

**ASX Release** 

9 April 2024

#### APPROVALS PROGRESS AND INCREASED AREA 2 MINERAL RESOURCE ESTIMATE

#### **Key Highlights:**

- The Public Hearing of the Goschen Project's Environment Effects Statement (EES) commenced on 25 March 2024.
- The Area 2 Mineral Resource estimate (MRE) has increased as follows:
  - From 26.0 Millon tonne (Mt) (Indicated) to 81.3 Mt @ 3.16% Total Heavy Mineral (THM)
    - Indicated Mineral Resource 75.5 Mt @ 3.17% THM
    - Inferred Mineral Resource 5.7 Mt @ 3.06% THM
  - The additional Area 2 MRE lifts the Company's total inventory tonnage by 6% to 892.1 Mt.

VHM Limited ("VHM" or the "Company") is pleased to provide an update on the Goschen Project's EES approvals progress and to provide an updated Inferred and Indicated MRE of 81.3 Mt @ 3.16% THM grade containing 2.6 Mt of in-situ Heavy Mineral Sands (HMS) in Area 2.

#### **Goschen Approvals Update**

The Directions Hearing for the Goschen Project's EES approvals process was held on Tuesday, 13 February 2024. The independent Inquiry and Advisory Committee (IAC) appointed by the Victorian Planning Minister informed the representing parties of the agenda, and duration for the Public Hearing stage.

The Public Hearing stage commenced on Monday 25 March 2024 and will conclude on Tuesday 30 April 2024.

Upon completion of the Public Hearing the IAC has 40 business days to provide the Victorian Planning Minister with a recommendation on the Goschen Project.

#### **AREA 2 Mineral Resource Estimate**

The Area 2 MRE crosses over the Company's retention licence (RL) 6806 and exploration licence (EL) 6419 (Figure 1). Area 2 was previously classified into two areas - Area 2 West, and Area 2 East with amalgamation of the two zones to form Area 2 for the Mineral Resource estimation.

Area 2 is located 3.5 kilometres (km) north west of the base plant (Area 1) for the proposed Goschen Rare Earths and Mineral Sands Project (Goschen).

The Mineral Resource estimate contains 65,000 tonnes of rare earths (TREO+Y), 0.5 Mt of zircon, 0.3 Mt of rutile and 0.2 Mt of leucoxene and increases the Company's total inventory of TREO from 602,000 tonnes to 649,000 tonnes (Appendix 1, Table 1).

The MRE includes moderate to high-grade strand-like zones between 7m and 10m from surface and extends 2.6 km north-south and 3.5 km east-west and remains open in all directions.

The Area 2 West Resource was first estimated in 2019 and reported in the Company's Prospectus<sup>1</sup>. Area 2 East was drilled in 2019<sup>2</sup>, however, the samples were stored and not submitted for assaying. Assay results and subsequent mineralogy composites were interpreted by independent consultant Right Solutions Australia, to combine the two adjacent resources into a single model to generate the revised and expanded resource estimate.

**VHM Chief Executive Officer Ron Douglas said:** *"The addition of Area 2's Mineral Resource estimate provides further upside for the Company's Global Resources, and these results demonstrate the valuable characteristics of the rich mineralisation found in Victoria's Murray-Darling Basin."* 

"VHM's primary focus is on taking Goschen through to development, so I am pleased the Panel Hearing for the Goschen Project's Environment Effects Statement has now commenced and under the direction of an independent Inquiry and Advisory Committee."

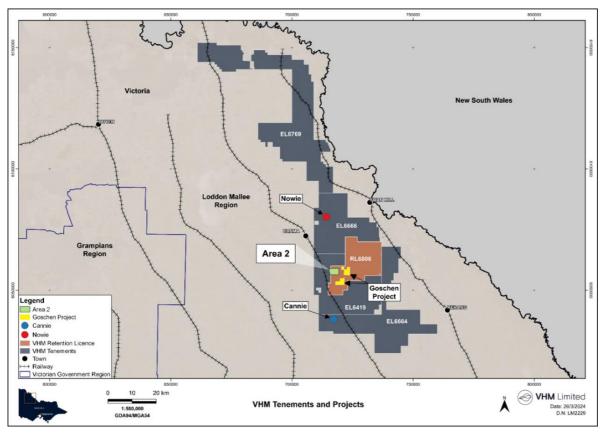


Figure 1: Area 2 Project location

A total of 256 drill holes were used for the Area 2 Mineral Resource estimate. The Indicated and Inferred classification reflects the appropriate level of confidence in grade, tenor, and spatial continuity of this estimate. A summary of the Area 2 Mineral Resource estimate is provided in Appendix 1, Table 2.

<sup>2</sup> See Annual Report release dated 3 October 2023.

<sup>&</sup>lt;sup>1</sup> Prospectus dated 21 November 2022 as supplemented by the supplementary Prospectus dated 5 December 2022, lodged with the ASX on 5 January 2023.

Figure 2: Long-section 718000mE showing drill holes with significant intercepts and block model THM grades

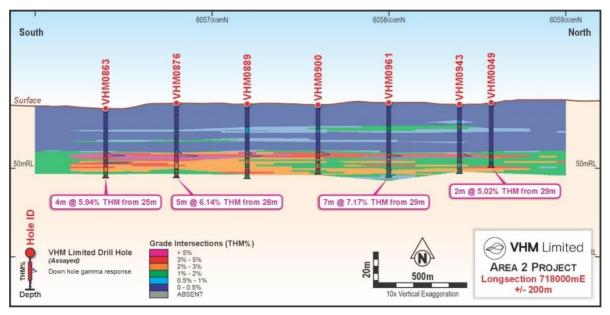
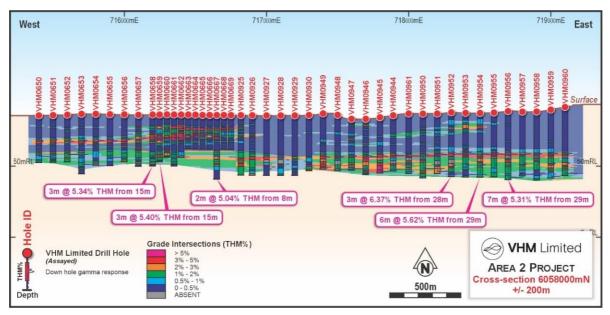


Figure 3: Cross-section 6058000mN showing drill holes with significant intercepts and block model THM grades



#### **Competent Person's Statement**

The information in this release that relates to Area 2 Exploration Results and Mineral Resource estimates is based on, and fairly represents information and supporting documentation compiled by Mrs Jacinta Blincow, who is an employee of Right Solutions Australia. Mrs Blincow is a Competent Person who is a member of Australian Institute of Geoscientists and who consents to the inclusion in the release of the matters based on the information in the form and context in which it appears. Mrs Blincow 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).

The information in this announcement regarding the Company's Mineral Resource estimate for the Goschen, Area 4, Cannie and Nowie Projects set out in Appendix 1 were contained in the Prospectus dated 21 November 2022 and updated in the following ASX Announcements:

- Definitive Feasibility Study: "Goschen Project DFS Refresh" 28 March 2023.
- Mineral Resource Statement: "New Cannie Critical Mineral Project" 16 May 2023.
- Company Ore Reserve update: "Outstanding Results for Area 4 of the VHM Leases" 29 September 2023.
- Nowie MRE: Quarterly Activities report dated 29 January 2024.

The Company confirms that it is not aware of any new information or data that materially affects the Mineral Resource estimates referenced in the above-mentioned market announcements and that all material assumptions and technical parameters underpinning the Mineral Resource estimates continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Persons' findings are presented have not been materially modified.

#### ENDS

This announcement has been approved by the Board of VHM.

#### For Further Information Contact:

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### Appendix 1: Mineral Resource tables

Table 1: Company Mineral Resource inventory

Project <sup>(1)</sup>	Mineral Resource Category	Material	In-situ THM	тнм	TREO + Y	In-situ TREO Grade <sup>(3)</sup>	In-situ TREO
		(Mt)	(Mt)	(%)	(%)	(%)	(t)
Goschen	Measured	30.7	1.8	5.72	2.72	0.16	48,000
(Area 1 and Area 3)	Indicated	266.3	8.3	3.13	2.34	0.07	195,000
Alea 3)	Inferred	287.7	6.9	2.34	2.10	0.05	140,000
Area 2	Indicated	75.5	2.4	3.17	2.48	0.08	59,400
	Inferred	5.7	0.2	3.09	2.62	0.08	4,600
Area 4	Indicated	18.0	0.8	4.60	1.91	0.09	16,000
Cannie	Inferred	191.7	5.9	3.05	3.00	0.09	176,000
Nowie	Inferred	16.4	0.6	3.82	1.80	0.07	11,000
GRAND	Measured	30.7	1.8	5.72	2.72	0.16	48,000
TOTAL	Indicated	359.8	11.5	2.55	2.34	0.06	269,000
	Inferred (2)	501.6	13.3	2.62	2.49	0.07	332,000
	Total <sup>(2)</sup>	892.1	26.6	2.70	2.44	0.07	649,000

Notes: Any discrepancies in totals are a function of rounding.

- 1. Mineral Resources reported at a grade of 1.0% THM for Goschen Area 1 and Area 3, 1% TVHM (THM \* VHM) for Area 2, Area 4, Nowie and 1.75% THM for Cannie
- 2. Total Mineral resources reported at a combined cut-off grade of 1.0% THM, 1% TVHM and 1.75% THM
- 3. In-situ TREO Grade is calculated by THM Grade multiplied by TREO Grade

	Mineral		In-situ	Bulk	тнм	Slimes	Oversize material >2			THM ass	emblage <sup>(2,3</sup>	)				THM to	onnage <sup>(2,3)</sup>		
Area	Resource category	Material (Mt)	THM (Mt)	density (gcm³)	(%)	(%)	mm (%)	Zircon (%)	Rutile (%)	Leucoxen e (%)	Ilmenite (%)	Xenotime (%)	Monazite (%)	Zircon (Mt)	Rutile (Mt)	Leucoxe ne (Mt)	Ilmenite (Mt)	Xenotime (Mt)	Monazite (Mt)
Area O	Indicated	45.6	1.5	1.73	3.4%	21%	6%	20%	11%	8%	23%	0.6%	3.7%	0.31	0.17	0.13	0.35	0.01	0.06
Area 2 East	Inferred	4.5	0.1	1.73	3.1%	21%	7%	21%	11%	8%	23%	0.7%	3.9%	0.03	0.02	0.01	0.03	0.00	0.01
EdSI	Total (1)	50.1	1.7	1.73	3.4%	21%	6%	20%	11%	8%	23%	0.6%	3.7%	0.34	0.19	0.14	0.38	0.01	0.06
Area 0	Indicated	29.9	0.8	1.72	2.8%	20%	8%	21%	15%	12%	24%	0.7%	2.9%	0.18	0.13	0.10	0.20	0.01	0.02
Area 2 West	Inferred	1.3	0.0	1.73	3.0%	23%	10%	13%	7%	5%	15%	0.3%	2.7%	0.00	0.00	0.00	0.01	0.00	0.00
west	Total (1)	31.2	0.9	1.72	2.8%	20%	8%	21%	15%	11%	23%	0.7%	2.9%	0.18	0.13	0.10	0.21	0.01	0.03
Grand	Indicated	75.5	2.4	1.73	3.2%	21%	7%	21%	13%	10%	23%	0.7%	3.4%	0.49	0.30	0.23	0.55	0.02	0.08
Grand Total	Inferred	5.7	0.2	1.73	3.1%	21%	8%	19%	10%	8%	22%	0.6%	3.6%	0.03	0.02	0.01	0.04	0.00	0.01
Total	TOTAL	81.3	2.6	1.73	3.2%	21%	7%	20%	12%	9%	23%	1%	3%	0.52	0.32	0.24	0.59	0.02	0.09

#### Table 2: Area 2 Mineral Resource estimate (Inferred and Indicated)

	Mineral							Rar	e Earth Oxio	des								
Area	Resource	La <sub>2</sub> O <sub>3</sub>	CeO <sub>2</sub>	Pr <sub>6</sub> O <sub>11</sub>	$Nd_2O_3$	$Sm_2O_3$	Eu <sub>2</sub> O <sub>3</sub>	$Gd_2O_3$	Tb <sub>4</sub> O <sub>7</sub>	Dy <sub>2</sub> O <sub>3</sub>	Ho <sub>2</sub> O <sub>3</sub>	Er <sub>2</sub> O <sub>3</sub>	$Tm_2O_3$	Yb <sub>2</sub> O <sub>3</sub>	Lu <sub>2</sub> O <sub>3</sub>	$Y_2O_3$	TREO+Y <sub>2</sub> O <sub>3</sub>	TREO+Y <sub>2</sub> O <sub>3</sub>
	category	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(Kt)
A	Indicated	0.5%	1.0%	0.12%	0.4%	0.08%	0.004%	0.07%	0.01%	0.07%	0.01%	0.04%	0.01%	0.05%	0.007%	0.45%	2.9%	44.60
Area 2 East	Inferred	0.5%	1.0%	0.11%	0.4%	0.08%	0.004%	0.07%	0.01%	0.06%	0.01%	0.04%	0.01%	0.04%	0.006%	0.4%	2.7%	3.82
Lasi	Total <sup>(1)</sup>	0.5%	1.0%	0.12%	0.4%	0.08%	0.004%	0.07%	0.01%	0.07%	0.01%	0.04%	0.01%	0.05%	0.007%	0.45%	2.9%	48.41
A	Indicated	0.3%	0.6%	0.07%	0.3%	0.05%	0.003%	0.05%	0.01%	0.05%	-	0.04%	0.01%	0.04%	-	0.4%	1.9%	16.16
Area 2 West	Inferred	0.3%	0.6%	0.07%	0.2%	0.04%	0.002%	0.04%	0.01%	0.04%	-	0.02%	0.00%	0.02%	-	0.2%	1.6%	0.59
VVESI	Total (1)	0.3%	0.6%	0.07%	0.3%	0.05%	0.003%	0.05%	0.01%	0.05%	-	0.04%	0.01%	0.04%	-	0.4%	1.9%	16.75
<b>A A A</b>	Indicated	0.4%	0.9%	0.10%	0.4%	0.07%	0.003%	0.06%	0.01%	0.06%	0.01%	0.04%	0.01%	0.05%	0.005%	0.4%	2.5%	60.75
Grand Total	Inferred	0.4%	0.9%	0.11%	0.4%	0.07%	0.003%	0.06%	0.01%	0.06%	0.01%	0.04%	0.01%	0.04%	0.005%	0.4%	2.5%	4.41
TUIdi	TOTAL	0.4%	0.9%	0.10%	0.4%	0.07%	0.003%	0.06%	0.01%	0.06%	0.01%	0.04%	0.01%	0.05%	0.005%	0.4%	2.5%	65.17

Notes: Any discrepancies in totals are a function of rounding.

- 1. Mineral resource reporting THM reported at a cut-off of 1% TVHM (THM x TVHM)
- 2. Mineral assemblage, via QEMScan Particle Analysis, is reported as a percentage of in-situ THM content

3. The Area 2 Mineral Resource has been calculated by in-situ tonnes as a model attribute field and back calculated to determine each mineral assemblage and oxide percentage based on THM percentages

### Appendix 2: Mineral Resource Estimate and Reporting Criteria

In accordance with ASX Listing Rule 5.8 (Requirements applicable to reports of Mineral Resources for material mining projects) and the 2012 JORC reporting guidelines, information material to the Area 2 Mineral Resource estimate is summarised below. More detail is provided in the JORC Code (2012 Ed.) Appendix 3, Table 1, Sections 1 to 3.

#### Geology and geological interpretation

#### **Regional geological setting**

The Murray Basin underlies an area of 300,000 km<sup>2</sup> of north-western Victoria, south-eastern South Australia and south-western New South Wales and comprises flat, late Miocene to Pliocene, Epochaged sediments (Brown & Stephenson, 1991).

Accumulations of 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 Area 2 Project area is interpreted to lie west of the Avoca Fault, within the Stawell structural zones. Basement rock within the Stawell Zone comprises Cambrian to Ordovician turbidites intruded by granites. The Stawell Zone extends west from the Avoca Fault to its western limit at the Moyston Fault.

The Cannie Fault, which extends northeast-southwest east of the Project area, is a small splay fault connecting the Avoca Fault in the eastern part VHM tenements to a second, north-westerly trending splay of the Avoca Fault. The Area 2 Project lies to the west of the Cannie Fault.

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.

The Murravian Gulf was dammed in the late Pleistocene by uplift of the Pinnaroo Block to the southwest of the depocenter 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.

#### Local geological setting

The heavy mineral sands at the Area 2 deposit are hosted within the offshore and near shore/marginal marine depositional paleo-environment of the Loxton Sands. The grain size of the Loxton Sands generally decreases with depth within Area 2. Five main strandlines have been interpreted in the middle to upper portions of the Loxton Sands and four sheet-like horizons of mineralisation within the lower portions of the Loxton Sands. The strandlines are known to develop by reworking of coastal sediments because of wave action while sheet deposits are associated with near-shore sediments.

Area 2 was previously classified into two areas, Area 2 West and Area 2 East with amalgamation of the two zones to form Area 2 during the mineral resource estimation.

#### Sampling and subsampling techniques

Drill samples were obtained at 1 m intervals generating approximately 8 kg of drill spoil that was then split down to approximately ~1200 to ~2500g by a riffle splitter for export to the primary analytical laboratory. The sub-split samples were labelled and bagged for transport to the primary laboratory for processing. All sample intervals and the correlating sample numbers were recorded digitally directly into the Company's database.

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 MX Deposit database where it had been validated and stored to maintain data security.

A multi-staged drill program of 256 drillholes was conducted between March 2017 and April 2019 to determine the mineralisation within Area 2. 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 76 mm diameter (NQ) and 3 m in length. All holes were drilled vertically with majority of the samples downhole taken at 1 m intervals.

A regular rectangular grid spacing for the Area 2 deposit was on a spacing of 400 m in the north-south direction and with 50 m and 100 m stations to the east-west direction. The 400 m x 100 m 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 50 m spacing is within the western side of the deposit as a result of intersecting high-grade strandlines.

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

Resource classification has been completed on a zone-by-zone basis where drill spacing and assay availability for THM, mineral assemblage and chemical analysis have been considered. Predominantly an indicated resource classification is applied for the entirety of the Zone where sufficient data is available. However, in some instances varied availability of data has required single zones to have mixed classifications including both indicated and inferred. Indicated and inferred zones have been created by digitising a polygon in Datamine and coding all blocks from that zone that share XY coordinates encapsulated within the polygon.

#### Sample analysis method

Sample Analysis–Diamantina Assay Method (static gravity drop heavy liquid separation)

Area 2 West samples were dispatched to Diamantina Laboratories (Diamantina) which followed the general assay process flow described as follows.

- The samples selected for assay were received by Diamantina check-in process then oven dried at approximately 110°C until samples were completely dry.
- Samples were then rotary split down to approximately ~100 g 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 wet screens used either a top screen of 1 mm (90% of all samples from Area 2 West sent to Diamantina) or a top screen of 2mm (10% of all samples from Area 2 West sent to Diamantina) and a bottom screen of 38 μm
- Material captured by the upper screen (OS) and 38 µm (SAND) screens was individually captured, dried and weighed, whilst material passing through the 38 µm (SLIMES) screen was lost to wastewater systems.
- The SAND fraction was analysed by static gravity assisted Heavy Liquid Separation (HLS) using tetrabromoethane (TBE)
- Four holes were completed with the following method however using 20  $\mu m$  screens for the sand and slime fractions.

#### Sample Analysis–ALS Assay Method (centrifuge-assisted heavy liquid separation)

Samples were dispatched to ALS Global (ALS) Laboratories which followed the general assay process flow described as follows;

- The samples selected for assay were received by ALS Laboratories check-in process then oven dried at approximately 110°C until samples were completely dry.
- Samples were then riffled split down to approximately ~500 g 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 1 mm and a bottom screen of 20 μm. 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 and 20  $\mu$ m (SAND) screens was individually captured, dried and weighed, whilst material passing through the 20  $\mu$ m (SLIMES) screen was lost to wastewater systems.
- The SAND fraction (1 mm to -20 μm) was split down to approximately ~100 g sub-splits for centrifuge assisted Heavy Liquid Separation (HLS) using tetrabromoethane (TBE).

Mineral assemblage composites have been prepared for the Area 2 deposit by utilising both x-ray fluorescence (XRF), ICP-MS and QEMSCAN to define the mineralogy and chemistry as a proportion of the THM. All sample composites were selected exclusively by VHM and completed by ALS Global Perth.

- 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 ICP-MS technique provides measurements of relative elemental abundances (down to limits of a few parts per million) that cannot be picked up using XRF techniques, which allows for a quantifiable basis for determination of mineralogy, provenance, depositional environment, and diagenetic history.
- The QEMSCAN method of analysis, carried out using particle scale analysis, required the samples to be screened into +150 µm and -150 µm screen fraction prior to sample preparation and QEMSCAN analysis to give a quantitative understanding of the elemental composition and mineralogical assemblage. Screening the composite sample into two sub-samples, using a bottom screen of 150 µm ensures any segregation between coarse and fine particles during the setting of the resin for the polished section used for QEMSCAN analysis is managed.

#### **Estimation methodology**

A total of 256 drillholes were used for the Area 2 mineral 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.

VHM generated a topographic DTM surface within Datamine using the surveyed drill collars from holes completed in the Area 2 Project. 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 field duplicates and standards and by ALS using internal duplicates and standards.

The rate of submission for company standards was 1:20 and for submitted field duplicates was 1:100. Field duplicates were taken at the frequency of 1:20 however due to the selective assay method, 1:100 were submitted to the laboratory. Both laboratories completed their internal QAQC checks including laboratory standards every 40th sample and a laboratory repeat every 25th sample prior to the results being released.

A majority of the standard samples submitted to the laboratory by VHM were within acceptable limits of +3SD however two standards fell outside tolerance (>3STD). These were reviewed and accepted based on surrounding standards and assays.

Ordinary Kriging estimation technique was used to interpolate THM, Slimes and OS grades from drill samples into the block model. Nearest neighbour techniques were used to interpolate mineral assemblage, rare earth elements, index values and non-numeric sample identification into the block model.

The mostly regular dimensions of the drill grid and the anisotropy of the drilling and sampling grid allowed the use of ordinary kriging and nearest neighbour methodologies as no de-clustering of samples was required.

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. The minor direction of 0.5 remained constant for all four search passes to control the distribution of grade in the vertical extent. Each zone was estimated with a directional search ellipse with varying search ranges over three search passes. The minimum number of samples required was three and the maximum was 16.

Area 2's Mineral Resource estimate bulk density formula is described as:

• Bulk Density = (0.009 \* THM) + 1.698.

It is believed that the bulk density applied the MRE is conservative and fit for purpose at this level of confidence for the MREs and in line with VHM's Area 1 MRE.

#### 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.

Cut-off grade for TVHM (THM x VHM) was used to prepare the reported resource estimates. A 1% TVHM cut-off grade was selected for reporting the resource estimate following visual validation through spatial positioning of the grade interpolation at varying cut-offs and is in line with the previous IHC Robbins 2019 MRE for Area 2 West. The reporting of the Indicated and Inferred Mineral Resource refers to a global estimate for the Area 2 deposit.

# 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.

# Appendix 3 – Area 2 - JORC Table 1 (JORC Code, 2012 Edition)

# Section 1: Sampling Techniques and Data

(Criteria in this section apply to all succeeding section
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Criteria	section apply to all succeeding sectio	Commentary
Sampling techniques	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul> <li>Aircore drilling, commenced on 25 November 2017 and completed on 2 April 2019, was used to obtain 1m sample intervals.</li> <li>The following information covers the sampling process: <ul> <li>each 1 m sample is homogenized within the bag by manually rotating the sample bag.</li> <li>The large 1m Aircore drill samples were split down to approximately ~1000 to ~2500g by rotary splitter for export to the primary analytical laboratory.</li> <li>a sample of sand, approximately 20g, is scooped from the sample bag for visual THM% and SLIMES% estimation and logging. The same sample mass is used for every pan sample for visual THM% and SLIMES% estimation.</li> <li>The standard sized sample of approximately 20g is to ensure calibration is maintained for consistency in visual estimation.</li> <li>Downhole geophysical surveys were conducted to utilise gamma signatures for ascertaining mineralisation zones within the lithological sequence.</li> <li>Duplicates were taken at the drill rig from side-by-side sample locations at a rate of ~1 in 20.</li> <li>Duplicates were taken within mineralisation zones as the waste material was excluded from sampling.</li> <li>Commercially obtained standards were inserted by the laboratory at a rate of ~1 in 40.</li> <li>The laboratory sample was oven dried at 105 degrees for a minimum of 2 hours (and then redried for up to 12 hours if required), and split down to 100 g sub samples.</li> <li>Area 2 West samples were dispatched to Diamantina Laboratories, Perth. The following information covers the sampling process at Diamantina:</li> <li>All drill hole sub-samples were screened using vibrating screens with a top screen of 2 mm and a bottom screen of 38 µm. Oversize (+2 mm fraction) was then submitted for heavy liquid separation using TBE to determine total heavy mineral content.</li> </ul> </li> <li>All drill hole sub-samples were screened using vibrating screens with a top screen of 1 mm and a bottom screen of 20 µm. Oversize (+1 mm fraction) was then submitted for heavy liquid sep</li></ul>

Drilling techniques	<i>circulation, open-hole hammer,</i> <i>rotary air blast, auger, Bangka,</i> <i>sonic, etc.) and details (e.g. core</i> <i>diameter, triple or standard tube,</i> <i>depth of diamond tails, face-</i> <i>sampling bit or other type, whether</i> <i>core is oriented and if so, by what</i> <i>method, etc.).</i>	was the contractor used for the drilling t support the Area 2 Mineral Resource g with inner tubes for sample return was usidered a standard industry technique for al Sand (HMS) mineralisation. Aircore drilling everse circulation drilling where the sample is the face and returned inside the inner tube. bods used were 3 m long. (76 mm) drill bits and rods were used. were vertical.
Drill sample recovery	<ul> <li>core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> <li>condition from While initially can occur in t sample and a The initial 0 m in order to acl The entire 1m primary split a attached to th retained.</li> <li>At the end of cleaned by bly silt potentially The twin-tube</li> </ul>	ecovery is monitored by recording sample n 'dry good' to 'wet poor'. collaring the hole, limited sample recovery he initial 0m to 1m sample interval owing to ir loss into the surrounding loose soil. n to 1 m sample interval is drilled very slowly hieve optimum sample recovery. n sample is collected at the drill rig with the at the drill rig using the rotary splitter he base of the cyclone. The coarse reject is each drill meter and drill rod, the drill string is owing down with air to remove any clay and built up in the sample tubes. e aircore drilling technique is known to quality samples from the face of the drill hole itions).
Logging	<ul> <li>have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> <li>Wia digital entra and later uplot change datable past logging to database. The aircore sa grainsize, sor washability, e any relevant of cultural activite Every drill hol Logging is un Guideline with description to collection.</li> </ul>	e is logged in full. dertaken with reference to a Drilling n codes prescribed and guidance on ensure consistent and systematic data
Sub- sampling techniques and sample preparation	<ul> <li>whether quarter, half or all cores taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality, and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in-situ material collected, including</li> <li>collected and ALS Global la The water tab intersected with the sample types, the nature, quality, and appropriateness of the sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in-situ material collected, including</li> </ul>	ple interval is rotary split at the drill rig, dispatch to Diamantina laboratories and aboratories. ble depth was noted in all geological logs if hereby sample condition was specified as 2 kg to ~2.5 kg of each sample was placed mple bags and exported to Diamantina or ALS Global Laboratories for THM the samples are silty sand, sandy clay, sandy clay or clay and this preparation hsidered appropriate. izes were deemed suitable to reliably , slime, and oversize characteristics, based kperience of the geologists involved and with laboratory staff.

	<ul> <li>for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	Field duplicates of the samples were completed at a frequency of 1 per 20 primary samples in the field.
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul> <li>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.</li> <li>Area 2 West samples were dispatched to Diamantina Laboratories (static gravity drop heavy liquid separation) which followed the general assay process flow described as follows: <ul> <li>The samples selected for assay were received by Diamantina check-in process then oven dried at approximately 110°C until samples were completely dry</li> <li>Samples were then rotary split down to approximately ~100 g sub-splits (weighed and captured) with one sample then submitted to screening via vibrating deck screens with the application of water</li> <li>Every 25th sample was submitted to the same process as a laboratory repeat</li> <li>The wet screens used either a top screen of 1 mm (90% of all samples from Area 2 West sent to Diamantina) or a top screen of 2mm (10% of all samples from Area 2 West sent to Diamantina) or a top screen of 2mm (10% of all samples from Area 2 West sent to Diamantina) or a top screen of 2mm (10% of all samples from Area 2 West sent to Diamantina) or a top screen of 2mm (10% of all samples from Area 2 West sent to Diamantina) and a bottom screen of 38 µm (SLIMES) screen was lost to wastewater systems.</li> <li>The SAND fraction (1 mm to -38 µm) was split down to approximately ~100 g sub-splits for static gravity assisted Heavy Liquid Separation (HLS) using tetrabromoethane (TBE)</li> <li>The laboratory used TBE as the heavy liquid medium – with density range between 2.92 and 2.96 g/ml</li> <li>Four holes were completed with the following method however using 20 µm screens for the sand all sime fractions.</li> <li>Samples were then riffled split down to approximately 110°C until samples were completely dry.</li> <li>Samples were then riffled split down to approximately -500 g sub-splits (weighed and captured) then soaked for 24 hours in 1% tetrasodium pyrophosphate (TSPP) – a dispersing agent used to help</li></ul></li></ul>

Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>weighed, whilst material passing through the 20 µm (SLIMES) screen was lost to wastewater systems.</li> <li>The SAND fraction (1 mm to -20 µm) was split down to approximately ~100 g sub-splits for centrifuge assisted Heavy Liquid Separation (HLS) using tetrabromoethane (TBE)</li> <li>The laboratory used TBE as the heavy liquid medium – with density range between 2.92 and 2.96 g/ml</li> <li>Field duplicates of the samples were completed at a frequency of 1 per 20 primary samples in the field however 1 per 100 samples were submitted for assay due to the selective assay method.</li> <li>Both Laboratories completed their 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.</li> <li>VHM standards were inserted at a frequency of 1 per 20 samples.</li> <li>Analysis of QAQC samples shows the laboratory data to be of acceptable accuracy and precision.</li> <li>All results are checked by the company's Geology Manager</li> <li>Two twinned holes have been made to the assay data received from Diamantina and ALS Global. Assays were imported into the MXDeposit database.</li> <li>Field and laboratory duplicate data pairs (THM/OS/SLIME) of each batch are plotted to identify potential quality control issues.</li> <li>Standard Reference Material sample results are checked from each sample batch to ensure they are within tolerance (&lt;3SD) and that there is no bias.</li> <li>Two standards fell outside tolerance (&gt;3STD). These were reviewed and accepted based on surrounding standards and assays.</li> <li>The field and laboratory data were exported from the VHM database and imported into Datamine by Right Solutions.</li> <li>Data validation criteria are included to check for overlapping sample intervals, end of hole match between 'Lithology', 'Sample', 'Survey' files and other common</li> </ul>
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	errors. Down hole geophysical surveys were conducted to utilise gamma signatures for ascertaining mineralisation zones within the lithological sequence. Drill hole 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 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. A regular rectangular ~400m x ~100m grid spacing is
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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</li> </ul>	A regular rectangular ~400m x ~100m grid spacing is dominant at the Area 2 Project with a tighter drill spacings of ~400m x ~50m on seven drill lines in Area 2 West The company has completed 256 drill holes between 2017 and 2019 to determine the mineralisation potential at Area 2 (RL6806 and EL6419)

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	clas • Wh	imation procedure(s) and ssifications applied. tether sample compositing has an applied.	The 400m x 100m spaced aircore holes and regular grid are sufficient to provide a good degree of confidence in potential future geological models at this stage. The 50m spacing on the five drill lines aims to further confirm the potential continuity across strike. Each aircore drill sample is a single 1m sample of sand intersected down the hole. No down hole compositing has occurred for Total Heavy Mineral (THM) analysis. Sample composites for QEMScan analysis, submitted to ALS Global Perth, were completed on mineralised zones utilising the sinks from the THM analysis. Composite intervals were selected based on THM grades and lithology boundaries.
Orientation of data in relation to geological structure	san san the con If th drill orie stru intru sho	ether the orientation of npling achieves unbiased npling of possible structures and extent to which this is known, asidering the deposit type. The relationship between the ling orientation and the entation of key mineralised uctures is considered to have oduced a sampling bias, this build be assessed and reported if terial.	The aircore drilling was oriented perpendicular to the strike of potential mineralisation as defined by previous historical drill data information. The strike of the potential mineralisation, based on observations using geology logging, down hole geophysical surveys and proximity to existing deposits define by the company, is northwest-southeast. All drill holes were vertical, and the orientation of the potential mineralisation is relatively horizontal. The orientation of the drilling is considered appropriate for testing the lateral and vertical extent of potential mineralisation without any bias.
Sample security	• The	e measures taken to ensure nple security.	Air core samples are stored on site (in the paddock on pallets). The samples were then dispatched to Perth using Swan Hill Freight agents and delivered directly to Diamantina laboratory. The laboratory inspected the packages and did not report tampering of the samples. Area 2 East samples stored until analysis; these were delivered to the company's storage facility in Perth.
Audits or reviews		e results of any audits or reviews 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	<ul> <li>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.</li> <li>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.</li> </ul>	The exploration work was completed on tenements that are 100% owned by VHM Limited in Victoria, Australia. The drill samples for this Mineral Resource estimate were taken from tenements RL6806 and EL6419.
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	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

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		historical review in preparation for their current work program. The historic data comprises surface sampling, limited aircore drilling and mapping. The historic results are not reportable under JORC 2012.
Geology	<ul> <li>Deposit type, geological setting, and style of mineralisation.</li> </ul>	The heavy mineral sands as defined at the Area 2 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.
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	All relevant drill hole information is reported regarding the drilling programs completed between 25 <sup>th</sup> November 2017 and 2 <sup>nd</sup> of April 2019 Hole collars were surveyed by an independent surveyor using industry standard equipment. Holes were drilled vertically. Drill hole depth cross verified with drilling reports and geologist log for each hole. All relevant drill hole data is reported associated with the model build
Data aggregation methods	<ul> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	No data aggregation methods were utilised, all samples were completed on 1m down hole intervals, no top cuts were employed, and all cut-off grades have been reported. Total Valuable Heavy Mineral (TVHM >1%) was used to provide cut-off grades for reporting. TVHM is calculated by THM * VHM.
Relationship between mineralisation widths and intercept lengths	<ul> <li>should be clearly stated.</li> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> </ul>	The nature of the potential mineralisation is broadly horizontal, thus vertical aircore holes are thought to represent close to true thicknesses of the mineralisation. Downhole widths are reported.

	<ul> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	
Diagrams	<ul> <li>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.</li> </ul>	Refer to Figure 2, Figure 9 and Figure 12 in the main body of the report.
Balanced reporting	<ul> <li>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.</li> </ul>	All exploration results reported as part of the Area 2 drilling program representing both low- and high- THM results to ensure representative reporting of data.
Other substantive exploration data	<ul> <li>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.</li> </ul>	<ul> <li>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 XRF Analysis (XRF) and Quantitative Evaluation of Minerals by Scanning Electron Microscopy (QEMSCAN). This was to gain a quantitative understanding of the elemental composition and mineralogical assemblage. 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.</li> <li>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.</li> <li>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.</li> <li>The samples were analysed using QEMScan technology in Field Scan Mode (FS) and Particle Mineral analysis.</li> <li>A total of 39 mineral assemblage composites were used to characterise the mineral ogy and chemistry for the deposit.</li> <li>Once all of the sample compositing was completed, the sample identification and mineral assemblage composites in this manner allows for composite results to be</li> </ul>

		applied to the resource block model and for those results to then be reported and weighted on THM in the final Mineral Resource estimate. Details of summary drill hole mineral assemblage composite IDs and associated results are presented in Appendix 6.
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	Mix sample support occurs across Area 2 West and Area 2 East, further HLS analysis on Area 2 West samples using -1mm to +20µm sand fraction with centrifuge assist is recommended. Additional sample composites for QEMScan, XRF and ICP-MS analysis across zones with limited data.

# Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code Explanation	Commentary
Database integrity	<ul> <li>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.</li> <li>Data validation procedures used.</li> </ul>	Exploration data provided by the company to Right Solutions in the form of CSV files exported from an MXDeposit database. The company provided CSV file for the down hole 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 validity of results.
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	No site visits were undertaken by the Competent Person during drilling as drilling was completed prior to their appointment.
Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	The geological interpretation was undertaken by Right Solutions in collaboration with the company's Managing Director 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 completed across the entire sedimentary package utilising THM, Oversize, slimes, geological logging, down hole gamma signatures. The Mineral Resource estimate was controlled by geological wireframes and surfaces.
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 4km in the north-south direction and 3.2 km wide in the east-west direction. It is approximately 15-20 m thick and buried by an average of 14 m of overburden.

Estimation and	The neture and entropy interacts	The MRE was conducted using Determine Studie RM
Estimation and modelling techniques	<ul> <li>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.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	The MRE was conducted using Datamine Studio RM Pro. Ordinary Kriging estimation technique was used to interpolate THM, Slimes and OS grades from drill samples into the block model. Nearest neighbour techniques were used to interpolate mineral assemblage, rare earth elements, index values and non-numeric sample identification into the block model. The mostly regular dimensions of the drill grid and the anisotropy of the drilling and sampling grid allowed the use of ordinary kriging and nearest neighbour methodologies as no de-clustering of samples was required. 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. Each zone was estimated with a directional search ellipse with varying search ranges over three search passes. Hard domain boundaries were used in the interpolation of grade for each zone. The average parent cell size used for the interpolation was approximately a quarter of the standard drill section line spacing. Parent cell size used is 25mE x 100mN x 1mRL. No assumptions were made regarding the modelling of selective mining units; however, it is assumed that a form of dry mining will be undertaken. Any other mining methodology will be more than adequately catered for with the parent cell size that was selected for the modelling exercise. Sub-cell dimensions are a factor of the parent cell size using the ratios of 4 x 4 x 5. 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 requi
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of dotormination of the moisture	Tonnages were estimated on an assumed dry basis.
	determination of the moisture content.	

Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	Cut-off grade for TVHM (THM x VHM) was used to prepare the reported resource estimates. A 1% TVHM cut-off grade was selected for reporting the resource estimate following visual validation through spatial positioning of the grade interpolation at varying cut-offs and is in line with the previous IHC Robbins 2019 MRE for Area 2 West.
Mining factors or assumptions	<ul> <li>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.</li> </ul>	No specific mining method is assumed other than potentially the use of dry mining methods.
Metallurgical factors or assumptions	<ul> <li>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.</li> </ul>	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. No recoveries were used or accounted for in the reporting of the MRE.
Environmental factors or assumptions	<ul> <li>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.</li> </ul>	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	<ul> <li>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry,</li> </ul>	Area 2 MRE bulk density formula is described as: Bulk Density = (0.009 * THM) + 1.698.

	<ul> <li>the frequency of the measurements, the nature, size and representativeness of the samples.</li> <li>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.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	It is believed that the bulk density applied the MRE is conservative and fit for purpose at this level of confidence for the MREs.
Classification	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (ie 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).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	The resource classification for the Area 2 deposit was based on the following criteria: drill hole spacing, geological, grade continuity and estimated search pass. The classification of the indicated and inferred Mineral Resource was supported by all of the criteria as noted above. Historic drilling assay data was not included in the Area 2 MRE. The Competent Person 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 of the mineral resource estimate have been undertaken at this point in time. Internal peer reviews were completed by Right Solutions.
Discussion of relative accuracy/ confidence	<ul> <li>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.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	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 Area 2 deposit. No production data is available for comparison with the deposit.

# Appendix 4 – Drill collar locations of drilling in the Area 2 Project

Table 1: Drill collar locations for drilling completed by the Company between 25 November 2017 and 31 March 2019

Hole ID	Easting (GDA94)	Northing (GDA94)	Elevation	Depth (m)	Azimuth	Dip
VHM0008	716201	6056411	86	40	0	-90
VHM0009	719008	6056350	96	51	0	-90
VHM0010	718223	6058569	87	40	0	-90
VHM0028	716724	6056403	85	42	0	-90
VHM0029	717901	6056380	83	38	0	-90
VHM0044	716008	6058630	86	36	0	-90
VHM0045	716393	6058656	86	36	0	-90
VHM0046	716805	6058611	85	36	0	-90
VHM0047	717205	6058607	86	36	0	-90
VHM0048	717620	6058584	85	36	0	-90
VHM0049	717999	6058578	87	36	0	-90
VHM0050	718392	6058565	90	38	0	-90
VHM0051	718791	6058552	88	42	0	-90
VHM0071	715977	6056423	88	42	0	-90
VHM0072	716406	6056411	86	36	0	-90
VHM0073	717200	6056392	83	30	0	-90
VHM0074	717596	6056392	85	36	0	-90
VHM0075	718402	6056359	86	42	0	-90
VHM0631	715700	6056800	90	45	0	-90
VHM0632	715800	6056800	89	36	0	-90
VHM0633	715900	6056800	88	33	0	-90
VHM0634	716000	6056800	88	33	0	-90
VHM0635	716100	6056800	88	42	0	-90
VHM0636	716200	6056800	87	33	0	-90
VHM0637	716300	6056800	87	33	0	-90
VHM0638	716400	6056800	86	33	0	-90
VHM0639	716500	6056800	86	42	0	-90
VHM0640	716551	6056800	85	33	0	-90
VHM0641	716601	6056800	85	33	0	-90
VHM0642	716648	6056800	85	36	0	-90
VHM0643	716700	6056800	85	36	0	-90
VHM0644	716750	6056800	85	36	0	-90
VHM0645	716800	6056800	85	36	0	-90
VHM0646	716849	6056800	85	36	0	-90
VHM0647	716900	6056800	85	42	0	-90
VHM0648	716950	6056800	85	36	0	-90

Hole ID	Easting (GDA94)	Northing (GDA94)	Elevation	Depth (m)	Azimuth	Dip
VHM0649	716999	6056800	84	36	0	-90
VHM0650	715400	6058000	86	33	0	-90
VHM0651	715500	6058000	86	33	0	-90
VHM0652	715599	6058000	86	33	0	-90
VHM0653	715699	6058000	87	42	0	-90
VHM0654	715799	6058000	87	36	0	-90
VHM0655	715900	6058000	86	36	0	-90
VHM0656	716000	6057999	86	33	0	-90
VHM0657	716100	6058000	86	36	0	-90
VHM0658	716199	6058000	86	36	0	-90
VHM0659	716249	6058000	86	33	0	-90
VHM0660	716300	6058000	86	30	0	-90
VHM0661	716350	6058000	86	36	0	-90
VHM0662	716400	6058000	86	30	0	-90
VHM0663	716450	6058000	86	24	0	-90
VHM0664	716500	6058000	86	24	0	-90
VHM0665	716551	6058000	86	24	0	-90
VHM0666	716600	6058000	86	24	0	-90
VHM0667	716650	6058000	86	45	0	-90
VHM0668	716701	6058000	86	24	0	-90
VHM0669	716751	6057999	86	24	0	-90
VHM0670	716601	6058800	86	24	0	-90
VHM0671	716500	6058800	86	39	0	-90
VHM0672	716450	6058800	86	24	0	-90
VHM0673	716401	6058800	86	24	0	-90
VHM0674	716350	6058800	86	24	0	-90
VHM0675	716301	6058800	86	24	0	-90
VHM0676	716250	6058800	86	24	0	-90
VHM0677	716200	6058800	86	24	0	-90
VHM0678	716150	6058800	86	24	0	-90
VHM0679	716100	6058800	86	42	0	-90
VHM0680	716051	6058800	86	24	0	-90
VHM0681	716000	6058800	86	24	0	-90
VHM0682	715899	6058800	86	24	0	-90
VHM0683	715801	6058800	86	24	0	-90
VHM0684	715720	6058800	86	42	0	-90
VHM0858	717501	6056401	85	39	0	-90
VHM0859	717602	6056400	85	36	0	-90
VHM0860	717702	6056400	84	39	0	-90
VHM0861	717802	6056400	83	39	0	-90

Hole ID	Easting (GDA94)	Northing (GDA94)	Elevation	Depth (m)	Azimuth	Dip
VHM0862	717901	6056400	84	39	0	-90
VHM0863	718001	6056400	84	39	0	-90
VHM0864	718103	6056400	85	39	0	-90
VHM0865	718201	6056400	86	42	0	-90
VHM0866	718402	6056400	86	45	0	-90
VHM0867	718601	6056400	87	45	0	-90
VHM0868	718800	6056400	91	47	0	-90
VHM0869	719001	6056400	95	48	0	-90
VHM0870	717400	6056800	83	39	0	-90
VHM0871	717500	6056800	84	37	0	-90
VHM0872	717602	6056800	85	39	0	-90
VHM0873	717700	6056800	85	39	0	-90
VHM0874	717800	6056800	85	39	0	-90
VHM0875	717900	6056800	86	38	0	-90
VHM0876	718000	6056800	87	42	0	-90
VHM0877	718101	6056800	88	42	0	-90
VHM0878	718201	6056800	88	42	0	-90
VHM0879	718402	6056800	87	45	0	-90
VHM0880	718602	6056800	87	45	0	-90
VHM0881	718803	6056801	89	45	0	-90
VHM0882	718999	6056800	91	45	0	-90
VHM0883	717400	6057200	83	36	0	-90
VHM0884	717500	6057200	83	39	0	-90
VHM0885	717600	6057200	85	39	0	-90
VHM0886	717700	6057200	86	39	0	-90
VHM0887	717800	6057200	86	39	0	-90
VHM0888	717900	6057200	86	39	0	-90
VHM0889	717999	6057200	86	42	0	-90
VHM0890	718100	6057200	87	41	0	-90
VHM0891	718201	6057200	87	42	0	-90
VHM0892	718301	6057200	87	42	0	-90
VHM0893	718299	6057200	87	42	0	-90
VHM0894	718400	6057200	87	45	0	-90
VHM0895	718600	6057200	87	39	0	-90
VHM0896	718801	6057200	89	42	0	-90
VHM0897	718999	6057200	89	42	0	-90
VHM0898	717801	6057600	86	39	0	-90
VHM0899	717900	6057600	86	39	0	-90
VHM0900	718002	6057600	86	39	0	-90
VHM0901	718099	6057600	86	42	0	-90

Hole ID	Easting (GDA94)	Northing (GDA94)	Elevation	Depth (m)	Azimuth	Dip
VHM0902	718201	6057600	86	39	0	-90
VHM0903	718301	6057600	86	39	0	-90
VHM0904	718400	6057600	87	39	0	-90
VHM0905	718500	6057600	87	39	0	-90
VHM0906	718600	6057600	87	39	0	-90
VHM0907	718701	6057600	87	39	0	-90
VHM0908	718801	6057600	88	39	0	-90
VHM0909	718900	6057600	89	39	0	-90
VHM0910	719001	6057600	89	51	0	-90
VHM0911	718300	6056400	86	42	0	-90
VHM0912	718501	6056400	86	45	0	-90
VHM0913	718699	6056400	89	47	0	-90
VHM0914	718901	6056400	94	51	0	-90
VHM0915	719101	6056400	94	48	0	-90
VHM0916	718300	6056800	87	42	0	-90
VHM0917	718500	6056800	87	45	0	-90
VHM0918	718702	6056800	88	45	0	-90
VHM0919	718901	6056800	92	48	0	-90
VHM0920	719101	6056800	90	45	0	-90
VHM0921	718500	6057200	87	45	0	-90
VHM0922	718701	6057200	87	48	0	-90
VHM0923	718901	6057200	89	48	0	-90
VHM0924	719100	6057200	89	45	0	-90
VHM0925	716821	6058001	86	42	0	-90
VHM0926	716901	6058000	86	42	0	-90
VHM0927	717000	6058000	86	42	0	-90
VHM0928	717100	6058000	86	42	0	-90
VHM0929	717200	6058000	86	42	0	-90
VHM0930	717300	6058000	86	39	0	-90
VHM0931	716834	6058400	86	39	0	-90
VHM0932	716901	6058400	86	39	0	-90
VHM0933	717000	6058400	86	39	0	-90
VHM0934	717101	6058400	86	39	0	-90
VHM0935	717200	6058400	86	39	0	-90
VHM0936	717300	6058400	86	36	0	-90
VHM0937	717400	6058401	88	42	0	-90
VHM0938	717500	6058400	89	42	0	-90
VHM0939	717601	6058400	86	39	0	-90
VHM0940	717701	6058400	84	40	0	-90
VHM0941	717801	6058400	84	38	0	-90

Hole ID	Easting (GDA94)	Northing (GDA94)	Elevation	Depth (m)	Azimuth	Dip
VHM0942	717901	6058400	84	36	0	-90
VHM0943	718001	6058400	86	39	0	-90
VHM0944	717892	6058001	86	39	0	-90
VHM0945	717799	6058000	84	39	0	-90
VHM0946	717699	6058000	83	39	0	-90
VHM0947	717599	6058000	83	36	0	-90
VHM0948	717500	6058000	86	39	0	-90
VHM0949	717399	6058000	87	39	0	-90
VHM0950	718100	6058000	87	45	0	-90
VHM0951	718201	6058000	87	42	0	-90
VHM0952	718300	6058000	88	45	0	-90
VHM0953	718401	6057999	87	45	0	-90
VHM0954	718502	6058000	87	45	0	-90
VHM0955	718600	6058000	88	45	0	-90
VHM0956	718700	6058000	89	48	0	-90
VHM0957	718801	6058000	88	45	0	-90
VHM0958	718901	6058001	88	48	0	-90
VHM0959	719000	6058000	90	48	0	-90
VHM0960	719101	6058000	91	48	0	-90
VHM0961	718000	6058000	87	42	0	-90
VHM0962	718101	6058400	87	42	0	-90
VHM0963	718200	6058400	87	42	0	-90
VHM0964	718300	6058400	88	42	0	-90
VHM0965	718399	6058400	90	48	0	-90
VHM0966	718500	6058400	89	48	0	-90
VHM0967	718600	6058400	87	45	0	-90
VHM0968	718699	6058400	87	45	0	-90
VHM0969	718800	6058400	88	45	0	-90
VHM0970	718899	6058400	89	45	0	-90
VHM0971	719000	6058400	90	48	0	-90
VHM0972	719100	6058400	89	48	0	-90
VHM0973	716495	6056434	85	39	0	-90
VHM0974	716594	6056430	85	33	0	-90
VHM0975	716648	6056430	85	33	0	-90
VHM0976	716701	6056426	85	33	0	-90
VHM0977	716751	6056425	84	33	0	-90
VHM0978	716799	6056423	84	30	0	-90
VHM0979	716849	6056420	84	30	0	-90
VHM0980	716898	6056419	84	39	0	-90
VHM0981	716951	6056418	84	30	0	-90

Hole ID	Easting (GDA94)	Northing (GDA94)	Elevation	Depth (m)	Azimuth	Dip
VHM0982	717002	6056418	83	30	0	-90
VHM0983	717049	6056419	83	30	0	-90
VHM0984	717101	6056416	83	30	0	-90
VHM0985	715801	6056450	88	30	0	-90
VHM0986	716104	6056445	87	30	0	-90
VHM0987	715597	6057202	88	33	0	-90
VHM0988	715700	6057200	91	42	0	-90
VHM0989	715801	6057200	89	30	0	-90
VHM0990	715901	6057201	87	30	0	-90
VHM0991	716003	6057201	87	30	0	-90
VHM0992	716099	6057200	87	42	0	-90
VHM0993	716201	6057200	86	30	0	-90
VHM0994	716302	6057200	86	30	0	-90
VHM0995	716400	6057198	86	30	0	-90
VHM0996	716450	6057200	86	30	0	-90
VHM0997	716501	6057201	86	42	0	-90
VHM0998	716547	6057203	86	30	0	-90
VHM0999	716601	6057201	86	30	0	-90
VHM1000	716649	6057189	85	30	0	-90
VHM1001	716702	6057210	85	30	0	-90
VHM1002	716751	6057200	85	33	0	-90
VHM1003	716800	6057200	85	30	0	-90
VHM1004	716847	6057200	85	33	0	-90
VHM1005	716900	6057200	85	30	0	-90
VHM1006	715500	6057600	85	30	0	-90
VHM1007	715604	6057600	85	30	0	-90
VHM1008	715700	6057600	86	39	0	-90
VHM1009	715801	6057600	86	33	0	-90
VHM1010	715899	6057600	86	39	0	-90
VHM1011	716000	6057600	86	33	0	-90
VHM1012	716101	6057600	86	30	0	-90
VHM1013	716201	6057600	86	30	0	-90
VHM1014	716299	6057601	86	30	0	-90
VHM1015	716350	6057600	86	30	0	-90
VHM1016	716400	6057600	86	27	0	-90
VHM1017	716449	6057600	86	27	0	-90
VHM1018	716499	6057600	86	42	0	-90
VHM1019	716550	6057600	86	30	0	-90
VHM1020	716599	6057600	86	30	0	-90
VHM1021	716650	6057600	87	30	0	-90

Hole ID	Easting (GDA94)	Northing (GDA94)	Elevation	Depth (m)	Azimuth	Dip
VHM1022	716698	6057600	86	30	0	-90
VHM1023	715400	6058400	86	30	0	-90
VHM1024	715499	6058400	86	30	0	-90
VHM1025	715601	6058400	86	30	0	-90
VHM1026	715700	6058400	86	30	0	-90
VHM1027	715802	6058400	86	39	0	-90
VHM1028	715901	6058400	87	30	0	-90
VHM1029	716000	6058400	87	30	0	-90
VHM1030	716101	6058400	87	39	0	-90
VHM1031	716150	6058400	87	30	0	-90
VHM1032	716200	6058400	87	30	0	-90
VHM1033	716250	6058400	87	30	0	-90
VHM1034	716300	6058400	87	30	0	-90
VHM1035	716350	6058400	86	30	0	-90
VHM1036	716399	6058400	86	30	0	-90
VHM1037	716451	6058400	86	30	0	-90
VHM1038	716500	6058400	86	39	0	-90
VHM1039	716550	6058400	86	30	0	-90
VHM1040	716599	6058400	86	30	0	-90
VHM1041	716700	6058400	86	30	0	-90

Notes:

1. Actual collar co-ordinates present in table.

2. Collar coordinates, elevation and orientation given in GDA 94 MGA Zone 54

### Appendix 5 – Significant assays from THM data at the Area 2 Project

Table 1: Significant intercepts located within high-grade zone.

	From	То	Interval	тнм	SLIME	Oversize	
Hole ID	(m)	(m)	(m)	(%)	(%)	(%)	
VHM0858	28	30	2	3.25	21.14	1.08	
VHM0858	33	35	2	2.22	19.88	18.16	
VHM0858	38	39	1	2.25	26.46	4.94	
VHM0859	27	35	8	4.84	22.74	11.71	
VHM0859	35	36	1	2.80	22.18	4.59	
VHM0860	26	29	3	6.52	22.38	5.04	
VHM0860	29	32	3	2.63	18.54	14.13	
VHM0860	36	37	1	2.59	22.13	11.17	
VHM0861	25	29	4	5.44	23.16	3.01	
VHM0861	30	36	6	2.22	20.36	5.30	
VHM0862	25	29	4	5.55	23.39	1.75	

	From	То	Interval	ТНМ	SLIME	Oversize
Hole ID	(m)	(m)	(m)	(%)	(%)	(%)
VHM0862	29	30	1	2.50	22.26	3.37
VHM0862	30	37	7	2.73	20.85	4.98
VHM0863	25	29	4	5.94	21.80	2.02
VHM0863	30	36	6	3.47	21.78	6.37
VHM0864	26	30	4	3.79	23.10	3.04
VHM0864	31	36	5	2.76	22.13	3.16
VHM0865	28	31	3	7.95	21.74	2.58
VHM0865	38	40	2	2.20	23.69	1.56
VHM0866	27	30	3	6.90	23.75	2.58
VHM0866	31	32	1	3.11	18.56	6.45
VHM0866	35	38	3	3.24	22.53	3.20
VHM0866	38	39	1	2.91	25.25	10.09
VHM0867	28	32	4	5.38	19.46	2.52
VHM0867	37	40	3	3.63	22.45	7.27
VHM0867	40	42	2	4.00	3.34	22.64
VHM0868	31	33	2	5.89	20.22	2.55
VHM0868	33	34	1	2.61	16.95	1.18
VHM0868	38	43	5	2.92	21.51	10.84
VHM0869	33	34	1	4.06	13.04	2.88
VHM0869	39	42	3	2.76	23.57	0.21
VHM0870	26	29	3	3.58	20.02	4.72
VHM0870	29	30	1	2.13	22.13	12.52
VHM0870	32	35	3	3.29	18.64	20.68
VHM0870	35	36	1	2.16	21.09	8.82
VHM0871	26	30	4	3.79	18.47	8.23
VHM0871	30	33	3	2.50	20.05	2.67
VHM0872	29	32	3	4.46	21.28	5.79
VHM0872	32	36	4	2.82	20.46	3.95
VHM0873	27	31	4	4.43	21.33	2.98
VHM0873	33	36	3	2.72	22.24	5.01
VHM0874	28	31	3	4.19	19.54	4.91
VHM0874	32	35	3	2.55	21.27	8.03
VHM0874	36	37	1	2.18	12.23	33.94
VHM0875	28	32	4	4.02	21.01	3.44
VHM0875	32	38	6	3.21	21.02	11.49
VHM0876	28	29	1	2.60	20.54	3.17
VHM0876	29	33	4	7.02	23.21	2.39
VHM0876	33	35	2	2.31	20.75	4.93
VHM0876	35	36	1	2.62	23.56	2.69
VHM0876	36	37	1	2.23	21.49	2.82

	From	То	Interval	тнм	SLIME	Oversize
Hole ID	(m)	(m)	(m)	(%)	(%)	(%)
VHM0876	38	39	1	2.14	16.93	8.78
VHM0877	30	32	2	4.91	26.76	7.97
VHM0877	32	40	8	2.91	20.45	2.44
VHM0878	29	32	3	3.64	24.26	2.93
VHM0878	32	33	1	2.53	21.02	0.41
VHM0878	35	40	5	2.57	19.48	8.98
VHM0879	28	32	4	4.06	20.42	3.96
VHM0879	36	39	3	2.47	19.26	8.34
VHM0879	39	40	1	2.21	23.69	2.64
VHM0880	29	31	2	3.78	16.44	5.21
VHM0880	31	32	1	3.49	16.44	4.01
VHM0880	32	34	2	2.88	21.19	2.82
VHM0880	37	39	2	2.49	19.58	16.49
VHM0880	40	41	1	2.05	25.03	3.01
VHM0881	31	32	1	2.11	12.89	9.45
VHM0881	32	33	1	3.67	15.36	1.56
VHM0881	38	40	2	2.51	21.21	2.84
VHM0882	29	31	2	3.94	15.32	2.06
VHM0882	31	32	1	2.37	20.56	0.40
VHM0882	36	38	2	3.90	21.63	5.72
VHM0883	26	28	2	2.71	19.62	0.89
VHM0883	32	33	1	2.08	24.40	8.12
VHM0884	26	28	2	3.96	22.19	1.44
VHM0884	28	29	1	2.13	20.25	3.78
VHM0884	31	32	1	2.02	20.72	6.59
VHM0884	35	36	1	2.73	20.58	10.29
VHM0885	27	35	8	2.77	22.82	5.09
VHM0885	35	36	1	3.40	21.87	8.68
VHM0885	36	37	1	2.47	21.91	5.23
VHM0886	27	31	4	5.17	21.46	3.10
VHM0886	32	33	1	2.07	19.24	5.87
VHM0886	33	34	1	3.07	23.17	8.35
VHM0886	34	35	1	2.38	18.75	7.53
VHM0886	37	38	1	2.41	24.44	2.94
VHM0887	28	31	3	4.67	23.23	3.99
VHM0887	31	32	1	2.16	17.35	4.68
VHM0887	34	35	1	2.44	22.72	10.17
VHM0887	35	36	1	2.72	22.25	4.34
VHM0888	27	28	1	3.74	21.37	6.08
VHM0888	28	29	1	4.42	24.08	3.15

	From	То	Interval	тнм	SLIME	Oversize	
Hole ID	(m)	(m)	(m)	(%)	(%)	(%)	
VHM0888	29	30	1	5.77	20.74	5.68	
VHM0888	30	31	1	6.64	23.34	1.98	
VHM0888	31	33	2	3.61	21.62	1.85	
VHM0888	33	39	6	2.77	21.47	4.49	
VHM0889	27	30	3	3.42	20.59	2.52	
VHM0889	31	32	1	2.00	16.86	13.16	
VHM0889	32	34	2	2.49	17.87	9.86	
VHM0889	36	39	3	3.11	20.05	10.67	
VHM0889	39	40	1	2.14	21.35	2.10	
VHM0890	27	31	4	4.22	20.02	4.31	
VHM0890	31	32	1	2.82	18.64	2.09	
VHM0890	35	36	1	2.46	17.00	20.70	
VHM0890	36	39	3	2.71	19.96	6.48	
VHM0891	28	34	6	4.03	22.58	3.28	
VHM0892	31	32	1	3.26	21.21	2.48	
VHM0892	27	32	5	4.58	24.89	3.16	
VHM0893	27	32	5	4.18	23.99	2.22	
VHM0894	28	30	2	5.25	24.83	4.01	
VHM0894	39	40	1	2.00	23.39	8.46	
VHM0894	43	44	1	2.57	41.57	4.82	
VHM0895	29	30	1	4.33	22.45	4.44	
VHM0895	30	31	1	3.00	20.51	1.24	
VHM0895	36	39	3	2.93	29.27	8.85	
VHM0896	30	31	1	4.47	18.01	4.63	
VHM0896	37	38	1	2.04	19.28	5.47	
VHM0897	28	31	3	2.78	19.58	2.74	
VHM0897	35	36	1	4.28	19.80	0.36	
VHM0898	28	30	2	3.86	22.35	1.03	
VHM0898	30	39	9	2.88	18.72	9.70	
VHM0899	27	28	1	3.39	24.45	2.71	
VHM0899	28	31	3	3.52	31.13	5.58	
VHM0900	27	30	3	3.53	21.17	2.36	
VHM0900	30	32	2	2.51	19.42	2.30	
VHM0900	33	35	2	2.43	22.40	12.37	
VHM0900	35	36	1	2.10	21.87	3.75	
VHM0900	36	37	1	3.48	21.15	4.01	
VHM0900	37	38	1	2.55	20.92	2.05	
VHM0901	27	30	3	4.41	23.73	2.88	
VHM0901	30	31	1	2.39	21.19	1.20	
VHM0901	32	33	1	2.68	18.77	6.11	

	From	То	Interval	ТНМ	SLIME	Oversize
Hole ID	(m)	(m)	(m)	(%)	(%)	(%)
VHM0902	27	30	3	4.79	23.55	3.05
VHM0902	30	31	1	2.05	23.92	2.24
VHM0902	35	39	4	3.25	20.97	8.68
VHM0903	28	30	2	6.11	25.92	3.74
VHM0903	37	38	1	2.70	21.86	1.27
VHM0904	27	30	3	3.95	23.71	3.82
VHM0904	30	31	1	2.49	20.97	0.38
VHM0904	37	38	1	2.58	23.48	1.83
VHM0905	28	30	2	4.27	21.25	3.87
VHM0905	30	31	1	2.31	19.96	2.99
VHM0905	35	36	1	2.25	20.97	5.99
VHM0906	28	31	3	3.49	20.29	2.58
VHM0906	36	38	2	2.09	17.44	17.55
VHM0907	28	31	3	2.68	20.89	4.31
VHM0907	35	36	1	2.39	22.77	2.63
VHM0907	36	38	2	3.98	21.54	16.04
VHM0907	38	39	1	2.13	17.36	18.55
VHM0909	30	32	2	4.14	18.40	4.73
VHM0909	37	39	2	2.79	16.77	15.08
VHM0910	31	33	2	6.23	19.47	3.05
VHM0910	38	39	1	3.05	18.67	5.02
VHM0911	28	32	4	6.77	20.80	4.42
VHM0911	37	40	3	5.82	19.52	10.62
VHM0912	27	28	1	4.81	23.33	5.37
VHM0912	28	30	2	5.64	25.29	1.16
VHM0912	35	38	3	3.40	22.98	3.74
VHM0913	30	31	1	2.30	16.28	6.21
VHM0913	31	32	1	5.10	18.75	2.36
VHM0913	32	34	2	4.23	19.00	2.45
VHM0913	38	40	2	3.22	18.04	21.44
VHM0913	40	41	1	2.03	21.57	10.04
VHM0914	32	34	2	4.74	17.17	2.66
VHM0914	39	41	2	3.12	21.39	5.77
VHM0915	30	32	2	4.44	13.73	3.12
VHM0915	32	33	1	2.47	16.14	1.23
VHM0915	36	40	4	3.46	23.82	3.58
VHM0915	44	45	1	2.51	17.59	19.86
VHM0915	47	48	1	2.34	22.35	17.40
VHM0916	27	31	4	3.52	25.68	3.40
VHM0916	37	39	2	3.39	23.32	8.06

	From	То	Interval	ТНМ	SLIME	Oversize
Hole ID	(m)	(m)	(m)	(%)	(%)	(%)
VHM0916	39	40	1	2.32	25.39	9.01
VHM0917	30	31	1	2.46	21.69	8.44
VHM0917	31	32	1	2.09	20.83	1.58
VHM0917	36	39	3	2.79	22.69	5.02
VHM0917	40	43	3	2.07	28.20	8.23
VHM0918	29	31	2	3.46	18.41	5.00
VHM0918	38	39	1	3.21	18.38	12.85
VHM0918	39	44	5	2.18	22.10	9.53
VHM0919	31	33	2	4.88	37.12	2.28
VHM0919	38	40	2	4.20	20.06	5.78
VHM0920	28	30	2	3.11	24.61	3.53
VHM0920	34	35	1	2.18	25.31	2.56
VHM0920	35	37	2	3.27	20.44	2.89
VHM0921	27	29	2	3.94	18.92	5.32
VHM0921	29	31	2	4.82	21.71	2.49
VHM0921	35	38	3	3.14	17.41	15.93
VHM0921	43	44	1	3.24	17.68	3.63
VHM0922	29	31	2	4.16	19.03	2.21
VHM0922	36	39	3	3.30	21.33	3.48
VHM0923	30	32	2	3.77	16.78	3.12
VHM0923	35	36	1	2.23	18.36	0.22
VHM0923	37	39	2	2.66	22.04	4.93
VHM0924	27	29	2	3.11	17.58	2.33
VHM0924	37	39	2	2.57	21.53	8.99
VHM0924	43	44	1	2.16	18.32	5.87
VHM0925	30	32	2	3.95	18.42	13.18
VHM0925	32	33	1	2.81	19.58	5.38
VHM0925	35	36	1	3.13	21.94	10.47
VHM0926	29	31	2	3.85	19.45	12.68
VHM0937	31	32	1	3.14	21.84	2.10
VHM0937	34	35	1	2.07	17.03	14.07
VHM0937	36	37	1	2.56	16.63	27.58
VHM0937	37	38	1	2.62	22.29	5.16
VHM0938	35	36	1	5.82	17.46	14.44
VHM0938	37	39	2	3.23	21.87	14.34
VHM0938	41	42	1	7.01	17.85	21.73
VHM0939	29	34	5	3.95	20.13	8.98
VHM0939	34	39	5	2.22	22.08	9.84
VHM0940	30	31	1	5.05	24.12	0.65
VHM0940	31	32	1	4.44	22.99	0.36

	From	То	Interval	тнм	SLIME	Oversize	
Hole ID	(m)	(m)	(m)	(%)	(%)	(%)	
VHM0940	33	35	2	2.13	15.65	11.50	
VHM0940	35	36	1	3.64	20.32	5.95	
VHM0940	36	37	1	2.20	18.81	4.45	
VHM0940	38	39	1	2.39	18.46	6.84	
VHM0940	39	40	1	4.29	18.35	2.53	
VHM0941	27	30	3	4.34	19.75	7.25	
VHM0941	30	37	7	2.76	18.87	12.47	
VHM0942	27	29	2	2.65	17.83	0.26	
VHM0943	28	30	2	4.84	23.53	0.91	
VHM0943	31	32	1	2.03	20.29	14.25	
VHM0943	37	38	1	2.04	20.06	2.36	
VHM0943	38	39	1	2.11	20.06	11.55	
VHM0944	27	30	3	2.75	19.30	2.48	
VHM0944	34	35	1	3.85	23.74	10.86	
VHM0945	26	29	3	3.25	21.49	0.11	
VHM0945	29	30	1	2.16	18.91	4.31	
VHM0945	32	38	6	4.32	21.06	19.54	
VHM0946	26	30	4	3.79	21.08	3.58	
VHM0946	30	32	2	2.44	22.41	4.82	
VHM0946	32	33	1	2.01	21.00	6.74	
VHM0946	36	37	1	3.27	21.34	6.94	
VHM0947	26	27	1	3.93	22.48	0.62	
VHM0947	31	34	3	2.07	20.96	13.51	
VHM0948	29	30	1	3.72	24.94	2.92	
VHM0948	38	39	1	2.37	30.66	2.46	
VHM0949	28	29	1	2.05	19.95	2.07	
VHM0949	30	32	2	3.86	24.11	2.56	
VHM0949	32	34	2	2.10	22.21	5.56	
VHM0949	34	35	1	3.06	14.07	32.33	
VHM0949	35	36	1	3.70	20.86	8.27	
VHM0949	36	39	3	2.62	27.75	7.35	
VHM0950	28	29	1	3.09	22.21	4.31	
VHM0950	32	33	1	5.95	24.18	2.66	
VHM0950	33	34	1	2.16	18.41	0.98	
VHM0950	40	41	1	2.67	22.48	6.33	
VHM0950	41	42	1	3.43	21.31	6.35	
VHM0951	28	30	2	4.85	22.01	3.68	
VHM0951	37	42	5	2.44	21.78	7.75	
VHM0952	28	31	3	6.37	23.62	2.64	
VHM0952	33	34	1	2.31	21.85	10.37	

	From	То	Interval	ТНМ	SLIME	Oversize
Hole ID	(m)	(m)	(m)	(%)	(%)	(%)
VHM0952	37	39	2	2.71	23.66	14.19
VHM0953	8	11	3	5.11	23.84	2.61
VHM0954	29	32	3	4.63	21.91	3.33
VHM0954	32	34	2	2.32	23.39	3.20
VHM0955	28	31	3	4.54	22.99	2.20
VHM0955	31	32	1	2.04	25.99	0.19
VHM0956	29	31	2	4.10	19.55	3.46
VHM0956	31	33	2	3.44	21.34	1.94
VHM0956	34	35	1	2.25	21.08	0.72
VHM0956	38	39	1	2.04	19.01	15.94
VHM0957	29	31	2	2.84	17.87	3.27
VHM0957	37	38	1	2.08	21.54	6.52
VHM0958	29	32	3	2.82	18.64	3.08
VHM0958	32	33	1	2.03	19.11	0.50
VHM0959	31	34	3	4.70	19.62	2.79
VHM0959	38	41	3	2.66	22.01	1.02
VHM0959	42	43	1	2.16	22.31	4.11
VHM0960	33	35	2	3.70	23.27	2.72
VHM0960	31	34	3	2.99	19.36	12.00
VHM0960	43	44	1	2.91	17.78	17.32
VHM0961	29	33	4	4.55	22.93	4.56
VHM0961	33	36	3	2.21	21.75	5.39
VHM0961	38	39	1	2.39	23.53	5.86
VHM0962	28	31	3	4.82	22.73	0.94
VHM0962	38	39	1	2.08	19.59	7.25
VHM0963	28	31	3	3.61	29.46	2.90
VHM0963	31	32	1	2.24	29.93	4.15
VHM0963	38	39	1	2.19	18.34	12.95
VHM0964	29	30	1	2.80	18.47	4.67
VHM0964	30	33	3	5.54	22.75	1.23
VHM0964	33	36	3	2.24	22.08	2.27
VHM0964	38	40	2	3.14	20.40	6.22
VHM0965	33	35	2	5.54	22.18	0.97
VHM0965	39	42	3	3.25	20.07	7.21
VHM0966	30	31	1	2.72	20.88	4.46
VHM0966	31	33	2	7.18	23.97	0.75
VHM0966	37	43	6	2.78	23.42	4.16
VHM0966	46	47	1	4.75	25.23	11.57
VHM0967	28	29	1	2.63	17.97	3.95
VHM0967	29	31	2	5.58	24.00	1.97

	From	То	Interval	ТНМ	SLIME	Oversize
Hole ID	(m)	(m)	(m)	(%)	(%)	(%)
VHM0967	31	34	3	2.16	21.40	2.39
VHM0967	38	39	1	2.19	20.45	5.77
VHM0968	28	31	3	5.28	20.01	2.77
VHM0968	31	32	1	2.57	18.57	0.48
VHM0969	28	31	3	2.58	21.64	1.04
VHM0969	36	38	2	1.88	19.25	6.20
VHM0970	31	34	3	4.27	22.35	0.97
VHM0971	30	31	1	2.21	22.03	0.14
VHM0971	38	39	1	2.18	19.96	1.61
VHM0972	29	32	3	3.40	18.73	2.25
VHM0972	33	34	1	2.69	19.62	0.88
VHM0972	36	39	3	3.10	18.21	11.60
VHM0972	47	48	1	2.73	24.46	13.90

Reporting parameters:

- 1. Average THM% of combined samples.
- 2. Heavy Liquid Separation (HLS), 20µ 1mm Centrifuge method.
- 3. Interval within modelled high-grade zone where THM % >2%.
- 4. A maximum of interval waste of 1% THM included if lithology supports inclusion in significant intercept.
- 5. No high cut applied to data set.
- 6. No minimum reporting length applied.

## Appendix 6 – Significant assays from mineral assemblage data at the Area 2 Project

Table 1: Mineral assemblage results via Quantitative Automated Mineralogical Analysis (QEMScan)

	Total				THM Ass	emblage			
Composite ID	Heavy Mineral (THM)	Zircon	Rutile	Leucoxe ne	Ilmenite	Monazite	Xenotime	VHM	Trash
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
19Q0007	3.4	14.5	22.5	18.5	14.7	1.1	0.5	71.8	28.2
19Q0008	1.4	9.5	18.3	16.8	17.3	0.9	0.3	63.1	37
19Q0009	1.4	19.4	13.2	9.4	27.6	2.9	0.7	73.2	26.8
19Q0010	3	27.2	11.6	7.5	30.4	3.7	1	81.5	18.5
19Q0011	1.8	5.9	5	3.8	10.1	0.9	0.3	25.9	74.1
19Q0044	2.9	20.5	25	18.8	15.2	1.3	0.6	81.4	18.6
19Q0045	1.1	11.7	21.5	19.6	19.6	1.1	0.4	73.9	26.1
19Q0046	2.9	23.1	16.3	13.5	25.6	3.5	0.7	82.7	17.3
19Q0047	1	24.2	11.7	9.3	29.6	3.9	1	79.7	20.3
19Q0048	3.4	13.4	5.1	3.2	14.8	2.9	0.3	39.6	60.4
19Q0049	2.9	26.8	13.2	8.4	31.5	4	1.1	85.1	15
19Q0050	2.5	13.1	21.3	17.3	12.3	0.8	0.3	65.2	34.8
19Q0051	1.8	5.9	14.8	13.9	15	0.6	0.3	50.4	49.6
19Q0052	2.9	24.4	15.2	10.3	26.2	3.6	0.6	80.4	19.6
19Q0053	3.3	26.1	9.1	5.1	26.1	3.9	1	71.3	28.8
19Q0054	2.2	17.6	24.5	22	13.6	1.7	0.7	80	20
19Q0055	2.9	27.7	10.4	6.5	30.8	4.4	1.2	80.9	19.1
19Q0056	2.3	25.2	16.8	11.5	25.9	3.3	0.9	83.6	16.4
19Q0057	2.1	25.1	11.8	7.6	30.3	3.6	0.8	79	21
19Q0058	2.3	18.1	24	19	15.8	1.4	0.6	79	21
19Q0059	1.2	9.2	19.3	16.1	19.3	1.2	0.5	65.4	34.6
19Q0060	2.9	21.5	16.7	13.1	28.5	3.4	0.9	84	16
19Q0062	2.1	13.8	21.3	17.7	16.7	1	0.5	70.9	29.2
19Q0063	2	25.4	13	9.6	28.2	3.8	0.9	80.9	19.1
19Q0064	2.9	29	11.2	7	30.6	4.9	1.2	83.8	16.2
19Q0065	2.6	16.9	22.6	15.6	17.8	1.2	0.5	74.6	25.4
19Q0066	2	12.3	16.4	14.9	23.5	1.3	0.3	68.5	31.5
19Q0067	3.5	27.4	15.5	10.3	27.3	4.1	0.8	85.4	14.6
23Q0001	5.4	27.9	10.9	8.1	27	5.2	0.8	79.9	20.1
23Q0002	2.8	15.2	9.6	6.8	18.9	2.7	0.5	53.5	46.5
23Q0003	4.3	28.1	11.9	9	27.7	5.3	0.9	83.1	16.9
23Q0004	2.9	17.4	9.3	6.5	19.7	3.3	0.5	56.7	43.3
23Q0005	4.3	26.5	12.8	9.7	29.2	4.9	0.9	83.9	16.1

	Total	THM Assemblage								
Composite ID	Heavy Mineral (THM)	Zircon	Rutile	Leucoxe ne	Ilmenite	Monazite	Xenotime	VHM	Trash	
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
23Q0006	2.3	13.1	8.2	6.4	16.1	2.5	0.4	46.7	53.3	
23Q0007	4	27.7	13.1	10.7	29.9	4.9	0.9	87.3	12.7	
23Q0008	2.2	15.2	8.4	6.2	17.9	2.9	0.6	51.2	48.8	
23Q0009	4.4	24.7	13.4	10.9	28.8	4.2	0.7	82.7	17.3	
23Q0010	2.2	10.3	7.6	5.7	13.5	1.8	0.3	39.2	60.8	
23Q0011	4.4	23.3	14.1	10.4	26.5	4	0.7	79	21	
23Q0012	2.3	9.5	7.4	5.7	12.9	1.6	0.4	37.5	62.5	

Composite ID	Total Heavy Mineral (THM)		Rare Earth Oxides															
		La <sub>2</sub> O <sub>3</sub>	CeO <sub>2</sub>	Pr₀O <sub>11</sub>	Nd <sub>2</sub> O <sub>3</sub>	Sm <sub>2</sub> O <sub>3</sub>	Eu <sub>2</sub> O <sub>3</sub>	Gd <sub>2</sub> O <sub>3</sub>	Tb₄O <sub>7</sub>	Dy <sub>2</sub> O <sub>3</sub>	Er <sub>2</sub> O <sub>3</sub>	Tm <sub>2</sub> O <sub>3</sub>	Yb <sub>2</sub> O <sub>3</sub>	$Y_2O_3$	Ho <sub>2</sub> O <sub>3</sub>	Lu <sub>2</sub> O <sub>3</sub>	TREO	TREO +Y <sub>2</sub> O <sub>3</sub>
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
19Q0007	3.4	0.106	0.246	0.026	0.105	0.019	0.001	0.022	0.005	0.032	0.025	0.004	0.028	0.241			0.617	0.859
19Q0008	1.4	0.094	0.197	0.023	0.082	0.016	0.001	0.017	0.003	0.022	0.017	0.003	0.018	0.165			0.492	0.657
19Q0009	3.8	0.305	0.651	0.075	0.268	0.05	0.003	0.047	0.009	0.053	0.038	0.006	0.04	0.368			1.545	1.913
19Q0010	3	0.446	0.946	0.108	0.408	0.073	0.004	0.066	0.012	0.07	0.05	0.008	0.052	0.495			2.242	2.737
19Q0011	1.8	0.082	0.197	0.024	0.093	0.016	0.001	0.015	0.003	0.016	0.011	0.002	0.012	0.114			0.471	0.585
19Q0044	2.9	0.117	0.369	0.037	0.117	0.027	0.002	0.031	0.006	0.044	0.034	0.005	0.038	0.381			0.828	1.209
19Q0045	1.1	0.117	0.246	0.031	0.117	0.022	0.002	0.023	0.004	0.03	0.022	0.004	0.024	0.254			0.641	0.895
19Q0046	2.9	0.352	0.737	0.085	0.35	0.059	0.003	0.058	0.01	0.065	0.045	0.007	0.049	0.381			1.82	2.201
19Q0047	1	0.352	0.86	0.096	0.35	0.066	0.004	0.064	0.011	0.071	0.05	0.008	0.053	0.508			1.984	2.492
19Q0048	3.4	0.352	0.614	0.073	0.233	0.048	0.002	0.042	0.006	0.038	0.024	0.004	0.026	0.254			1.461	1.715
19Q0049	2.9	0.352	0.86	0.099	0.35	0.068	0.004	0.066	0.011	0.072	0.051	0.008	0.054	0.508			1.995	2.503
19Q0050	2.5	0.117	0.246	0.027	0.117	0.02	0.001	0.022	0.004	0.031	0.024	0.004	0.026	0.254			0.639	0.893
19Q0051	1.8	0.117	0.123	0.016	0	0.012	0.001	0.012	0.002	0.016	0.012	0.002	0.013	0.127			0.327	0.454
19Q0052	2.9	0.352	0.737	0.082	0.233	0.056	0.003	0.053	0.009	0.06	0.043	0.006	0.046	0.381			1.681	2.062
19Q0053	3.3	0.469	0.86	0.105	0.35	0.072	0.004	0.067	0.011	0.069	0.048	0.008	0.053	0.508			2.115	2.623
19Q0054	2.2	0.235	0.369	0.043	0.117	0.032	0.002	0.034	0.006	0.045	0.035	0.005	0.038	0.381			0.96	1.341
19Q0055	2.9	0.469	0.983	0.104	0.467	0.07	0.004	0.068	0.011	0.072	0.051	0.008	0.055	0.508			2.361	2.869
19Q0056	2.3	0.352	0.737	0.082	0.35	0.058	0.003	0.057	0.009	0.062	0.045	0.007	0.048	0.381			1.809	2.19
19Q0057	2.1	0.352	0.737	0.087	0.35	0.059	0.003	0.057	0.01	0.062	0.046	0.007	0.047	0.508			1.818	2.326
19Q0058	2.3	0.117	0.369	0.037	0.117	0.027	0.002	0.03	0.006	0.041	0.032	0.005	0.036	0.254			0.819	1.073
19Q0059	1.2	0.117	0.246	0.022	0.117	0.016	0.001	0.017	0.003	0.022	0.016	0.003	0.018	0.127			0.599	0.726
19Q0060	2.9	0.352	0.614	0.072	0.233	0.049	0.003	0.049	0.008	0.054	0.04	0.006	0.043	0.381			1.524	1.905
19Q0062	2.1	0.117	0.246	0.027	0.117	0.021	0.001	0.023	0.005	0.034	0.026	0.004	0.029	0.254			0.649	0.903
19Q0063	2	0.352	0.86	0.091	0.35	0.062	0.003	0.06	0.01	0.065	0.048	0.007	0.05	0.508			1.959	2.467

Table 2: Total Rare Earth Oxide results via Quantitative Automated Mineralogical Analysis (QEMScan) used to inform Mineral Resource estimate

Composite ID	Total Heavy Mineral (THM)		Rare Earth Oxides															
		La <sub>2</sub> O <sub>3</sub>	CeO <sub>2</sub>	Pr <sub>6</sub> O₁1	$Nd_2O_3$	Sm <sub>2</sub> O <sub>3</sub>	Eu <sub>2</sub> O <sub>3</sub>	Gd <sub>2</sub> O <sub>3</sub>	Tb₄O <sub>7</sub>	Dy <sub>2</sub> O <sub>3</sub>	Er <sub>2</sub> O <sub>3</sub>	Tm <sub>2</sub> O <sub>3</sub>	Yb <sub>2</sub> O <sub>3</sub>	<b>Y</b> <sub>2</sub> <b>O</b> <sub>3</sub>	Ho <sub>2</sub> O <sub>3</sub>	Lu <sub>2</sub> O <sub>3</sub>	TREO	TREO +Y <sub>2</sub> O <sub>3</sub>
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
19Q0064	2.9	0.469	0.983	0.117	0.467	0.082	0.004	0.077	0.013	0.08	0.055	0.008	0.06	0.508			2.414	2.922
19Q0065	2.6	0.117	0.246	0.027	0.117	0.021	0.002	0.024	0.005	0.035	0.028	0.005	0.031	0.254			0.656	0.91
19Q0066	2	0.117	0.246	0.031	0.117	0.023	0.002	0.024	0.004	0.03	0.022	0.004	0.025	0.254			0.644	0.898
19Q0067	3.5	0.469	0.86	0.099	0.35	0.068	0.003	0.065	0.011	0.072	0.051	0.008	0.054	0.508			2.109	2.617
23Q0001	5.4	0.641	1.41	0.161	0.567	0.107	0.005	0.091	0.014	0.086	0.057	0.009	0.066	0.6	0.018	0.01	3.242	3.242
23Q0002	2.8	0.386	0.81	0.097	0.347	0.065	0.003	0.054	0.009	0.054	0.036	0.005	0.039	0.34	0.012	0.006	1.923	1.923
23Q0003	4.3	0.703	1.46	0.175	0.629	0.117	0.005	0.099	0.015	0.093	0.06	0.01	0.064	0.59	0.019	0.01	3.459	3.459
23Q0004	2.9	0.449	0.94	0.113	0.408	0.077	0.003	0.065	0.01	0.062	0.04	0.006	0.042	0.4	0.013	0.007	2.236	2.236
23Q0005	4.3	0.629	1.39	0.156	0.567	0.105	0.005	0.089	0.014	0.088	0.058	0.009	0.065	0.57	0.019	0.01	3.203	3.203
23Q0006	2.3	0.359	0.78	0.09	0.323	0.06	0.003	0.05	0.008	0.05	0.032	0.005	0.034	0.31	0.01	0.005	1.81	1.81
23Q0007	4	0.599	1.37	0.15	0.542	0.101	0.005	0.087	0.014	0.084	0.056	0.009	0.063	0.57	0.018	0.01	3.108	3.108
23Q0008	2.2	0.372	0.76	0.094	0.335	0.063	0.003	0.051	0.008	0.049	0.032	0.005	0.036	0.31	0.01	0.005	1.824	1.824
23Q0009	4.4	0.553	1.15	0.14	0.495	0.092	0.004	0.08	0.013	0.078	0.052	0.008	0.056	0.51	0.017	0.009	2.747	2.747
23Q0010	2.2	0.218	0.48	0.055	0.199	0.038	0.002	0.032	0.005	0.031	0.02	0.003	0.023	0.2	0.007	0.003	1.117	1.117
23Q0011	4.4	0.574	1.27	0.145	0.515	0.097	0.004	0.08	0.013	0.08	0.053	0.008	0.061	0.54	0.017	0.009	2.926	2.926
23Q0012	2.3	0.256	0.53	0.065	0.231	0.043	0.002	0.038	0.006	0.037	0.025	0.004	0.03	0.25	0.008	0.004	1.28	0

Notes: Any discrepancies in totals are a function of rounding.

1. Recoverable assemblage, via QEMScan Particle Analysis, is reported as a percentage of in-situ THM content.

2. Recoverable Zircon Grade is calculated by THM Grade multiplied by Zircon Grade.

3. Recoverable Rutile Grade is calculated by THM Grade multiplied by Rutile Grade.

4. Recoverable Leucoxene Grade is calculated by THM Grade multiplied by Leucoxene Grade.

### Appendix 7 – Supplementary drill hole section map

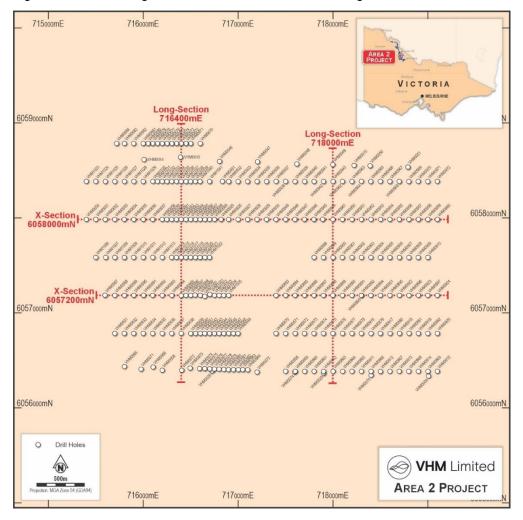


Figure 1: Plan showing drill hole collars and location of long-sections