

STRATEGIC UPDATE - CHILWA TO COMMENCE REE IONIC CLAY PROGRAM ACROSS LICENCE PACKAGE

Chilwa Minerals Limited (ASX: CHW) is pleased to provide an update on the Ionic Adsorption Clay deposit potential across its Lake Chilwa licence package in southern Malawi, building on previously released exploration results.

This announcement draws on information previously disclosed to the market and outlines the Company's next phase of planned test work. This program is to work in parallel with the current HMS and the hard rock diamond drilling which is ongoing.

KEY POINTS

- Chilwa Minerals tenement package around the Lake Chilwa basin encompasses a large, geologically coherent mineral system with demonstrated potential for multiple REE-bearing mineralisation styles; being Rare Earth Element (REE) bearing (principally Monazite) Heavy Mineral Sands (HMS) deposits, Carbonatite and alkaline intrusive hosted REE, and potential Ionic Adsorption Clay (IAC) REE deposits.
- Previous work indicates elevated AREO*¹ within composites formed from HMS Sonic Drilling with potential contribution from secondary sources of REE distinct from the monazite already estimated within the heavy mineral assemblage.
- The basal clay unit identified beneath the HMS package may represent a consistent and underexplored source of REE mineralisation across the licences.
- Separately, clay and sap-rock units sitting above hard rock targets have identified extensive REE bearing intervals, geographically distinct from HMS deposits, including MP0DD001 (48.5m @1,567ppm TREO from 73.2m downhole and 33m@ 1,545ppm TREO from 132.9m downhole) ²
- Further systematic test work, including the establishment of an IAC-specific department within the Company, is planned to assess grade distribution, mineralogical controls and leachable REE inventory through the license package.
- Material to be initially assayed has come from the existing Sonic drilling program, avoiding the need to redrill material for assaying and increasing turnaround times for results.

¹ ★ Aggregate rare earth oxides (AREO, determined by XRF and including Cerium (Ce₂O₃), Europium (Eu₂O₃), Gadolinium (Gd₂O₃), Lanthanum (La₂O₃), Neodymium (Nd₂O₃), Praseodymium (Pr₆O₁₁), Samarium (Sm₂O₃) and Ytterbium (Yb₂O₃))

² Refer ASX Announcement 20 October 2025



GEOLOGICAL CONTEXT AND REE SOURCE INTERPRETATION

HMS exploration drilling completed to date across the Lake Chilwa licences has consistently intersected a stratigraphic sequence comprising surficial sands, underlying silty-sands and a basal clay horizon developed at the base of the HMS system. As announced on 17 July 2024³, a set of heavy mineral concentrate (HMC) composites were generated from material produced during standard HMS sink–float assay. These ‘sinks’ were composited recognising internal stratigraphic structure within the HMS deposits, comprising a top sandy upper layer, a middle silty-sand layer, and a lower basal clay unit.

Aggregate rare earth oxides (AREO, determined by XRF and including Cerium (Ce_2O_3), Europium (Eu_2O_3), Gadolinium (Gd_2O_3), Lanthanum (La_2O_3), Neodymium (Nd_2O_3), Praseodymium (Pr_6O_{11}), Samarium (Sm_2O_3) and Ytterbium (Yb_2O_3)) were elevated throughout the composites, including in the clay at the base of the mineral sands deposit. .

The Company considers the REE within the Mineral Sands deposit to be in majority attributed to REE-bearing heavy minerals such as monazite but that the presence of REE within the basal clay unit may be consistent with REE mobilisation from primary alkaline or carbonatite source rocks within the Lake Chilwa basin, followed by transport and adsorption onto fine-grained clay minerals within the HMS basal clay horizon.

Chilwa’s Managing Director, Cadell Buss, commented.

Work completed to date continues to strengthen our understanding of the Lake Chilwa mineral system as more than a conventional heavy mineral sands project. While the presence of rare earths within the HMS was expected due to monazite, Rare Earth values within the basal clay horizons suggests a contribution from other potential REE sources

This supports our view that a component of the rare earth assemblage is derived from secondary processes operating within the basin, rather than being solely locked up in discrete heavy minerals.

Importantly, further information may be generated from existing drilling and sample material, allowing us to advance our rare earth understanding in a disciplined and cost-effective manner. The next phase of work will focus on further characterising the basal clay units and assessing their potential through targeted analysis and test work.

The economic benefit of an additional deposit type beneath known HMS deposits, as we are currently engaged in a Scoping Study to determine the viability of their economic extraction is of course compelling in the context of shared infrastructure and mine planning.

Additionally, given the fact that we drilled an extra 2m in depth on every hole into clay material during the HMS Sonic programs we can immediately test this material and avoid the need to commence a drilling program until these results are known, thus increasing the turnaround time.

³ Refer ASX announcement 17 July 2024

IONIC CLAY-HOSTED REE POTENTIAL BENEATH AND ADJACENT HMS

The principal mechanism for the formation of an Ionic Adsorption Clay deposits is recognised as in-situ weathering of REE bearing rocks (per-alkaline granites, carbonatites) to create abundant clay minerals as a product of weathering, with subsequent adsorption of REE minerals onto clay surfaces. These deposits can remain in-situ or be mobilised and redeposited elsewhere in an active sedimentary basin. Leaching of REE inventory from an HMS deposited for concentration at the base of the HMS deposit is a further mechanism recognised as potentially creating REE bearing clays beneath or adjacent to an HMS deposit. All three mechanisms can also interact to create hybrid deposit types.

The basal clay unit occurring beneath identified HMS deposits occurs throughout the license package and represents a uniform, readily accessible exploration target. Conceptually, this unit has the potential to host REE mineralisation analogous to ionic adsorption clay (IAC) systems recognised elsewhere globally.

Several plausible deposit mechanisms may exist or co-exist within the Chilwa Basin.

- Primary REE-bearing minerals are sourced from in-basin and proximal carbonatite and alkaline intrusions;
- Weathering, erosion and groundwater transport liberate REE into solution;
- REE are subsequently adsorbed onto negatively charged clay surfaces beneath paleo-shoreline HMS accumulations.
- A further deposit mechanism for IAC beneath HMS deposits which the Company intends to investigate involves leaching of REE from HMS with redeposition to clay minerals below and adjacent the HMS.

RESIDUAL VERSUS TRANSPORTED IAC DEPOSITS:

Two end-member models are recognised for ionic clay-hosted REE mineralisation: **residual (in situ)** profiles developed directly above REE-fertile source rocks, and **transported clay systems** where REE-enriched material has been reworked and redeposited. Both mechanisms can also combine to create hybrid systems.

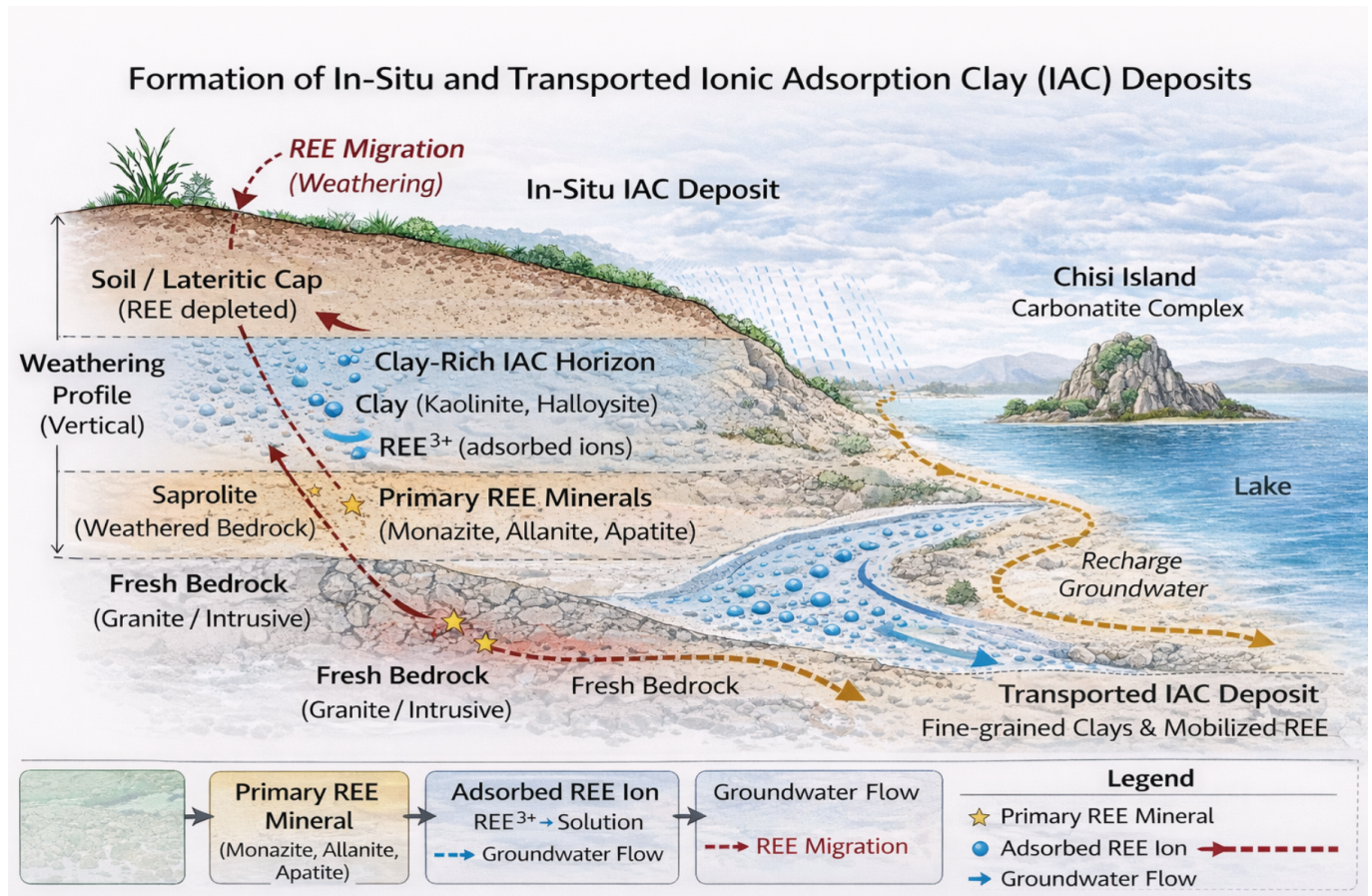


Figure 1 General schematic model for the formation of Ionic Adsorption Clay deposits (IAC) deposits) both in situ and transported within the Lake Chilwa Basin

STRATEGIC AND POLICY CONTEXT

Rare earth elements are increasingly recognised as critical to the global energy transition, defence, and advanced manufacturing supply chains. In this context, governments and supranational bodies have announced a range of initiatives aimed at securing diversified and transparent sources of critical minerals.

In the United States, the **Project Vault** initiative highlights the strategic importance of building secure, allied supply chains for critical minerals, including REE, outside of traditional dominant jurisdictions, notably China.

Similarly, recent European Union policy announcements emphasise the need to accelerate domestic and allied critical mineral projects, with a focus on ESG-aligned development, traceability, and supply chain resilience.

The Chilwa Minerals project is well positioned within this evolving policy landscape, given its location in a stable jurisdiction, potential for multi-commodity development, and proximity to existing infrastructure.

PLANNED TEST WORK PROGRAM

Chilwa Minerals plans to undertake further targeted test work using material already available from completed sonic drilling programs.

The proposed program includes:

- Selection of approximately 200 drill holes across the Mposa HMS deposit (see figure 4 below);
- Sub-sampling of the ~2 m basal clay interval preserved at the bottom of each hole, already collected from HMS sonic drill program;
- Individual sample analysis to establish REE grade distribution, variability and spatial trends;
- Generation of representative composite samples derived from these intervals;
- Preliminary leach test work on selected composites to assess REE extractability.

This staged approach is designed to efficiently evaluate the potential for an ionic clay-hosted REE system while leveraging existing drilling and sample inventories.

Separately, the Company intends to assay for TREO and perform leach test work from clay intervals recovered from above Carbonatite hosted REE targets currently being tested with diamond drilling.

In addition, the Company intends to modify the SOP for normal HMS Sonic resource development drilling and proceed to sonic refusal at a sub-set of points dispersed through HMS deposits. This will provide background information as well as the depth potential of potential ionic clays beneath the HMS.

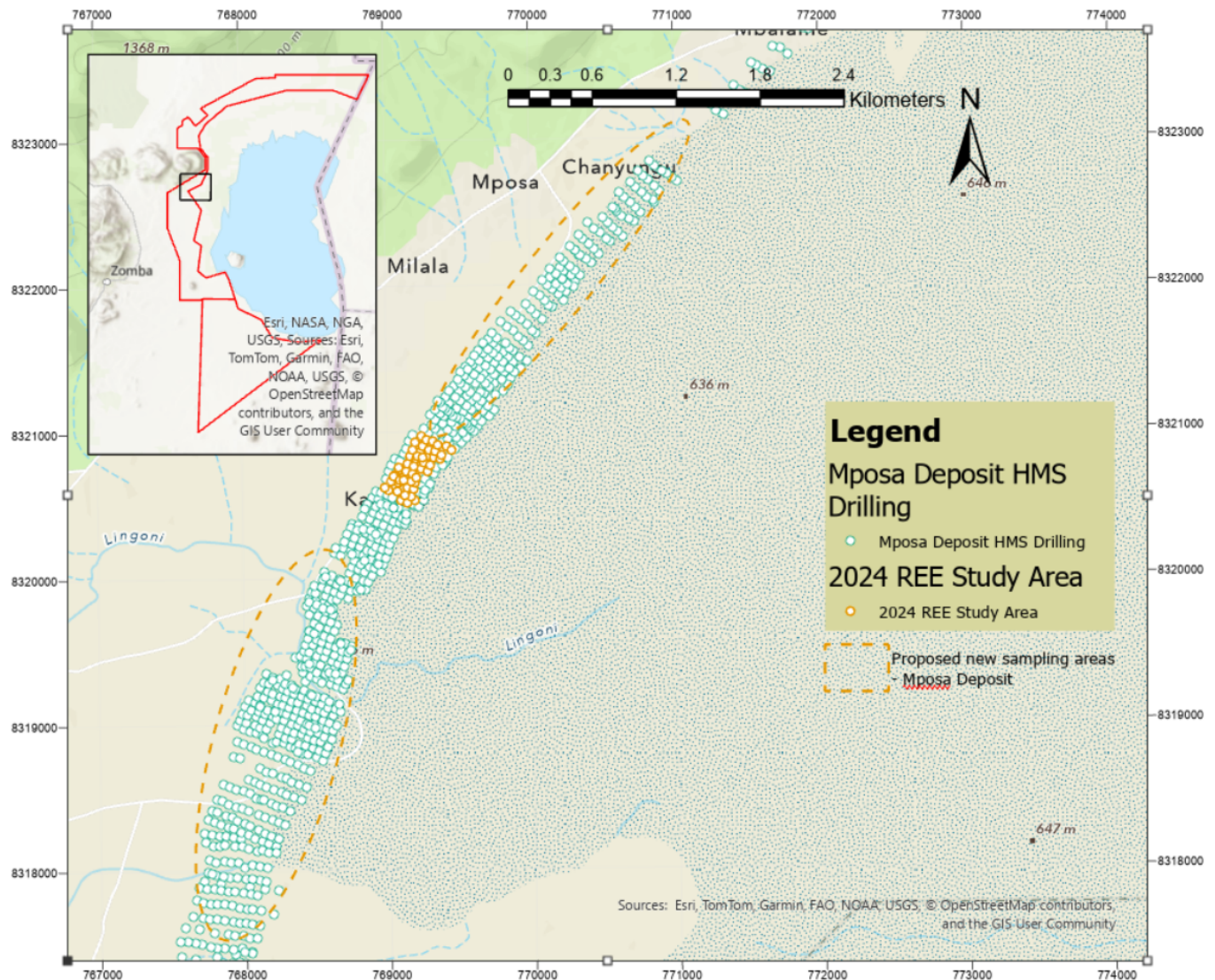


Figure 2 Planned sampling locations at the Mposa deposit within 2024 REE study area

-ENDS-

This Announcement has been authorised by the Managing Director.

For further information contact:

Cadell Buss

Founder and Managing Director

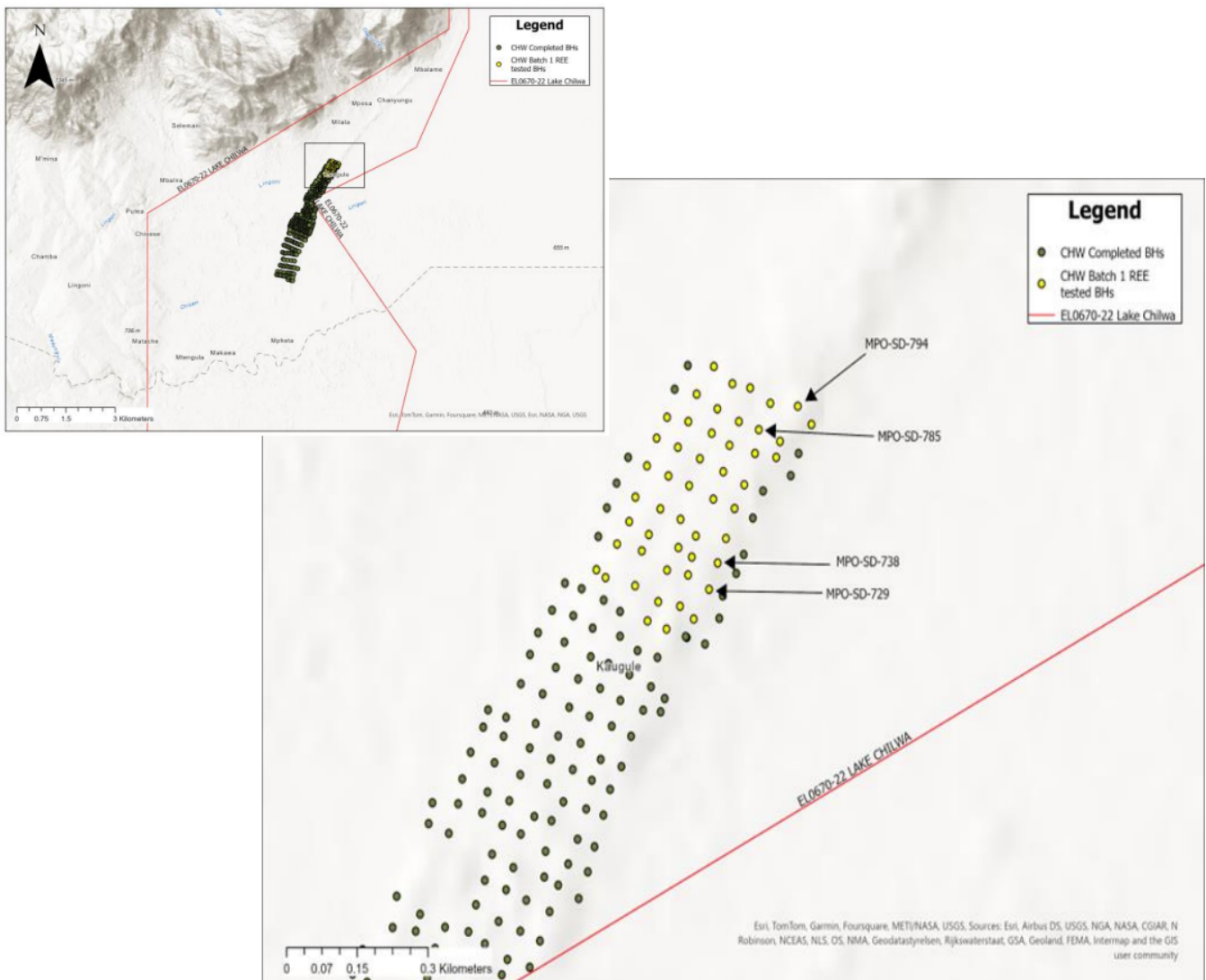
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Compliance Statement

The information in this announcement that relates to exploration results was prepared and first disclosed under JORC Code 2012. The information was extracted from the Company's previous ASX announcements as identified in the body of this report. All of the announcements are available to view on the Company's website <https://www.chilwaminerals.com.au/>. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original announcements and confirms that the form and context in which any Competent Person's findings are presented have not been materially modified from the original market announcements.

Appendix 1

HMS drilling locations showing the set of 50 BHID from which composites for REE analysis were derived, as discussed in the Company's announcement dated 7 July 2024.



Appendix 2

Highlight composite intervals, as discussed in the Company's announcement dated 17 July 2024⁴ showing XRF derived AREO values.

Hole ID	From (m)	To (m)	Length (m)	"AREO"* (ppm)	NdPr (ppm)	Scandium (g/t)	Niobium (ppm)
MPO - SD - 716	0.00	3.85	3.85	5,270	1,300	60	2,792
MPO - SD - 717	0.00	15.00	15.00	5,741	1,419	46	2,827
Incl	4.00	15.00	11.00	6,280	1,571	44	2,764
MPO - SD - 718	0.00	15.00	15.00	4,875	1,193	45	3,013
MPO - SD - 719	0.00	12.00	12.00	4,990	1,233	57	3,017
MPO - SD - 720	0.00	12.00	12.00	4,983	1,200	43	3,367
MPO - SD - 721	0.00	4.10	4.10	2,430	600	40	2,988
MPO - SD - 721	6.00	8.70	2.70	5,840	1,400	50	2,705
MPO - SD - 726	0.00	16.00	16.00	4,861	1,215	40	3,354
MPO - SD - 727	0.00	16.00	16.00	4,629	1,188	51	3,075
Incl	4.00	6.00	2.00	7,530	1,800	40	3,400
MPO - SD - 728	0.00	15.00	15.00	3,618	873	60	2,647
MPO - SD - 729	0.00	15.00	15.00	7,138	1,669	47	2,834
Incl	4.00	15.00	11.00	8,737	2,058	50	2,882
MPO - SD - 730	0.00	9.00	9.00	7,358	1,873	50	2,813
Incl	4.70	9.00	4.30	9,750	2,500	40	2,500
MPO - SD - 737	0.00	15.00	15.00	6,261	1,573	40	2,707
Incl	4.00	6.00	2.00	12,890	3,300	40	3,000
MPO - SD - 738	0.00	15.00	15.00	6,319	1,537	49	2,957
Incl	5.80	15.00	9.20	8,070	1,900	40	3,100
MPO - SD - 739	0.00	16.44	16.44	4,157	966	45	2,830
MPO - SD - 740	0.00	12.00	12.00	3,638	883	53	2,883
MPO - SD - 741	0.00	10.00	10.00	3,558	840	46	3,020
MPO - SD - 746	0.00	10.00	10.00	3,664	920	46	3,700
MPO - SD - 747	0.00	12.00	12.00	4,505	1,067	47	2,950
Incl	4.00	6.00	2.00	8,760	2,200	60	3,000
MPO - SD - 748	0.00	15.00	15.00	3,514	833	49	2,833
MPO - SD - 749	0.00	15.00	15.00	5,016	1,263	58	2,635
MPO - SD - 750	0.00	15.00	15.00	4,503	1,087	45	3,047
MPO - SD - 756	0.00	9.00	9.00	3,581	833	30	3,411
MPO - SD - 757	0.00	10.00	10.00	3,832	940	58	3,180
MPO - SD - 758	0.00	10.00	10.00	3,110	740	44	2,700
MPO - SD - 759	0.00	10.00	10.00	4,478	1,110	52	2,660

⁴ Refer ASX Announcement 17 July 2024

Hole ID	From (m)	To (m)	Length (m)	"AREO"* (ppm)	NdPr (ppm)	Scandium (g/t)	Niobium (ppm)
Incl	6.00	10.00	4.00	7,880	2,000	40	2,800
MPO - SD - 760	0.00	15.00	15.00	5,170	1,253	38	3,093
MPO - SD - 764	0.00	4.00	4.00	2,430	600	50	3,456
MPO - SD - 764	6.00	9.00	3.00	1,940	350	<20	2,167
MPO - SD - 765	0.00	10.00	10.00	3,658	740	44	2,700
Incl	4.00	6.00	2.00	7,930	2,000	40	3,100
MPO - SD - 767	0.00	10.00	10.00	3,498	828	59	2,718
Incl	4.20	6.00	1.80	7,650	1,900	50	3,300
MPO - SD - 768	0.00	15.00	15.00	4,232	1,033	42	2,640
MPO - SD - 769	0.00	15.00	15.00	6,279	1,487	47	3,053
Incl	6.00	15.00	9.00	7,160	1,700	40	3,200
MPO - SD - 773	0.00	9.00	9.00	2,498	556	36	3,378
MPO - SD - 774	0.00	10.00	10.00	1,936	270	28	2,260
MPO - SD - 775	0.00	10.00	10.00	2,534	600	68	2,760
MPO - SD - 776	0.00	10.00	10.00	4,402	1,080	54	2,540
Incl	6.00	10.00	4.00	7,750	1,900	30	2,600
MPO - SD - 777	0.00	9.70	9.70	4,147	988	52	2,776
MPO - SD - 778	0.00	8.00	8.00	5,313	1,225	58	3,050
Incl	4.00	8.00	4.00	7,115	1,650	45	3,200
MPO - SD - 782	0.00	10.00	10.00	3,342	754	55	3,541
MPO - SD - 783	0.00	9.70	9.70	3,038	641	54	2,686
MPO - SD - 784	0.00	8.00	8.00	5,953	1,500	55	2,825
Incl	6.00	8.00	2.00	15,470	3,900	80	3,200
MPO - SD - 785	0.00	9.55	9.55	7,902	1,994	63	2,816
Incl	6.00	9.55	3.55	15,590	3,900	50	2,900
MPO - SD - 786	0.00	9.00	9.00	4,739	1,167	59	2,944
MPO - SD - 790	0.00	8.00	8.00	4,047	963	57	3,328
Incl	4.25	6.00	1.75	8,910	2,300	70	3,300
MPO - SD - 791	0.00	10.00	10.00	2,029	425	45	2,602
MPO - SD - 792	0.00	10.50	10.50	3,693	800	58	2,943
Incl	4.00	6.00	2.00	8,100	1,900	70	3,200
MPO - SD - 793	0.00	10.00	10.00	4,578	1,120	52	2,860
Incl	6.00	10.00	4.00	7,980	2,000	50	3,200
MPO - SD - 794	0.00	8.50	8.50	6,048	1,482	59	2,759
Incl	4.00	8.50	4.50	8,020	2,000	50	2,900
MPO - SD - 795	0.00	6.00	6.00	5,527	1,267	33	2,967