

10,000 m PHASE 1 RESOURCE EXPANSION DRILLING ADVANCES AT BARKLY

Barkly Rare Earths Limited (**ASX:BAK**) (**'Barkly'** or the **'Company'**) is pleased to report progress of its 10,000 m Phase 1 resource expansion drilling programme at the flagship Barkly Project. The programme targets shallow extensions around the current **40 Mt @ 2,100 ppm TREO Inferred Mineral Resource**¹ where mineralisation remains open in all directions.

Highlights

- **45 holes have now been completed** for over 1,000 m, with operational conditions improving and momentum growing following early ground and groundwater challenges
- **Next drilling area targets extensions** immediately adjacent to the existing Inferred Mineral Resource
- **First laboratory assay results** expected in the coming weeks
- **Programme targeting shallow resource expansion** around the existing 40 Mt @ 2,100 ppm TREO Inferred Mineral Resource, which was defined from 46 drill holes for 755 m
- **Targeting Q4 CY2026 resource update** based on current drilling schedule and laboratory assay progress.

"We're pleased with the steady progress of the Phase 1 drilling programme, which is testing shallow growth potential around our existing 40 Mt Inferred Mineral Resource. Early ground and groundwater conditions challenged the drill crew, but drilling rates are improving rapidly and samples are now moving through to the laboratory. This campaign is designed to test for mineralisation extensions that could support a future Mineral Resource update, and we look forward to reporting the first laboratory assays in the coming weeks. The Company is investigating opportunities to further improve drilling productivity and maximise the benefit of recent operational momentum, with the current field schedule preserving flexibility for additional drilling beyond the planned 10,000 m campaign, subject to Board approval."

Craig Wright — Managing Director

¹ Refer to Previous Disclosure section

BARKLY DRILLING UPDATE

Programme Overview

The Company's 10,000 m Phase 1 resource 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 Mineral Resource is reported in accordance with the JORC Code (2012) above a 430-ppm NdPr cut-off grade (see Previous Disclosure section).

Exploration Target

Barkly Rare Earths Limited's Exploration Target is reported as a range of potential tonnes and grades in Table 1, and its area is illustrated in purple in Figure 1. Exploration Targets are approximations. The potential quantity and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a Mineral Resource for the target area and it is uncertain if further exploration will result in the estimation of a Mineral Resource. The Exploration Target is reported in accordance with the JORC Code (2012).

Table 1: Barkly Project Rare Earths Exploration Target

Category	Tonnage (Mt)	TREO (ppm)	NdPr (ppm)
Exploration Target	200–1,000	1,600–1,900	500–700

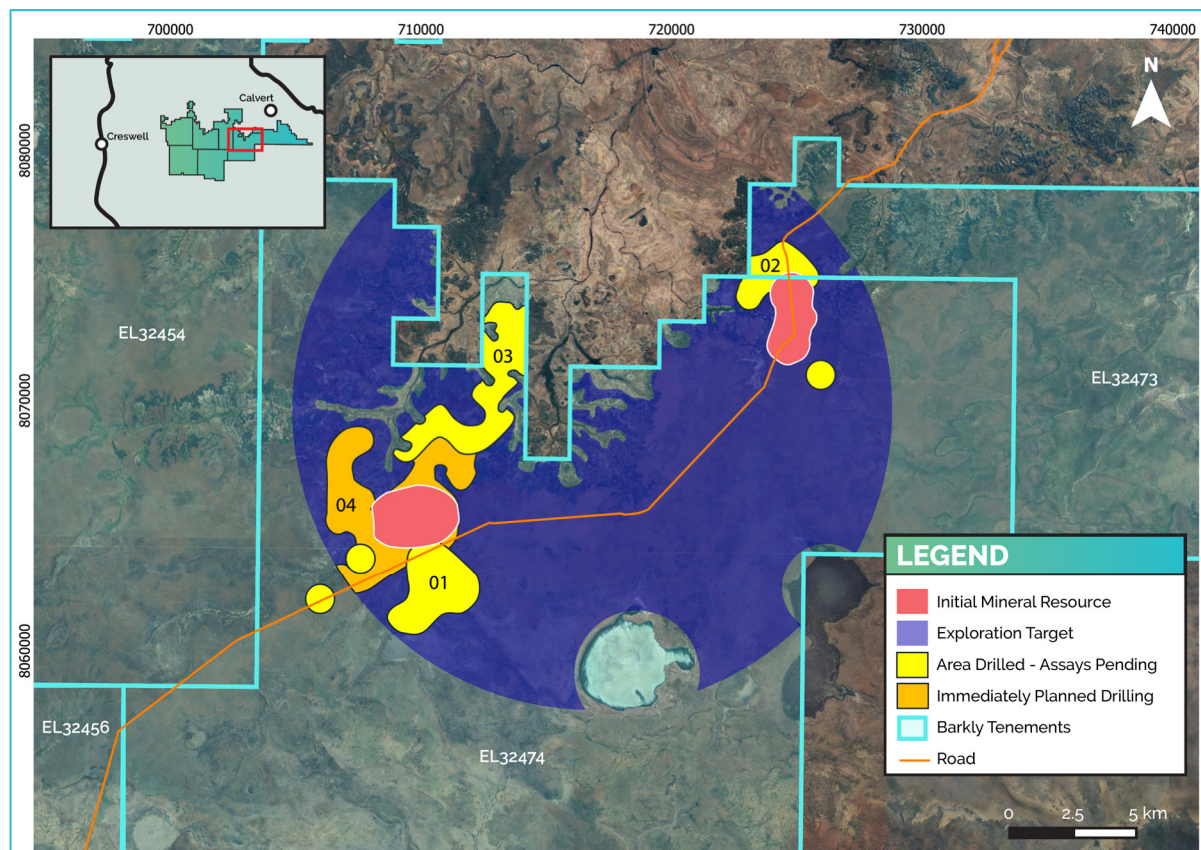


Figure 1: Barkly Project Exploration Target area shown in purple, with the existing 40 Mt Inferred Mineral Resource shown in red. Numbered areas indicate the start-up drilling area (01), the subsequent area drilled (02), the most recently drilled dry-ground area (03), and the next scheduled drilling area (04).

The Exploration Target represents potential extensions of mineralisation beyond the current Inferred Mineral Resource. It is interpreted based on possible extensions of mineralisation in mapped, laterally extensive, near-horizontal Cretaceous sandstones, and on laboratory results from previously disclosed samples collected from 755 m of aircore drilling over 46 holes at the Barkly Project. Drill-hole spacing is variable, ranging from 150–300 m to single drill lines with approximately 1,000 m hole spacing (refer to Previous Disclosure section). The Exploration Target relates to an area where the presence of a mineral deposit can be suggested on the basis of interpreted geological continuity but has not been confirmed by drilling.

Barkly Rare Earths is currently testing the Exploration Target through its 10,000 m Phase 1 resource drilling programme, due for completion in Q4 CY2026. The majority of the programme's ~400 shallow holes, averaging ~25 m deep, are planned within the Exploration Target area illustrated in Figure 1. Assays from the initial drilling are currently pending.

Drilling Progress

Following one of the largest locally observed wet seasons, the Company expected the initial field start-up phase to require careful management. Adverse ground conditions and persistent groundwater flows from earlier rainfall contributed to a slower-than-planned start; however, these conditions are being managed as part of normal field operations and have improved materially as groundwater disperses through ongoing catchment drainage.



Figure 2: Reverse Circulation drilling at the Barkly Project.

Samples are geologically logged at the rig, with two portable XRF instruments used as qualitative field screening tools to assist geological logging and field planning. Laboratory assays will determine rare earth grades, and the Company expects to announce initial assay results to the market in the coming weeks.

After initially drilling in areas unduly affected by groundwater, the rig was moved to areas with more favourable ground conditions, including the current drilling area where the target mineralisation is shallow and interpreted to extend to surface. Drilling rates have improved, with 45 of the ~400 planned drillholes now completed.

The next area scheduled for drilling, illustrated in orange in Figure 1, is designed to test for extensions of mineralisation immediately adjacent to the existing Inferred Mineral Resource. The Company plans a Mineral Resource update for Q4 CY2026, subject to ongoing drilling and laboratory assay progress.

EXPLORATION NEXT STEPS

- Laboratory assay results from 10,000 m of drilling (to commence in the coming weeks and progress throughout Q3 & Q4 CY2026)
- Rare earths concentration and extraction testwork (ongoing)
- Mineral Resource update (Q4 CY2026, subject to drilling and laboratory assay progress)
- Geo-metallurgical test work and modelling (Q3 & Q4 CY2026)
- Buntine exploration results (Q3 CY2026)
- Follow-up exploration at Buntine (Q4 CY2026)

COMPETENT PERSON'S STATEMENT

The information in this announcement that relates to Exploration Targets is based on information evaluated by Richard Hall, who is a Fellow of the Australasian Institute of Mining and Metallurgy (FAusIMM), and a Member of the Geological Society of Australia. He has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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, 2012). He consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

Mr Hall serves as General Manager—Exploration of Barkly Rare Earths Limited, in which he has a shareholding. This association may give rise to a perceived conflict of interest in relation to his role as Competent Person.

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

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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: <https://barklyrareearths.com/link/yz8LQr>

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 dated 1 December 2025. The previous report was prepared in accordance with the 2012 Edition of the JORC Code, and it is available to view on the Company's website at 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 previous report and, in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the previous report 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 previous report.

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 (%)

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