligation to release updates or revisions to Forward .

Such forward looking statements involve known and unknown risks, uncertainties and other important factors beyond VHM Limited's control that could cause actual results, performance or achievements of VHM Limited to be materially different from future results, performance, or achievements expressed or implied by such forward looking statements.

Statements to reflect any changes. Recipients should form their own views as to these matters and any assumptions on which any of the Forward Statements are based and not place reliance on such statements.

Forward looking statements are based on numerous assumptions regarding VHM Limited's present and future business strategies and the environment in which VHM Limited will operate in the future. Among the important factors that could cause VHM Limited actual results, performance or achievements to differ materially from those in the forward-looking statements in this Presentation (without limitation) a significant change in VHM's performance (financial or otherwise) or operating environment, a material change to law or regulation (including changes to the regulatory policy or interpretation), and risks and uncertainties associated with the ongoing impacts of the COVID-19 pandemic, the conflict between Russia and Ukraine, and the Australian and global economic environment and capital market conditions.

These forward-looking statements speak only as at the date of this Presentation. Save as required by applicable law or regulation the Company expressly disclaims any obligation or undertaking to disseminate any updates or revisions to any forward-looking statements contained herein to reflect any change in the Company's expectations with regard thereto or any change in events, conditions or circumstances on which any such statements are based. As a result of these factors, the events described in the forward-looking statements in this Presentation may not occur.

No party other than the Company has authorised, permitted or caused the issue, submission, dispatch or provision of this presentation, or takes any responsibility for, or makes or purports to make any statement, representation or undertaking in this presentation and there is no statement in this presentation that is based on any statement by any other party. No person, either as a director, partner of or in the employment of the Company has any authority to make, imply, or give any representation or warranty whatsoever in relation to the information contained in this presentation. None of the VHM Parties take any responsibility for any information in this presentation or any action taken by you on the basis of such information.

To the maximum extent permitted by law, the VHM Parties:

- exclude and disclaim all liability, including (without limitation) any liability or negligence, for any expenses, losses, damages or costs incurred either as a result of the information in this presentation being inaccurate or incomplete in any way for any reason, or otherwise arising in connection with this presentation; and
- make no representation or warranty, express or implied, as to the currency, accuracy, reliability or completeness of information in this presentation.

Compliance Statement

The information in this presentation that relates to the Goschen DFS refresh and the Mineral Resource and Ore Reserve estimates were reported in the ASX announcement dated 28 March 2023. The Cannie Mineral Resource estimate was reported in the ASX announcement dated 16 May 2023 and the Area 4 Ore Reserve estimate was reported in the ASX announcement dated 29 September 2023. The Nowie exploration results were reported in the ASX announcement dated 8 August 2023. The Company confirms that it is not aware of any new information or data that materially affects the matters previously reported and that all material assumptions and technical parameters underpinning the Mineral Resources and Ore Reserves estimates and forecast financial information derived from the production target in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Persons' findings are presented and have not been materially modified.

For personal use only

# VHM Limited (ASX:VHM) overview

VHM Limited

Australian owned rare earths and mineral sands mine and processing developer

## Corporate Snapshot[1]

### Market Cap

A$95.55M

### Share Price

A$0.49

### Issued Shares

203,101,902

### Share Options

8,504,334

### Top 20 Shareholders

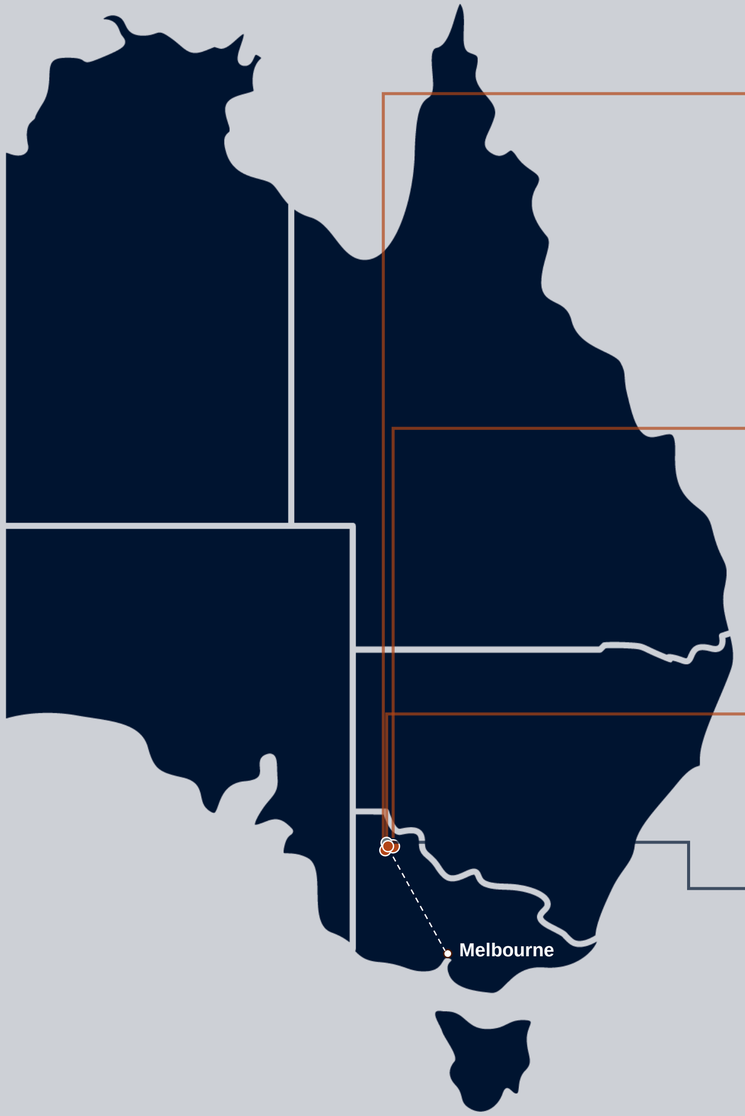
Top 20: 34%
Ellison WA: 8.9%

### Cash[2]

A$13.9 million

### Key Assets

Goschen Project
Orion Project
Cannie Project
Nowie Project




**GOSCHEN PROJECT[3]**

210Mt @ 3.8% THM, MRE 629Mt, 413Kt TREO, Zircon 21.4%, Rutile 9.7%, Mon 3.5%, Xen 0.6%

**CANNIE PROJECT[4]**

192Mt MRE @ 3.1% THM, 176Kt TREO, Zircon 24.5%, Rutile 15.5%, Mon 4.1%, Xen 0.8%

**AREA 4 ORION PROJECT[5]**

11.5Mt ORE @ 5.6% THM, Zircon 19.6%, Rutile 12.2%, Mon 3.0%, Xen 0.7%

**NOWIE PROJECT**

Notes:
(1): Market data at 27 October 2023 and sourced from the ASX
(2): Cash position reported 30 September 2023 to the ASX
(3): See Company ASX release dated 28 March 2023
(4): See Company ASX release dated 16 May 2023
(5): See Company ASX release dated 29 September 2023

For personal use only

VHM Limited

# VHM – Our value proposition

## Emerging Tier 1 integrated rare earth and minerals sands project with globally significant mineral assemblage

For personal use only

**Goschen's Strong Financials:** NPV A$1.525B I IRR 44% I Low Capex A$500M I FCF A$270M I Dual commodity stream[1]

**Life of Mine:** 20 years I Potential for a further 20 years based on Global Ore Reserves of 210.2Mt (subject to future approvals) I Final land acquisition agreement signed, securing ownership of 100% of the Goschen Project footprint.

**Advanced Approvals:** All environmental and social assessments complete I Adequacy assessment with Victorian government complete.

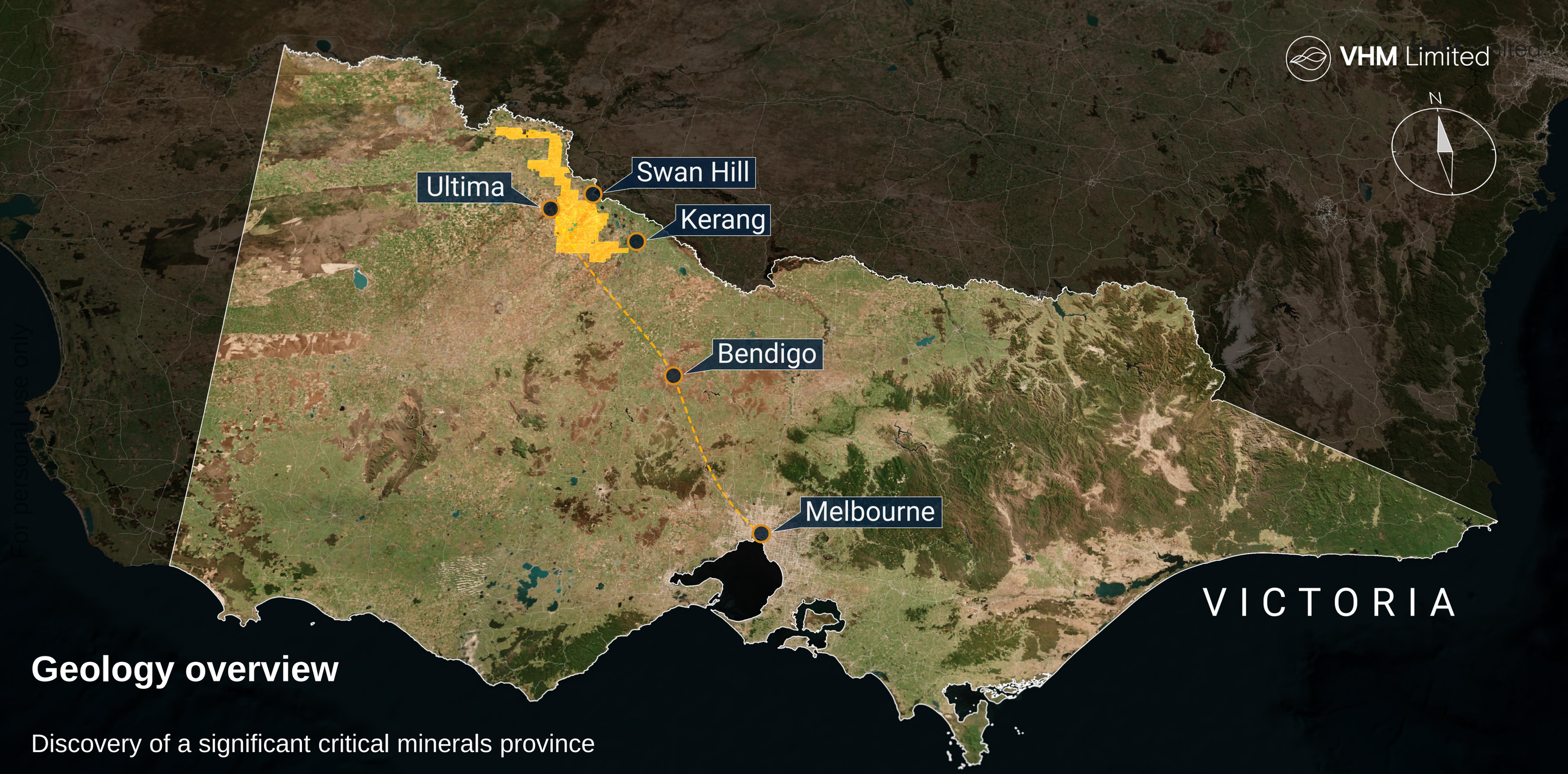
**Advanced Flowsheet:** Developed in partnership with Mineral Technologies and ANSTO and based on numerous metallurgical testwork programs.

**Critical Minerals:** 87% of Goschen's rare earth minerals basket value will be derived from dysprosium, neodymium, praseodymium, and terbium oxides, all are high demand 'critical' rare earths used in permanent magnets for EV traction motors[2].
Zircon and titanium are also listed on the Australian and US Critical Minerals List.

**First Offtake Agreement:** Indicating quality of commercial product from the Goschen Project.

**Discovery of New Major Critical Minerals Province in Victoria:** Stretching over 55 kilometres along the western flank of the Lake Boga Granite.

Notes:
(1): See Company ASX release 28 March 2023
(2): Rare Earth Market Outlook, Independent Analysis for VHM Limited (Q1 2023) Adamas Intelligence

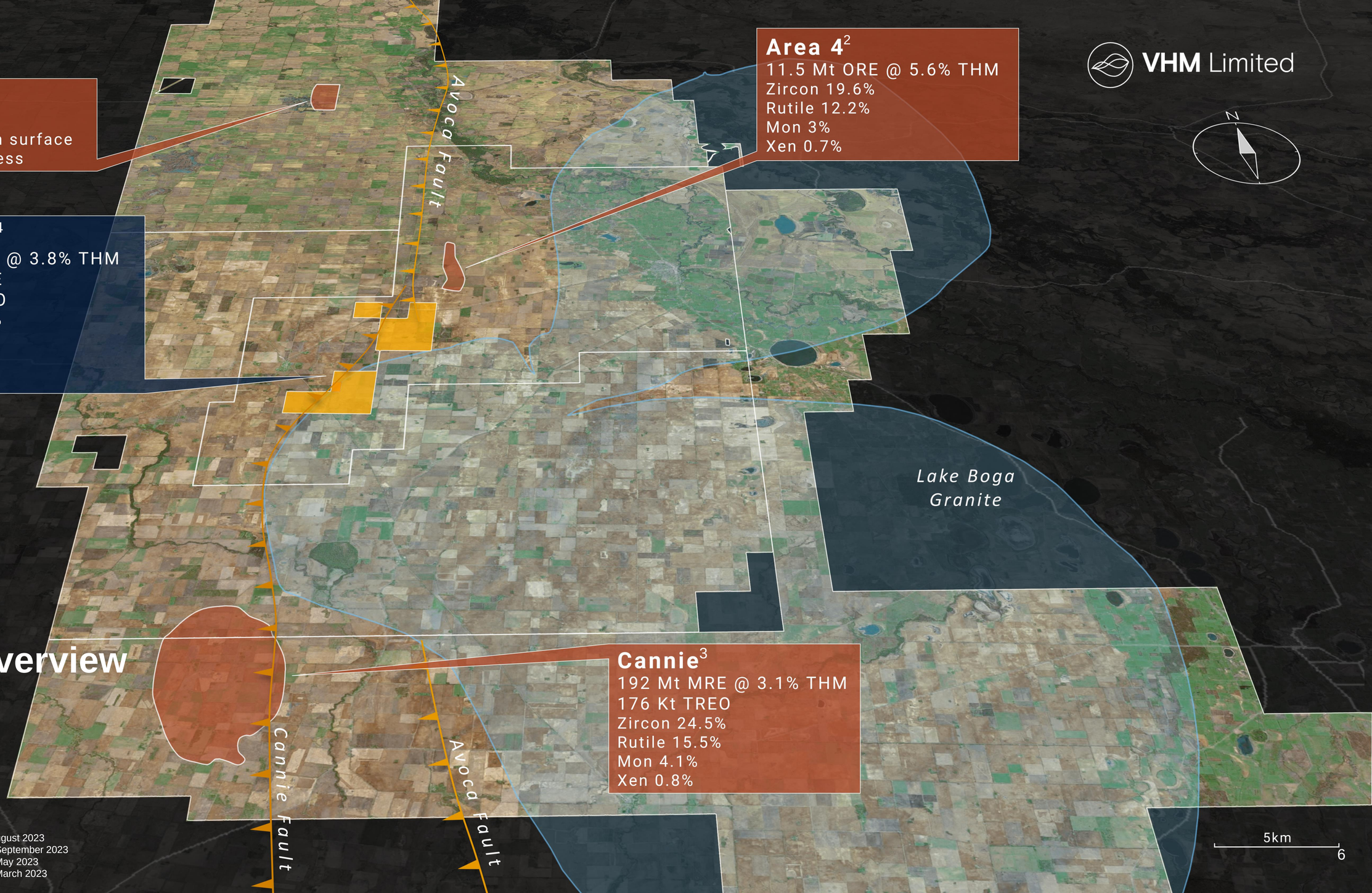



# Geology overview

Discovery of a significant critical minerals province

For personal use only

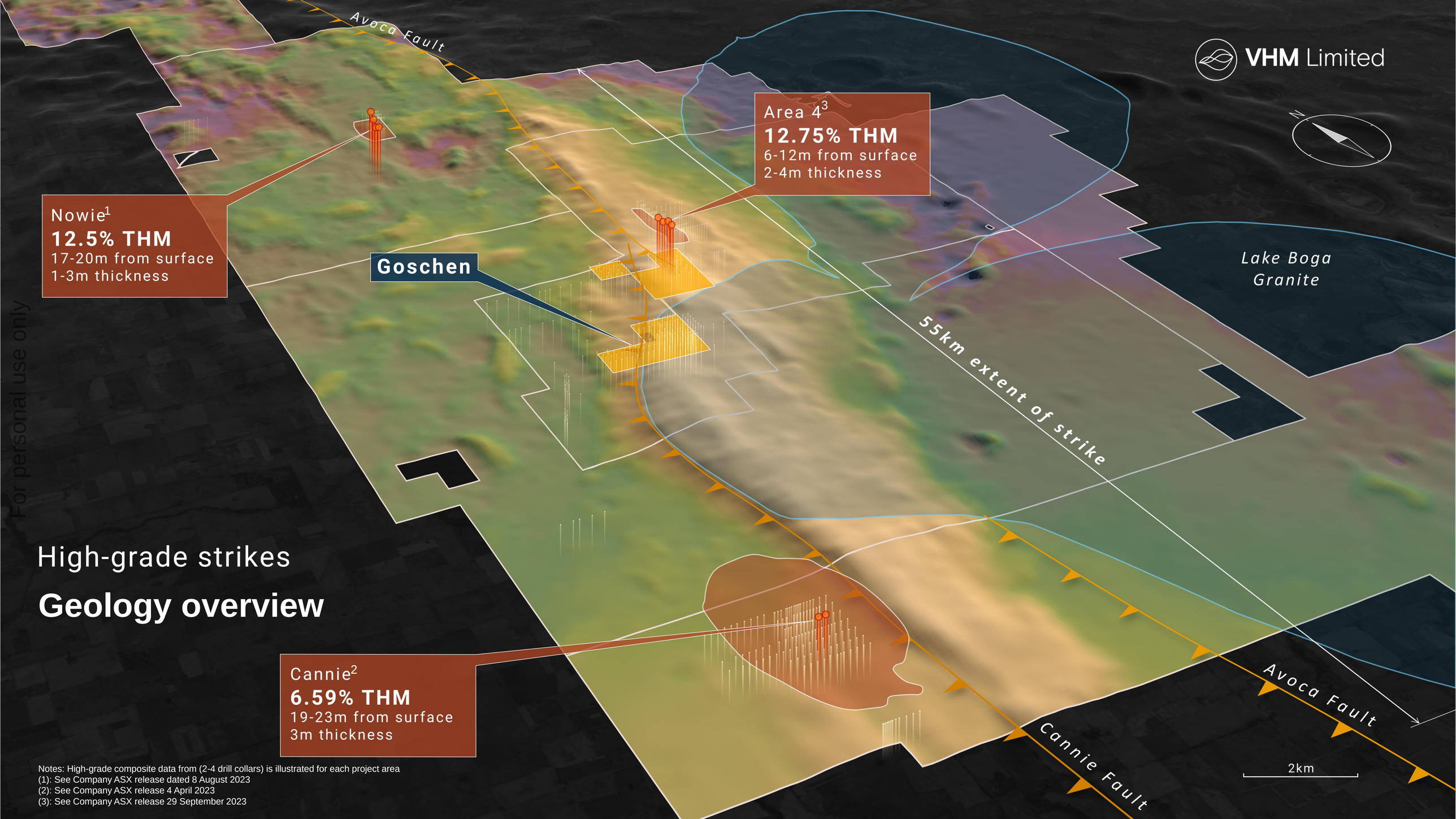
# Geology overview




VHM Limited

Notes:
(1): See Company ASX release dated 8 August 2023
(2): See Company ASX release dated 29 September 2023
(3): See Company ASX release dated 16 May 2023
(4): See Company ASX release dated 28 March 2023

For personal use only




# High-grade strikes

## Geology overview

Notes: High-grade composite data from (2-4 drill collars) is illustrated for each project area
(1): See Company ASX release dated 8 August 2023
(2): See Company ASX release 4 April 2023
(3): See Company ASX release 29 September 2023

For personal use only

# Global energy transition targets

## The catalyst driving demand for rare earth elements and commercialisation of Australia's critical minerals

For personal use only

**87% of Goschen basket value is derived from the critical rare earths crucial for electric vehicles and the green energy transition[1].**

| | | |
|---|---|---|
| 60 **Nd** Neodymium 144.242 — 46% | 59 **Pr** Praseodymium 140.90766 — 12% | 66 **Dy** Dysprosium 162.500 — 17% |
| 65 **Tb** Terbium 158.92535 — 12% | 40 **Zr** Zirconium 91.224 — HMC | 22 **Ti** Titanium 47.867 — HMC |

Notes: (1) Rare Earth Market Outlook, Independent Analysis for VHM Limited (Q1 2023) Adamas Intelligence

# Goschen Project permitting and approval pathway

We are here

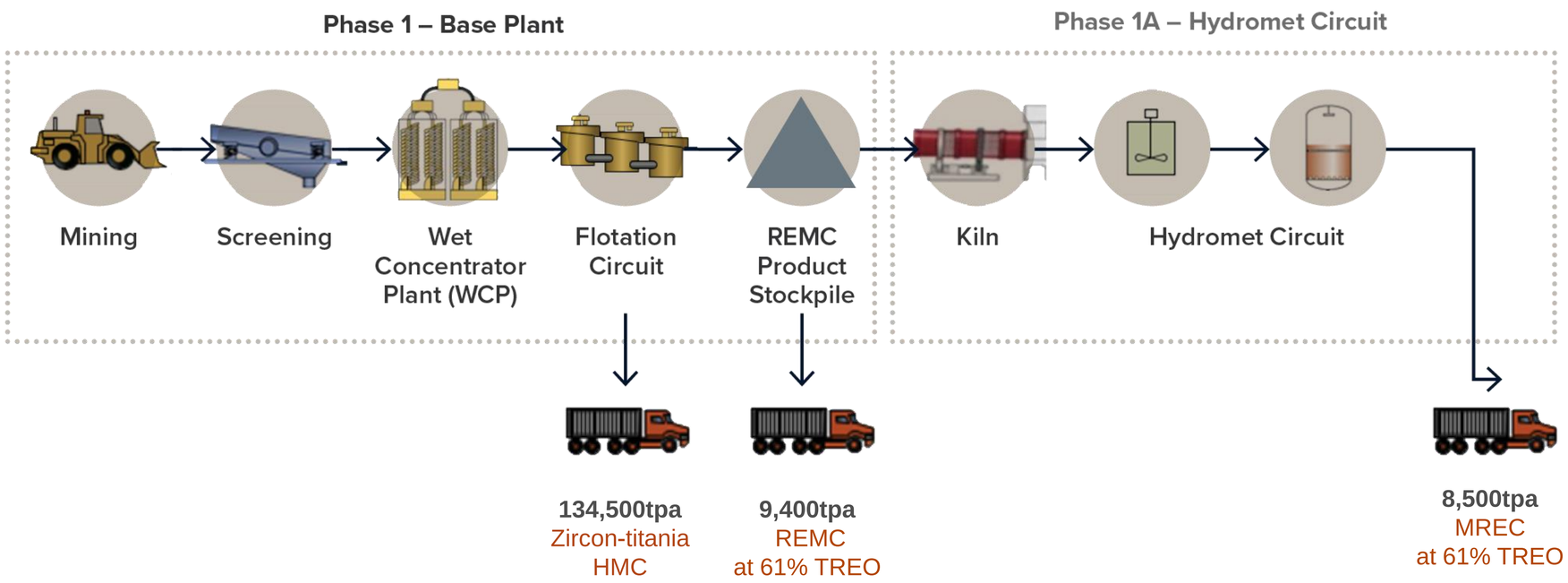
| Planning | | | Approvals & Construction | Operation | | Closure |
|---|---|---|---|---|---|---|
| 2018 – 2020 | 2021 – 2022 | 2023 | 2024 | 2024– 2026 | 2026 – 2044 | 2045 |
| ▪ Feasibility studies<br>▪ Preliminary environmental studies<br>▪ Stakeholder consultation<br>▪ Commence EES | ▪ Prepare EES design to inform EES assessment | ▪ Prepare EES<br>▪ EES public exhibition | ▪ EES Inquiry & Advisory Committee<br>▪ Ministerial decision on EES<br>▪ Obtain statutory approvals (including work plans)<br>▪ Commence construction | ▪ Production commences<br>▪ Phase 1 Processing REMC and HMC | ▪ Phase 1A Processing MREC and HMC | ▪ End of mining<br>▪ Rehabilitation and closure |

For personal use only

# Conventional low-cost processing

## Simple, low-risk, proven flowsheet: multiple commodity streams with demonstrated high recoveries

**High recoveries:** Continuous improvements achieved through multiple bulk sample drill programs and metallurgical testwork programs has delivered high recoveries of valuable rare earth, zircon and titanium products.




- **Low-cost truck shovel operation:** No drilling or blasting due to minerals being fully liberated in sand.
- **Logistics:** Ultima rail terminal (45km from the processing facility) will provide intermodal rail solution, to reach the shipping export ports. Products can be safely transported via rail and ship.

For personal use only

# Hydromet Pilot Plant results demonstrate potential

## Exceptional recoveries meet specifications required by Western strategic offtake partners

For personal use only

- Market leading recoveries achieved at ANSTO producing a high purity **mixed rare earth carbonate (MREC) product**
  - **>97%** critical light rare earths **Nd/Pr**
  - >**92%** and **94%** for critical heavy rare earths **Dy** and **Tb**, respectively
- Measurements of the final content of uranium or thorium were considered exceptionally low.

*Goschen MREC product contains less than 3% total impurities*

*Above: Goschen's rare earth product undergoing bench scale sulphation kiln testwork at ANSTO.*

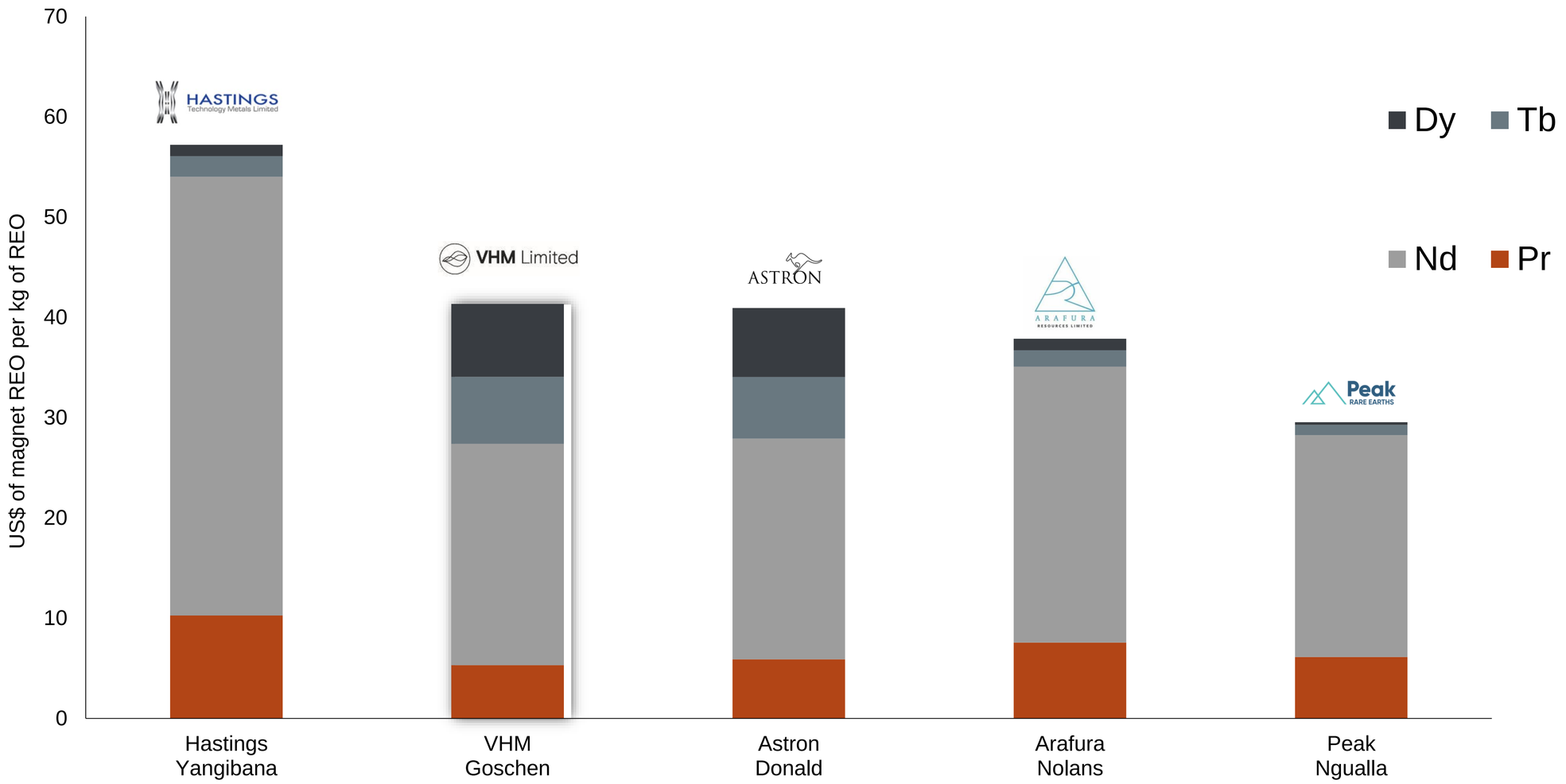
*Left: Final MREC product from the Hydromet Pilot program.*

Note: (1) See Company ASX release 6 June 2023

Acronyms : Australian Nuclear Science and Technology Organisation (ANSTO), Nd, – Neodymium, Pr – Praseodymium, Dy – Dysprosium, Tb – Terbium

# Magnet rare earth oxide basket value peer comparison

## Attractive proportion of valuable rare earth elements – heavy and light (US$/kg)




Note: See peer comparison table for source data in Appendix A

For personal use only

# Upcoming milestones

For personal use only

***Advance permitting*** *with the Public Exhibition of the Goschen Project*

***Finalise offtake*** *with strategic partners*

***Secure arrangements*** *for a Final Investment Decision*

***Mineral Resource exploration upside*** *remains to be unlocked*

#M74
VHM's EXHIBITION BOOTH

10 years of IMARC INTERNATIONAL MINING AND RESOURCES CONFERENCE+EXPO

Australian owned rare earths and mineral sands developer

For personal use only

# APPENDIX A

## Peer Comparison Data

# Project comparison table data for rare earth basket value

For personal use only

| | | | Magnet Rare Earth Oxide % Distribution of Rare Earth Product | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Name** | **Project** | **Product** | **Neodymium (Nd)** | **Praseodymium (Pr)** | **Dysprosium (Dy)** | **Terbium (Tb)** | **Stage of Development** | **Location** | **Market Cap*** |
| Arafura[1] | Nolans | Oxide | 20.5 | 5.9 | 0.3 | 0.1 | DFS | N.T. | $443.80M |
| Hastings[2] | Yangibana | Concentrate & Carbonate | 32.6 | 8.0 | 0.3 | 0.1 | DFS | W.A. | $102.19M |
| Peak[3] | Ngualla | Concentrate | 16.5 | 4.8 | 0.1 | 0.1 | BFS | Tanzania | $107.17M |
| VHM[4] | Goschen | Concentrate & Carbonate | 16.5 | 4.1 | 1.9 | 0.3 | DFS | VIC | $95.55M |
| Astron[5] | Donald | Concentrate | 16.4 | 4.6 | 1.8 | 0.3 | DFS | VIC | $78.56M |

Source data:
1. Arafura (ARU:ASX) data sourced from ASX release “Nolans Project Definitive Feasibility Study” published on 7 February 2019.
2. Hastings (HAS:ASX) data sourced from ASX release “Yangibana Project NPV increases 84% to A$1Billion (post tax)” published on 21 February 2022.
3. Peak (PEK:ASX) data sourced from ASX release “2023 Annual Report” published on 26 October 2023.
4. VHM (VHM:ASX) data sourced from ASX release “ANSTO Testwork Demonstrates High Extraction of Rare Earth Minerals” published on 17 January 2023.
5. Astron (ATR:ASX) data sourced from ASX release “Investor Presentation – Donald Project DFS” published on 17 May 2023.

*Market capital data at 27 October 2023 and sourced from the ASX

*All data is subject to change without notice*

For personal use only

# APPENDIX B

## VHM Board and Management

# Board and management team

For personal use only

**Don Runge**
BEng Mining, MAusIMM
**Non-Executive Chairman**

40+ years' operational and project experience including industrial minerals where he managed the development of the Uley Graphite Project in South Australia.
Mr Runge has held executive management positions for Newcrest Mining Limited, including Manager for Ridgeway Underground Project Development and General Manager of Cracow Gold Mine.
Managed the team advising Philix Mining Corporation on development of its Silangan Au/Cu Project.

**Ron Douglas**
BE, FAIM, MAusIMM, MAICD
**Executive Director and Interim CEO**

Extensive executive and operations delivery experience gained over a 40-year career with publicly listed global mining, energy, and manufacturing companies.
Mr Douglas expertise is in executive operations delivery positions with strengths in major capital program execution, and running corporate profit/loss centres, involving strategic program directorship, safety leadership and corporate transaction negotiation.

**Other Directorships:**
- Director of Talbot Investments

**Ian Smith**
BEng Mining (Honours), BFinAdmin, FAusIMM, FIEAust
**Non-Executive Director**

40+ years executive and board experience with a career spanning domestic and international mining and mining services companies.
Mr Smith's technical, operational and commercial disciplines have been attributes of his successful delivery of major capital projects and business growth for a number of listed companies and has held managing director and chief executive officer positions for Orica and Newcrest Mining.

**Other Directorships:**
- Chair of Rex Minerals Limited
- NED of Kestrel Coal Limited
- NED of Raven Gold Limited

**Maree Arnason**
BA, FAICD
**Non-Executive Director**

35 years' experience across the resources, energy and manufacturing sectors and is highly experienced in the areas of governance, strategy, sustainability, risk, corporate affairs, stakeholder relations, transformations, divestments and integrations. Her broad commodity experience includes iron ore, gold, copper, timber, coal, mineral sands, and natural gas.

**Other Directorships:**
- NED of Gold Road Resources Limited
- NED of Ardea Resources Limited
- Chair of Juniper Aged Care
- ASIC Corporate Governance Consultative Panel
- Co-founder and Director of Energy Access Services

**Graham Howard**
BAppSc (Geology), FAusIMM
**Non-Executive Director**

35+ years' operations and project experience with significant corporate experience as Chief Executive Officer of unlisted public companies and an ASX-listed gold company.
Mr Howard managed the Telfer Gold Mine (Newcrest) mineral resource inventory expansion, held significant senior management functions including Boddington Gold Mine (Newcrest) and Silangan Au/Cu Project.

**Other Directorships:**
- NED of VP Minerals Limited

**Michael Sheridan** BEc, LLB, LLM, GradDipAppFinInv
**Chief Financial Officer**

30+ years' operations and financial experience as executive, having worked at senior management levels in publicly listed companies, predominantly in the international resources sector (mining and oil and gas), as well as telecommunications and corporate advisory sectors.

**Ms Carly O'Regan** MBA, GDipCom
**Executive General Manager, Strategy and Investor Relations**

Significant business and operational experience in a diverse range of industries, including finance, commercial, mining, oil and gas, both in Australia and internationally including Barclays Global Investors (iShares), Chevron Australia Gorgon and Wheatstone Projects, KPMG, Newcrest, and Shell Australia.

**Mr Bernie Hyde**
**Executive General Manager, Operations Readiness**

25+ years supervisory and management experience in operations and maintenance roles in the mining industry.
Mr Hyde is the current Chair of the MCA (Vic) Safety and Health Working Group.

For personal use only

# APPENDIX C
## JORC Tables

# Company Ore Reserves

## 210.2Mt Ore Reserve

| Area | Classification | Ore | In-situ THM | THM | THM Assemblage[1] | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Zircon | Rutile | Leucoxene | Ilmenite | Monazite | Xenotime |
| | | (Mt) | (Mt) | (%) | (%) | (%) | (%) | (%) | (%) | (%) |
| Area 1 | Proved | 24.5 | 1.3 | 5.4 | 29.9 | 10.8 | 9.0 | 24.7 | 4.3 | 0.8 |
| Area 1 | Probable | 14.6 | 0.5 | 3.2 | 29.2 | 11.7 | 9.2 | 25.5 | 4.5 | 0.9 |
| Area 3 | Probable | 159.6 | 5.6 | 3.5 | 20.3 | 9.4 | 8.1 | 25.8 | 3.4 | 0.6 |
| Area 4 | Probable | 11.5 | 0.6 | 5.6 | 19.6 | 12.2 | 10.1 | 24.6 | 3.0 | 0.7 |
| **Total** | **Proved** | **24.5** | **1.3** | **5.4** | **29.9** | **10.8** | **9.0** | **24.7** | **4.3** | **0.8** |
| | **Probable** | **185.7** | **6.7** | **3.6** | **20.9** | **9.8** | **8.4** | **25.7** | **3.4** | **0.6** |
| **Grand Total** | | **210.2** | **8.0** | **3.8** | **22.4** | **10.0** | **8.5** | **25.5** | **3.6** | **0.7** |

| Area | Classification | Rare Earth Oxides[1] | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $CeO_2$ | $Dy_2O_3$ | $Er_2O_3$ | $Eu_2O_3$ | $Gd_2O_3$ | $La_2O_3$ | $Nd_2O_3$ | $Pr_6O_{11}$ | $Sm_2O_3$ | $Tb_4O_7$ | $Tm_2O_3$ | $Y_2O_3$ | $Yb_2O_3$ | TREO |
| | | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) |
| Area 1 | 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 | 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 | 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 |
| Area 4 | Probable | 0.655 | 0.049 | 0.035 | 0.002 | 0.046 | 0.310 | 0.277 | 0.073 | 0.050 | 0.008 | 0.006 | 0.335 | 0.037 | 1.884 |
| **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** | **0.802** | **0.057** | **0.039** | **0.003** | **0.055** | **0.378** | **0.338** | **0.092** | **0.064** | **0.009** | **0.006** | **0.386** | **0.041** | **2.287** |
| **Grand Total** | | **0.828** | **0.059** | **0.041** | **0.003** | **0.056** | **0.395** | **0.345** | **0.095** | **0.065** | **0.010** | **0.006** | **0.400** | **0.042** | **2.359** |

Note: (1) Any discrepancies in totals are a function of rounding. THM Assemblage and Rare Earth Oxides are reported as a percentage of in-situ THM content.
(2) The Ore Reserve was prepared and first disclosed under the JORC Code (2012) in the ASX release dated 29 September 2023.

For personal use only

For personal use only

VHM Limited

# Company Mineral Resources

## 820.4Mt Mineral Resource estimate

| Area | Mineral Resource Category | Material | In Situ THM | Bulk Density | Total Heavy Mineral (THM) | Slimes | Oversize material >2mm | THM Assemblage[3] | | | | | | Rare Earth Oxides | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Zircon | Rutile | Leucoxene | Ilmenite | Monazite | Xenotime | $La_2O_3$ | $CeO_2$ | $Pr_6O_{11}$ | $Nd_2O_3$ | $Sm_2O_3$ | $Eu_2O_3$ | $Gd_2O_3$ | $Tb_4O_7$ | $Dy_2O_3$ | $Ho_2O_3$ | $Er_2O_3$ | $Tm_2O_3$ | $Yb_2O_3$ | $Lu_2O_3$ | $Y_2O_3$ | TREO + $Y_2O_3$ |
| | | (Mt) | (Mt) | (gcm3) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) |
| 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 | 0.48 | 0.96 | 0.11 | 0.38 | 0.07 | 0.004 | 0.06 | 0.01 | 0.07 | | 0.05 | 0.01 | 0.05 | | 0.47 | 2.72 |
| | Indicated | 62.2 | 1.4 | 1.72 | 2.31 | 18 | 2 | 26.6 | 11.5 | 9.2 | 25.0 | 4.6 | 0.9 | 0.53 | 1.11 | 0.12 | 0.46 | 0.08 | 0.004 | 0.07 | 0.02 | 0.07 | | 0.05 | 0.01 | 0.05 | | 0.48 | 3.04 |
| | **Total[1]** | **92.9** | **3.2** | **1.73** | **3.44** | **17** | **3** | **27.7** | **11.2** | **9.1** | **24.9** | **4.5** | **0.8** | **0.51** | **1.06** | **0.12** | **0.43** | **0.08** | **0.004** | **0.07** | **0.02** | **0.07** | | **0.05** | **0.01** | **0.05** | | **0.48** | **2.94** |
| 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 | 0.31 | 0.66 | 0.07 | 0.28 | 0.05 | 0.003 | 0.05 | 0.01 | 0.06 | | 0.04 | 0.01 | 0.04 | | 0.39 | 1.97 |
| | **Total[1]** | **26.0** | **0.7** | **1.72** | **2.80** | **20** | **8** | **22.0** | **16.0** | **12.0** | **25.0** | **3.0** | **1.0** | **0.31** | **0.66** | **0.07** | **0.28** | **0.05** | **0.003** | **0.05** | **0.01** | **0.06** | | **0.04** | **0.01** | **0.04** | | **0.39** | **1.97** |
| 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 | 0.36 | 0.78 | 0.09 | 0.33 | 0.06 | 0.003 | 0.05 | 0.01 | 0.05 | | 0.04 | 0.01 | 0.04 | | 0.37 | 2.19 |
| | Inferred | 287.7 | 6.7 | 1.72 | 2.32 | 18 | 3 | 17.2 | 8.7 | 7.5 | 22.7 | 2.9 | 0.5 | 0.35 | 0.76 | 0.08 | 0.31 | 0.06 | 0.003 | 0.05 | 0.01 | 0.05 | | 0.03 | 0.01 | 0.03 | | 0.36 | 2.10 |
| | **Total[1]** | **491.8** | **13.6** | **1.73** | **2.76** | **18** | **3** | **18.2** | **8.9** | **7.7** | **23.9** | **3.0** | **0.6** | **0.36** | **0.77** | **0.09** | **0.32** | **0.06** | **0.003** | **0.05** | **0.01** | **0.05** | | **0.03** | **0.01** | **0.04** | | **0.36** | **2.14** |
| 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 | 0.32 | 0.67 | 0.07 | 0.28 | 0.05 | 0.002 | 0.05 | 0.01 | 0.05 | | 0.03 | 0.01 | 0.04 | | 0.33 | 1.90 |
| | **Total[1]** | **18.0** | **0.8** | **1.74** | **4.60** | **20** | **5** | **19.0** | **11.0** | **10.0** | **24.0** | **3.0** | **1.0** | **0.32** | **0.67** | **0.07** | **0.28** | **0.05** | **0.002** | **0.05** | **0.01** | **0.05** | | **0.03** | **0.01** | **0.04** | | **0.33** | **1.90** |
| Cannie | Inferred | 191.7 | 5.9 | 1.70 | 3.1 | 19 | 6 | 24.5 | 15.5 | 24.3 | 2.1 | 4.1 | 0.8 | 0.49 | 1.06 | 0.12 | 0.45 | 0.08 | 0.004 | 0.07 | 0.01 | 0.07 | 0.02 | 0.05 | 0.01 | 0.05 | 0.01 | 0.49 | 3.00 |
| | **Total[2]** | **191.7** | **5.9** | **1.70** | **3.1** | **19** | **6** | **24.5** | **15.5** | **24.3** | **2.1** | **4.1** | **0.8** | **0.49** | **1.06** | **0.12** | **0.45** | **0.08** | **0.004** | **0.07** | **0.01** | **0.07** | **0.02** | **0.05** | **0.01** | **0.05** | **0.01** | **0.49** | **3.00** |
| **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 | 0.48 | 0.96 | 0.11 | 0.38 | 0.07 | 0.004 | 0.06 | 0.01 | 0.07 | | 0.05 | 0.01 | 0.05 | | 0.47 | 2.72 |
| | **Indicated** | 310.3 | 9.8 | 1.73 | 3.19 | 19 | 3 | 20.5 | 10.1 | 8.6 | 24.9 | 3.4 | 0.7 | 0.38 | 0.81 | 0.09 | 0.34 | 0.06 | 0.003 | 0.05 | 0.01 | 0.05 | | 0.04 | 0.01 | 0.04 | | 0.38 | 2.27 |
| | **Inferred** | 479.4 | 12.5 | 1.71 | 2.61 | 18 | 4 | 20.6 | 11.8 | 15.4 | 13.1 | 3.4 | 0.7 | 0.42 | 0.90 | 0.10 | 0.37 | 0.07 | 0.003 | 0.06 | 0.01 | 0.06 | 0.008 | 0.04 | 0.01 | 0.04 | 0.004 | 0.42 | 2.52 |
| | **TOTAL** | **820.4** | **24.1** | **1.72** | **2.95** | **18** | **4** | **21.2** | **11.0** | **12.1** | **18.8** | **3.5** | **0.7** | **0.41** | **0.87** | **0.10** | **0.36** | **0.07** | **0.003** | **0.06** | **0.01** | **0.06** | **0.004** | **0.04** | **0.01** | **0.04** | **0.002** | **0.41** | **2.43** |

| | Material | In-Situ TREO + $Y_2O_3$ Grade[4] | In-Situ TREO + $Y_2O_3$ |
|---|---|---|---|
| | (t) | (%) | (t) |
| **Area 1, Area 2 West, Area 3, Area 4, Cannie** | 820,364,884 | 0.07 | 588,355 |

Notes
1. Any discrepancies in totals are a function of rounding
2. Mineral resources reported at a cut-off grade of 1.0% THM
3. Mineral resources reported at a cut-off grade of 1.75% THM
4. Mineral assemblage, via QEMScan Particle Analysis, is reported as a percentage of in-situ THM content
5. In-situ TREO grade is calculated by THM grade (2.95%) multiplied by TREO grade (2.43%)

**The Mineral Resource estimate was prepared and first disclosed in the ASX release dated 16 May 2023.*

VHM Limited

# vhmltd.com.au

Level 11, 330 Collins Street, Victoria 3000

---

**For further information contact:**

Ron Douglas
Interim Chief Executive Officer
Ron.Douglas@vhmltd.com.au

Carly O'Regan
Executive General Manager
carly.oregan@vhmltd.com.au

For personal use only