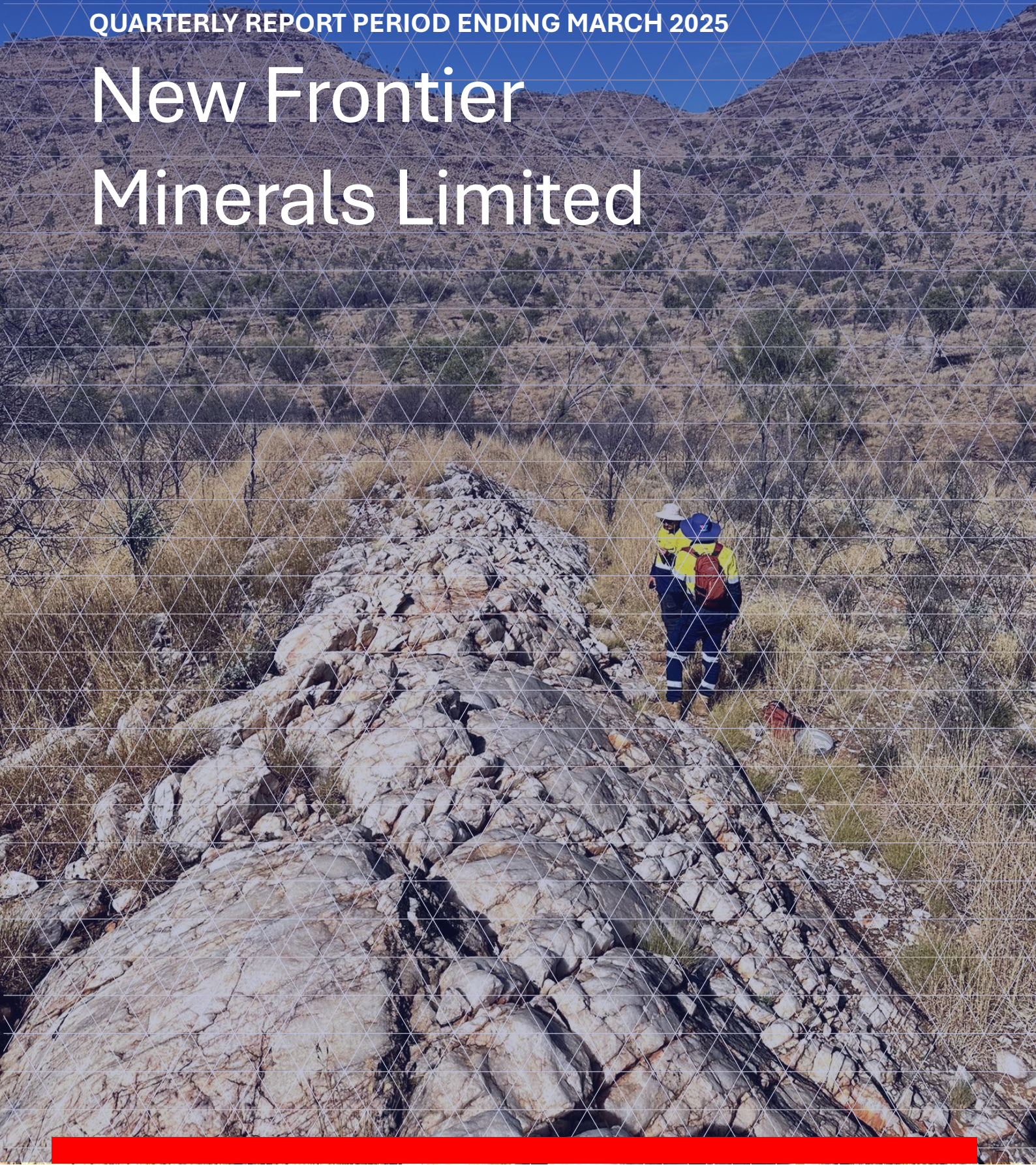


QUARTERLY REPORT PERIOD ENDING MARCH 2025

# New Frontier Minerals Limited





## QUARTERLY HIGHLIGHTS

### Exploration

- ❖ New Frontier Minerals completed a helicopter-borne radiometric and magnetic survey identifying 46 priority exploration targets, including 18 high-priority zones with potential niobium and heavy rare earth (HRE) mineralisation
- ❖ Rock chip analysis at Cusp and Bobs Prospects revealed outstanding concentrations of Heavy Rare Earth Elements (HREEs), with Dysprosium and Terbium contributing significantly to the mineral basket
- ❖ These HREEs are crucial for advanced technologies like EVs, wind turbines, medical devices and military systems, presenting NFM as a potentially key player in diversifying global supply chains outside China
- ❖ Formalised a Memorandum of Understanding (MOU) with Austral Resources to process copper ore from NFM's Big One Deposit via Austral's Mt Kelly facility
- ❖ The alliance targets joint value creation by accelerating trial mining, regulatory approvals, and advancing exploration within the NWQ Copper Project

### Next steps

- ❖ Deploy a detailed exploration campaign at Harts Range in Q2 2025, with targeted mapping and sampling to refine drilling priorities
- ❖ Advance regulatory, technical, and drilling activities under the Austral partnership to fast-track copper production

### Corporate

- ❖ Completed the sale of the Broken Hill East Project to Impact Minerals, unlocking \$275,000 in shares and \$102,000 in security deposits and enabling reinvestment into key ventures, including Harts Range and NWQ Copper Projects
- ❖ NFM reiterates its commitment to finding a development partner for the Mkushi Copper Project in Zambia, which holds substantial exploration and operational promise
- ❖ **Total cash and liquid investments of \$1.395 million**, comprised of \$686k cash, ASX: IMI stock currently valued at ~\$520k (40 million shares x \$0.013 per share as at 31/03/2025) along with 20 million unlisted options (expiry 30/11/2029, strike \$0.07) and ASX: IPT stock valued at ~\$189k (37,774,040 shares x \$0.005 per share as at 31/03/2025)

**New Frontier Minerals Ltd (ASX: NFM)** is pleased to report its quarterly activities report for the period ending 31 March 2025.

During the quarter, the Company prioritised its portfolio optimisation strategy by completing the divestment of the Cangai Copper Mine Project to Infinity Mining Limited (ASX: IMI) and securing the highly promising Harts Range Project in the Northern Territory.

## **HARTS RANGE PROJECT**

New Frontier Minerals Ltd (ASX: NFM) made substantial progress at the Harts Range Heavy Rare Earths, Uranium, and Niobium Project, located 140 km northeast of Alice Springs in the Northern Territory, over the January to March 2025 quarter. The Company's strategic exploration activities have bolstered its confidence in the project's significant mineralisation potential.

### **Helicopter-Borne Geophysical Survey**

New Frontier recently completed a comprehensive helicopter-borne radiometric and magnetic survey across the Harts Range Project. The survey was a pivotal step in accelerating the exploration of the tenements EL32513 and EL32046. With the primary aim of identifying extensions of known uranium, niobium, and heavy rare earth (HRE) mineralisation, the survey provided critical data to enhance the prioritisation of future drilling and ground truthing activities.

The analysis highlighted numerous distinct radiometric anomalies and confirmed the structural alignment of mineralised pegmatites at key locations, including the Cusp and Bobs Prospects<sup>1</sup>. Enhanced magnetic imagery revealed that these prospects align along an ENE-trending structure, suggesting potential mineralised extensions in both the northern and southern regions of the project area. The survey data underscored the significant exploration potential of the Harts Range Project, setting the stage for more detailed investigations.

On 4 March 2025, the Company announced the completion of a detailed geophysical interpretation by Southern Geoscience Consultants. This study built upon the initial survey by identifying 46 priority exploration targets across the project area. Specifically, the evaluation pinpointed 18 high-priority, 16 medium-priority, and 12 lower-priority targets for follow-up exploration<sup>2</sup>. A 1:10,000 scale structural interpretation was also achieved, marking a localised radiometric and magnetic anomaly at both the Cusp and Bobs Prospects. The data has greatly assisted in target drillhole generation.

### **Rare Earth Distribution Analysis**

Rare earth distribution analysis formed a crucial component of ongoing exploration activities at the Harts Range Project. The analysis focused on rock chip samples collected from pegmatite outcrops in the Cusp and Bobs Prospects. Results revealed exceptionally high concentrations of heavy rare earth elements (HREEs), with Dysprosium Oxide (Dy<sub>2</sub>O<sub>3</sub>) and Terbium Oxide (Tb<sub>4</sub>O<sub>7</sub>) identified as dominant contributors to the total rare earth oxide (TREO) composition.

At the Cusp Prospect, analysis of 13 mineralised rock chip samples revealed that over 92% of the rare earth oxide basket was composed of heavy rare earths. Dysprosium and Terbium combined accounted for 13.63% of the TREO basket, with Dysprosium Oxide (11.76%) and Terbium Oxide (1.87%) demonstrating the significant value of this deposit<sup>4</sup>.

The Bobs Prospect showed even higher HREE concentrations in its 12 analysed samples, with HREEs making up more than 97% of the rare earth basket. Yttrium Oxide (71.06%) was particularly prominent, alongside Dysprosium Oxide (8.75%) and Terbium Oxide (1.18%). The similarities between the Cusp and Bobs Prospects, both structurally and mineralogically, highlighted the potential for further high-value discoveries along their east-west trending structure<sup>4</sup>.

### **Strategic Importance of Heavy Rare Earth Elements - Summary**

Heavy rare earth elements like Dysprosium and Terbium are crucial for enhancing Neodymium-Iron-Boron magnets, essential in technologies driving electrification and green energy, including electric vehicles and wind turbines. Dysprosium improves thermal stability, while Terbium enhances durability and resistance to demagnetisation<sup>8</sup>.

Demand for Dysprosium is rising steadily, with projected growth from USD 1,054.3 million in 2025 to USD 1,750.3 million by 2035, driven by its importance in sectors such as automotive, renewable energy, and electronics<sup>7</sup>.

Global supply challenges stem from China's dominance, which controls 90% of rare earth processing capacity. Limited separation facilities outside China create dependency, pushing industries to seek diversified supply chains<sup>9</sup>.

The Harts Range Project positions New Frontier Minerals as a key player in addressing these challenges. With significant deposits of heavy rare earths like Dysprosium and Terbium discovered at the Cusp and Bobs Prospects, the project offers the potential to contribute to high-demand markets and reduce reliance on Chinese sources, especially in the defence and green energy sectors.

### **Next Steps**

Building on the robust data produced in the March 2025 quarter, NFM plans to launch a focused exploration campaign in April 2025. This will involve detailed mapping and sampling to validate and refine the geophysical targets in preparation for drill testing.



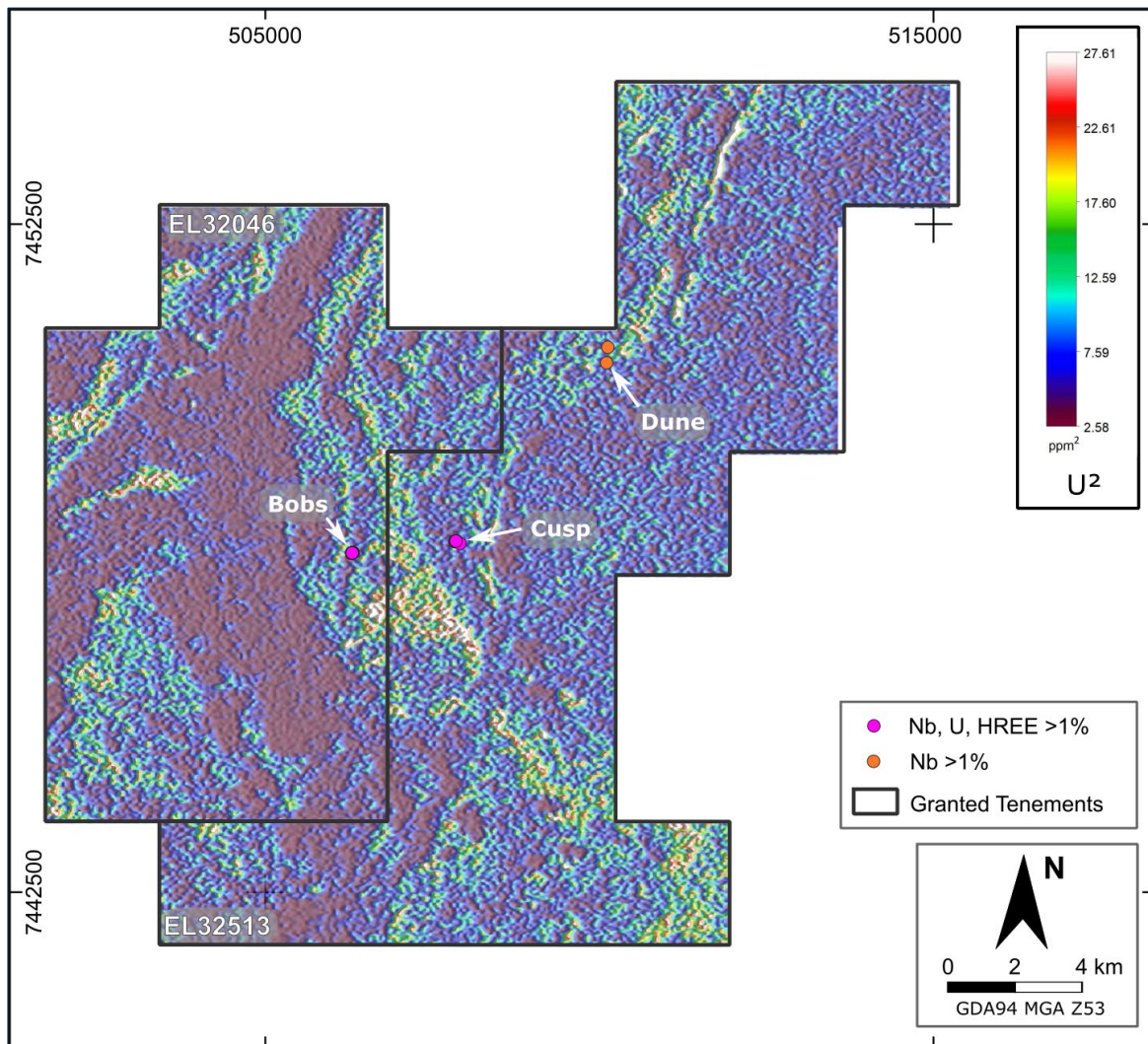


Figure 1: Uranium squared ( $U^2$ ) image shows extensive regional wide uranium anomalism and known mineralised projects<sup>3</sup>

## Strategic Alliance Between NFM and Austral Resources

New Frontier announced it had formalised a Memorandum of Understanding (MOU) with Austral Resources Australia Ltd (ASX: AR1) on 21 January 2025 to establish a strategic alliance targeting the Mt Isa copper belt. This collaboration aimed to integrate the two companies' complementary assets, leveraging AR1's copper processing plant and NFM's exploration and mining expertise to unlock significant value.

The combined footprint within the Mt Isa copper belt positioned the alliance as a competitive force amidst industry majors such as BHP, Anglo American, and Glencore. NFM's immediate objective was to supply copper ore from the Big One Deposit (Mineral Resource Estimate of 2.1 Mt at 1.1% Cu – Refer to Appendix B). Additionally, the alliance proposed expanding activity to other satellite prospects within NFM's NWQ Copper Project.

Under the agreement, AR1 would process NFM's copper ore at its Mt Kelly facility, contingent on ore passing metallurgical test requirements. This partnership provided a dual benefit, offering NFM a clear pathway to production while enabling AR1 to secure a new source of copper ore to bolster throughput at its processing plant<sup>5</sup>.

### Alliance Objectives and Framework

The MOU outlined a collaborative framework where both companies committed to working on a best-efforts basis to capitalise on their shared resources. Key undertakings under this alliance include the following objectives:

- Formalising a processing agreement for NFM to supply copper ore from the Big One Deposit and, if suitable, other prospective targets within the NWQ Copper Project
- Conducting metallurgical test work at AR1's Mt Kelly plant to ensure the ore meets processing standards
- Ensuring profit-sharing terms are equitable, guaranteeing that neither party incurs losses as part of the arrangement
- The agreement also set out roles for both companies to achieve these objectives. NFM would focus on progressing regulatory, technical, and operational milestones, including:
  - Applying for a mining lease over the Big One Deposit, with the process anticipated to take 18–24 months
  - Seeking approval for trial mining and metallurgical testing of the existing copper oxide stockpiles at the Big One Deposit
  - Expanding the known resource through further drilling campaigns
  - Commencing exploration of satellite prospects within the NWQ Copper Project

AR1's responsibilities included performing the necessary metallurgical testing to confirm ore suitability and supporting NFM through its mining lease application process.

### Next Steps

Immediate steps outlined under the alliance included a meeting between NFM and AR1 teams in Queensland to map out a detailed work program. The program's primary focus would encompass advancing the Big One Deposit, initiating metallurgical testing on historical copper stockpiles, and expediting regulatory requirements to fast-track copper production.

The strategic alliance underscored NFM's steady progress in advancing the NWQ Copper Project and marked a pivotal moment in its exploration efforts to position itself as a key player within the Mt Isa copper belt. Both companies expressed a shared commitment to achieving mutually beneficial outcomes through this relationship.



## Successful Asset Optimisation Strategy

### Sale of Broken Hill East Project

On 10 March 2025, New Frontier announced it had entered into an agreement to sell its wholly owned subsidiary, BHA No. 1 Pty Ltd (BHA), to Impact Minerals Limited (ASX: IPT). BHA holds the non-core Broken Hill East Project. Under the terms of the agreement, NFM transferred all shares in BHA to IPT in exchange for \$275,000 worth of IPT shares, calculated on the 14-day VWAP price of \$0.0073 per share as at close of market, 7 March 2025. The IPT shares are subject to voluntary escrow arrangements, with one-sixth of the shares released each month over a six-month period.

The agreement also included IPT assuming responsibility for a 2% net smelter return royalty tied to the tenements held by BHA. Security bonds totalling \$102,000 have also been returned to the NFM. The sale was finalised on 10 March 2025.

The divestment of the Broken Hill East Project marked NFM's third successful sale of a non-core asset within an 18-month period. This series of strategic transactions allowed the Company to redeploy funds and management focus towards its priority Harts Range and NWQ Copper Projects.

NFM's Board emphasized the importance of its disciplined approach to asset optimisation, which generated significant value from non-core holdings. The Company remains optimistic about securing a development partner for its last remaining non-core asset, the Mkushi Copper Project in Zambia.

The Mkushi Project encompasses an operating copper mine and numerous prospective targets, identified through IP surveys that revealed high chargeability zones overlapping copper soil anomalies. These areas present potential targets for disseminated copper sulphide mineralisation, making the asset particularly attractive for future partnerships.

The Board reiterated its commitment to advancing its core projects while pursuing the appropriate development opportunities for Mkushi to enhance shareholder value.

## CORPORATE ACTIVITY

### Investor and Shareholder Engagement

On Thursday, 13 March 2025, the Company hosted a live webinar to provide an update on the Company's recent activities.

The webinar was presented by Non-Executive Director Joel Logan and Senior Technical Consultant Kevin Das. During the session, Mr. Logan and Mr. Das provided updates on the Company's Harts Range Project in the Northern Territory and its NWQ Copper Project.

The presentation was followed by a Q&A session, allowing attendees to address specific queries regarding the Company's projects and plans.

### Changes to Directors' Interest

Mr. Gerrard Hall, Director of New Frontier Minerals, was issued 4,000,000 Performance Rights valued at \$46,400 on 20 January 2025, adding to his existing shareholdings. No securities were sold, and no contract changes occurred.

Mr. Eduardo Robaina, Director of New Frontier Minerals, was issued 4,000,000 Performance Rights valued at \$46,400 on 20 January 2025, as approved by shareholders at the General Meeting on 28 November 2024. This is his first acquisition of securities, with no disposals or changes to contracts reported.

Mr. Joel Logan, Director of New Frontier Minerals, was issued 4,000,000 Performance Rights valued at \$46,400 on 20 January 2025, as approved by shareholders at the General Meeting on 28 November 2024. This increases his holdings to 1,000,000 ordinary shares and 4,000,000 Performance Rights, with no disposals or contract changes reported.

## **FINANCIAL UPDATE**

### **Quarterly Cash and Liquid Investments Position**

Cash on hand and liquid investments at end of the quarter totalled \$1.395 million (including cash on hand of \$686,000, and ASX listed shares, as noted below).

The Company holds 40 million Infinity Mining Limited (ASX: IMI) shares which have a total market value of ~\$520,000 (40 million shares x \$0.013 per share as at 31/03/2025) along with 20 million unlisted options (expiry 30/11/2029, strike \$0.07). The shares were released from escrow on 15 April 2025.

The Company also holds 37,774,040 Impact Minerals Limited (ASX: IPT) shares which have a total market value of ~\$189,000 (37,774,040 shares x \$0.005 per share as at 31/03/2025). The shares are subject to voluntary escrow arrangements, with one-sixth of the shares being released each month over a six-month period.

During the quarter, rehabilitation security bonds totalling \$268,000 were refunded to the Company in relation to the Cangai Copper Mine tenements and Broken Hill East tenements now sold.

Rehabilitation security bonds held at the end of the quarter totalled \$54,000.

### **Securities on Issue at Quarter End**

Ordinary shares            1,453,735,355

Performance shares    107,750,000

### **Information Required Under ASX Listing Rules**

#### **1. ASX LR 5.3.5**

During the Quarter \$63,000 was paid to related parties of the Company relating to non-executive director fees and exploration consulting fees paid to an entity controlled by a related party.



## 2. ASX LR 5.3.1

	Consulting fees	Rates and mines departments fees
Cangai	2,000	-
BHA	1,000	-
QLD	-	1,000
Zambia	-	-
Harts Range	101,000	4,000
	<b>104,000</b>	<b>5,000</b>

## ASX LR 5.3.3

In accordance with ASX Listing Rule 5.3.3, a schedule of Company's tenements can be found at Appendix A.

**-END-**

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

### COMPANY

Dale Hanna  
**Company Secretary**

**E.** [d.hanna@newfrontierminerals.com](mailto:d.hanna@newfrontierminerals.com)

### MEDIA & INVESTOR RELATIONS

Melissa Tempa  
**NWR Communications**

**E.** [melissa@nwrcommunications.com.au](mailto:melissa@nwrcommunications.com.au)

### 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”.

### References

1. ASX Announcement, *NFM completes geophysical survey at Harts Range Project, Northern Territory dated 4 February 2025*
2. ASX Announcement, *Geophysical interpretation identifies 46 HREE-Nb-U priority targets at Harts Range, NT, dated 31 March 2025*
3. ASX Announcement, *Harts Range Project lights up, with numerous airborne geophysical uranium anomalies across the tenure, dated 4 March 2025*
4. ASX Announcement, *Heavy Rare Earths Dominant at Harts Range Project, Northern Territory, dated 9 April 2025*
5. ASX Announcement, *Strategic alliance with Austral Resources to process NFM copper ore, dated 21 January 2025*
6. ASX Announcement, *Sale of Broken Hill East Project, dated 10 March 2025*
7. <https://www.futuremarketinsights.com/reports/dysprosiummarket#:~:text=This%20demand%20is%20projected%20to,earth%20element%20across%20different%20industries.>
8. <https://www.arnoldmagnetics.com/wp-content/uploads/2017/10/Important-Role-of-Dysprosium-in-Modern-PermanentMagnets-150906.pdf>
9. <https://www.reuters.com/world/china-hits-back-us-tariffs-with-rare-earth-export-controls-2025-04-04/>

### Competent Persons Statement

I, Mark Biggs, confirm that I am the Competent Person for the Competent Person Report from which the information to be publicly released has been obtained and confirm that:

- I have read and understood the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition) and the relevant sections of Chapter 5 and Guidance Note 31 from the ASX Listing Rules.
- I am a Competent Person as defined by the JORC Code 2012 Edition, having 35 years of experience that is relevant to the REE, industrial mineral, and copper mineralisation types, quality and potential mining method(s) of the deposit(s) described in the Report. In addition, I have 21 years of experience in the estimation, assessment and evaluation of Exploration Results and Mineral Resource Estimates, the activity for which I am accepting responsibility.
- I am a Member of The Australasian Institute of Mining and Metallurgy (Member # 107188).
- I have reviewed the Report or Excerpt from the Report to which this Consent Statement applies.
- I am a consultant working for ROM Resources and have been engaged by New Frontier Minerals Limited to prepare the documentation for various prospects within the Harts Range Prospect area on which the Report is based.

In addition:

- I have disclosed to New Frontier Minerals Limited the full nature of the relationship between myself and the Company, including any issues that could be perceived by investors as a conflict of interest. Mr Biggs is a director of ROM Resources, a



company which is a shareholder of New Frontier Minerals Limited. ROM Resources provides ad-hoc geological consultancy services to New Frontier Minerals Limited.

- I verify that the Report is based on and fairly and accurately reflects in the form and context in which it appears, the information in my supporting documentation relating to exploration results and any Mineral Resource Estimates.
- I consent to the release of the Report and this Consent Statement by the Directors of New Frontier Minerals Limited.

### **Disclaimers**

Any references to previous ASX announcements should be read in conjunction with this release. Photos and commentary in this announcement regarding field observations of surface geology are included in this report for geological context and are not to be considered by the reader as a substitute for assays.

### **Forward Looking Statements**

Certain information in this document refers to the intentions of New Frontier Minerals Ltd, but these are not intended to be forecasts, forward-looking statements or statements about future matters for the purposes of the Corporations Act or any other applicable law. The occurrence of events in the future is subject to risks, uncertainties and other factors that may cause New Frontier Minerals Ltd's actual results, performance or achievements to differ from those referred to in this announcement. Accordingly, New Frontier Minerals Ltd, its directors, officers, employees, and agents, do not give any assurance or guarantee that the occurrence of the events referred to in this announcement will occur as contemplated.

The interpretations and conclusions reached in this announcement are based on current geological theory and the best evidence available to the authors at the time of writing. It is the nature of all scientific conclusions that they are founded on an assessment of probabilities and, however high these probabilities might be, they make no claim for complete certainty. Any economic decisions that might be taken based on interpretations or conclusions contained in this announcement will therefore carry an element of risk. The announcement may contain forward-looking statements that involve several risks and uncertainties. These risks include but are not limited to, economic conditions, stock market fluctuations, commodity demand and price movements, access to infrastructure, timing of approvals, regulatory risks, operational risks, reliance on key personnel, Ore Reserve and Mineral Resource estimates, native title, foreign currency fluctuations, exploration risks, mining development, construction, and commissioning risk. These forward-looking statements are expressed in good faith and believed to have a reasonable basis. These statements reflect current expectations, intentions or strategies regarding the future and assumptions based on currently available information.

Should one or more of the risks or uncertainties materialise, or should underlying assumptions prove incorrect, actual results may vary from the expectations, intentions and strategies described in this announcement. No obligation is assumed to update forward-looking statements if these beliefs, opinions, and estimates should change or to reflect other future developments.

### **ASX Listing Rule 5.23.2**

New Frontier Minerals Ltd confirms that it is not aware of any new information or data that materially affects the information included in this market announcement and that all material assumptions and technical parameters underpinning the estimates in this market announcement continue to apply and have not materially changed.

## APPENDIX A – TENEMENT SCHEDULE

**Table 1: Jackaderry (Cangai), New England Orogen in NSW**

Tenement ID	Ownership at start of Quarter	Ownership at end of Quarter	Change during the Quarter
EL8635*	100%	100%	-
EL8625*	100%	100%	-
EL8601*	100%	100%	-

Transfer of the Jackaderry tenements received NSW Ministerial consent on April 11<sup>th</sup>, 2025 for EL 8635 and EL8625, and April 14<sup>th</sup> 2025 for EL8601.

**Table 2: Broken Hill East, located within a 20km radius of Broken Hill in NSW**

Tenement ID	Ownership at start of Quarter	Ownership at end of Quarter	Change during the Quarter
EL8434	100%	0%	100%
EL8435	100%	0%	100%

**Table 3: Mt Oxide, Mt Isa region in northwest Queensland**

Tenement ID	Ownership at start of Quarter	Ownership at end of Quarter	Change during the Quarter
EPM 26513	100%	100%	-
EPM 26525	100%	100%	-
EPM 26574	100%	100%	-
EPM 26462	100%	100%	-
EPM 27440	100%	100%	-

**Table 4: Zambia**

Tenement ID	Ownership at start of Quarter	Ownership at end of Quarter	Change during the Quarter
24659-HQ-LEL (Mkushi)	100%	100%	-

**Table 5: Harts Range**

Tenement ID	Ownership at start of Quarter	Ownership at end of Quarter	Change during the Quarter
EL32513	85%	85%	-
EL32406	85%	85%	-
EL34022	100%	100%	-

## APPENDIX B: RESOURCE TONNAGES – BIG ONE DEPOSIT

Resource Type	Ore Type	Inferred (l)	Indicated (M)	Measured (l)	Copper Grade (%)	Silver Grade (g)	Contained Copper (t)	Contained Silver (kg)
Mine Dumps	Oxidised	0	0.007	-	1.2	4.0	86	29
Mine Insitu	Oxidised	1.7	0	-	1.0	1.1	17,000	1,870
Mine Insitu	Fresh	0.4	0	0	1.2	1.4	4,800	560
Sub-Totals		<b>2.1</b>	<b>0.007</b>	<b>0</b>			<b>21,886</b>	<b>2,459</b>

Notes:

Cut-off grade 0.45% Cu. Source: CCZ geology team

Refer to ASX announcement dated 28 February 2022