

10,000 m RARE EARTHS RESOURCE GROWTH DRILLING CAMPAIGN COMMENCES AT BARKLY

Barkly Rare Earths Limited (**ASX:BAK**) (**'Barkly'** or the **'Company'**) advises that drilling has commenced today at the Company's flagship Barkly Rare Earths Project. The Company's objective for the 10,000 metre Phase 1 drilling programme is to rapidly grow the existing **40 Mt @ 2,100 ppm TREO Inferred Mineral Resource** at the Barkly Project.

Highlights

- **Drill rig on site** and preparing to commence the first hole today
- **10,000 m Phase 1 drilling** programme of ~400 shallow holes (25m average depth) targets the expansion of existing 40 Mt Inferred Mineral Resource
- **Access track and pad preparation** works continuing to support progressive drilling across the project area
- **Planned and consistent newsflow across Q3–Q4 CY2026** as Company seeks to expand the 40 Mt Inferred Mineral Resource by end of CY2026

"Commencing drilling is an exciting and important milestone for Barkly as we move into active resource-expansion work at our flagship Barkly Project. With the rig on site preparing to drill the first holes, I am joining the field team at Barkly as we execute this carefully planned programme designed to test the scale potential around our existing 40 Mt Inferred Mineral Resource."

The 10,000 m Phase-1 resource expansion drilling programme provides Barkly with a strong opportunity to generate the geological, chemical and bulk-density data needed to support future resource growth and classification work. We look forward to keeping shareholders updated as drilling progresses and results become available."

Craig Wright — Managing Director

BARKLY DRILLING PROGRAMME

Activity Update

After Barkly initiated its civil works programme last week, the drill rig which mobilised from Cobar, New South Wales, arrived at site yesterday and is preparing to drill the first of ~400 holes today in the Company's 10,000 m drilling programme.

Among the first holes to be drilled are several 60-m-deep holes situated near the two existing optimised pit shells that delineate the Inferred Mineral Resource. These deeper holes will help provide a stronger geological framework for understanding basin stratigraphy, and provide data points for mineralisation continuity outside of the existing resource. For the remainder of next week, the drill rig will undertake reconnaissance and resource-infill drilling around the defined 40 Mt Inferred Mineral Resource.

Drilling at the project is anticipated to ramp up across the first week as the drillers and technical staff on site become familiar with the material types, and work together to fine-tune the sample quality and drilling efficiency.

Samples will be geologically logged and chemically analysed at the rig using two portable XRF (pXRF) instruments before selected samples are dispatched to the laboratory for assay. Geological logging and pXRF chemical analysis from each drillhole will be reviewed daily to dynamically adjust the priority schedule of planned drilling and optimise the programme to meet its primary objective of rapid resource expansion.

Phase 1 Drilling Plan Overview

The drilling programme targets expansion of the existing 40 Mt Inferred Mineral Resource which grades 2,100 ppm Total Rare Earth Oxide (TREO) for 82,000 tonnes of contained TREO. The resource is reported in accordance with the JORC Code (2012) above a 430-ppm NdPr cut-off grade (refer to Previous Disclosure section).

The initial 40-Mt Inferred Mineral Resource at Barkly is classified within two optimised pit shells (green ovals in Figure 1, below), and mineralisation is open laterally in all directions. The Company drilled four holes between the two resource areas that also intersected rare earth mineralisation, suggesting **potential for lateral resource expansion across the intervening ~20 km expanse and more broadly across the Immediate Zone** (purple area in Figure 1, below).

The Company has designed the 10,000 m Phase-1 programme primarily comprising RC drilling to target resource expansion across the Immediate Zone, coinciding with the Company's previously announced Exploration Target (refer to ASX Announcement 7 April 2026ⁱ). The majority of the ~400 shallow holes, averaging ~25 m deep, are planned within the Immediate Zone on ~800 m spacing.

The drilling programme will also test for extensions of rare earth mineralisation across the Intermediate Zone (yellow area in Figure 1, below) and more widely across the project area. It will also provide bulk density data and sample quality information, which the Company plans to use to support future resource classification work, including potential conversion to higher-confidence resource categories.

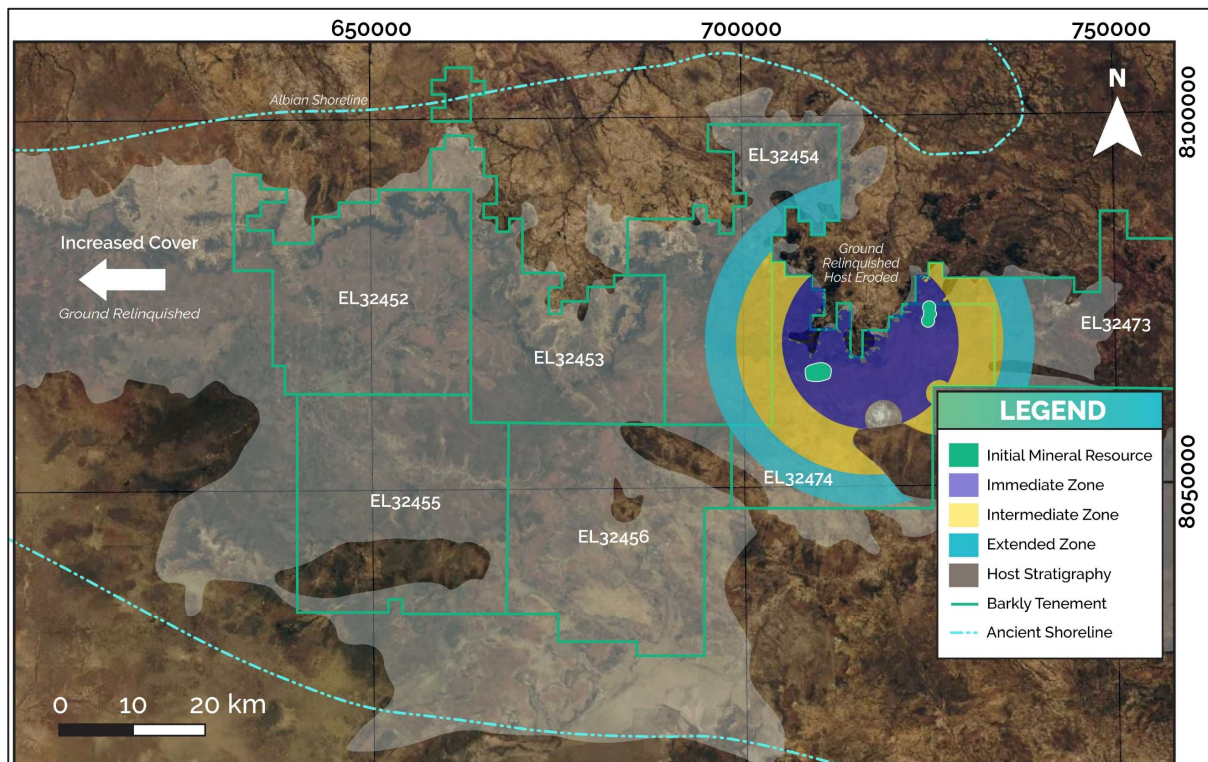


Figure 1: Extent of the initial Inferred Mineral Resource and the surrounding Immediate, Intermediate, and Extended zones.

The rare-earth-mineralised quartz sand at Barkly is interpreted to have been deposited on the seabed in a marine palaeo-embayment encompassed by the Barkly Project tenements. This depositional setting provides the geological basis for testing potential continuity of grade and thickness. The extent of mineralisation beyond the current Inferred Mineral Resource remains to be tested by drilling, and this continuity will be determined through the Phase 1 drilling programme.

EXPLORATION NEXT STEPS

- 60-m stratigraphic hole drilling commencement (today)
- Short ~24 m resource hole drilling commencement (next week)
- Ongoing exploration results from 10,000 m of drilling in ~400 shallow holes (Q3 & Q4 CY2026)
- Rare earths concentration and extraction testing (ongoing)
- Mineral Resource estimate update (Q4 CY2026)
- Geo-metallurgical test work and modelling (Q3 & Q4 CY2026)
- Buntine exploration results (Q3 CY2026)
- Follow-up exploration at Buntine (Q4 CY2026)

This announcement has been authorised for release by the Board of Barkly Rare Earths Limited.

ENDS

Enquiries

Barkly Rare Earths Investor Relations

+61 8 9386 0855

ir@barklyrareearths.com

About Barkly Rare Earths Limited:

Barkly Rare Earths Limited (**ASX:BAK**) is an Australian mineral exploration company focussed on the discovery and development of economic mineral deposits, driven by technical expertise and disciplined execution. Its strategy is to discover, delineate, and develop deposits capable of supporting long-term production to meet growing global demand.

The Company's flagship Barkly Project in Australia's Northern Territory spans 5,030 km² and is held 100% by Barkly Rare Earths. It has an initial Inferred Mineral Resource of 40 Mt @ 710 ppm Magnet Rare Earth Oxide (MREO), within 2,100 ppm Total Rare Earth Oxide (TREO) (reported above a 430 ppm NdPr cut-off grade). The Mineral Resource includes a high terbium component, with low uranium and thorium. Initial conventional leaching tests achieved 74% MREO extraction, with initial beneficiation test work returning a mineral concentrate of 29,000 ppm TREO. The consistently high magnet rare-earth grade and continuity of mineralisation presents an opportunity to build a project of global significance.

At the Company's Buntine Project in the Northern Territory, the Fraynes Formation is chronostratigraphically equivalent to the Barney Creek Formation that hosts the McArthur River Pb-Zn deposit, making the Fraynes Formation a target for greenfields base metal exploration. Polymetallic mineralisation is exposed at the Buntine Project along a nine-kilometre (9 km) strike length of late-Paleoproterozoic sedimentary rocks and overlying Cenozoic sediments, with three different anomalous zones of Pb-Co, U-W-Pb-Ni, and Zn-Pb-Co-Cu along the mineralised corridor. Rock chip samples grade up to 667 ppm Zn, 1% Pb, 1,760 ppm Co, 316 ppm Cu, 10% Mn, 7,100 ppm Ni, and 239 ppm Cr.

For more information, please visit: barklyrareearths.com.

Forward Looking Statements

This announcement includes various 'forward-looking statements' with respect to, among other things, goals, plans, and strategies. Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties and other factors beyond the control of the Company that may cause the actual results, performance and outcomes to be materially different from those expressed or implied by such statements. Forward-looking statements are provided as a general guide only and should not be relied on as an indication or guarantee of future performance. Given these uncertainties, recipients are cautioned not to place undue reliance on any forward-looking statement. Subject to any continuing obligations under applicable law, the Company disclaims any obligation or undertaking to disseminate any updates or revisions to any forward-looking statements in this announcement to reflect any change in expectations in relation to any forward-looking statements or any change in events, conditions or circumstances on which any such statement is based.

Previous Disclosure

The information in this announcement that relates to Exploration Results and Mineral Resources is extracted from the previous report titled Barkly and Buntine Projects, Northern Territory, Australia, Independent Technical Report, included as Annexure A to the Company's Prospectus, of 1 December 2025. The previous report was prepared in accordance with the 2012 Edition of the JORC Code, and it is available to view at the Company's website www.barklyrareearths.com. The Company confirms that it is not aware of any new information or data, as at the date of this announcement, that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's (Paul Teniere) findings are presented have not been materially modified from the original market announcement.

Glossary

TREO (Total Rare Earth Oxide)

$\text{La}_2\text{O}_3 + \text{CeO}_2 + \text{Pr}_6\text{O}_{11} + \text{Nd}_2\text{O}_3 + \text{Sm}_2\text{O}_3 + \text{Eu}_2\text{O}_3 + \text{Gd}_2\text{O}_3 + \text{Tb}_4\text{O}_7 + \text{Dy}_2\text{O}_3 + \text{Ho}_2\text{O}_3 + \text{Er}_2\text{O}_3 + \text{Tm}_2\text{O}_3 + \text{Yb}_2\text{O}_3 + \text{Lu}_2\text{O}_3 + \text{Y}_2\text{O}_3$

NdPr (Neodymium-Praseodymium mixed oxide)

$\text{Nd}_2\text{O}_3 + \text{Pr}_6\text{O}_{11}$

MREO (Magnet Rare Earth Oxide)

$\text{Nd}_2\text{O}_3 + \text{Pr}_6\text{O}_{11} + \text{Tb}_4\text{O}_7 + \text{Dy}_2\text{O}_3$

MREO Ratio (%)

$\text{MREO}/\text{TREO} \times 100$

ⁱ ASX Announcement 7 April 2026 'Investor Presentation'. Apart from that which is disclosed in this document, the Company, its directors, officers and agents are not aware of any new information that materially affects the information contained in the 7 April 2026 announcement.