

## **MAIDEN DRILL PROGRAM UNDERWAY AT KANGANKUNDE**

- Phase 1 drill program has now commenced,
- Phase 1, consisting of 44 holes for 12,500 metres, is designed to provide definition of mineralisation in the upper 300 metres,
- First assays are anticipated in approximately 6-8 weeks,
- Metallurgical sampling to commence in November,
- Phase 2 drill program consisting of two additional deep drill holes, each 1,000 metres in length, to test the extent and tenor of mineralisation down to 800 metres,
- Kangankunde is a globally significant rare earth resource in potential size, grade and quality. The carbonatite host has outstanding grades of up to 23.7% TREO<sup>1</sup>, with very low thorium <sup>2</sup>.

Lindian Resources Limited (ASX: LIN) ("Lindian" or "the Company") is pleased to advise shareholders that drilling has commenced at the Kangankunde Rare Earths Project. This announcement provides further information about the program objectives.

**Chief Executive Officer, Mr Alistair Stephens said:** *"When I commenced with Lindian in early August 2022, I set an ambitious plan to be drilling at Kangankunde within 3 months. With shareholder approval for the acquisition granted in late September, and the blessing of the Kangankunde Community who have supported our plan, I thank the Lindian team who have worked tirelessly to prepare all necessary logistics and supplies that are necessary for a drill program of the size we are embarking upon. This is the first drill program at Kangankunde since the 1990's. It will form the basis toward a Mineral Resource Estimate under the 2012 JORC code, or at a minimum, an exploration target. A steady stream news in the form of assay results, metallurgical test work results, additional exploration targets, and potentially an MRE, represent multiple value drivers for shareholders. I look forward with excitement to the results of the works programs and will provide further updates as we progress.*

*The Kangankunde Rare Earths Project is a globally significant resource in potential for size, grade and quality, and the drilling program now underway can be expected to confirm and build on previous historical work."*

<sup>1</sup> Refer ASX announcement 1 August 2022

<sup>2</sup> Refer ASX announcement 13 October 2022

## **PHASE 1 DRILL PROGRAM**

The Phase 1 program consists of 44 drill holes for 10,000 metres of RC drilling and 2,500 metres of core drilling on the Kangankunde hill top. The drill pattern is based on 50 metre east-west sections, and as radial fans perpendicular to the interpreted carbonatite boundary where topography provides access (Figure 1).

The objective of this program is to provide initial definition of the mineralised carbonatite and surrounding carbonatite breccia rocks within an area of 800m long and 800m wide. Monazite mineralisation hosting rare earth elements is clearly visible in the rocks that crop out in this area. Phase 1 drilling will be limited to the Kangankunde hill top using two RC rigs and one core rig to complete as many holes as possible until the wet season, typically from December to March, limits access.

## **PHASE 2 DRILL PROGRAM**

Two additional deep drill holes are planned from drill pads near the base of the Kangankunde hill (Figure 1) and are designed to allow drilling to continue during the early stages of the wet season. These two drill holes, each 1,000 metres in length, are designed to test the N-S and E-W axes of the carbonatite between 300 metres and 800 metres below the hill top. Phase 2 will commence after Phase 1 is completed, and will be dependent on the wet season

A cross section with the Phase 1 drilling plan from the hill top and (one of) the Phase 2 deep holes from the base of the hill on simplified interpreted geology is shown in Figure 2 below.

## **METALLURGICAL SAMPLING**

During November, samples will be taken for metallurgical test work including mineralogy and recovery works. It is hoped that the outcomes of this work program will be available toward the end of the first quarter of next year. This will combine resource definition drilling with metallurgical recovery outcomes.

## **SAMPLE PREPARATION AND ASSAY**

Samples from all works will undergo sample preparation at an internationally accredited laboratory in Africa with subsamples then shipped to Australia for assay. Testwork will be undertaken on-site to determine bulk density of the mineralisation and surrounding rock types which will be applicable to future resource modelling and mine planning. Assay turn around is anticipated to be 6 to 8 weeks to account for transport, customs clearances, sample preparation and assaying.

Figure 1: Interpreted geology with Phase 1 drill program hole location and planned drill traces (red) and Phase 2 (purple)

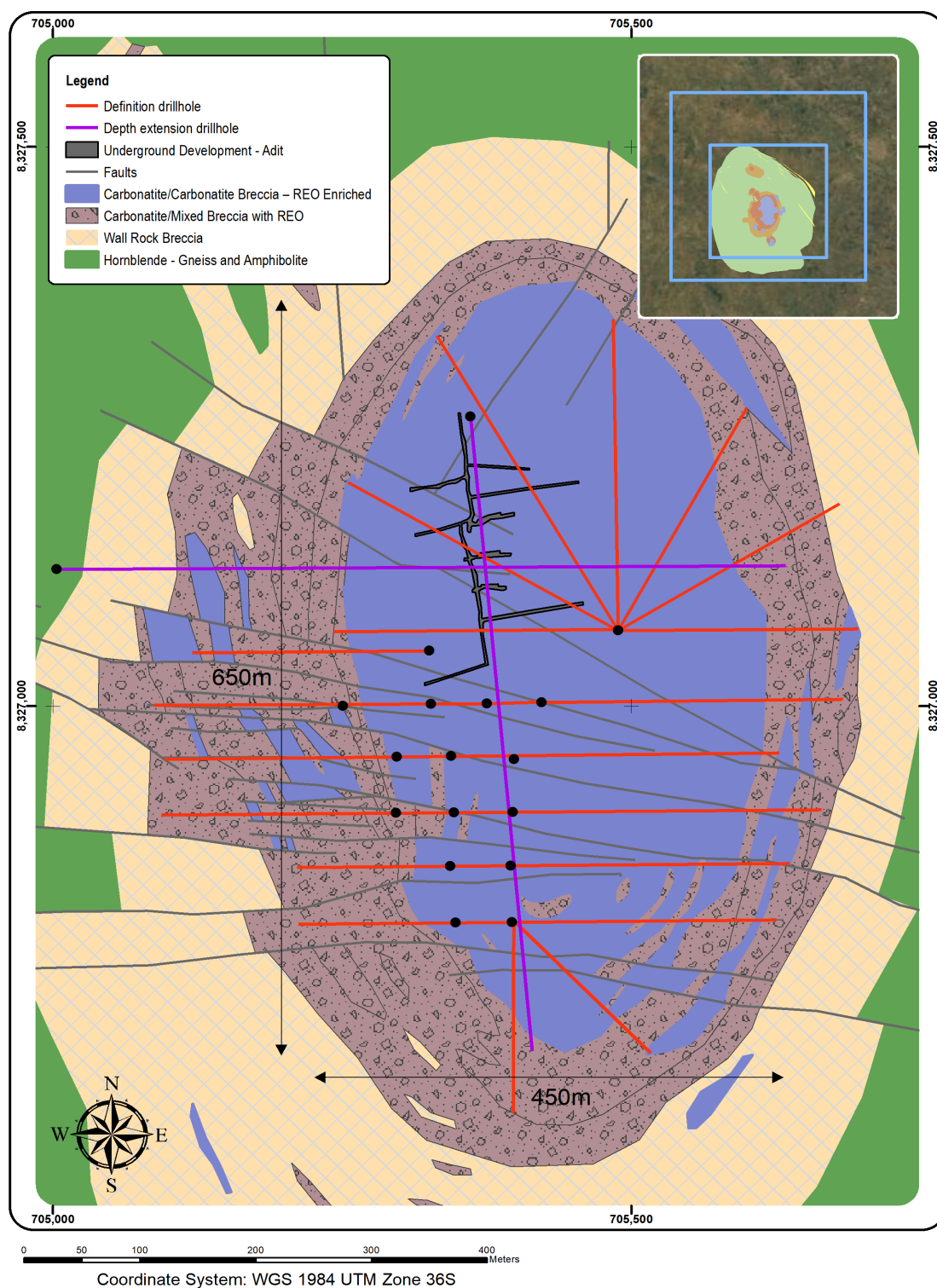
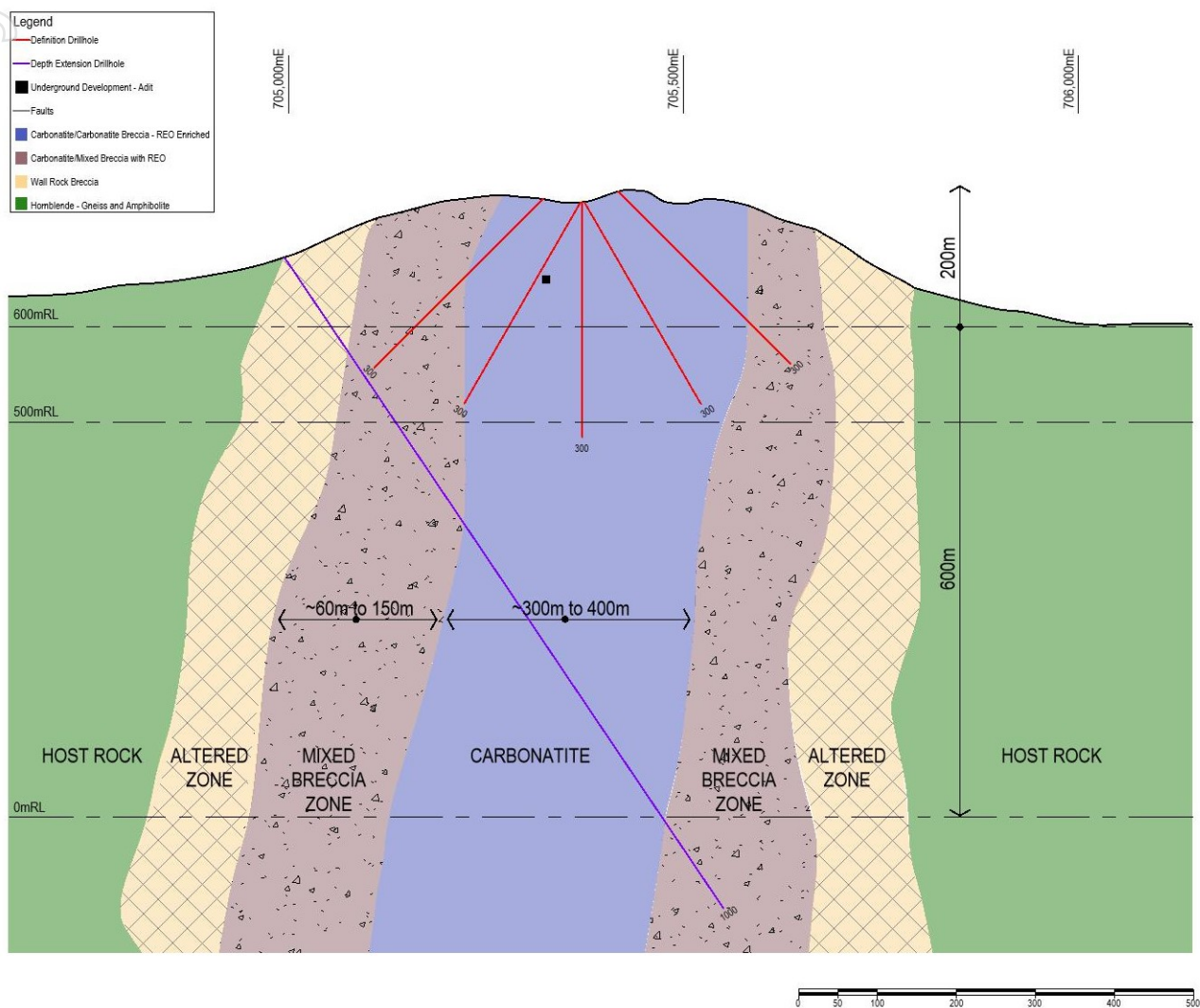


Figure 2: Cross section 8327100mN showing interpreted and simplified geological units and planned drill traces





## GEOLOGY AND MINERALISATION

The Resource Team has mapped the geology of the Kangankunde Complex over the last month. The team has identified three distinct target mineralised zones;

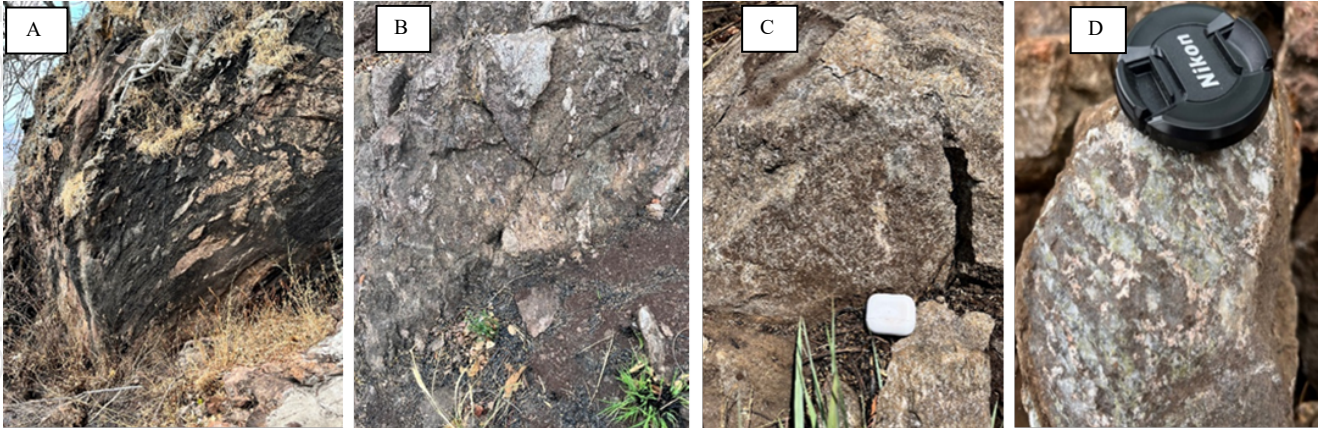


Figure 3: A. Mixed Breccia Zone; B. Carbonatite/Carbonatite Breccia; C. Large bladed crystals of monazite mineralisation; D. Monazite mineralisation has a distinct green colour.

### Carbonatite/Carbonatite Breccia

This rock type contains abundant monazite mineralisation in a mixed Carbonatite and Carbonatite Breccia that consists dominantly of dolomite, and varying proportions of ankerite and apatite. This zone has a geometry of 650 metres long and 450 metres wide. This zone is interpreted to be the most significantly mineralised portion of the system.

### Carbonatite Breccia

Peripheral to the Carbonatite/Carbonatite Breccia is a mixed breccia zone that consists of Carbonatite and altered (Fenite) host rock, contains monazite mineralisation, and varies in width from 50 metres to 300 metres. Within this peripheral mixed breccia are zones of Carbonatite/Carbonatite Breccia. This is interpreted to be a lower grade mineralised zone.

### Altered (Fenite) Zone

Peripheral to the Carbonatite Breccia zone is a zone of altered (fenite or fenitised) host rock, that is likely to be unmineralised.

### Host Rock

The host rock, where mapped, is typically an interlayered amphibolite or gneiss rock with little or no alteration or mineralisation.





JCB onsite repairing hill top access roads



Grader on site maintaining access road



Drill rig and drill site



Drill hole preparation

This ASX announcement was authorised for release by the Lindian Board.

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## ABOUT LINDIAN

Lindian Resources Limited is an ASX-listed Australian company with globally significant high-quality rare earths and bauxite assets both critical and strategic commodities that empower technology to enable energy efficiency.

## COMPETENT PERSONS' STATEMENT

The information in this announcement that relates to exploration results of the **Kangankunde Rare Earths Project** is extracted from reports released to the Australian Securities Exchange (ASX) on 1 August 2022 titled "Lindian to Acquire 100% of Globally Significant Kangankunde Rare Earths Project" and on 13 October 2022 titled "Major Drill Program to Commence at Kangankunde" and are available to view at [www.lindianresources.com.au](http://www.lindianresources.com.au) and for which Competent Persons' consents were obtained. This announcement also contains information compiled by Mr Alistair Stephens who is the Chief Executive Officer of the Company. Mr. Stephens is a Fellow of the Australasian Institute of Mining and Metallurgy (AUSIMM) and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration, and to the activity being undertaken, to qualify as a Competent Person as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC code). 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.

Each Competent Person's consent remains in place for subsequent releases by the Company of the same information in the same form and context, until the consent is withdrawn or replaced by a subsequent report and accompanying consent.

The Company confirms that is not aware of any new information or data that materially affects the information included in the original ASX announcements released on 1 August 2022 and 13 October 2022.

## 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 that announcement.