

ASX RELEASE | 6 DECEMBER 2024

# 500m long pegmatite identified at Harts Range Project, Northern Territory

- ❖ A second reconnaissance trip to the Harts Range Project, highly prospective for Uranium, Niobium & Heavy Rare Earths (HRE) mineralisation, have revealed more key targets including a 500m long pegmatite at the Big Jay Prospect
- ❖ This follows assays from rock chips samples collected from outcropping pegmatites during the first recent visit to the Harts Range Project returning excellent high-grade readings up to 29.80% Nb<sub>2</sub>O<sub>5</sub>, 14.04% U<sub>3</sub>O<sub>8</sub>, 1.63% Dy<sub>2</sub>O<sub>3</sub>, 0.22% Tb<sub>4</sub>O<sub>7</sub> and 23.02% Ta<sub>2</sub>O<sub>5</sub><sup>1</sup>
- ❖ Aim was to assess historical prospects<sup>1,2</sup> including Cusp, Bobs, Bobs West and Dune (renamed from Niobium Anomaly), take fresh field readings and collect rock chips samples
- ❖ Big Jay Prospect is 1.6km SSE from Bobs, which is considered prospective for uranium-niobium-HRE mineralisation
- ❖ Proximal to Cusp and Bobs, the team identified two new areas of interest – Cusp North and Bobs North – which showed potential for base and precious metal mineralisation
- ❖ 13 samples from the prospective areas have been dispatched to the laboratory for analysis
- ❖ Next steps is the commission of a heliborne radiometric and magnetic survey during January 2025

**New Frontier Minerals Ltd** (“New Frontier”, or “the Company”) (**ASX: NFM**) is pleased to announce that its exploration planning is well underway at the Harts Range project, 140km north-east from Alice Springs with new targets identified and further rock chip samples sent for testing.

A notable finding was at the newly named Big Jay Prospect (Figure 1) where a 500m long pegmatite was observed. The geology team consider this to be prospective for uranium-niobium-HRE mineralisation and, pending the results from rock chip assays, expect this to become a key target to investigate.

## **NEW FRONTIER CHAIRMAN GED HALL COMMENTED:**

*“The geology team’s recent follow up visit to the Harts Range Project reinforces the Board’s commitment to accelerating development efforts and identifying new prospective targets in the region. The critical next phase of the exploration campaign will be a heliborne geophysical survey which has the potential to significantly expand the areas of interest”.*

<sup>1</sup> ASX:CCZ Announcement: [HIGH-GRADE ASSAYS UP TO 29.80% Nb<sub>2</sub>O<sub>5</sub> & 14.04% U<sub>3</sub>O<sub>8</sub> VALIDATE HARTS RANGE PROJECT POTENTIAL](#), dated 6 November 2024

## IDENTIFYING NEW TARGETS AT HARTS RANGE

Positive progress has stemmed from the geology team's second reconnaissance visit to the Harts Range Uranium, Niobium & Heavy Rare Earths Project<sup>1,2</sup> in late November 2024. The key objectives were to assess historical prospects and visit new areas of interest that could become viable targets.

The first task undertaken was to visit known prospects – Cusp, Bobs, Bobs West and Dune (renamed from Niobium Anomaly) – that are prospective for uranium-niobium-HRE mineralisation<sup>1</sup> (Figure 1). The team took field readings, noted key observations and collected rock chips samples for further analysis.

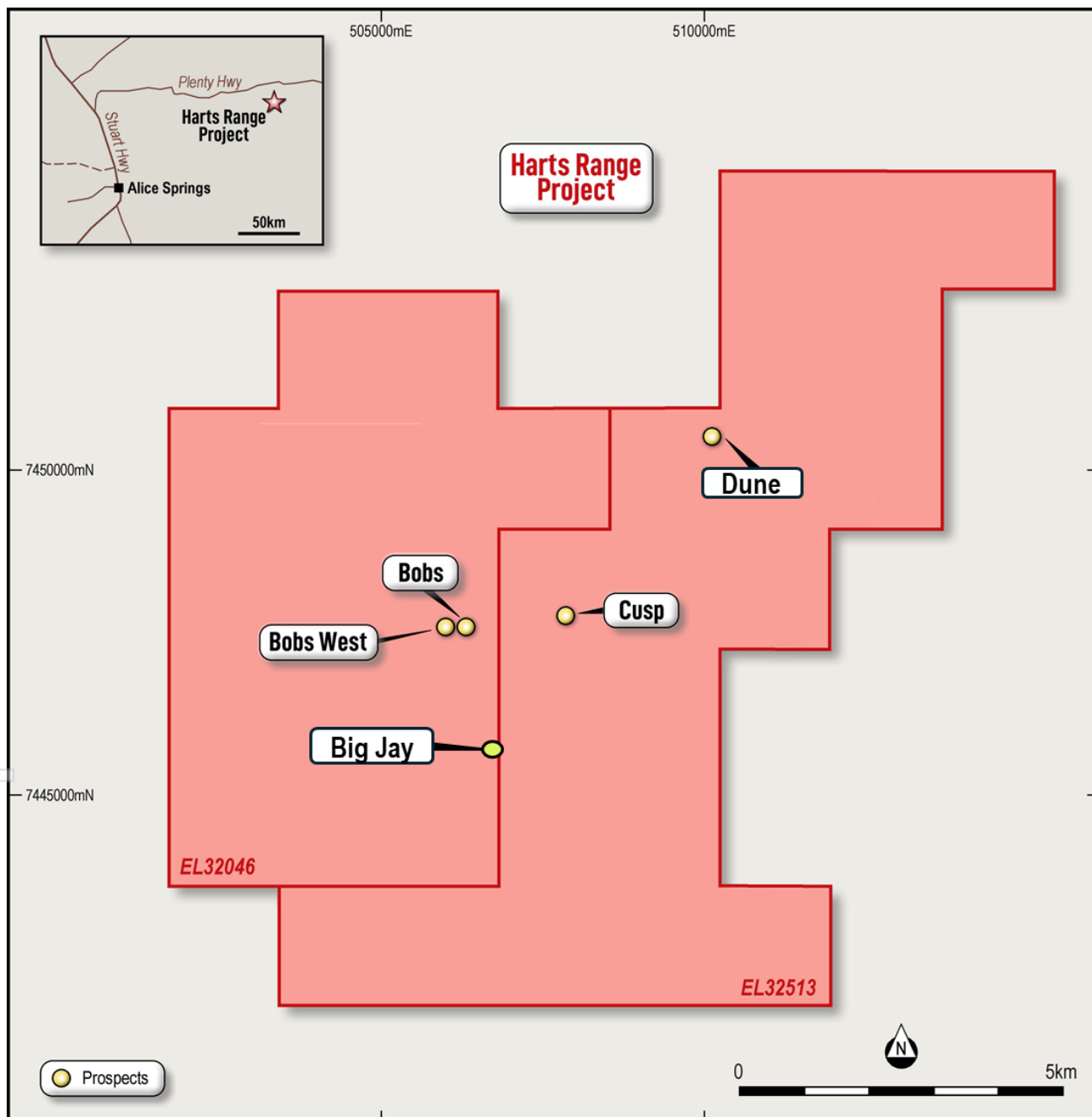


Figure 1: Harts Range prospects location map

Source: NFM geology team

Interestingly, two new areas were identified proximal to the Cusp and Bob Prospects that exhibited potential for base metal mineralisation. The team undertook a preliminary assessment at both sites and collected some rock chip samples that will be assayed.

### Next Steps

All 13 samples collected from the reconnaissance trip have been sent to Intertek (Malaga – Perth, Western Australia) for geochemical analysis. Once the results are returned and interpreted, the findings and insights will be released to the market.

In addition, the Board is targeting to finalise a heliborne radiometric and magnetic survey during January 2025, which should aid delineating and identify additional targets across the Harts Range Project for field investigation.

**-END-**

This announcement was approved for release by the Board of New Frontier Minerals Limited.

**For further information please contact**

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### REFERENCES

- 1) CCZ ASX Release – 21 & 28 October and 6 November 2024
- 2) Barfuss, R. (Barfuss Corporation Pty Ltd) 19 November 2007: “A Brief report on Samarskite Mineralisation in the Harts Range Project” (unpublished report) and Barfuss, R. (Barfuss Corporation) 2014: The Harts Range Project Exploration Licence (EL 24552) – inclusive of the following references:
  - a. Caughey, A.R. (Flagstaff Geo Consultants Pty Ltd.), November 2007: Annual Report for Exploration Licence EL24552 for the period ending 25th August 2007 (for Barfuss Corporation Pty. Ltd.)
  - b. Caughey, R. (Flagstaff Geo Consultants Pty Ltd.) 2002 to 2006: various unpublished reports for Barfuss Corporation Pty. Ltd.
  - c. PNC Exploration (Australia): various open-file tenement annual, final and partial relinquishment reports, 1994 to 1997; Report Numbers CR1994-0325, CR995-0298, CR1995-0525, CR1995-0697, CR-1996-0285, CR1996-0286, CR-1997-0611. \*
  - d. Rutter, H. (Flagstaff Geo Consultants Pty Ltd.) 2006. ‘An analysis of airborne radiometric data from the Harts Range, N.T.’ (unpublished report)
  - e. Shaw, R.D., Senior, B.R., Offe, L.A., Stirzaker, J.F., Walton, D.G., Apps, H.E., Freeman, M.J. 1:250,000 Geological Map Series Explanatory Notes Illogwa Creek SF53-15. Bureau of Mineral Resources Australia & Northern Territory Geological Survey, 1985.

Note: \* Open file company reports sourced from the Northern Territory Mineral Industry Reports Management System (IRMS). Available at: <https://geoscience.nt.gov.au/gemis/ntgsjspui/handle/1/3> Riley, A. (31 October 2024) – Minerals Test Report (Unpublished for CCZ). Produced by: <https://www.intertek.com/>



## About New Frontier Minerals

New Frontier Minerals Limited is an Australian-based focussed explorer, with a strategy to develop multi-commodity assets that demonstrate future potential as an economic mining operation. Through the application of disciplined and structured exploration, New Frontier has identified assets deemed core and is actively progressing these interests up the value curve. Current focus will be on advancing exploration activity at the Harts Range Niobium, Uranium and Heavy Rare Earths Project which is circa 120km north-east from Alice Springs in the Northern Territory.

Other interests include the NWQ Copper Project, situated in the copper-belt district circa 150km north of Mt Isa in Queensland and the Broken Hill Project in western New South Wales.

New Frontier Minerals is listed on the LSE and ASX under the ticker “NFM”.