

# GLOBALLY SIGNIFICANT EXPLORATION TARGET DEFINED AT KANGANKUNDE

#### HIGHLIGHTS

- Exploration Target defined following the recently reported Mineral Resource Estimate of 261 million tonnes grading 2.19% TREO and is defined by mineralisation beneath the MRE
- The Exploration Target potential and Mineral Resource Estimate establishes Kangankunde as one of the world's largest rare earths deposits based on a globally recognised mineral reporting code

Lindian Resources Limited (ASX:LIN) ("Lindian" or "the Company") is pleased to publish an Exploration Target for the Kangankunde Rare Earths Project which, together with the recently published Mineral Resource Estimate ('MRE'), clearly establishes Kangankunde as one of the world's largest rare earths projects, underpinned by excellent grade, uniquely non-radioactive material and a high percentage of rare earth elements that are key to the clean energy transition. The Exploration Target for the Kangankunde Rare Earths Project Central Carbonatite is between 400 million tonnes (lower range) to 800 million tonnes (upper range) grading between 2.0% and 2.7% TREO.

Lindian completed two deep core drill holes beneath the MRE to test the potential for additional extensions to mineralisation. These two deep drill holes form the basis for an Exploration Target estimate tabled below.

Exploration target compiled for Kangankunde following deep drilling results.

Target	Range	Tonnes (millions)	Grade (TREO %)	
Exploration Target	Lower	400	2.0%	
Central Carbonatite	Central Carbonatite Upper		2.7%	

Cautionary Statement: The potential quantity and grade of the Exploration Target is conceptual in nature and therefore is an approximation. There has been insufficient exploration to estimate a Mineral Resource in the area considered an exploration target and it is uncertain if further exploration will result in the estimation of a Mineral Resource. The Exploration Target has been prepared and reported in accordance with the 2012 edition of the JORC Code.

#### COMMENTS

**Executive Chairman Asimwe Kabunga commented:** "This Exploration Target is a defining event for Lindian and for Malawi. While our MRE is itself outstanding, the Exploration Target demonstrates the potential for the Kangankunde project to grow significantly with further exploration activity and, is without a doubt, one of the world's largest rare earths deposits and an asset that is expected to have a material impact on the rare earths sector globally. It firmly positions Lindian as a major player in the industry with an asset that is fully permitted, licensed for production and enjoying very strong Government and Community support. We believe Kangankunde is highly attractive to potential off-takers for its ability to provide long term consistent product supply.

Further, we are making excellent progress for bringing our Stage 1 mining and processing operation online in late 2024 backed with a strong cash balance."



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**Chief Executive Officer Alistair Stephens added:** *"Kangankunde is now firmly established in a class of rare earths projects that are regarded as the very best in the world, as defined by scale, grade and the quality of the resource. The scale of this asset is simply astounding with additional exploration upside at depth and across the broader lease area which remains unexplored. Separately, we are advancing well on the infill mine development drill program which will allow us to define part of the MRE to the Indicated Category."* 

#### Mineral Resource Estimate for the Kangankunde Rare Earths Project

Resource Classification	Tonnes (millions)	TREO (%)	NdPr% of TREO** (%)	Tonnes Contained NdPr* (millions)	
Inferred Resource	261	2.19	20.2	1.2	

The information in this report that relates to a Mineral Resource Estimate for the Kangankunde Rare Earths was first released to the ASX on 3 August 2023 and is available to view on www.asx.com.au. The Company confirms that it is not aware of any new information or data that materially affects information included in the relevant market announcement, and that all material assumptions and technical parameters underpinning the estimates in the announcement continue to apply and have not materially changed.

#### **EXPLORATION TARGET**

An Exploration Target (Table 1) has been determined for the Central Carbonatite (Figure 3) of the Kangankunde rare earths project in addition to the current Mineral Resource Estimate (MRE)<sup>1</sup> (Table 2).

The Exploration Target has been considered following the successful Phase 2 deep drilling program that showed the continuity of high-grade rare-earth mineralisation up to 800 metres beneath the limits of the MRE. The significant intercepts reported in these depth extension holes were:

- 853.6 metres at 2.73% TREO from 52 metres in KGKRCDD074<sup>2</sup> and,
- 1,000 metres at 2.60% TREO,
  - o including, **805.26 metres at 2.90% TREO** from 152.85 metres in KGKDD009<sup>3</sup>

#### Table 1: Kangankunde Central Carbonatite Exploration Target

Target	Range	Tonnes (millions)	Grade (TREO %)	
Exploration Target	Lower	400	2.0%	
Central Carbonatite	Upper	800	2.7%	

The potential quantity and grade of the Exploration Target is conceptual in nature and therefore is an approximation. There has been insufficient exploration to estimate a Mineral Resource in the area considered an exploration target and it is uncertain if further exploration will result in the estimation of a Mineral Resource. The Exploration Target has been prepared and reported in accordance with the 2012 edition of the JORC Code.



<sup>&</sup>lt;sup>1</sup> LIN (ASX) Announcement 3 August 2023; "Lindian Reports Maiden Mineral Resource Estimate Of 261 Million Tonnes At High Grade Of 2.19% TREO"

<sup>&</sup>lt;sup>2</sup> LIN (ASX) Announcement 31 July 2023; First Deep Drill Hole Intercepts 854 Metres of Mineralisation Grading 2.73% TREO"

<sup>&</sup>lt;sup>3</sup> LIN (ASX) Announcement 18 September 2023; "Second Deep Drill Hole Intercepts 1,000 metres Of Mineralisation Grading 2.6% TREO"



The Exploration Target is based on the current geological understanding of the mineralisation geometry supported by more than 17,000 metres of drilling, resource estimation modelling and surface mapping but does not consider factors related to geological complexity, possible mining method or metallurgical recovery factors. This estimate provides an assessment of the potential scale of the Kangankunde project mineralisation beyond the existing MRE and the work programs needed to convert this estimate to a resource in the future.

The reported Kangankunde Central Exploration Target is defined by:

- The resource model for Kangankunde Central which is based on three-dimensional geological domains defined by drilling and surface mapping.
- The reported resource from this model was limited by data density to an inferred classification with the depth limit ranging from 200 metres (800mRL to the 600mRL) to 400 metres (750mRL to 350mRL) below surface.
- Beneath the inferred resource limit mineralisation has been identified by drill holes KGKRCDD074 and KGKDD009 to extend to -200mRL, 600 to 800 metres below current MRE limit. (Figure 1 and Figure 2)
- In addition to depth extension, the margins of the mineralisation have not been fully tested with surrounding wall rock/carbonatite breccias shown to be mineralised where drilled. To date drilling has not tested fully the lateral extents of this mineralisation.
- The Exploration Target lower tonnage range of 400 million tonnes assumes a depth limitation to the 200m RL. This material was included in the assessment of the existing resource model estimation but has insufficient drilling data to be classified according to JORC guidelines.
- The Exploration Target upper tonnage range projects the mineralisation below the current model limit from the 200mRL to the -200mRL, a further 400 vertical metres beyond the Exploration Target lower tonnage range depth limit. This depth extent is supported by drill holes KGKRCDD074 and KGKDD009 that both contained consistent rare earths mineralisation to this depth. This upper range tonnage assumes the tonnes of the lower 400 metres of the existing resource model (600mRL to 200mRL) will be replicated from 200mRL to -200mRL.
- The Exploration Target lower grade range is based on a 10% reduction of the MRE grade to account for the halo of surrounding lower grade mineralisation, while the upper grade range is based on an approximation of the higher-grade contiguous carbonatite grades assayed from KGKDDRC74 and KGKDD009 at depth.





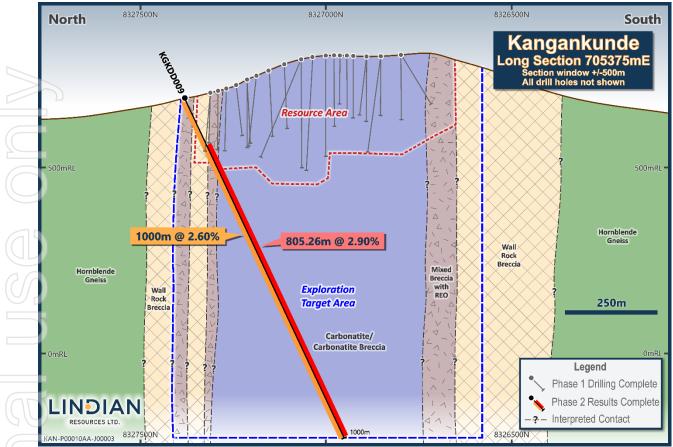


Figure 1: Long Section 705375mE showing Exploration Target area in relation to Mineral Resource Area and drill hole KGKDD009.





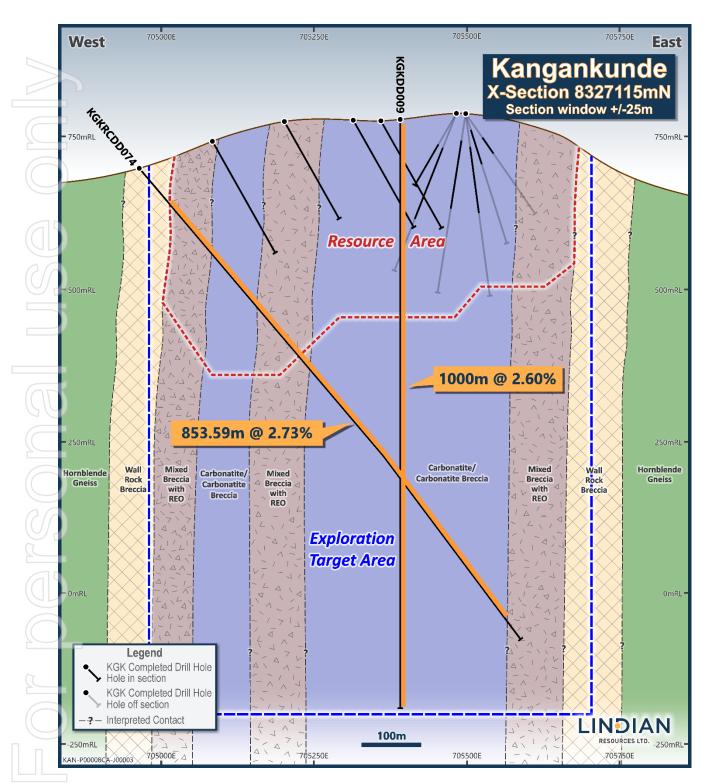


Figure 2: Cross Section 8327115mN showing Exploration Target area in relation to Mineral Resource Area and drill hole KGKRCDD074.





Other potential areas for exploration at North Knoll and South Knoll (Figure 3) have not been included at this stage and are the subject of a mapping and sampling program to be completed by December 2023.

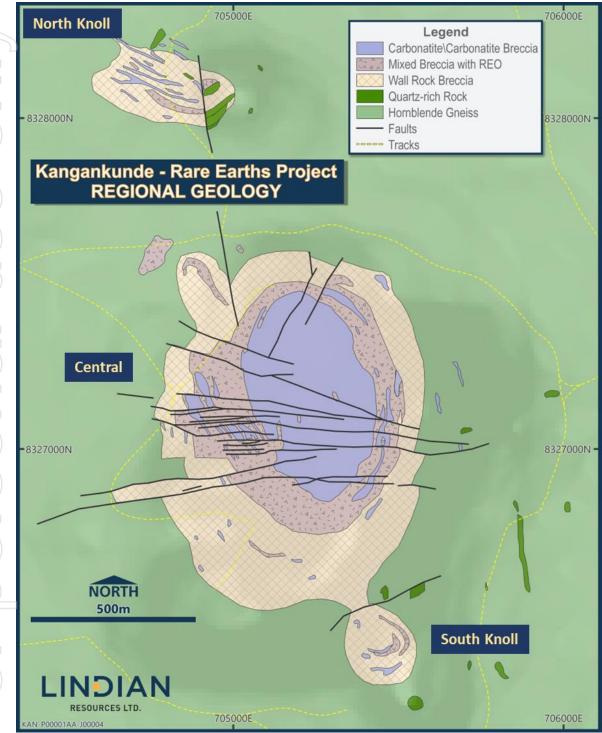


Figure 3: Kangankunde Project Geology



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#### **EXPLORATION TARGET WORK PROGRAMS**

The Central Carbonatite exploration target will be evaluated by drill programs aimed at creating a reportable resource. This work is anticipated to be conducted on a staged basis in conjunction with mine development over future years and consistent with staged operation expansion planning.

#### PHASE 3 DRILL PROGRAM

The Phase 3 infill drilling program is nearing completion. The aim of the program was to increase data density and subsequently resource estimation confidence in mineralisation to be included in the Project Feasibility Study.

## **About Lindian**

#### RARE EARTHS

**Lindian Resources Limited** has ownership of Malawian registered Rift Valley Resource Developments Limited that has 100% title to Exploration Licence EPL0514/18R and Mining Licence MML0290/22. The Exploration and Mining Licences have an Environmental and Social Impact Assessment Licence No.2:10:16.

 Table 2: Kangankunde Rare Earths Project Mineral Resource Above 0.5% TREO Cut-off Grade

R	Resource Classification	Tonnes (millions)	TREO (%)	NdPr% of TREO** (%)	Tonnes Contained NdPr* (millions)	
9	Inferred Resource	261	2.19	20.2	1.2	

## Forward Looking Statements

This announcement may include forward-looking statements, based on Lindian's expectations and beliefs concerning future events. Forward-looking statements are necessarily subject to risks, uncertainties and other factors, many of which are outside the control of Lindian, which could cause actual results to differ materially from such statements. Lindian makes no undertaking to subsequently update or revise the forward-looking statements made in this announcement, to reflect the circumstances or events after the date of the announcement.

#### **Competent Persons Statements**

The information in this report that relates to the Exploration Target for the Kangankunde Rare Earths Project is based on information compiled by Mr. Alistair Stephens, who is a Member of the Australian Institute of Mining and Metallurgy (AusIMM). Mr. Stephens is CEO of Lindian Resources Limited. Mr. Stephens has sufficient experience 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). Mr. Stephens consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

Unless otherwise stated, where reference is made to previous releases of exploration results in this announcement, the Company conforms that it is not aware of any new information or data that materially affects the information included in those announcements and all material assumptions and technical parameters underpinning the exploration results included in those announcements continue to apply and have not materially changed.

The information in this report that relates to previous exploration results for the Kangankunde Rare Earths Project was prepared and first disclosed under the JORC Code 2012 and has been properly and extensively cross-referenced





in the text to the date of the original announcement to the ASX. The Company is not aware of any new information or data that materially affects these exploration results as originally referenced.

The information in this report that relates to a Mineral Resource Estimate for the Kangankunde Rare Earths Project was first released to the ASX on 3 August 2023 and is available to view on www.asx.com.au. The Company confirms that it is not aware of any new information or data that materially affects information included in the relevant market announcement, and that all material assumptions and technical parameters underpinning the estimates in the announcement continue to apply and have not materially changed.

The Competent Persons' consents remain in place for subsequent releases by the Company of the same information in the same form and context, until the consents are withdrawn or replaced by a subsequent report and accompanying consent. The Company is not aware of any new information or data that materially affects the information in the ASX announcement of 3 August 2023 originally referencing its resources estimate, and that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed.

#### Appendix 1: Kangankunde Drill Hole Details (Datum UTM WGS84 Zone 36S)

	Drill Hole ID	Drill Type	UTM East (m.)	UTM North (m.)	Elevation (m.a.s.l.)	Hole Length EOH (m.)	Azimuth	Inclination
	KGKRCDD074	RC/DD	704975	8327119	683	980.59	095	-49
11	KGKDD009	DD	705386	8327384	669	1000	182	-66

