BARKLY RARE EARTHS

ASX ANNOUNCEMENT
ASX:BAK
6 July 2026

BARKLY READIES MAJOR 10,000 m RESOURCE EXPANSION DRILLING PROGRAMME

Barkly Rare Earths Limited (**ASX:BAK**) ('**Barkly**' or the '**Company**') is pleased to advise that civil works are commencing this week to provide access and prepare work areas for its 10,000-metre Phase 1 drilling programme, designed to test expansion potential around the existing 40 Mt @ 2,100ppm TREO Inferred rare earths Mineral Resource at the Barkly Project. Drilling is anticipated to commence next week.

Highlights

- **Full works crew mobilisation completed for 10,000 m ~400-hole Phase 1 drilling** programme to commence next week
- Entire programme targets the expansion of the existing 40 Mt Resource
- **Access tracks and pad preparation** crew on site with works commencing
- **30,000 litre in-situ diesel tank** delivered to support works crew and drill rig operations
- **Separately, Buntine Project samples have been submitted** for assay, with results expected Q3 CY2026
- **Consistent investor update programme** across Q3 and Q4, as Company seeks to expand 40 Mt Inferred **Mineral Resource by close Q4** CY2026

"This is an exciting step for Barkly. With site and pad preparation commencing this week, we are readying our initial 10,000 m Phase 1 drilling programme aimed at testing the next stage of growth from our existing 40 million tonne Inferred Mineral Resource.

What makes Barkly's 'soft rock' deposit particularly compelling is its combination of substantial scale potential, mineralisation at surface, and low deleterious radioactive element content, attributes that distinguish it from the plethora of global 'hard rock' rare earths projects."

Craig Wright — Managing Director

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BARKLY DRILLING PROGRAMME

Activity Update

The Company has assessed conditions at the Barkly Project and determined that the ground is now dry enough to support the off-road heavy machinery required for clearing and drilling more than 10,000 m across ~400 drillholes.

The Company's 30,000 litre diesel tank was delivered to site, and earthmoving equipment for pad and access preparation has arrived, including two loaders and one bulldozer. Work is scheduled to commence in preparation for drilling planned for next week (Figure 1, below).

Figure 1: Site preparation and infrastructure for the 10,000 m Phase 1 drilling programme.

Phase 1 Drilling Plan

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 2, 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 2, 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 2026[i]). A majority of the ~400 shallow holes, averaging ~25 m deep, are planned within the Immediate Zone on an ~800 m spacing.

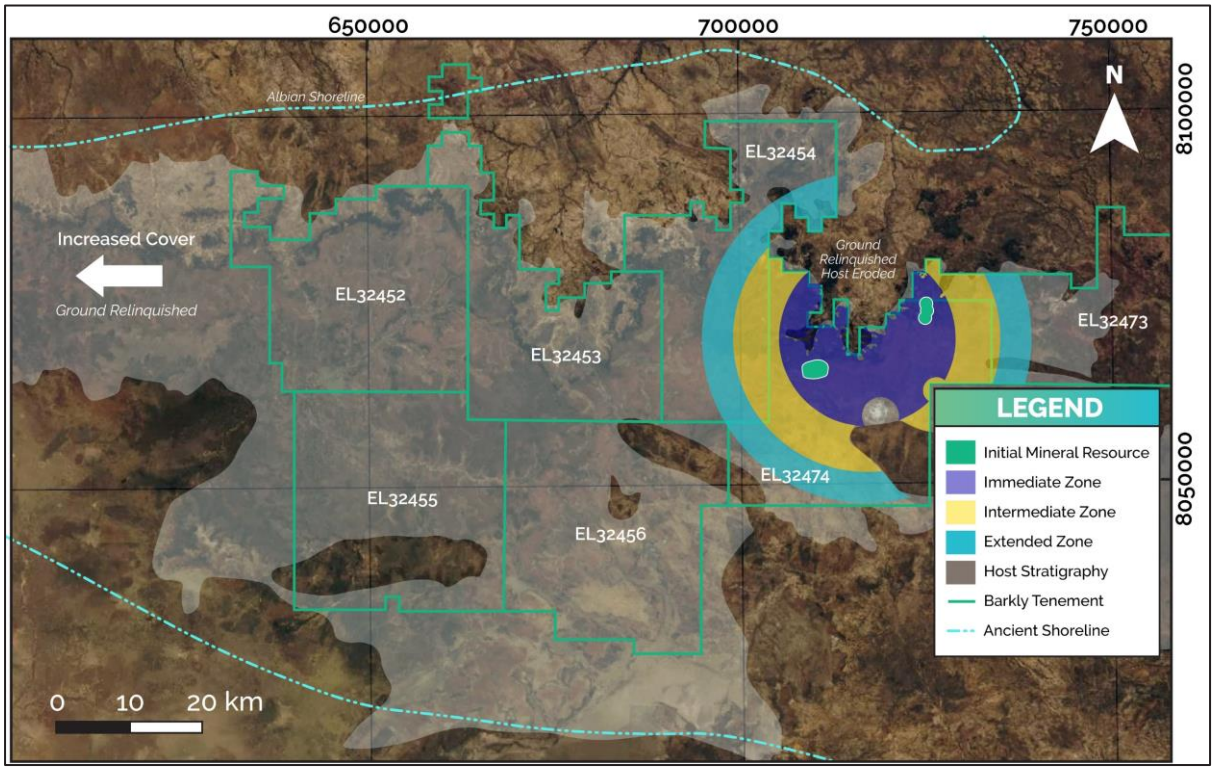

Figure 2: Extent of the initial Inferred Mineral Resource and the surrounding Immediate, Intermediate, and Extended zones.

The drilling programme will also test for extensions of rare earth mineralisation across the Intermediate Zone (yellow area in Figure 2, above) 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 development of Indicated and Measured Mineral Resources.

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 may support widespread 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.

Drilling Technology

Two portable X-ray fluorescence (pXRF) instruments will be mobilised to site this week, which will be used at the drilling rig by licensed operators to provide rapid indicative screening data from samples. The pXRF data collected each day will inform the priority focus areas for the balance of Phase 1 drilling, supporting ongoing optimisation of the programme as results are analysed.

Management incentives aligned with exploration success

The Company's Executive has volunteered performance remuneration milestones that are aligned with Mineral Resource growth and shareholder value development. These include lower and upper milestones for **Inferred Mineral Resource growth to 500 Mt and 700 Mt**, respectively, at a minimum grade of 1,600 ppm TREO. Full details of the performance milestones are provided in section 10.5 of the Company's IPO Prospectus.

BUNTINE FIELD PROGRAMME

The Company has advanced exploration activities at its Buntine Base Metals Project (Figure 3, below), originally planned for Q4 CY2026. The team undertaking reconnaissance mapping and rock-chip sampling has completed its fieldwork and submitted samples for assay. The sampling work was designed to further assess the prospectivity for polymetallic mineralisation over a 9-km strike length.

The Company has identified three different anomalous zones of Pb-Co, U-W-Pb-Ni, and Zn-Pb-Co-Cu along the mineralised corridor, with various historical rock chip samples grading up to 667 ppm Zn, 1% Pb, 1,760 ppm Co, 316 ppm Cu, 10% Mn, 7,100 ppm Ni, and 239 ppm Cr (refer to BAK prospectus dated 1 December 2025).

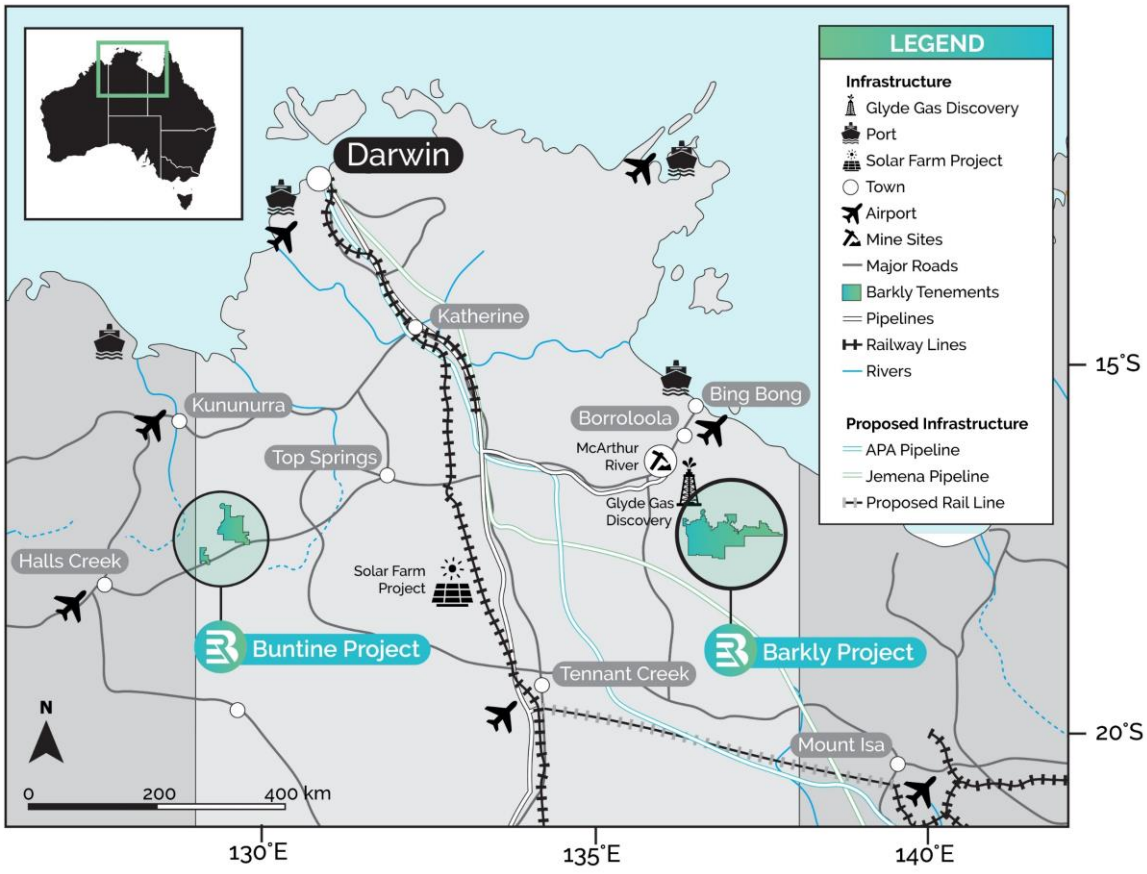

Figure 3: Location of the Barkly and Buntine projects.

CAPITAL MARKETS ADVISOR APPOINTED

The Company has appointed Perth-based capital markets adviser, Leeuwin Wealth Pty Ltd, to assist with investor engagement and capital markets strategy. Consideration for the agreement, which spans 18 months, is 6.0 million BAKO listed options (exercisable at A$0.30 and expiring 28 January 2029).

EXPLORATION NEXT STEPS

- Resource expansion 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

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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 km^2 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, 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)
$La_2O_3+CeO_2+Pr_6O_{11}+Nd_2O_3+Sm_2O_3+Eu_2O_3+Gd_2O_3+Tb_4O_7+Dy_2O_3+Ho_2O_3+Er_2O_3+Tm_2O_3+Yb_2O_3+Lu_2O_3+Y_2O_3$

NdPr (Neodymium-Praseodymium mixed oxide)
$Nd_2O_3+Pr_6O_{11}$

MREO (Magnet Rare Earth Oxide)
$Nd_2O_3+Pr_6O_{11}+Tb_4O_7+Dy_2O_3$

MREO Ratio (%)
MREO/TREO x 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.