

6 June 2023

Pilot Hydromet Plant Delivers Exceptional Recoveries of Mixed Rare Earth Carbonate

Key Highlights:

- Market leading recoveries are expected in the commercial plant based on ANSTO's Pilot Hydromet Plant converting the REMC feed to a high purity MREC Product
 - 97% for critical light rare earths Nd/Pr
 - 92% and 94% for critical heavy rare earths Dy and Tb, respectively
- The MREC product contained exceptionally low uranium and thorium content.
- Samples of the MREC product meets criteria for potential Domestic, European, North American, and Asian offtake partners for specification testing to advance discussions regarding commercial offtake.

VHM Limited (“VHM” or the “Company”) is pleased to update the market on the successful results from the Pilot Hydromet Plant and the production of high quality Mixed Rare Earth Carbonate (MREC) for the Goschen Rare Earths and Mineral Sands Project (“Goschen” or the “Project”).

This pilot-scale test confirmed that the Goschen Rare Earth Mineral Concentrate (REMC) is highly amenable to conventional Sulphate Bake processing to produce a MREC product. Recoveries of 97% of critical light rare earths Neodymium (Nd) and Praseodymium (Pd), and for critical heavy rare earths, 92% for Dysprosium (Dy) and 94% for Terbium (Tb) from the REMC feed are achievable using the processing pathway that has been developed at the Australian Nuclear Science and Technology Organisation (“ANSTO”), test facility.

VHM Managing Director, Graham Howard commented:

“The performance of the Pilot Hydromet Plant is outstanding. I’m incredibly grateful to the team at ANSTO who have worked closely with our VHM processing team and advising consultants to reach this milestone. These recoveries are world leading and meet required specifications of Western strategic offtake partners. The success of this plant opens opportunities for VHM to partner with other industry players.”

“It should be noted that a large part of this processing success is due to the unique and favourable mineralogy within the Goschen ore body. In addition, VHM can now provide valuable intellectual expertise to strategic partners who will benefit from knowledge sharing and the proof of concept of this Pilot Hydromet Plant.”

Designed and operated by leading rare earth research and testwork facility ANSTO, the Pilot Hydromet Plant used a conventional Sulphate Bake path followed by Water Leach and Purification stages prior to precipitating the MREC product (Figure 1). The engineering and fully integrated operation was designed to emulate the reagent consumptions and recoveries expected from a commercial operation.

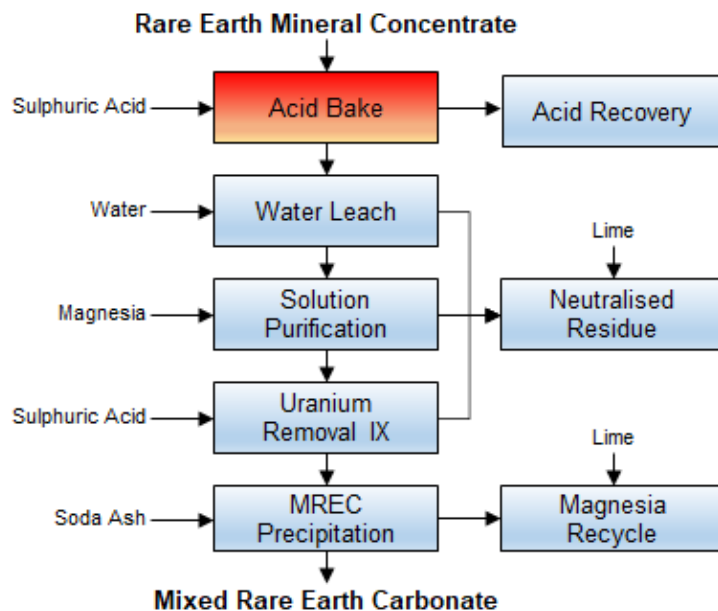


Figure 1: Process flowsheet for the Pilot Hydromet Plant to convert REMC to MREC

Overall, the following objectives were achieved or exceeded:

- Validated the flowsheet developed during the pre-pilot bench scale testwork (see ASX announcement 17 January 2023) at a larger and continuous scale.
- Confirmed previous testwork that exceptional high extractions to water leach (99% for Nd) can be achieved with overall recovery rates of 97% Nd/Pr, 92% Dy and 94% Tb) to final MREC can be expected from commercial processing of the Goschen orebody.
- The unique and favourable mineralogy of the Goschen ore body is amenable to the production of a high quality MREC product.

- Provision of a high-quality data set required to move through to the Front-End Engineering Design (“FEED”) Study.

Operating continuously for 120 hours, over 100 kg of MREC filter cake was produced from the integrated pilot plant. The final MREC product produced from the Hydromet process is shown in Figure 2. Product review samples will be provided to potential offtake partners or as part of strategic partnership discussions and the successful trial of the Pilot Plant is another important step along the path towards Financial Investment Decision.

Impurities in the final MREC product have been declared low, at 2.5% – 3.0% total impurities. This specification will offer advantages to downstream separation refineries. In addition, measurements of the final content of uranium or thorium were exceptionally low.

The data from this trial will be used to inform the FEED design work for the commercial scale Hydromet Plant. As previously announced, the Company will assess opportunities to accelerate the schedule of development as and when reasonable proposals become available.



Figure 2: Final Mixed Rare Earth Carbonate (MREC) product produced from Pilot Hydromet Plant

Next steps

- Process data will inform the FEED work for the commercial Hydromet Circuit.
- Provide data to key vendors to lock in procurement scheduled for long lead items.
- Final MREC product samples will be provided to potential offtake partners for evaluation.
- Goschen's first production of REMC, zircon and titania products remain on schedule for 2025 with production of MREC product to follow.

Australian Nuclear Science and Technology Organisation (ANSTO)

ANSTO's Minerals business unit based at Lucas Heights in NSW has extensive experience in rare earth process development and piloting, all the way through to separated final products.

ANSTO has a 40-year track record of providing practical solutions and innovative technology to the mining and minerals processing industries. Their work has included all facets of rare earth process flowsheets, including acid leaching, sulfation baking, caustic conversion, alkaline roasting, selective precipitation, impurity removal, solvent extraction, ion exchange, process water treatment (softening) and chemical concentrate production.

ENDS

This announcement has been approved by the Board of VHM.

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Competent Person's Statements

The information in this release that relates to metallurgical testwork is based on information compiled and / or reviewed by Mr Gavin Beer who is a Member of The Australasian Institute of Mining and Metallurgy (AusIMM) and a Chartered Professional. Mr Beer is a consulting metallurgist with sufficient experience relevant to the activity which he is undertaking to be recognised as competent to compile and report such information. Mr Beer consents to the inclusion in the report of the matters based on his information in the form and context in which it appears. Mr Beer does not hold securities in VHM.

The information in this release that relates to Exploration Results, is based on information and supporting documentation compiled by Mr Graham Howard, who is an employee of VHM Limited. Mr Howard is a Competent Person who is a Fellow of Australasian Institute of Mining and Metallurgy and who consents to the inclusion in the report of the matters based on his information in the form and context in which it appears. Graham Howard has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012).

Forward Looking Statement

This document may contain certain forward-looking statements concerning VHM Limited. Forward-looking statements are not statements of historical fact and actual events, and results may differ materially from those described in the forward-looking statements as a result of a variety of risks, uncertainties, and other factors. Forward-looking statements are inherently subject to business, economic, competitive, political, and social uncertainties, and contingencies. Many factors could cause the Company's actual results to differ materially from those expressed or implied in any forward-looking information provided by the Company, or on behalf of, the Company. Such factors include, among other things, risks relating to additional funding requirements, metal prices, exploration, development and operating risks, competition, production risks, regulatory restrictions, including environmental regulation and liability and potential title disputes.

Forward-looking statements in this document are based on the company's beliefs, opinions, and estimates of VHM Limited as of the dates the forward-looking statements are made, and no obligation is assumed to update forward looking statements if these beliefs, opinions, and estimates should change or to reflect other future developments.

JORC Code, 2012 Edition – Table 1

Area 1 and Area 3 Extended- JORC Table 1 (JORC Code, 2012 Edition)

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code Explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> • <i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</i> • <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> • <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> • <i>In cases where ‘industry standard’ work has been done this would be relatively simple (e.g. ‘reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay’). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g., submarine nodules) may warrant disclosure of detailed information.</i> 	<ul style="list-style-type: none"> • Sampling activities conducted in Area 1 and Area 3 Extended included Sonic drilling and Diamond Drilling. • Metallurgical bulk sample was completed on Sonic Drilling. • Geotechnical logging was completed on selective holes in field on both Sonic Drilling and Diamond Drilling, geotechnical samples of target material was packaged to preserve insitu attributes to enable testing of material properties in specialist external laboratories. • Sonic drilling was used to obtain samples at one metre intervals. The following information covers the sampling process: <ul style="list-style-type: none"> • The full one-metre drill samples were collected in plastic sheaths and placed in trays suitable for storing up to three meter intervals. • Metallurgical bulk sample was processed at the Company’s Kerang facility. The Company’s Manager Geology, Principal Mining Engineer and Principal Metallurgist defined composition of metallurgical samples. Metallurgical samples were compiled from multiple holes representative of likely ore feed characteristics of future process plant operations as defined by the Ore Reserve. • Metallurgical samples were taken that were representative of ore zones defined by the Ore Reserve (previously described in the Prospectus) as well as low grade sub ore and waste material. Samples were designed to test feed parameters based on the metallurgical flow sheet prepared for the Goschen Definitive Feasibility Study. • Sample logging software was used at the drill rig and at the Kerang Facility for recording sample intervals and descriptions. • Each metallurgical sample were compiled in bulka bags, with each bulka bag representing ore zones, low grade sub ore and waste material. The metallurgical samples were weighed, bulka bags were sealed and dispatched to the Mineral Technologies metallurgical testing facility for analysis.

Criteria	JORC Code Explanation	Commentary
		<ul style="list-style-type: none"> Sub samples were collected for moisture and bulk density testwork. Samples were selected on geological intervals based on logging data from each sonic hole and geological and assay data from existing Mineral Resource estimate (reported in the Prospectus).
Drilling techniques	<ul style="list-style-type: none"> <i>Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).</i> 	<ul style="list-style-type: none"> Noma Drilling and Star Drilling were the contractors used for the 2022 sonic drilling and sampling program upon which the Goschen 2022 metallurgical samples was based. A total of 306 sonic and diamond holes were drilled totalling 8,854.4m informing the metallurgical testwork and geotechnical analysis for Area 1 and Area 3 Extended. Of the 306 holes drilled, 288 sonic holes were drilled for metallurgical bulk sampling, totalling 8310.4m. A breakdown by location for the 288 sonic holes are as follows: <ul style="list-style-type: none"> 223 sonic drill holes were completed in Area 1 65 holes in Area 3 Extended The sonic drill collar spacing provided representative samples across Area 1 and Area 3 Ore Reserve. Of the 306 holes drilled, 18 geotechnical holes were drilled totalling 544m. A breakdown by location and drill type for the 18 geotechnical holes are as follows: <ul style="list-style-type: none"> 10 sonic holes totalling 238m were drilling in Area 1 for geotechnical analysis 1 diamond drill hole totalling 28m was drilled in Area 1 for geotechnical analysis. 7 diamond drill holes totalling 278m were drilled in Area 3 Extended for geotechnical analysis. Diamond drilling was completed using a PQ3 drill rod resulting in a core diameter of 83mm. Drill hole depths averaged 30m deep with a maximum of 40m deep. The Company trialled 8 holes which used a combination of arguer precollar with combined with a tail based on sonic drill method that targeted metallurgical sample horizons. Delays in productivity resulted in conversion for the remainder of the program to 100% sonic drilling method. Sonic drilling used outer diameter which ranged from 152 mm (6 inch) – 200mm (8 inch) in diameter. Drill hole depths averaged 30m deep with a maximum of 35m deep. One primary hole and up to three

Criteria	JORC Code Explanation	Commentary
		<p>subsidiary holes were completed at each drill location centroid in Area 1.</p> <ul style="list-style-type: none"> Sonic drilling is a standard technique for collection of sample from sand hosted deposits. Sonic drilling uses high frequency resonant energy generated in the Sonic head. This is used to advance the core barrel and core casing to sample the sand hosted heavy mineral deposit. The sonic rigs were mounted on a prime mover or tracks and a medium or heavy rigid truck is used for support. The Sonic drill rigs use water for the drilling process (no drilling muds are required). Any excess water utilised during drilling was captured within above ground water tanks. Whole sonic core was collected for metallurgical analysis.
Drill sample recovery	<ul style="list-style-type: none"> <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> <i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i> 	<ul style="list-style-type: none"> 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 0m to 1m sample interval owing to sample and air loss into the surrounding loose soil. The initial 0m to 1m sample interval is drilled very slowly in order to achieve optimum sample recovery. For sonic drilling, each entire one-metre sample is collected at the drill rig and enclosed within a plastic sheath. Each interval is then placed in a storage tray for dispatch to the initial split preparation facility. At the end of each drill rod, the drill string is cleaned to remove any clay and silt potentially built up in the sample tubes. For diamond drilling, core sample recovery was captured in geotechnical logging documented by a geotechnical consultant, Pitt&Sherry. Minor core loss was observed for both sonic and diamond drilling.
Logging	<ul style="list-style-type: none"> <i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i> <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i> 	<ul style="list-style-type: none"> Each sonic and diamond 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 content. Primary and subsidiary drill holes were logged in full. All sonic drill holes were logged using hand held gamma equipment. Intervals were recorded every 100mm down hole. 65 Area 3 Extended sonic holes

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	<ul style="list-style-type: none"> <i>The total length and percentage of the relevant intersections logged.</i> 	<ul style="list-style-type: none"> had additional logging using hand held XRF analysis equipment. Logging is undertaken with reference to a Drilling Guideline with codes prescribed and guidance on description to ensure consistent and systematic data collection.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> <i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i> <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> <i>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</i> <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<ul style="list-style-type: none"> Sub samples were collected for bulk sample and moisture analysis. The water table depth, if intersected, was noted in all geological logs. 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 principal metallurgist.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> <i>For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i> <i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of</i> 	<ul style="list-style-type: none"> The 2022 bulk sample program undertook the following sample logging process; The wet panning at the drill site or at Kerang site provides an estimate of the THM% which is sufficient for the purpose of determining approximate concentrations of THM in the first instance. Sonic sample: The individual one-metre sonic samples were photographed, and hand held gamma counts recorded on 0.1m intervals. These were compared with logging data and original aircore data that informed Mineral Resource estimation in the area that bulk samples were extracted. Primary sonic holes twinned the original aircore holes, providing reconciliation of the geology interpretation against aircore hole data that formed the basis of geology interpretation of the Mineral Resource.

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	<p><i>accuracy (i.e. lack of bias) and precision have been established.</i></p>	<p>Subsidiary sonic holes drilled at centroid provided further reconciliation data on the variability of the geological interpretation.</p> <ul style="list-style-type: none"> • The sealed bulk samples were delivered to Mineral Technologies metallurgical testing facility on the Gold Coast Queensland. • Metallurgical samples were processed through the Mineral Technologies facility in either 10 tonne or 20 tonne batches. • A sub-sample from each bulk bag was extracted for reference purposes. • The whole batch was then homogenised and be processed through a continuous feed preparation plant (FPP) circuit, consisting of a scrubber/trommel, a fine screen and a de-sliming stage. The aim of the circuit is to prepare feed suitable for beneficiation by gravity spirals. • Sub-samples of the FPP feed and product including slimes and oversize were retained. • Sub-samples of each bulk bag were also retained for reference purposes / future use. • A 10t sample of material originating from Area 1 representing the initial years of mining was homogenised and used for flowsheet verification test work. Assay across particle size ranges, specific gravity, particle size diameter and mineralogy will be used for a future metallurgical balance. • The prepared feed was then processed through a gravity concentrator circuit, consisting of a gravity spiral separation followed by wet table upgrade of the spiral concentrate. • The aim of the circuit was to produce a Heavy Mineral concentrate (HMC) recovering Rare Earth Mineral, Zircon, and high SG Ti-minerals only. • Sub-samples of the WCP products were retained. • The HMC was processed through an REMC flotation plant circuit. • The aim of the circuit was to produce a final mixed Rare Earth Mineral Concentrate (REMC) meeting the DFS specification. • Assay methodology for results reported by ANSTO are based on a sub-sample of the as-supplied moist REMC being dried and the moisture content determined. A representative sub-sample was separated for elemental analysis. The solid feed and any subsequent leach residue solids were be analysed

Criteria	JORC Code Explanation	Commentary
		<p>by a combination of XRF, and fusion / digest followed by ICP-OES and ICP-MS analysis of the digest liquor(s).</p> <ul style="list-style-type: none"> Both Metallurgical testing facilities maintain QAQC systems.
Verification of sampling and assaying	<ul style="list-style-type: none"> <i>The verification of significant intersections by either independent or alternative company personnel.</i> <i>The use of twinned holes.</i> <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> <i>Discuss any adjustment to assay data.</i> 	<ul style="list-style-type: none"> All results were checked by the company's Geology Manager and principal metallurgists. The company's competent person, Geology Manager, Principal Metallurgist, Principal Mining Engineer, and an independent Peer reviewer made periodic visits to the Goschen site and Kerang facility where metallurgical samples were processed and combined into bulka bags. Principal metallurgists managed on a weekly basis metallurgical sample program with Mineral Technologies testing facility and or Australian Nuclear Science and Technology Organisation (ANSTO). A process of laboratory data validation using mass balance is undertaken to identify entry errors or questionable data. Results compared with previous metallurgical programs and or Mineral Resource and Ore Reserve data. 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	<ul style="list-style-type: none"> <i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i> <i>Specification of the grid system used.</i> <i>Quality and adequacy of topographic control.</i> 	<ul style="list-style-type: none"> Drill hole collars 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 VHM Limited from data collected during a LIDAR survey commissioned by VHM. The accuracy of the locations is sufficient for this stage of exploration.

Criteria	JORC Code Explanation	Commentary
Data spacing and distribution	<ul style="list-style-type: none"> <i>Data spacing for reporting of Exploration Results.</i> <i>Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i> <i>Whether sample compositing has been applied.</i> 	<ul style="list-style-type: none"> Holes were developed within representative panels which were based on mine design and schedule from the Ore Reserve. This was designed to enable reconciliation of future mining and process outcomes (against the bulk sample metallurgy results) Drill holes are spaced on a grid of lines spaced at 200m in the N-S direction and typically between 100 and 200m in the E-W direction with some close-spaced drilling as close as 50m along traverses. One primary sonic hole and up to 3 subsidiary sonic holes were completed at each collar coordinate, in Area 1. The collar spacing is sufficient to provide a high degree of confidence in geological model and grade continuity and these metallurgical outcomes. Metallurgical drill holes were compiled under the direction of the Manager Geology and Principal metallurgist, to ensure representation of material types for testing.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i> 	<ul style="list-style-type: none"> The mineralisation at the Goschen Area 1 and Area 3 Extended 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	<ul style="list-style-type: none"> <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> Sonic samples were stored on site (at a dedicated warehouse in Kerang). The samples were then dispatched to Mineral Technologies, Gold Coast Queensland using Swan Hill Freight agents, and delivered directly to the Laboratories. Mineral Technologies metallurgical manager inspected the packages and did not report tampering of the samples
Audits or reviews	<ul style="list-style-type: none"> <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> Internal reviews were undertaken during the geological interpretation and throughout the metallurgical sampling process by the Manager Geology, Principal Metallurgist, Internal Peer reviewer, competent person.

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	<ul style="list-style-type: none"> <i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i> <i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i> 	<ul style="list-style-type: none"> The exploration work was completed on tenements that are 100% owned by VHM Ltd in Victoria, Australia. The drill samples for this metallurgical test program were drilled and collected from retention licence RL6806. 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.
Exploration done by other parties	<ul style="list-style-type: none"> <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> 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 metallurgical work program is based solely on work conducted by VHM Ltd.
Geology	<ul style="list-style-type: none"> <i>Deposit type, geological setting, and style of mineralisation.</i> 	<ul style="list-style-type: none"> The heavy mineral sands at the Goschen Project are 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.
Drill hole Information	<ul style="list-style-type: none"> <i>A summary of all information material to the understanding of the exploration results including a</i> 	<ul style="list-style-type: none"> Hole collars were surveyed by an independent surveyor using industry standard equipment.

Criteria	JORC Code Explanation	Commentary
	<p><i>tabulation of the following information for all Material drill holes:</i></p> <ul style="list-style-type: none"> • <i>easting and northing of the drill hole collar</i> • <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> • <i>dip and azimuth of the hole</i> • <i>down hole length and interception depth</i> • <i>hole length.</i> <p>• <i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i></p>	<ul style="list-style-type: none"> • Holes were drilled vertically. • 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	<ul style="list-style-type: none"> • <i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated.</i> • <i>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.</i> • <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<ul style="list-style-type: none"> • No data aggregation methods were utilised, no top cuts were employed, and all cut-off grades have been reported in the Prospectus.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> • <i>These relationships are particularly important in the reporting of Exploration Results.</i> • <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> • <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this</i> 	<ul style="list-style-type: none"> • The nature of the mineralisation is horizontal, thus vertical sonic and diamond holes represent the true thicknesses of the mineralisation that inform the metallurgical bulk sample.

Criteria	JORC Code Explanation	Commentary
	<i>effect (e.g. 'down hole length, true width not known').</i>	
Diagrams	<ul style="list-style-type: none"> <i>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 drill hole collar locations and appropriate sectional views.</i> 	<ul style="list-style-type: none"> Plan view and typical cross sections provided in Annexure F of the Prospectus.
Balanced reporting	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> Metallurgical results are reported by ANSTO and the Company's Principal Metallurgist responsible for rare earth mineral metallurgical testwork.
Other substantive exploration data	<ul style="list-style-type: none"> <i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i> 	<ul style="list-style-type: none"> During a bulk REMC trial material originating from Area 1 was shipped to Mineral Technologies and processed through FPP, WCP and rare earth flotation circuits as a proxy for the Goschen process flowsheet. The resulting REMC was collected and stored for further processing at ANSTO during the planned pilot scale trial. Metallurgical samples were provided to the ANSTO for preliminary leach extraction assessment using samples and conditions as detailed within the body of the report. It must be noted that the extraction numbers reported are indicative only and do not account for further losses or inefficiencies that may or may not occur due to further downstream processing to marketable product(s).
Further work	<ul style="list-style-type: none"> <i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<ul style="list-style-type: none"> Additional metallurgical testwork is in progress as part of the 2022 bulk sample program. Results inform metallurgical and engineering programs for the development of the Goschen Project.