14 June 2023

98Mt @ 890ppm TREO – Initial Independent High-Grade Rare Earth Mineral Resource at Circle Valley

- **Initial Mineral Resource of 98Mt @ 890ppm TREO containing 21,560t of NdPr metal at a high NdPr to TREO ratio of 25% at Circle Valley (MEK 100%).**
- **The shallow, high-grade Mineral Resource is reported entirely within an optimised pit shell and above a 430ppm TREO minus CeO_2 cut-off.**
- The Inferred Mineral Resource is largely drilled out with a 400m by 400m grid and was independently estimated by Cube Consulting Pty Ltd.
- **The optimised pit shell has an average depth of 26m, covers an area of ~18.8km^2, extending ~5.5km from north to south and ~7.5km from east to west.**
- **A discrete high-grade subset of the Mineral Resource (~1km^2) includes 13Mt @ 1,440ppm TREO within an optimised pit shell and above a 430ppm TREO minus CeO_2 cut-off.**
- Results from the 2023 drilling confirm the shallow high-grade mineralisation trends northwest and remains open in that direction, providing strong potential for further growth through drilling.
- Metallurgical optimisation test work to develop a recovery curve for both ammonium sulphate (ionic portion of the rare earths) and acid (non-ionic portion of the rare earths) is anticipated in July 2023 and will support further economic assessment.

Commenting on this Mineral Resource, Meeka's Managing Director Tim Davidson said:
"This initial high-grade Mineral Resource at Circle Valley is a commendation of the diligent work by our team in identifying and then executing on the rare earth opportunity, moving from concept to Mineral Resource in under 24 months.

The Mineral Resource is reported entirely within an optimised pit shell and supported by metallurgical and economic assumptions from our ongoing test work, ensuring it is a valuable, shallow, high-grade Mineral Resource.

Results from the most recent phase of 2023 drilling also show the high-grade mineralisation trends northwest and remains open in that direction, providing a compelling growth target."

Meeka Metals Limited ("**Meeka**" or "**the Company**") is pleased to report an initial rare earth Mineral Resource of 98Mt @ 890ppm TREO for the 100% owned Circle Valley Project. The Mineral Resource has a high NdPr to TREO ratio of 25%, containing 21,560t of high value NdPr metal.

This is the first rare earth Mineral Resource reported for Circle Valley and strong potential for growth exists with the shallow high-grade mineralisation trending northwest and remaining open in that direction.

The Mineral Resource is reported entirely within an optimised pit shell and above a 430ppm TREO minus CeO_2 (TREO-CeO_2) cut-off. The open pit optimisation constraining the Mineral Resource reflects current mining costs for a large scale, free digging truck and shovel operation. The optimised pit shell has an average depth of 26m and extends over an area of ~18.8km^2. Additionally, a discrete high-grade subset of the Mineral Resource (~1km^2)

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includes 13Mt @ 1,440ppm TREO within an optimised pit shell and above a 430ppm TREO-CeO_2 cut-off.

It is anticipated that if mining were to occur, areas that are subject to mining would be systematically backfilled and rehabilitated with topsoil (which is removed prior to mining and stored for re-use during remediation) as mining progresses. The rehabilitated areas would reflect the pre-mining condition of the Project area.

The Mineral Resource was prepared based on 12,401m of large diameter aircore drilling. Most of the holes are vertically oriented with an average depth of 40m. Drilling was completed with a Schramm T450 aircore/slimline RC drill rig. This allowed a larger diameter aircore drill bit and rods to be used (4-inch used as opposed to the general 3-inch diameter) resulting in a larger sample and access to increased downhole pressure to enable better sample recovery.

The Mineral Resource is largely drilled out with a 400m by 400m grid, with some areas drilled on a denser hole spacing. The Mineral Resource is reported entirely in the Inferred classification to reflect the metallurgical test work status and drill spacing.

Table 1 – Circle Valley Rare Earth Mineral Resource

Classification	Tonnes (Mt)	TREO (ppm)	TREO-CeO_2 (ppm)	NdPr (ppm)	Sc_2O_3 (g/t)
Inferred	98	890	660	220	25
Total	**98**	**890**	**660**	**220**	**25**

TREO (Total Rare Earth Oxide) = $La_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3 + Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Lu_2O_3 + Y_2O_3$

TREO-CeO_2 = TREO grade minus CeO_2

NdPr = $Nd_2O_3 + Pr_6O_{11}$

Sc_2O_3 = Scandium Oxide

Notes:
1. Mineral Resources are classified in accordance with JORC code (2012).
2. The Mineral Resource is constrained within a US$145/kg REO basket price optimised pit shell and above a 430ppm TREO-CeO_2 cut-off.
3. Estimates are rounded to reflect the level of confidence in the Mineral Resources at the time of reporting.

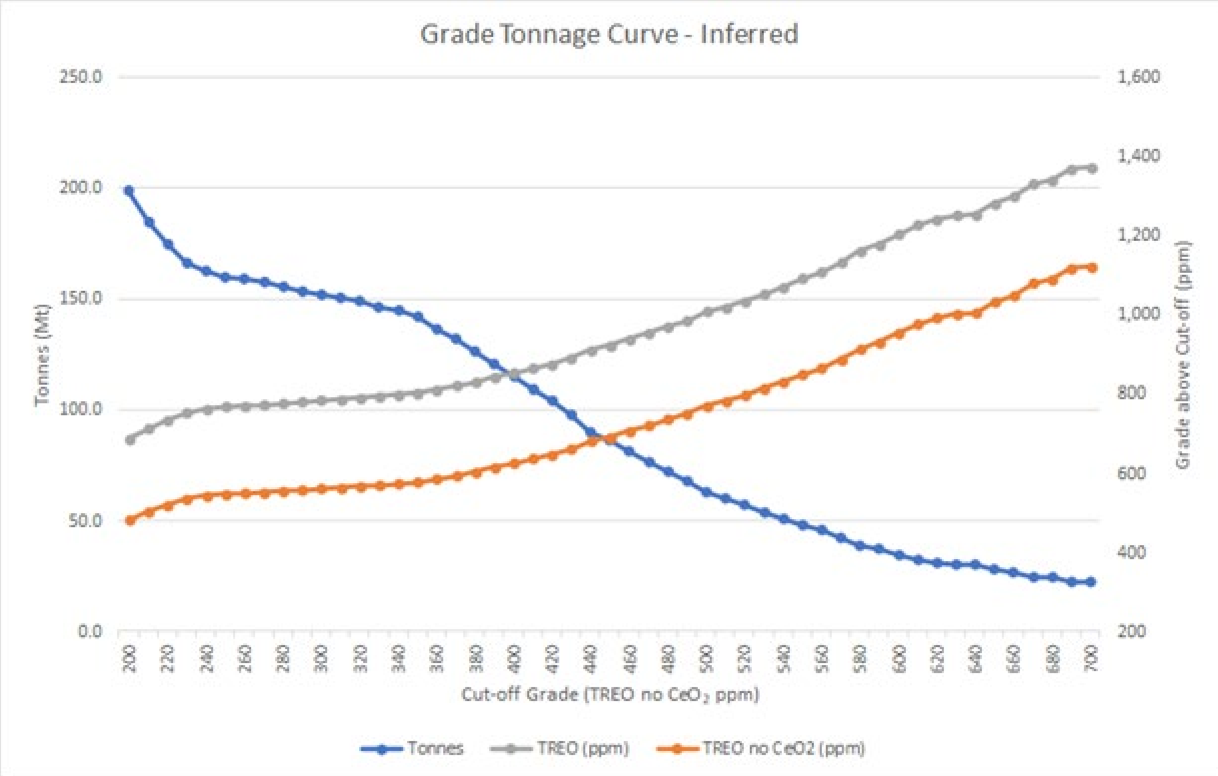


Figure 1: Grade tonnage relationship for the Circle Valley rare earth Mineral Resource.

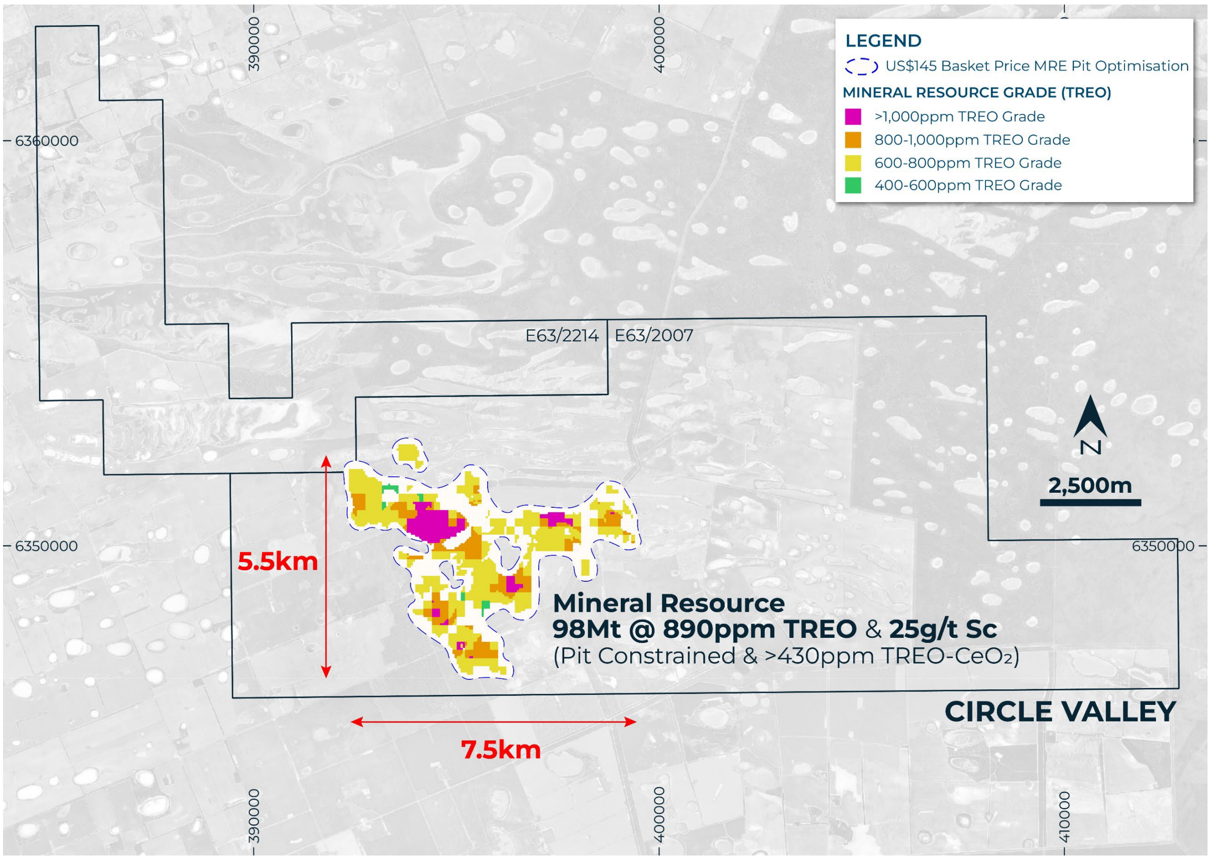


Figure 2: Plan showing rare earth Mineral Resource at MEK's 100% owned Circle Valley Project (222km[2]).

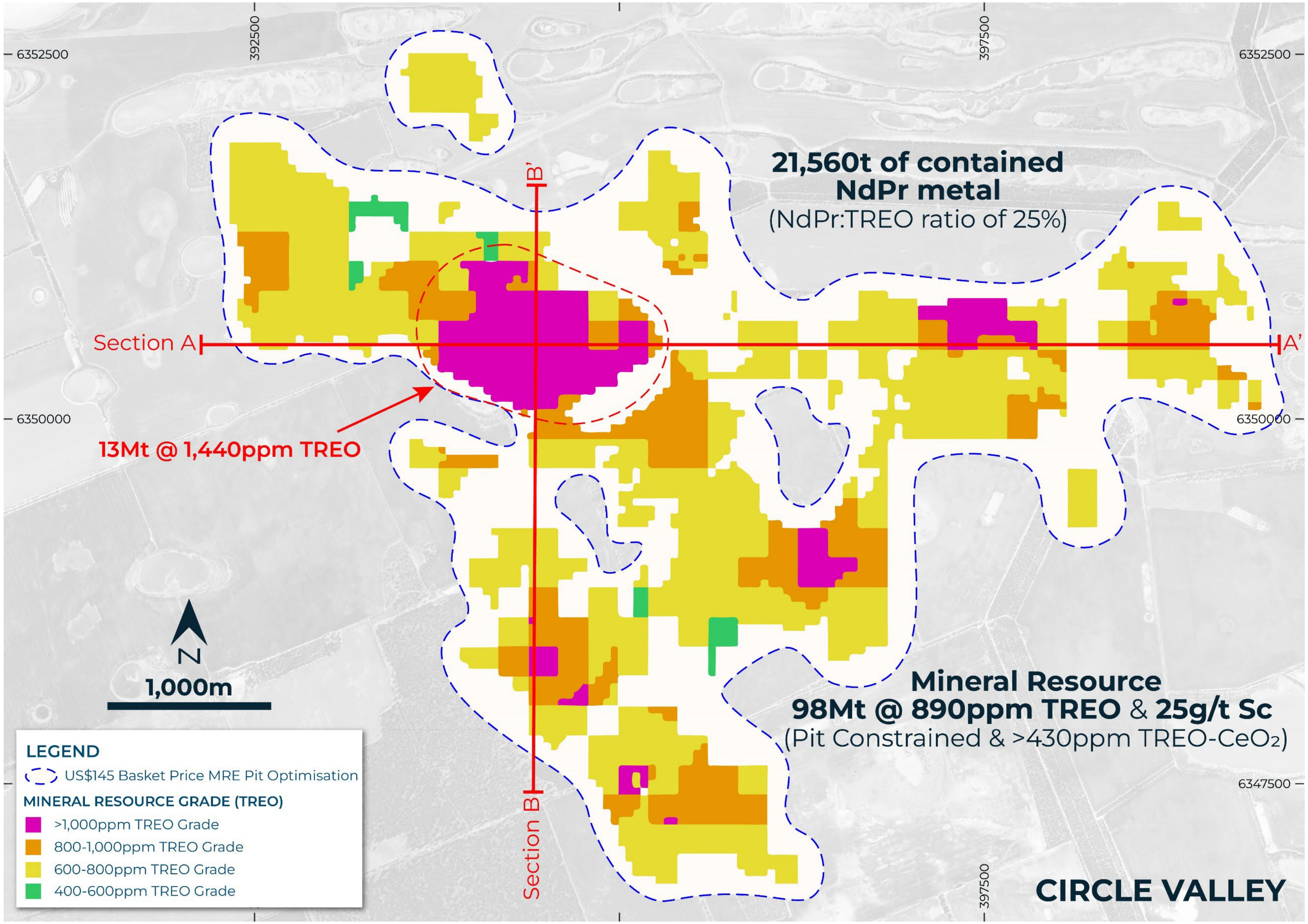


Figure 3: Plan showing the total Circle Valley Mineral Resource (98Mt @ 890ppm TREO) and a discrete high-grade subset of the Mineral Resource (13Mt @ 1,440ppm TREO).

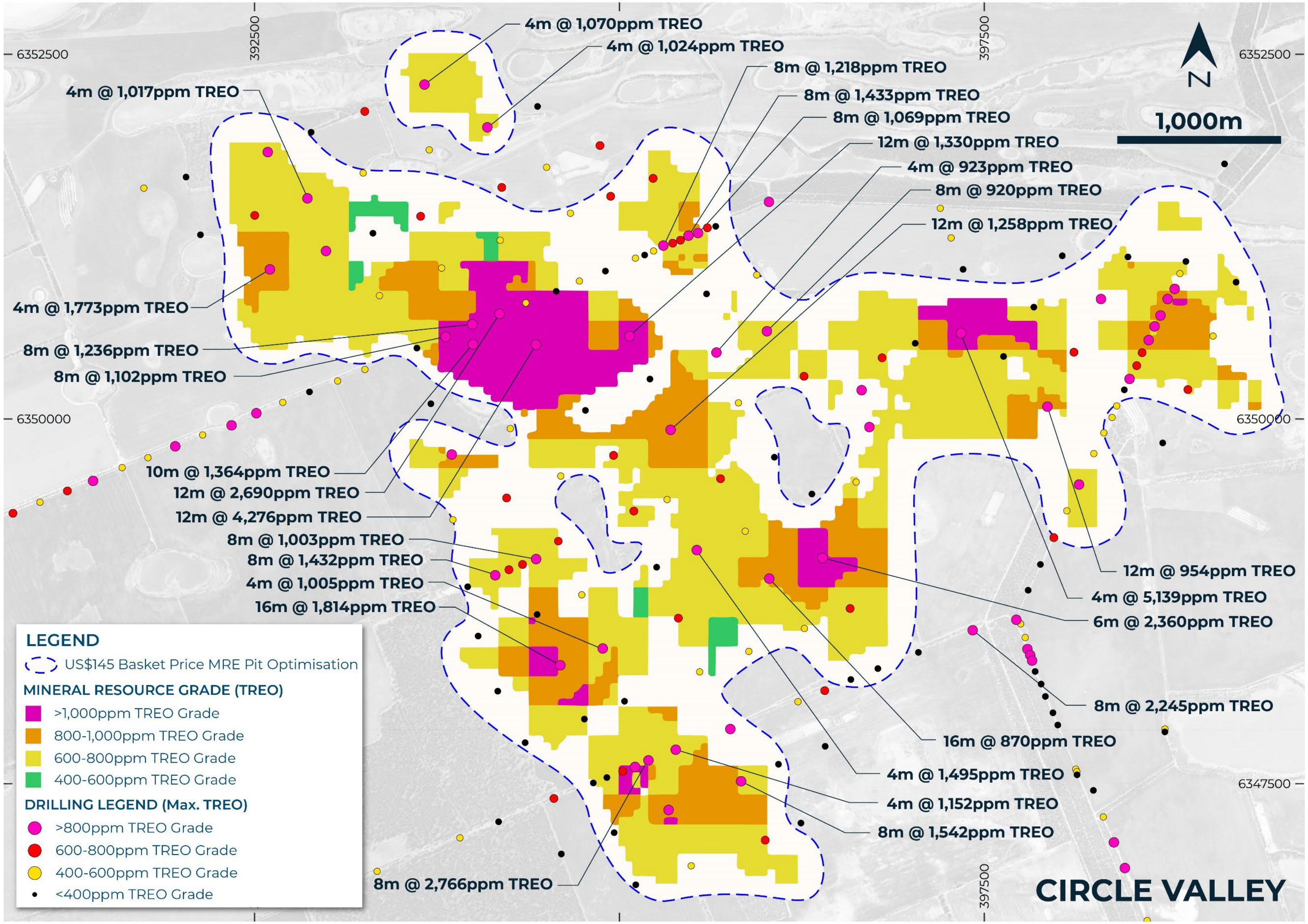


Figure 4: Plan showing the Circle Valley rare earth Mineral Resource, drill hole collar locations and assays (coloured points).

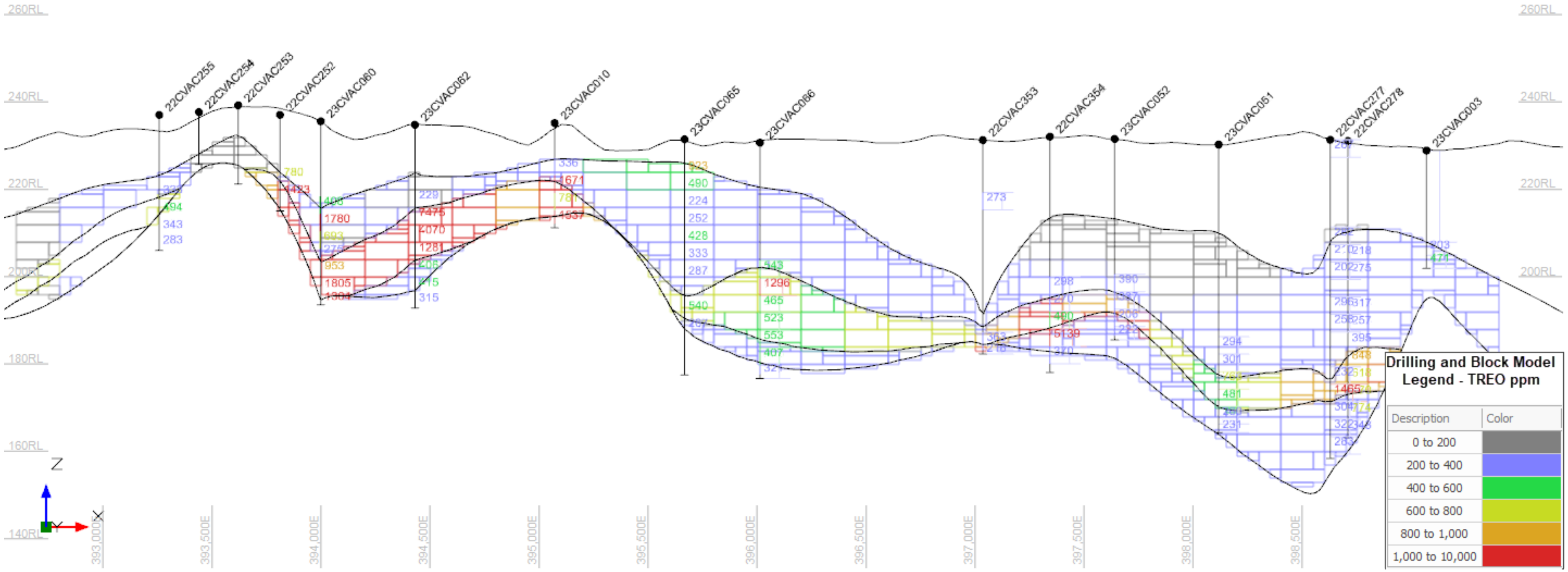


Figure 5: Section A-A' from Figure 3 showing drill hole assays and estimated Mineral Resource TREO block grades (section ~6,350,500mN looking north, 20x vertical exaggeration).

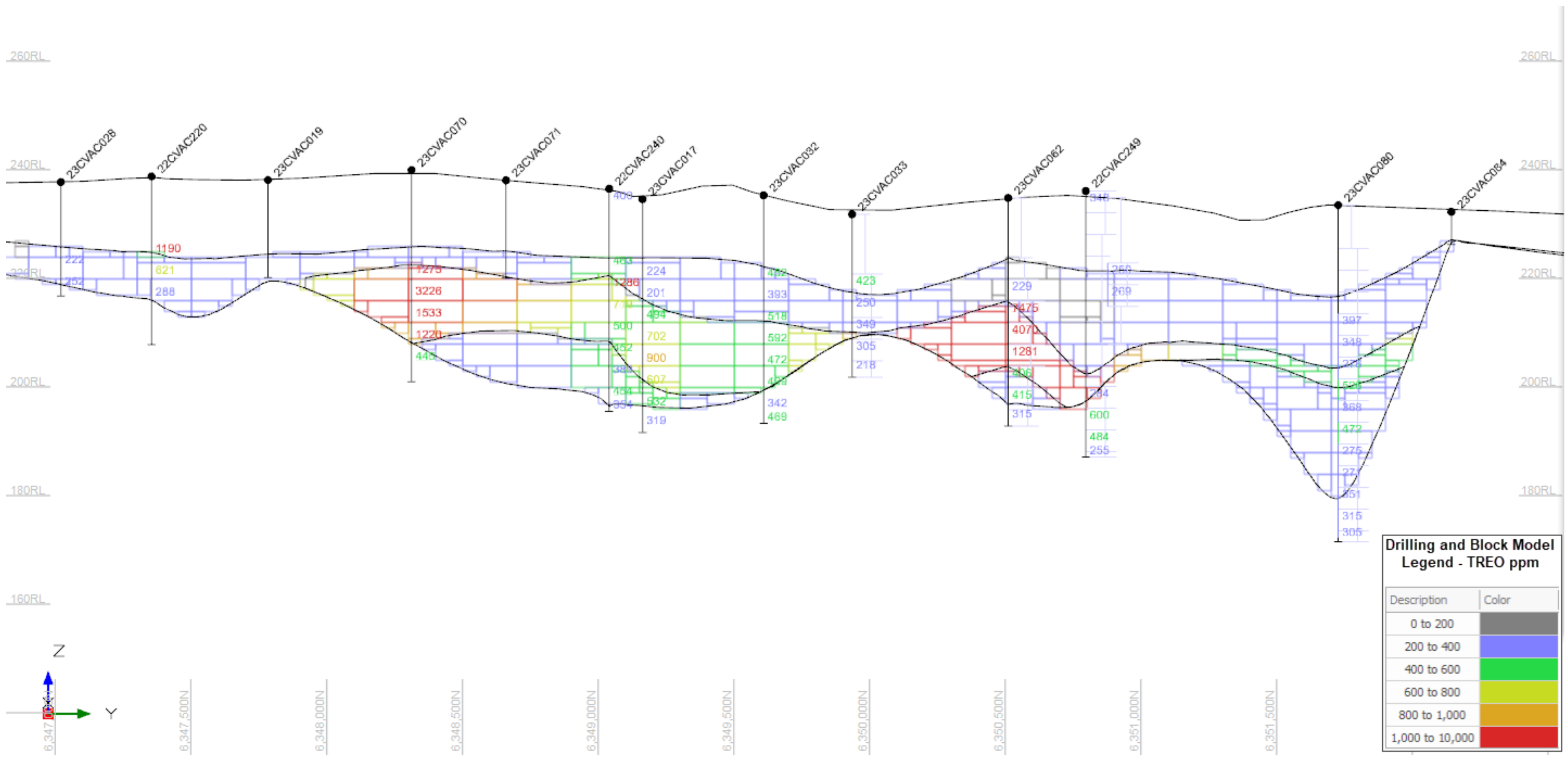


Figure 6: Section B-B' from Figure 3 showing drill hole assays and estimated Mineral Resource TREO block grades (~394,400mE looking west, 20x vertical exaggeration).

CIRCLE VALLEY MINERAL RESOURCE – SUMMARY OF MATERIAL INFORMATION

GEOLOGY AND GEOLOGICAL INTERPRETATION

The Circle Valley rare earth Mineral Resource is regionally situated within the Albany Fraser Orogen mobile fold belt. Locally it is within the Central Biranup Zone, south of the Bishops Hat Shear Zone, which separates the Biranup Zone from the Northern Foreland. The Biranup Zone is largely composed of granitic gneiss with local amphibolite lenses. The area is comprised of a complex stratigraphy, which is broadly separated into three unconformable formations.

Overlying the entire project area are Quaternary transported sediments, generally 2-12m deep. This formation is primarily composed of loose quartz sands with lesser clay content and sporadic well rounded quartz pebble horizons at or near the base of the unconformable contact with the underlying Plantagenet Group.

Unconformably overlying the Biranup Zone gneissic basement and regolith derivatives are Eocene sediments of the Plantagenet Group, divided into the Pallinup and Werrilup formations. These formations vary from non-existent to ~120m deep in paleochannels. Within the Mineral Resource the Eocene overburden is between 0 and 20m and averages ~10m. These sediments are interpreted as lacustrine to shallow marine sediments. The Pallinup Formation is observed as loosely consolidated grey clays and quartz sands. The Werrilup underlies the Pallinup and often presents with an organic rich basal layer, with rare horizons of coarse washed sand defining the unconformable contact with the underlying Biranup Formation. Both the Quaternary transported sediments and the Werrilup and Pallinup formations were logged separately but combined and domained as 'overburden' for Mineral Resource estimation purposes.

The rare earth mineralisation appears on the flanks of magnetic highs, which map more resistive units of shallow weathering. The mineralisation appears concentrated in the paleo valleys of deeper weathering, likely the result of deeper saprolitic profiles developing preferentially in these areas.

The mineralisation is hosted in weathered residual saprolitic clays derived from the rocks of the Biranup Zone. These clay sequences have been logged between 5 and 50m thick, are predominantly reduced, exhibiting cool colours and display a hard boundary between clay and fresh rock with minimal transitional saprock material observed in drilling. Rare warm coloured rusty-red upper saprolite clays are found as envelopes within the cool coloured grey-green lower saprolite clays and may be formed from weathered mafic gneiss units. The mineralisation is interpreted to have weathered from the underlying Biranup Formation granitic gneisses where it occurs in primary form such as apatite, monazite, xenotime or zircon. It is expected the extractable clay-hosted mineralisation occurs as secondary phosphate minerals. Work is ongoing to confirm the mineralogy and mineralisation style at Circle Valley.

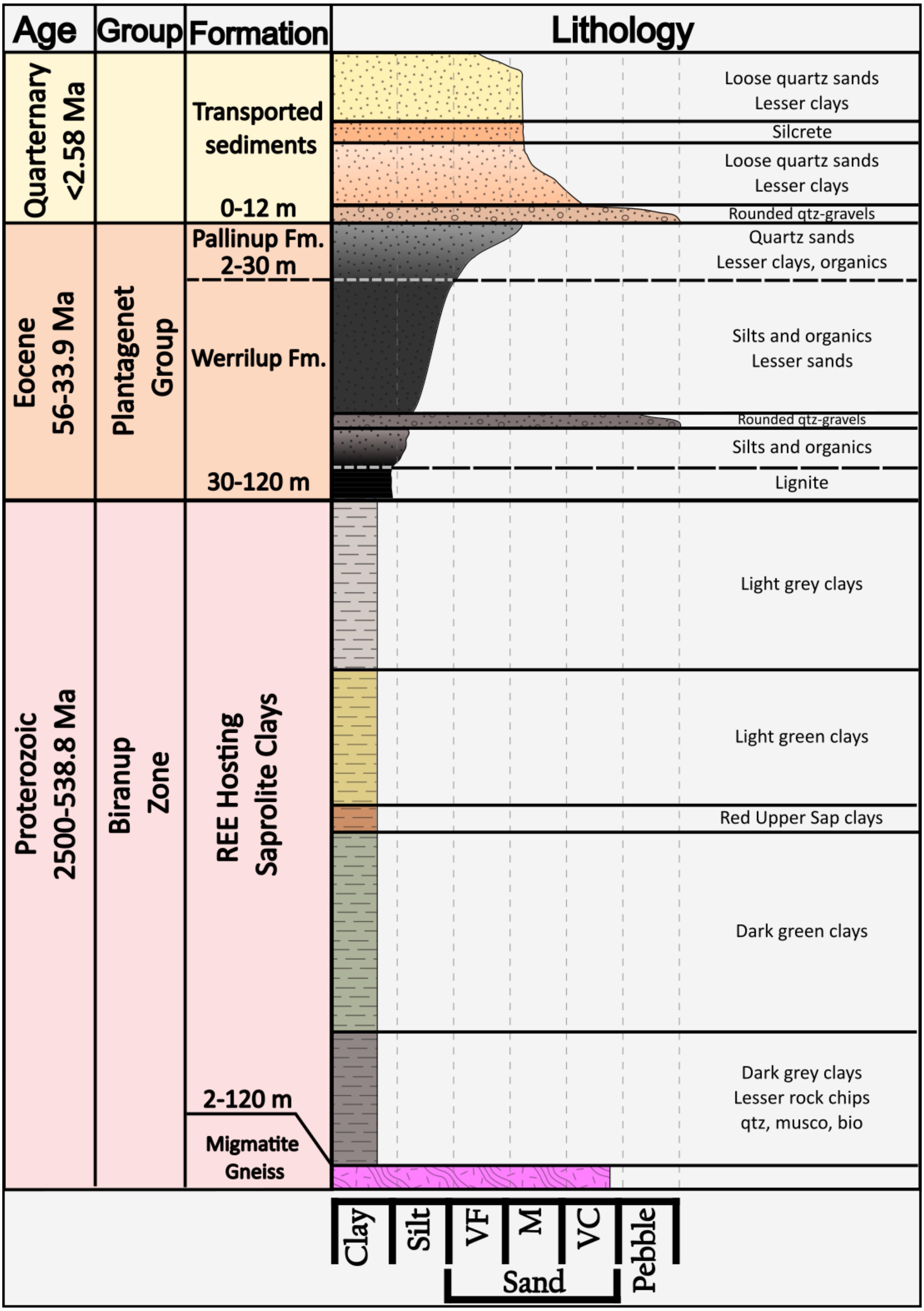


Figure 7: A typical stratigraphic section showing the geological units observed at Circle Valley.

DRILLING TECHNIQUES

The Mineral Resource was prepared based on 12,401m of large diameter aircore drilling. Most of the holes are vertically oriented with an average depth of 40.3m. Drilling was completed with a large format Schramm T450 aircore/slimline RC rig. This allowed a larger diameter aircore drill bit and rods to be used (4-inch used as opposed to the general 3-inch diameter) resulting in a larger sample and access to increased downhole pressure to enable better sample recovery.

SAMPLING AND SUB-SAMPLING TECHNIQUES

Two samples were collected for every 1m of drilling, a 1m cone-split sample from a fixed cone-splitter mounted to the rig's cyclone, and a 4m, speared, composite sample. The composite samples were submitted for rare earth, scandium and whole rock analysis. The 1m cone-split samples are stored as a record for future work. The composites were selectively sampled beginning at the base of the overburden.

Holes were drilled dry where possible and if samples became wet or the drillhole started making water the hole was abandoned.

Aircore sample recovery was monitored by a geologist on the rig and sample piles were photographed as a record at the end of hole. The sample splitter was cleaned at the end of every rod to minimise contamination and bias introduced by sample build up.

All drillholes were logged by a geologist to a level of detail that supports Mineral Resource estimation. This includes lithology, structure, veining, alteration and mineralisation. All aircore chip trays are archived.

All samples were bagged in a calico bag, grouped into larger polyweave bags and cable tied. Polyweave bags were placed in larger bulka bags with a sample submission sheet and tied shut. Consignment notes and delivery address details were written on the side of the bag and dispatched from site and delivered directly to ALS Perth (NATA Accredited Testing Laboratory, Corporate Accreditation No: 825, Corporate Site No: 23001).

SAMPLE ANALYSIS METHOD

The 4m spear composite samples were collected ensuring proportional sampling to acquire a 2-3kg sample. Samples are dried before crushing and pulverising. A 1g sample is used to determine loss on ignition. A 0.1g sample is prepared by lithium borate fusion to produce a fused bead, which is digested for analysis by mass-spectroscopy (MS) for rare earths, scandium and trace elements, and analysed by inductively coupled plasma atomic absorption spectroscopy (ICP-AES) for whole rock oxide geochemistry (ME-MS81d).

A handheld Olympus Vanta VMR XRF analyser provided immediate feedback from drilling by collecting a 50g sub-sample from the drilling spoils pile.

ESTIMATION METHODOLOGY

The geological interpretation utilised lithological logging and assay data to guide and control the Mineral Resource estimation. Leapfrog™ implicit modelling software was utilised to generate three-dimensional wireframes of the applicable regolith units. Estimation domains were based on grouping of the regolith domains into three zones as defined by regolith rheology, and by comparison of regolith statistics:

- Domain 1 – Overburden zone (soil, transported sands/gravels);
- Domain 2 – Saprolite zone; and,
- Domain 3 – Basement zone (saprock and fresh rock regolith zones).

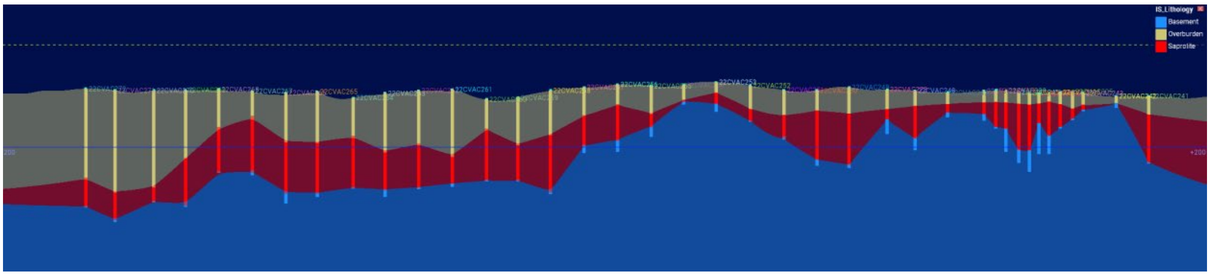


Figure 8: Modelled Lithology Domains – Section ~6,350,550mN looking north (10 x vertical exaggeration).

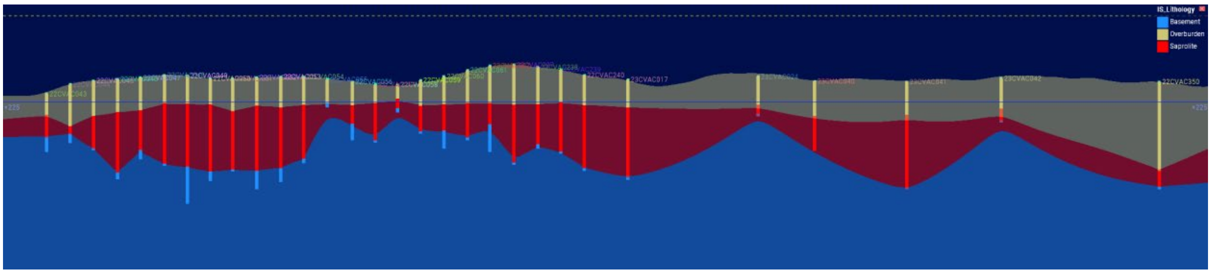


Figure 9: Modelled Lithology Domains – Section ~6,348,900mN looking north (10 x vertical exaggeration).

Within the saprolite zone, a mineralisation sub-domain was created defining a zone of elevated TREE mineralisation based on a nominal 400ppm TREE cut-off.

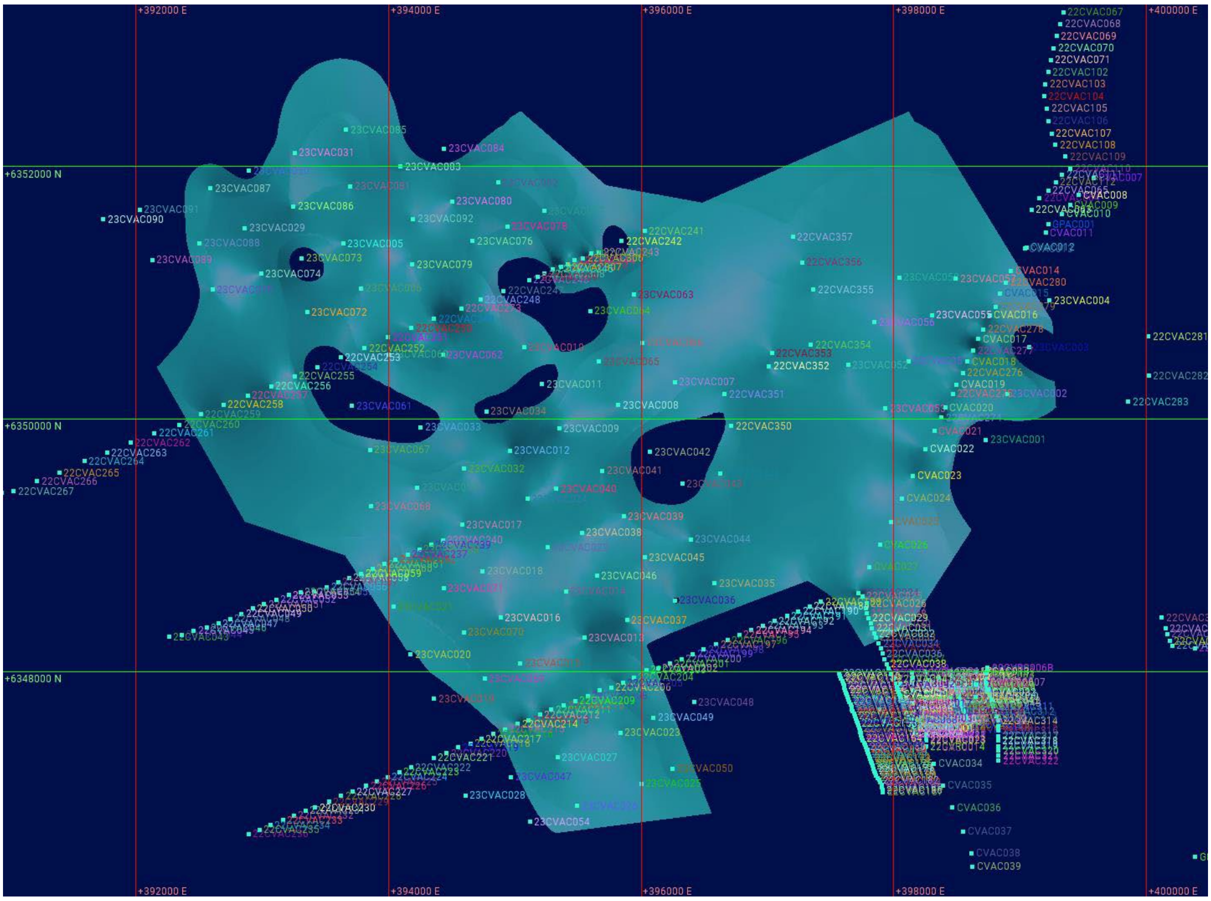


Figure 10: Plan view showing extents of 400ppm TREE mineralisation sub-domain.

Drill hole sample data was flagged using domain codes generated from three-dimensional mineralisation domains. Sample data was composited to 4m downhole lengths using a best-fit-method. No residuals were generated. Statistical analysis was carried out on data from all estimated domains, with hard boundary techniques employed within each estimation domain except for the basement domain which employed a one-way hard boundary with the saprolite.

A total of 15 REE grade attributes (Y, La, Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, and Lu), the associated element Sc, and two deleterious elements (U, and Th) were estimated. In addition, estimates were generated for key whole rock chemistry including Al_2O_3, Fe_2O_3, CaO, and MgO. Final estimated values are converted to stoichiometric oxide values by calculation using published ratios to support reporting of rare earth oxides (REO). The grade estimation process was completed with Maptek Vulcan software using Ordinary Kriging (OK). For estimation domains with insufficient sample data a variogram model from a comparable domain was assigned.

Interpolation parameters were derived using standard exploratory data analysis techniques of statistical and continuity analysis. Appropriate interpolation strategies were developed on a domain basis using kriging neighbourhood analysis (KNA) with a minimum number of 8 composites and a maximum number of 16 composites, with an octant search applied with a restriction on the number of composites per octant set to four. Blocks were estimated in a two-pass strategy with first pass maximum search distances of 630m and 2,000m depending on estimation variable and domain. The second pass extended the search distance by 50% and removed the octant restriction.

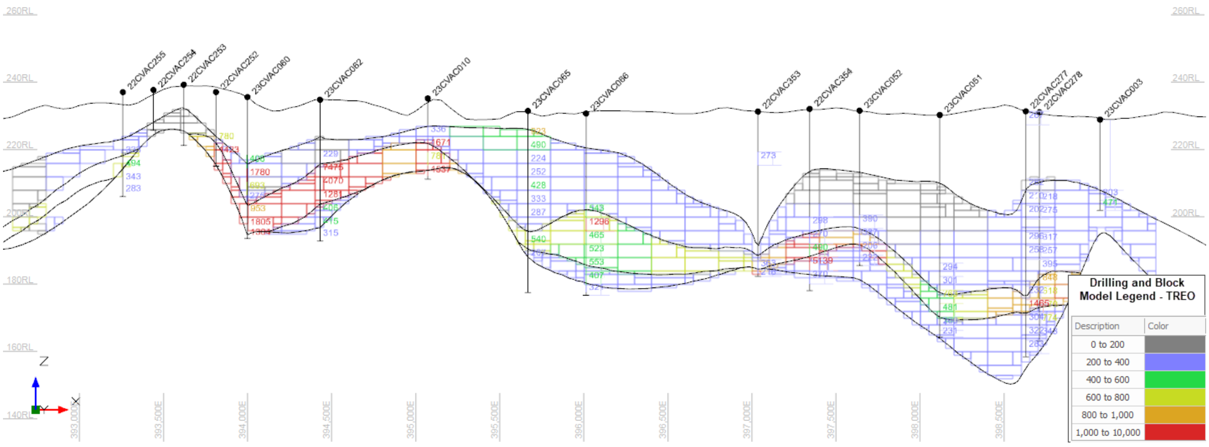


Figure 11: Section showing drill hole assays and estimated Mineral Resource TREO block grades (section ~6,350,500mN looking north, 20 x vertical exaggeration).

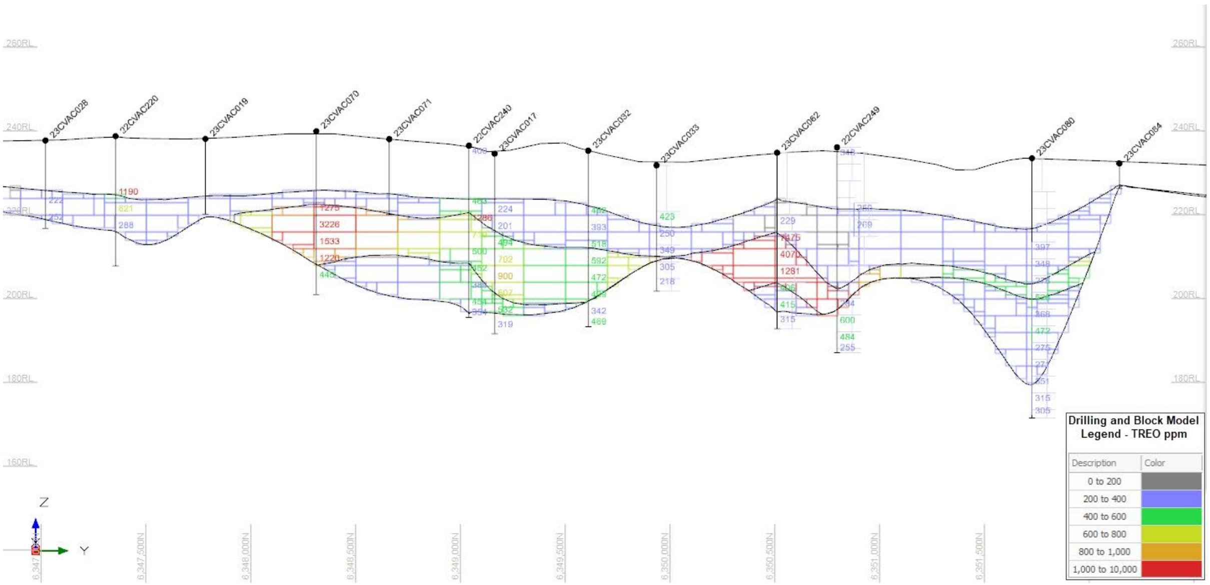


Figure 12: Section showing drill hole assays and estimated Mineral Resource TREO block grades (~394,400mE looking west, 20 x vertical exaggeration).

Bulk density was applied via direct assignment within the block model. The values assigned to the saprolite zone were based on preliminary measurements of vacuum sealed samples weighed in air and in water. The saprolite density was applied as 1.89g/cm³, while values for the overburden and basement zones were 1.7g/cm³ and2.1 g/cm³ respectively.

The model has a block size of 200 m (X) by 200 m (Y) by 4 m (Z) with sub-celling of 50 m (X) by 50 m (Y) by 1m (Z). Drilling over the main Mineral Resource zone has been completed at approximately 400 m (X) by 400 m (Y). Grades were estimated into the parent cells.

The block model was validated using a combination of visual and statistical techniques including global statistics comparisons, correlation coefficients comparisons, and trend plots.

CLASSIFICATION

A range of criteria was considered by Cube Consulting Pty Ltd when addressing the suitability of the classification boundaries. These criteria include:

- Geological continuity and volume;
- Drill spacing and drill data quality;
- Modelling technique; and,
- Estimation properties, including search strategy, number of informing composites, average distance of composites from blocks and kriging quality parameters.

Blocks have been classified in the Inferred category, primarily based on drill spacing in combination with other model estimate quality parameters. Classification of the Inferred Mineral Resource is limited to the saprolite domains only, with the overburden and basement mineralisation excluded.

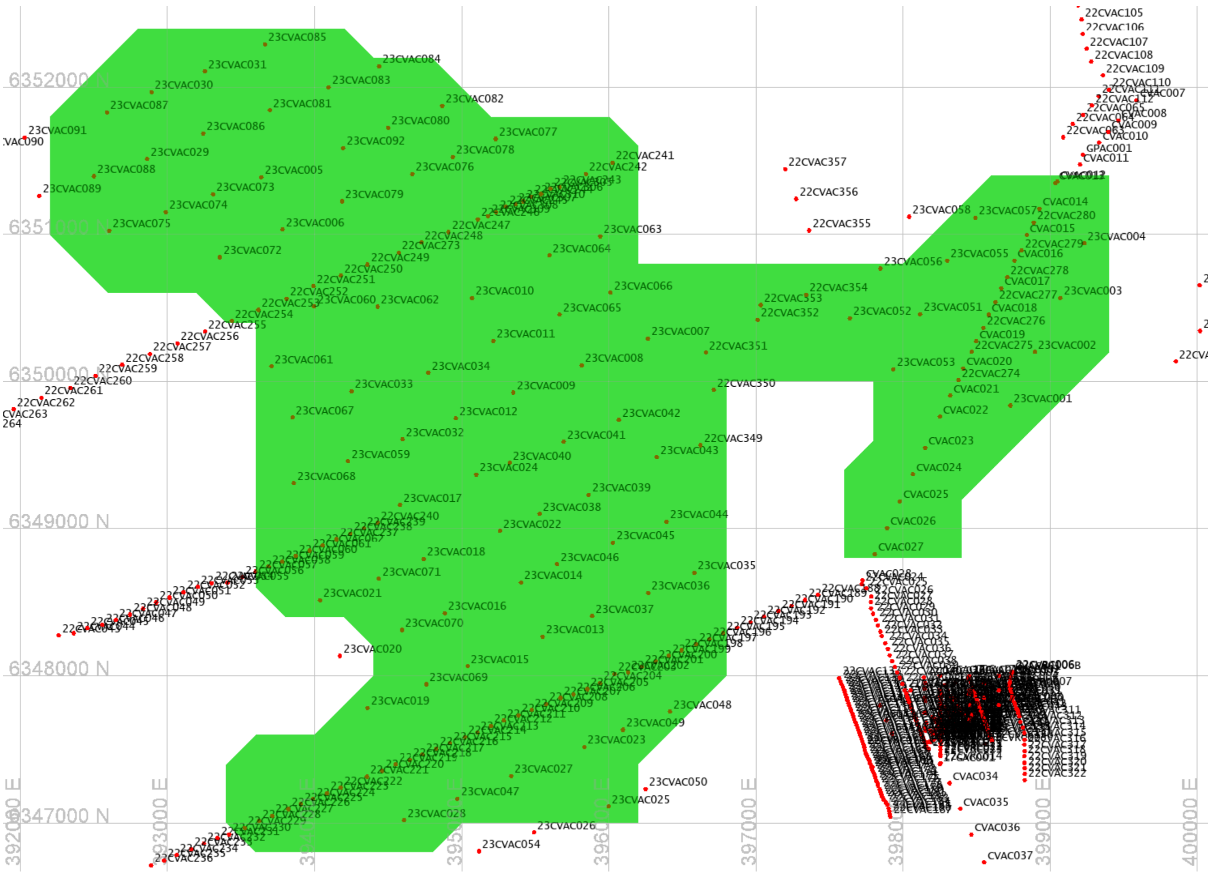


Figure 13: Plan view showing the limits of the Inferred Mineral Resource at Circle Valley.

MINING, METALLURGICAL AND CUT-OFF GRADES FACTORS OR ASSUMPTIONS

The Mineral Resource has been reported within an optimised pit shell and above a 430ppm TREO-CeO_2 cut-off. The parameters used to define the cut-off grade and optimised pit shell are presented in Table 3, 4 and 5.

Selection of the cut-off considered metallurgical recoveries and costs based on a process of scrubbing to produce a slurry, particle size separation through screening and hydro-cyclone classification to discard the non-target elements in the coarse fraction, while retaining the -20µm size fraction (which hosts most of the REE), followed by a tank leach process to recover the REE. Further metallurgical test work is required.

Mining and overhead (G&A) cost inputs assume a large scale, free digging open pit truck and shovel mining operation.

A basket price of US$145 based on consensus analyst forecast pricing expected in the short to medium term for the mixed REO product.

Table 2 – Mining Physical Parameters Used for Open Pit Optimisation

Item	Parameter
Wall Angle (degrees)	30
Mining Dilution	0%
Mining Recovery	100%

Table 3 – Cost Assumptions Used for Open Pit Optimisation

Category	Applied to	Units	Cost (AUD)
G&A Costs	Ore/Waste	per bcm	$1.00
Mining	Ore/Waste	per bcm	$5.00
Processing*	Ore	per tonne	$11.00

**Processing costs assume a +1Mtpa processing operation based on a high-level flow sheet consisting of:*

- *Scrubbing mined feed ore to produce a slurry;*
- *Particle size separation through screening and hydro-cyclone classification to remove the +20µm size fraction from the feed stream;*
- *Leaching the fine fraction (-20µm) using 2% concentration sulfuric acid (H_2SO_4) to recover the REE; and,*
- *Precipitation to produce a mixed REO plus Sc_2O_3 concentrate for sale.*

Table 4 – Revenue Assumptions Used for Open Pit Optimisation

Item	Parameter
Metallurgical Recovery*	45%
Payability**	70%
State Royalty	5%
Average REO Basket Price (USD/kg)	$145
Average Sc_2O_3 Price (USD/kg)	$930
Exchange Rate (AUD:USD)	0.65
Average REO Basket Price (AUD/kg)	$223
Calculated Cut-off (TREO ppm no CeO_2)	430

**Metallurgical recovery estimate based on ongoing test work.*
***Payability estimate based on dialogue with industry participants.*

Reporting of Mineral Resources have been assessed against a resource limiting optimisation shell using appropriate cost, metallurgical recovery, and price assumptions. Material within the optimised pit shell has, in the opinion of the Competent Person, met the conditions for reporting of a Mineral Resource with reasonable prospects of economic extraction.

ABOUT RARE EARTH ELEMENTS

Rare earths are used in glass and ceramics, phosphors, medical imaging, communication technology, the automotive industry, electric vehicles and in renewable energy generation. The unique chemical and physical properties of rare earths make them a critical material across a number of rapidly evolving markets and industrial applications. Of particular importance are the magnet rare earth elements, neodymium and praseodymium (NdPr), used in the manufacture of powerful permanent magnets for electric motors and turbines.

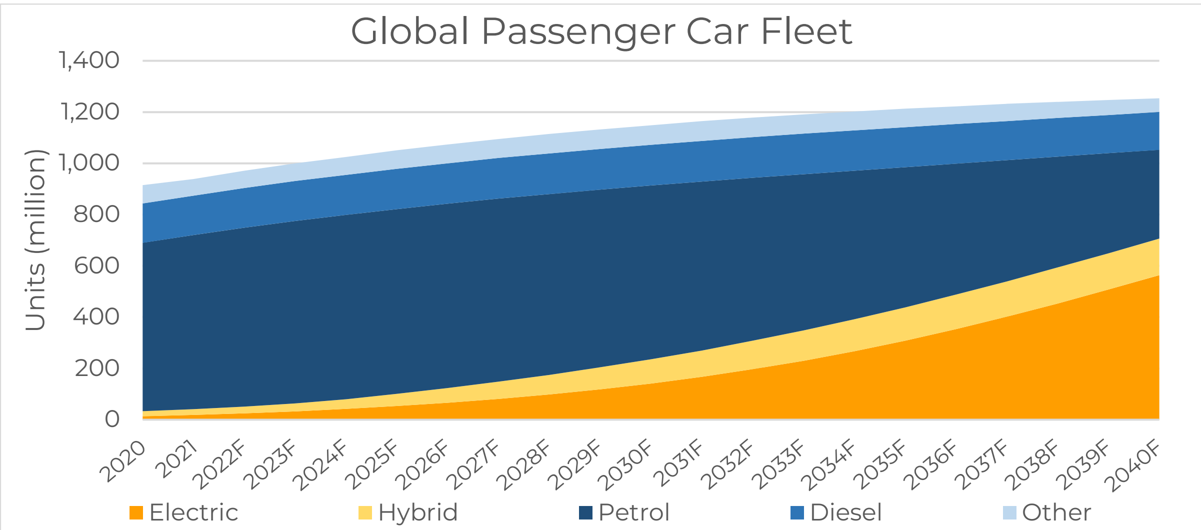
Key global megatrends driving strong and diversified demand for NdPr include:

- Low carbon energy transition – electric drive motors and turbines.
- Military application – guidance and control systems.
- Communications technology.
- Sustainable resource security – increasing scarcity of and global competition for resources.
- Supply chain security – against a backdrop of heightened geopolitical tension and push to diversify supply away from concentrated sources.

KEY DEMAND DRIVERS FOR RARE EARTH ELEMENTS

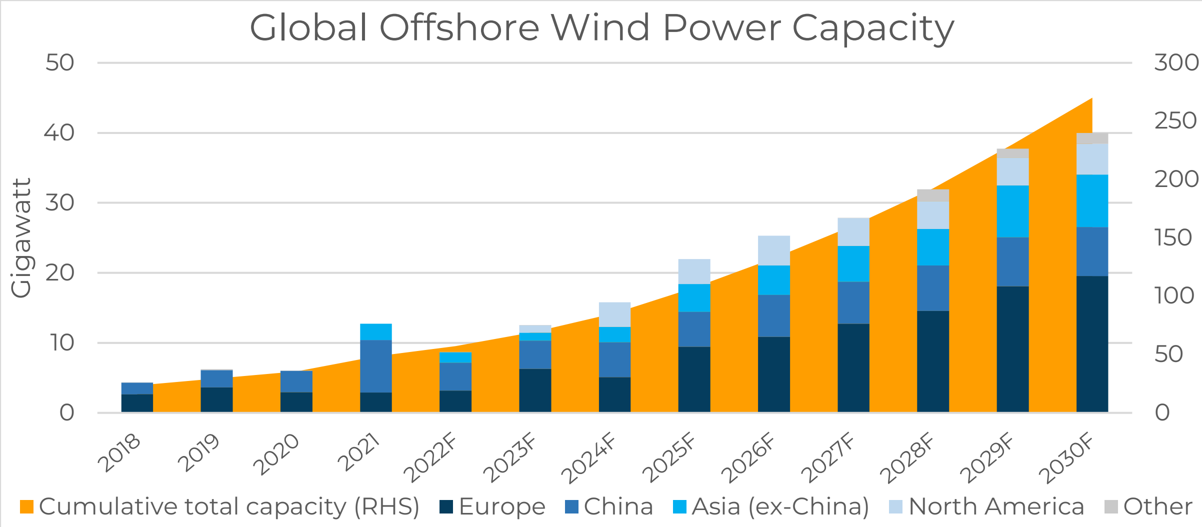
The public and private sector push toward a low carbon economy is driving increased penetration of electric vehicles (EV) and use of renewable technologies for energy generation. These megatrends drive growing demand for permanent magnets and are forecast to be the primary driver of growth in rare earth demand over next 10 years.

Global EV sales are forecast to grow at 20% CAGR to 2026 (20 million units/year). By 2040 there are forecast to be more EV's on the road than hydrocarbon powered passenger vehicles. Each EV uses 2-5kg of rare earth magnets.[1]



[1] Argus, "Rare Earth Analytics", Report, April 2022.

Installed wind turbine generating capacity is forecast to grow at 25% CAGR to 2030. Each direct-drive turbine uses 650kg of rare earth magnets per megawatt of generation capacity.[2]



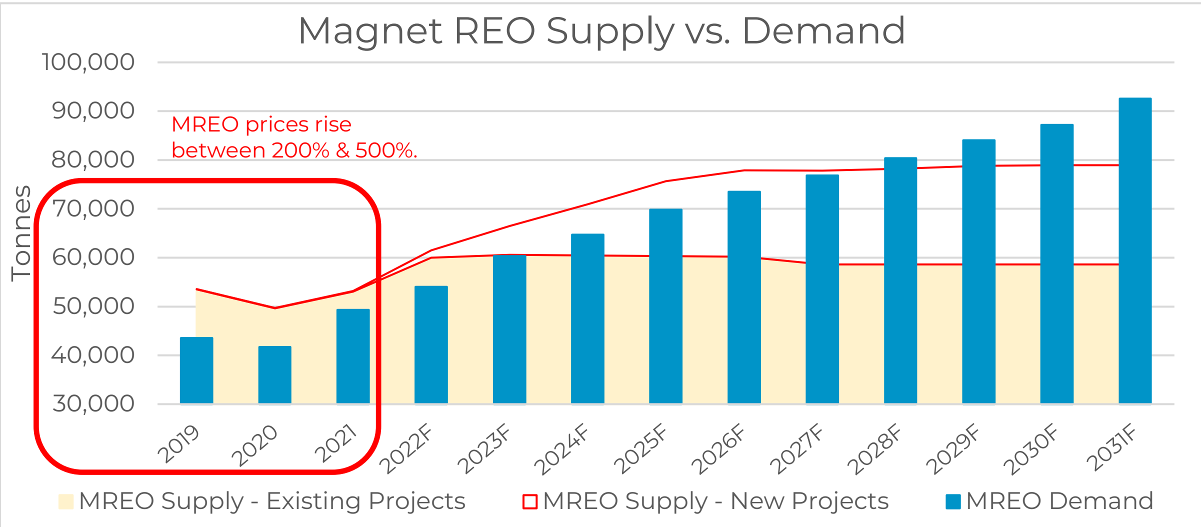
THE OPPORTUNITY – GROWING DEMAND OUTPACES SUPPLY

Global demand for magnet rare earth elements neodymium, praseodymium, dysprosium and terbium is expected to grow faster than demand for all other rare earth elements, challenging the ability of the supply-side to keep up.

Market analysts forecast a supply deficit in magnet rare earth oxide (MREO) of between 15% and 37%, within the next 5 years due to tight supply from current producers and a lack of new production coming online.[3]

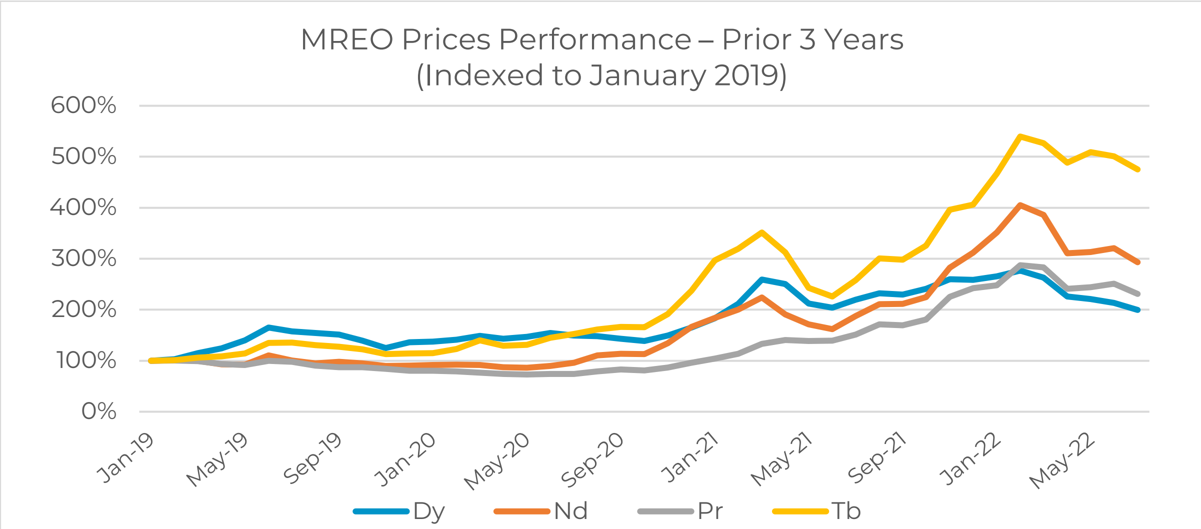
Key points:

- **MREO supply deficit of 37% forecast by 2031 if no new supply comes online.**
- **MREO supply deficit of 15% forecast by 2031 if <u>all</u> new sources of supply are developed and produce as forecast.**



[2] Argus, "Rare Earth Analytics", Report, April 2022.
[3] Argus, "Rare Earth Analytics", Report, April 2022.

To understand potential impact of supply shortfalls on MREO pricing, the preceding 3 years (2019 through 2021) provides a good guide. While markets were in a state of balance, MREO prices appreciated between 200% and 500%.[4]



ABOUT CLAY HOSTED RARE EARTH DEPOSITS

Clay hosted rare earth deposits often enjoy significant project and cost advantages compared to hard rock deposits, with lower cost bulk mining and a simple process flow sheet. Clay deposits do not require the higher cost comminution and beneficiation processes that hard rock deposits require, resulting in lower capital intensity and lower operating cost to produce a refined product. The generally higher proportion of magnet rare earth elements (neodymium-praseodymium) in clay deposits also results in a high value product. Additionally, clay deposits may not produce the deleterious tailings waste.

Criteria	Clay Hosted REE	Hard Rock Hosted REE
Mineralisation	▪ Elevated MREO.	▪ Can be either LREO or HREO dominant mineralisation.
Resource Definition	▪ Rapid, shallow, drilling into clay. ▪ Lower cost.	▪ Slow, deeper, drilling into hard rock. ▪ Higher cost.
Mining	▪ Shallow mining. ▪ Lower strip ratio. ▪ Higher productivity. ▪ No blasting required. ▪ Lower cost.	▪ Higher strip ratio. ▪ Lower productivity. ▪ Blasting required. ▪ Higher cost.
Processing	▪ Simple process flow sheet. ▪ No comminution (crushing or milling). ▪ Lower capital and operating costs.	▪ Complex process flow sheet. ▪ Requires comminution and beneficiation. ▪ Higher capital and operating costs.
Environmental	▪ Low levels of radionuclides. ▪ Non-radioactive waste. ▪ Progressive rehabilitation of mining footprint.	▪ Possible deleterious elements in waste.

[4] Argus, "Rare Earth Analytics", Report, April 2022.

This announcement has been authorised for release by the Company's Board of Directors.

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ABOUT MEEKA

Meeka Metals Limited is a gold and rare earths company with a portfolio of high quality 100% owned projects across Western Australia.

Gold

Meeka's flagship Murchison Gold Project has a combined 281km² landholding in the prolific Murchison Gold Fields and hosts a large high-grade +1.2Moz JORC Resource. The Company is actively growing these Resources while also progressing toward production. The release of the Murchison Gold Project Scoping Study in December 2021 outlined a robust Project that produces over 420koz of gold[5].

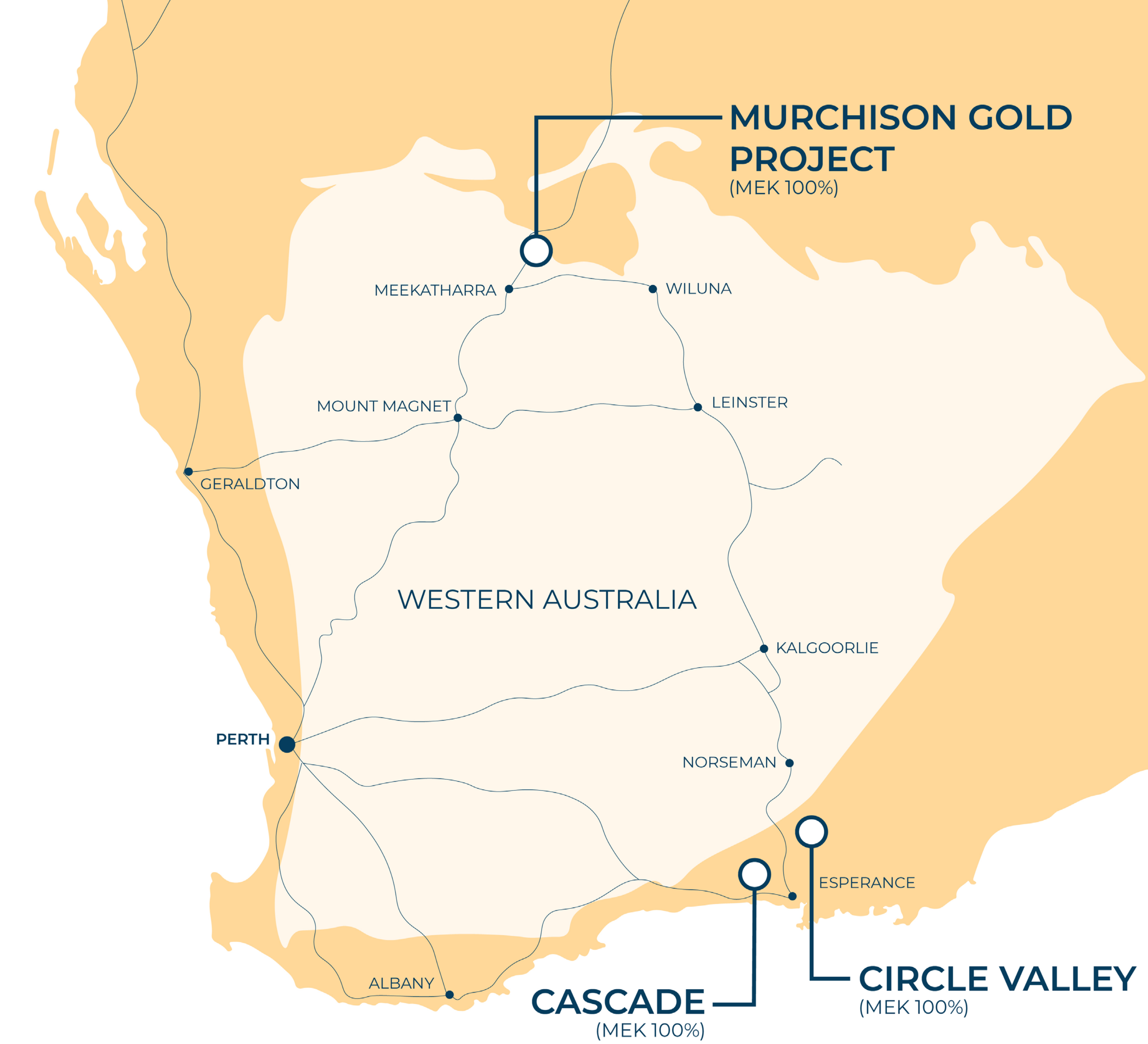
In addition, Meeka owns the Circle Valley Project (222km²) in the Albany-Fraser Mobile Belt (also host to the Tropicana gold mine – 3Moz past production). Gold mineralisation has been identified in four separate locations at Circle Valley and presents an exciting growth opportunity, which is being aggressively pursued.

Rare Earths

Meeka controls the Cascade Rare Earths Project (2,269km²) in a region that is rapidly emerging as a highly prospective clay rare earths province. Importantly, the results to date contain high levels of permanent magnet metals (neodymium-praseodymium). These metals are geopolitically critical, and the Company intends to accelerate its understanding of Cascade through metallurgical work and ongoing drilling.

Circle Valley also hosts clay rare earths within thick, near surface mineralised zones below shallow transported cover. The mineralisation consistently demonstrates a high proportion of the grade as neodymium-praseodymium oxides. Metallurgical work, in addition to infill and extensional drilling are ongoing. An initial Mineral Resource is targeted for 2023.

[5]First reported in announcement dated 1 December 2021 and titled "Murchison Gold Project Scoping Study". The Company confirms that it is not aware of any new information or data that materially affects the information included in the original announcement and that all material assumptions and technical parameters underpinning the target continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.



Mineral Resource Summary

Project	Measured Tonnes ('000t)	Measured Grade (g/t)	Measured Ounces ('000oz)	Indicated Tonnes ('000t)	Indicated Grade (g/t)	Indicated Ounces ('000oz)	Inferred Tonnes ('000t)	Inferred Grade (g/t)	Inferred Ounces ('000oz)	Total Tonnes ('000t)	Total Grade (g/t)	Total Ounces ('000oz)
Andy Well	150	11.4	55	1,050	9.3	315	650	6.5	135	1,800	8.6	505
Turnberry				4,600	1.6	230	6,000	2.4	455	10,600	2.0	685
St Anne's				270	2.8	25				270	2.8	25
TOTAL	**150**	**11.4**	**55**	**5,900**	**3.0**	**570**	**6,700**	**2.8**	**590**	**12,700**	**3.0**	**1,215**

Notes:
1. Mineral Resources reported to the market on 3 May 2023. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original announcement and that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.
2. Mineral Resources are classified in accordance with JORC code (2012).
3. The Andy Well Mineral Resource is reported using 0.1g/t cut-off grade.
4. The Turnberry open pit Mineral Resource is only the portion of the Mineral Resource that is constrained within a A$2,600/oz optimised pit shell and above a 0.5g/t gold cut-off grade.
5. The Turnberry underground Mineral Resource is only the portion of the Mineral Resource that is located outside the A$2,600/oz optimised pit shell and above a 1.5g/t gold cut-off grade.
6. The St Anne's Mineral Resource is constrained within a A$2,600/oz optimised pit shell and above a 0.5g/t gold cut-off grade.
7. Estimates are rounded to reflect the level of confidence in the Mineral Resources at the time of reporting.

COMPETENT PERSON'S STATEMENT

The information that relates to Exploration Results as those terms are defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserve", is based on information reviewed by Mr Duncan Franey, a Competent Person who is a member of The Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Mr Franey is a full-time employee of the Company. Mr Franey 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'. Mr Franey consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Mineral Resources for the Circle Valley REE deposit is based on information compiled by Mr Daniel Saunders, a Competent Person who is a Fellow of The Australasian Institute of Mining and Metallurgy. Mr Saunders is an independent consultant to the Company and is employed by Cube Consulting Pty Ltd. Mr Saunders 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'. Mr Saunders consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information that relates to Mineral Resources was first reported by the Company in its announcement to the market on 3 May 2023. The Company is not aware of any new information or data that materially affects the information included in this announcement and that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

FORWARD LOOKING STATEMENTS

Certain statements in this report relate to the future, including forward looking statements relating to the Company's financial position, strategy and expected operating results. These forward-looking statements involve known and unknown risks, uncertainties, assumptions and other important factors that could cause the actual results, performance or achievements of the Company to be materially different from future results, performance or achievements expressed or implied by such statements. Actual events or results may differ materially from the events or results expressed or implied in any forward-looking statement and deviations are both normal and to be expected. Other than required by law, neither the Company, their officers nor any other person gives any representation, assurance or guarantee that the occurrence of the events expressed or implied in any forward-looking statements will actually occur. You are cautioned not to place undue reliance on those statements.

JORC 2012 – TABLE 1: CIRCLE VALLEY

Section 1 Sampling Techniques and Data
(Criteria in this section apply to all succeeding sections.)

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Sampling techniques	• Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	• Aircore and RC drilling conducted with a large format Schramm T450 aircore/slimline RC rig. • Chips collected through a cyclone and cone-split for 1 metre samples and spear sampled for 4 metre composites. • Aircore sampling with a 4 inch cutting bit. • RC drilling conducted with 5.5 inch face sampling hammer bit.
	• Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	• Drill chips were cone split sampled for 1m intervals and spear sampled for 4m composite sampling. • Samples were drilled dry wherever possible and where they were wet this was logged. • Sample recovery was actively monitored by geologists on the rig to ensure maximum recovery is achieved.
	• Aspects of the determination of mineralisation that are Material to the Public Report. • In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	• Air core drilling was used to obtain 1m cone split samples as reference samples. Four metre spear composite samples were collected ensuring proportional sampling to acquire a 2-3kg sample. Samples are dried before crushing and pulverising. A 1g sample is used to determine loss on ignition. A 0.1g sample is prepared by lithium borate fusion to produce a fused bead which is digested for analysis by mass-spectroscopy (MS) for rare earth elements (including Scandium) and trace elements and analysed by inductively coupled plasma atomic absorption spectroscopy (ICP-AES) for whole rock oxide geochemistry. ALS analysis code ME-MS81d. • pXRF analysis was conducted for immediate feedback from drilling by collecting a small 50g sub-sample from the drilling spoils pile and analysed with an Olympus Vanta VMR XRF analyser.
Drilling techniques	• Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	• Aircore drilling with cutting bits and face sampling hammers were used to collect the samples. The drilling was conducted using a Schramm T450 AC/slimline RC rig drilling with 400psi/1240cfm onboard air. 4 inch aircore blade bits were used with 3.5 inch drill pipe. Holes were generally drilled to blade refusal. Occasionally based on geology the hole would be extended using hammer to assess bedrock geology.
Drill sample recovery	• Method of recording and assessing core and chip sample recoveries and results assessed.	• Visual estimate of drill chip recovery recorded in database as well as photographs of drill spoils taken for reference.
	• Measures taken to maximise sample recovery and ensure representative nature of the samples.	• A large format AC rig with adequate onboard air to drill holes dry. Where wet samples were collected they were

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		logged as such. Constant observation and assessment of sample recoveries on the rig ensured recoveries were maximised.
	• 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.	• Unknown at this stage.
Logging	• Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	• All holes logged at 1 m resolution for the entirety of the hole. • Holes logged qualitative: lithology, alteration, foliation. • All holes chipped for the entire hole to preserve a chip tray record of all holes drilled.
	• Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	• Qualitative: visual logging and pXRF analysis (semi-quantitative for some elements). • Quantitative: multielement geochemistry elements; no density measurements taken • Chip samples taken from every metre of every hole to maintain chip tray record.
	• The total length and percentage of the relevant intersections logged.	• All holes logged for entire length of hole.
Sub-sampling techniques and sample preparation	• If core, whether cut or sawn and whether quarter, half or all core taken.	• No core drilling completed.
	• If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	• Chips cone-split, sampled dry where possible for 1 m samples. Composite samples were spear-sampled. • AC sample were spear sampled in up to 4 m composite intervals.
	• For all sample types, the nature, quality and appropriateness of the sample preparation technique.	• The primary sample collected is considered appropriate technique for the purpose of the drilling. 4 m composites are considered appropriate for preliminary assessment of mineralisation and for preliminary resource estimation. The drill method and rig employed allowed for samples to be kept mostly dry and maintain good sample recoveries.
	• Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	• Duplicates and blanks were routinely included in the 1 m sampling sequence and submitted when 1 m samples were submitted to the laboratory. CRMs have not yet been used due to the early stage of exploration. • Duplicate speared composite samples were collected for a selection of holes using pXRF data to guide sample selection to sample mineralisation.
	• Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	• All composites were speared ensuring the total depth of the sample pile was sampled to provide a representative sample. Close attention was paid when spearing to the size of each sample making up a composite. The size of the sample is kept consistent within each composite.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		• Single metre samples are cone split and duplicates are taken every 20 m to monitor variability. • Duplicate speared composite samples were taken and results are pending.
	• Whether sample sizes are appropriate to the grain size of the material being sampled.	• The sample size is considered appropriate for mineralisation being sampled.
Quality of assay data and laboratory tests	• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	• Gold analysis is determined by 50g Fire Assay and AAS and is considered a total analysis. • ME analysis by ICP-MS and ICP-AES Analysis and is appropriate for rare earth elements, trace element and whole rock geochemistry. The analysis is a total technique which analyses resistive minerals as well. • pXRF while a qualitative dataset is considered appropriate for whole-rock geochemical analysis and monitoring of trace elements for alteration when used indicatively and relative to the results of similarly collected samples.
	• 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.	• An Olympus Vanta 50KV VMR handheld pXRF instrument was used in conjunction with the EasySampler system to analyse the drill powder produced. • All three beams were used with a 10 second time lapse for each beam. • No factors have been used on the data. • The data is considered qualitative and is used only indicatively to assess alteration and potential mineralisation based on anomalism relative to other drill samples analysed.
	• 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.	• Laboratory certified CRMs and blanks were inserted by the laboratory and analysed in the sample stream and have performed acceptably. • Field duplicates were included in the 4 m composite sample stream, results are pending. • No external laboratory checks have been conducted at this stage.
Verification of sampling and assaying	• The verification of significant intersections by either independent or alternative company personnel.	• Significant intersections are verified by multiple Company personnel prior to release.
	• The use of twinned holes.	• No twin holes at present.
	• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	• Data stored in Datashed database, logging performed in Logchief with auto-validation and synchronised to Datashed database, data validated by database administrator, import validate protocols in place. Visual validation by company geologists.
	• Discuss any adjustment to assay data.	• Multielement results (REE) are converted to stoichiometric oxide (REO) using element-to-oxide stoichiometric conversion factors.
Location of data points	• Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and	• Collars: surveyed with Garmin GPS accurate to +/- 3m.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	other locations used in Mineral Resource estimation.	
	• Specification of the grid system used.	• MGA94 - Zone 51
	• Quality and adequacy of topographic control.	• Loose topographic control from geophysical data. Appropriate for this early-stage exploration.
Data spacing and distribution	• Data spacing for reporting of Exploration Results.	• From 20m up to 1km. • Spacing appropriate for first pass reconnaissance drilling and preliminary resource assessment.
	• Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	• The current drill spacing is appropriate for preliminary resource estimation work.
	• Whether sample compositing has been applied.	• Generally 4m composite assays reported.
Orientation of data in relation to geological structure	• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	• Mineralisation occurs in horizontal saprolitic clay horizons. Vertical drilling employed to intersect mineralisation perpendicular.
	• If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	• The drilling is oriented perpendicular to mineralisation.
Sample security	• The measures taken to ensure sample security.	• Samples were delivered from the Company tenure directly to the laboratory using a freight company in sealed bulka bags.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• No external QC reviews have been conducted on the project so far.

Section 2 Reporting of Exploration Results
(Criteria listed in the preceding section also apply to this section.)

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Mineral tenement and land tenure status	• Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. • The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	• Two Exploration Licence (EL) covering a land area of 222km2. • Meeka Metals Limited is the current holder, having a 100% interest in the EL's. • Tenure predominantly overlies freehold agricultural land used for crop and livestock farming. • Prior to conducting ground disturbing exploration on private land, a land access agreement must be signed between the Company and the relevant landowner. • The tenements are in good standing.
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	• The Project has had limited exploration work completed over it. Exploration by previous operators included Pan Australian Exploration Pty Ltd, Toro Energy Limited and Spitfire Oil Limited, who focussed on uranium and lignite mineralisation within paleochannels. • Reconnaissance aircore (AC) drilling programs targeting the underlying greenstone belts for gold

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		mineralisation has been completed by AngloGold Ashanti Australia Limited and Terrain Minerals Ltd. • The historical data has been assessed and is of good quality.
Geology	• Deposit type, geological setting and style of mineralisation.	• The Circle Valley Project lies within the Central Biranup Zone of the Proterozoic Albany Fraser Province. • Lithologies of the Biranup Zone comprise paragneiss, or orthogneiss and meta-basic rocks. • It is interpreted that there is a subordinate portion of reworked Archaean rocks within the package. • Magnetics of the Project area displays strong deformation with complex folding, faulting and thrusting. • The target type is Tropicana style gold mineralisation hosted in high grade metamorphic rocks of the Albany Fraser Mobile Belt. • It is thought that the regolith hosted REE enrichment originates through weathering of underlying felsic rocks (granite, gneiss).
Drill hole Information	• 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: o easting and northing of the drill hole collar o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar o dip and azimuth of the hole o down hole length and interception depth o hole length. • If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	• All drill results are reported to the ASX in line with ASIC requirements.
Data aggregation methods	• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. • Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. • The assumptions used for any reporting of metal equivalent values should be clearly stated.	• No top-cuts have been applied when reporting results. • Individual Au and ME assay results have been reported. • Multielement results (REE) are converted to oxide (REO) using element-to-oxide stoichiometric conversion factors.
Relationship between mineralisa-tion widths and intercept lengths	• These relationships are particularly important in the reporting of Exploration Results. • If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. • If it is not known and only the down hole lengths are reported, there should be a	• Drill holes are oriented to drill perpendicular to mineralisation. • Mineralisation occurs in horizontally oriented saprolitic clay horizons.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	clear statement to this effect (eg 'down hole length, true width not known').	
Diagrams	• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	• Drilling is presented in long-section and cross section as appropriate and reported quarterly to the ASX in line with ASIC requirements.
Balanced reporting	• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	• All drillhole results have been reported including those drill holes where no significant intersection was recorded.
Other substantive exploration data	• Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	• All meaningful and material data is reported.
Further work	• The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). • Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	• Return of remaining REE assays from this drill programme. • A preliminary resource estimate will be compiled using the recently drilled AC grid from Circle Valley. • Metallurgy work is on-going to assess the extractability of the REEs.

Section 3 Estimation and Reporting of Mineral Resources
(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Database integrity	• Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. • Data validation procedures used.	• Geological data is stored in a Data Shed SQL server database. User access to the database is regulated by specific user permissions and validation checks to ensure data is valid. • Existing protocols maximise data functionality and quality whilst minimizing the likelihood of error introduction at primary data collection points and subsequent database upload, storage and retrieval points. Data templates with lookup tables and fixed formatting are used for collecting primary data using Logchief software on field laptops. The software has validation routines and data is subsequently imported into a secure central database. • The SQL server database is configured for validation through parent/child table relationships, required fields, logical constraints and referenced library tables. Data that fails these rules on import is rejected or quarantined until it is corrected. • The SQL server database is centrally managed by a Database Administrator who is responsible for all aspects of data entry, validation, development, and quality control & specialist queries.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		There is a standard suite of validation checks for all data. • Cube validated the data using automated error identification in Leapfrog Geo as well as visual checks. • Errors identified were communicated to Meeka and clarified or adjusted as necessary. • The Competent Person considers the data to be valid and fit for purpose to inform a Mineral Resource estimate.
Site visits	• Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	• The Competent Person for Table 1, Section 1 and 2 conducts regular site visits. The Competent Person for Table 1, Section 3 has not visited the Circle Valley site.
	• If no site visits have been undertaken indicate why this is the case.	• The drilling was completed prior to the commencement of the Mineral Resource estimate. As a result, there would be no meaningful value from a site visit at that time. • The Competent Person did however engage frequently with the Competent Person (for Section 1 and 2) to discuss drilling protocols and sampling approaches. • In addition, photos of AC chips were reviewed. • There is no surface exposure of the mineralisation or underlying geology. • Geological data including high resolution chip tray photographs are stored electronically. • The Competent person is satisfied with the approaches to the drilling and sampling.

Geological interpretation	• Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	• There is a moderate to high degree of confidence in the interpretation of the geology units given the flat lying and reasonably consistent nature of the regolith.
		• There is unlikely to be any significant structural disruption to the mineralisation through the resource area.
		• Estimation domains were based on grouping of the regolith domains into three zones as defined by regolith rheology, and by comparison of regolith statistics:
		  • Domain 1 – Overburden zone
		  • Domain 2 –Saprolite zone
		  • Domain 3 – Basement zone
		• A sub-domain was developed in the saprolite to capture elevated mineralisation based on a nominal 400 ppm TREE cut-off.

	• Nature of the data used and of any assumptions made.	• The dataset (geological mapping, AC core logging and assays etc.) are considered acceptable for determining a geological model. • From this data, downhole lithological, alteration, geochemical and structural information were considered and incorporated into the geological interpretation.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	• The effect, if any, of alternative interpretations on Mineral Resource estimation.	• Alternative geological interpretations were considered throughout the process. • These focussed on the key elements informing the geological model. • The Competent Person considers that due to the nature of the deposit, alternative interpretations of the geological model are not likely to materially deviate from the final interpretation.
	• The use of geology in guiding and controlling Mineral Resource estimation.	• Host lithology from geological logging were considered as the foundation for the Geological Interpretation. • Within this defined geological domain, estimation domains were interpreted based on geochemistry and assay results. • The Competent Person considers the application of the geological controls to define the estimation domaining as best practice to control the Mineral Resource Estimation.
	• The factors affecting continuity both of grade and geology.	• Changes in lithology at a local scale can influence the grade and geological continuity. • The Competent Person has considered this risk by reviewing the materiality of alternate interpretations as well as assigning lower confidence Resource classification to areas of low information density.
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 extends over ~15km^2 (~3km by ~5km) and from ~10m to ~50m below surface. The mineralised wireframes vary between ~4m and ~32m in width.

Estimation and modelling techniques	• The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	• The grade estimation used the Ordinary Kriging ("OK") technique. A total of 15 rare earth element (REE) grade attributes (Y, La, Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, and Lu) and Sc. Final estimated values are converted to stoichiometric oxide values by calculation using published ratios to support reporting of rare earth oxides (REO).
		• Grade interpolation used 4 m composited samples constrained by the estimation domain boundaries which were either treated as hard or soft boundaries based on statistical boundary analysis.
		• Interpolation parameters were derived using standard exploratory data analysis techniques of statistical and continuity analysis. Appropriate interpolation strategies were developed on a domain basis using kriging neighbourhood analysis ("KNA"), which included:
		  • Oriented ellipsoidal search radii ranged from 630 m to 2,000 m depending on the estimation domain;
		  • Minimum number of samples of 8; minimum number of samples of 16,

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		and octant search with a maximum of 4 samples per octant • The maximum extrapolation distance from the last data points was no more than 200m. • Computer software used for the modelling and estimation were: • Leapfrog Geo v2022 was used for geological domain modelling. • Supervisor v8.14 was used for geostatistical analysis. • Maptek Vulcan 2022 was used for grade interpolation.
	• The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	• This is a maiden Mineral Resource estimate for the Circle Valley.
	• The assumptions made regarding recovery of by-products.	• No assumptions made.
	• Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	• Estimates were completed for U and Th as well as for Al_2O_3, Fe_2O_3, CaO and MgO.
	• In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	• The estimation block model definitions are: • Non-rotated block model with an azimuth of 000°GN; • OK panel size was set at 200 m by 200 m by 4m (XYZ) • Sub-block size of 50 m by 50 m by 1m (XYZ); • The bulk of the drilling data is on 400 m by 400 m grid spacings, and • Appropriate search ellipses were derived from KNA with an average search radii of 630m to 2,000m and average anisotropy of 30:20:1 (major/semi/minor). • Selection of the block size was based on the geometry of the mineralisation, and data density.
	• Any assumptions behind modelling of selective mining units.	• No assumptions made regarding mining of selective mining units.
	• Any assumptions about correlation between variables.	• Correlations between the elements were determined from statistical analysis of the REE and demonstrated strong positive correlations between the majority of REE variables, particularly for the heavy rare earth elements in the primary mineralised domain.
	• Description of how the geological interpretation was used to control the resource estimates.	• The Geological Domains provided the foundation for the determination of the estimation domains. These Geological Domains incorporate lithology, alteration, and mineral chemistry associations.
	• Discussion of basis for using or not using grade cutting or capping.	• Grade based distance restrictions on samples were used to minimise the influence of isolated high-grade outliers. Samples above a defined grade threshold were restricted to within a single block dimension. Outside this range the samples were unavailable for use in interpolation.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	• The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	• Grade estimation is validated visually on a section-by-section review; statistically by comparison of input drillhole data against estimated grade and by swath plots of northing, easting, and RL to composite data. • In addition, the geology, estimation domaining and final estimate is peer reviewed. This includes detailed discussion on applied methodology and parameters.
Moisture	• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	• Tonnages are estimated on a dry basis.
Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied.	• Selection of the cut-off considered metallurgical recoveries and costs based on a process of scrubbing to produce a slurry, particle size separation through screening and hydro-cyclone classification to discard the non-target elements in the coarse fraction, while retaining the -20µm size fraction (which hosts most of the REE), followed by a tank leach process to recover the REE. Metallurgical test work remains ongoing. • Mining and overheads (G&A) cost inputs used to inform the cut-off assume a large scale, free digging open pit truck and shovel mining operation.
Mining factors or assumptions	• Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	• Mining assumes a large scale, free digging open pit truck and shovel mining operation.
Metallurgical factors or assumptions	• The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	• Assumptions made regarding metallurgical recoveries and costs reference the ongoing test work being performed on representative samples from the Circle Valley REE MRE.
Environmental factors or assumptions	• Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well	• Due to the shallow nature of potential open pit operations, mining waste would be progressively placed back into the shallow workings prior to rehabilitation of any disturbed areas taking place.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	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.	
Bulk density	• Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.	• Bulk density was applied via direct assignment within the block model. The values assigned to the saprolite zone was based on preliminary measurements of seven vacuum sealed samples weighed in air and in water. The saprolite density was applied as 1.89 g/cm^3, while values for the overburden and basement zones were assumed at 1.7 g/cm^3 and 2.1 g/cm^3 respectively based on acceptable material type averages.
	• 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.	• Measurements for saprolite samples employed the Archimedes method of with in air relative to weight in water using wrapped and vacuum sealed saprolite samples.
	• Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	• Densities are assigned according to the regolith horizon model interpreted from downhole logging.
Classification	• The basis for the classification of the Mineral Resources into varying confidence categories.	• The models have utilised all available data. • The model has been classified as Inferred as determined by drill spacing and local geological and grade confidence. • The Competent Person considers the block model to be appropriately estimated based on validation of input and estimated grades through visual assessment, domain grade mean comparisons, and a review of swath plots. • The local error increases in areas of wider spaced data and as such the model estimated reflects the confidence according to applied classification criteria.
	• Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	• Appropriate account has been taken of all relevant factors in determining classification.
	• Whether the result appropriately reflects the Competent Person's view of the deposit.	• The classification reflects the view of the Competent Person.
Audits or reviews	• The results of any audits or reviews of Mineral Resource estimates.	• The Mineral Resource was estimated by consultants Cube Consulting Pty Ltd. • An internal peer review has been completed prior to this release and no material issues have been highlighted.
Discussion of relative accuracy/ confidence	• Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence	• The Mineral Resource estimates have been reported in accordance with the guidelines within the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources & Ore Reserves & reflects the relative accuracy of the Mineral Resources estimate. The Competent Person

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	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.	deems the process to be in line with industry standards for resource estimation & therefore within acceptable statistical error limits. • The confidence reflected in the Inferred classification of the deposit is based on exploration, sampling and assaying information gathered through appropriate techniques from appropriately spaced drillholes and geological understanding,
	• The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	• The statement relates to global estimates of tonnes and grade for open pit mining scenarios.
	• These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	• No production data are available.