

ASX RELEASE | 4 MARCH 2025

## Harts Range Project lights up, with numerous airborne geophysical uranium anomalies across the tenure

- ❖ Outstanding results from the geophysical campaign, with interpreted radiometric data lighting up numerous discrete Uranium anomalies across the entire Harts Range Project
- ❖ More significantly, as Uranium is a critical pathfinder element for high value Heavy Rare Earths mineralisation, it highlights the material exploration potential within the tenure
- ❖ At the key Bobs and Cusp Prospects, enhanced imagery shows discreet Uranium anomalies coincident with mineralised pegmatites<sup>3</sup> that are prime targets for drill testing
- ❖ Further, enhanced magnetics (RTP 1VD) imagery shows Bobs and Cusp sit on an ENE trending structure, which is interpreted to repeat to the north and south
- ❖ Southern Geoscience Consultants are undertaking a detailed 1:10,000 scale structural interpretation that should provide key information and additional targets once finalised, likely by mid-to-late March

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**New Frontier Minerals Ltd** (“New Frontier” or “the Company”) (**ASX: NFM**) is pleased to announce the excellent results from the processing and interpretation of geophysical data by Southern Geoscience Consultants. The interpretation has identified numerous discreet uranium anomalies – a path finder to heavy rare earths mineralisation – lighting up across the Harts Range Uranium, Niobium and Heavy Rare Earths Project, located 140km north-east of Alice Springs in the Northern Territory.

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

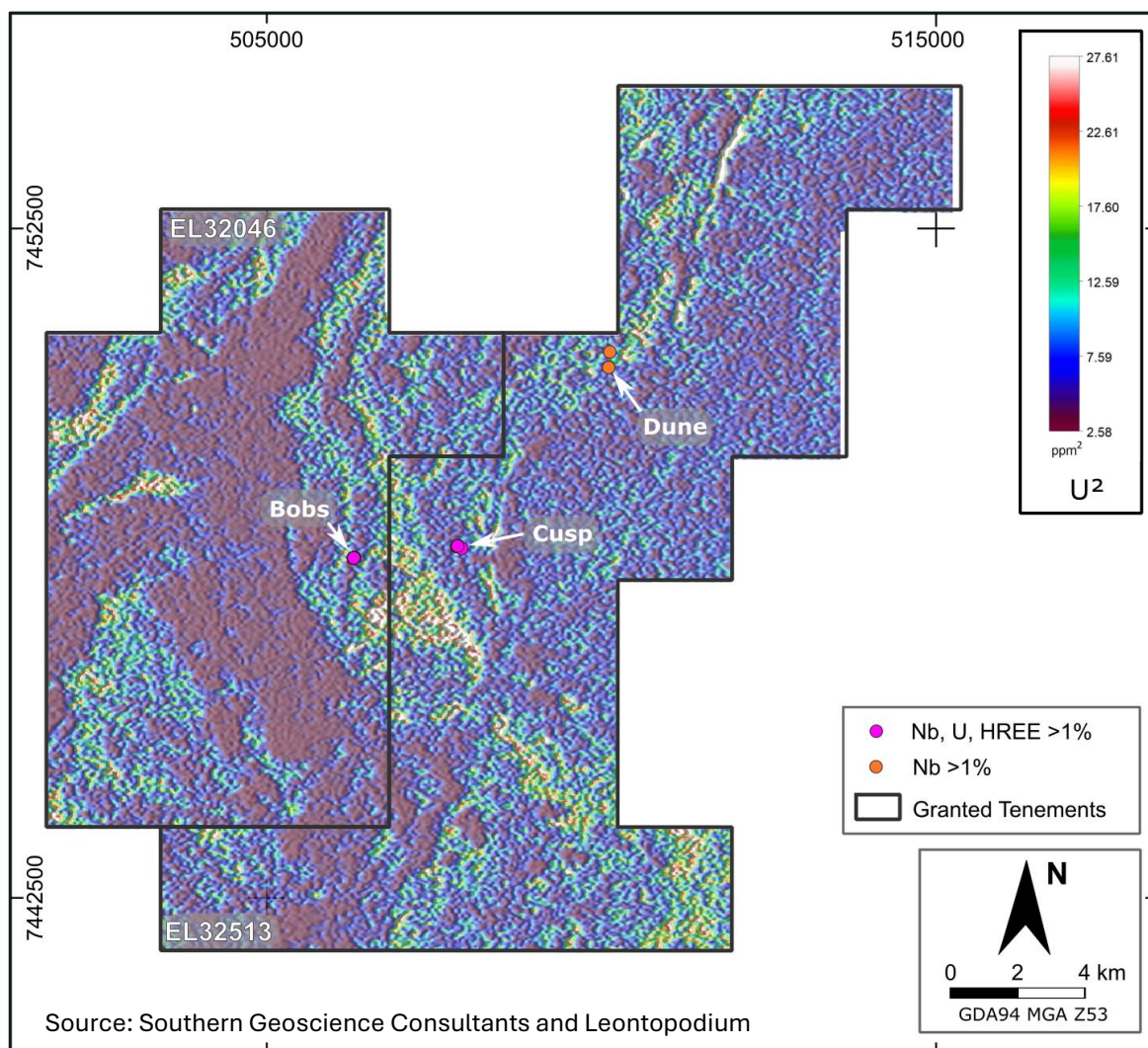
*“The geophysicist’s interpreted results are beyond the Board’s expectations, with multiple targets for uranium anomalies lighting up across the entire Harts Range Project. Even better, is the Uranium anomalies are a pathfinder for high value Heavy Rare Earths mineralisation. As expected, the Cusp and Bobs Prospects are now clearly prime targets. Overall, the exploration potential at the Harts Range Project has increased significantly, and the geology team are set to return to site imminently to work on systematically identifying prime targets to drill-test.”*

## DATA PROCESSING AND RADIOMETRIC TARGETING

New Resolution Geophysics (NRG) was engaged to undertake a high-resolution, airborne radiometric and magnetic survey at the Harts Range Project<sup>1</sup>. With the survey and data acquisition completed during the month of January 2025. Southern Geoscience Consulting was engaged to process and interpret the data.

The first phase of radiometric data processing has been completed with enhancements utilising various ratios to isolate discrete uranium highs for targeting in the field. Further to this, detailed integrated interpretation of the magnetics and radiometric data is being undertaken to provide an understanding of the bedrock geology setting to support target selection for follow up exploration.

As uranium serves as a key pathfinder element, it plays a crucial role in guiding exploration efforts to vector into areas that host heavy rare earths mineralisation. The uranium squared ( $U^2$ ) image enhancement process has removed the thorium and potassium to show widespread regional uranium anomalies for follow up (Figure 1).

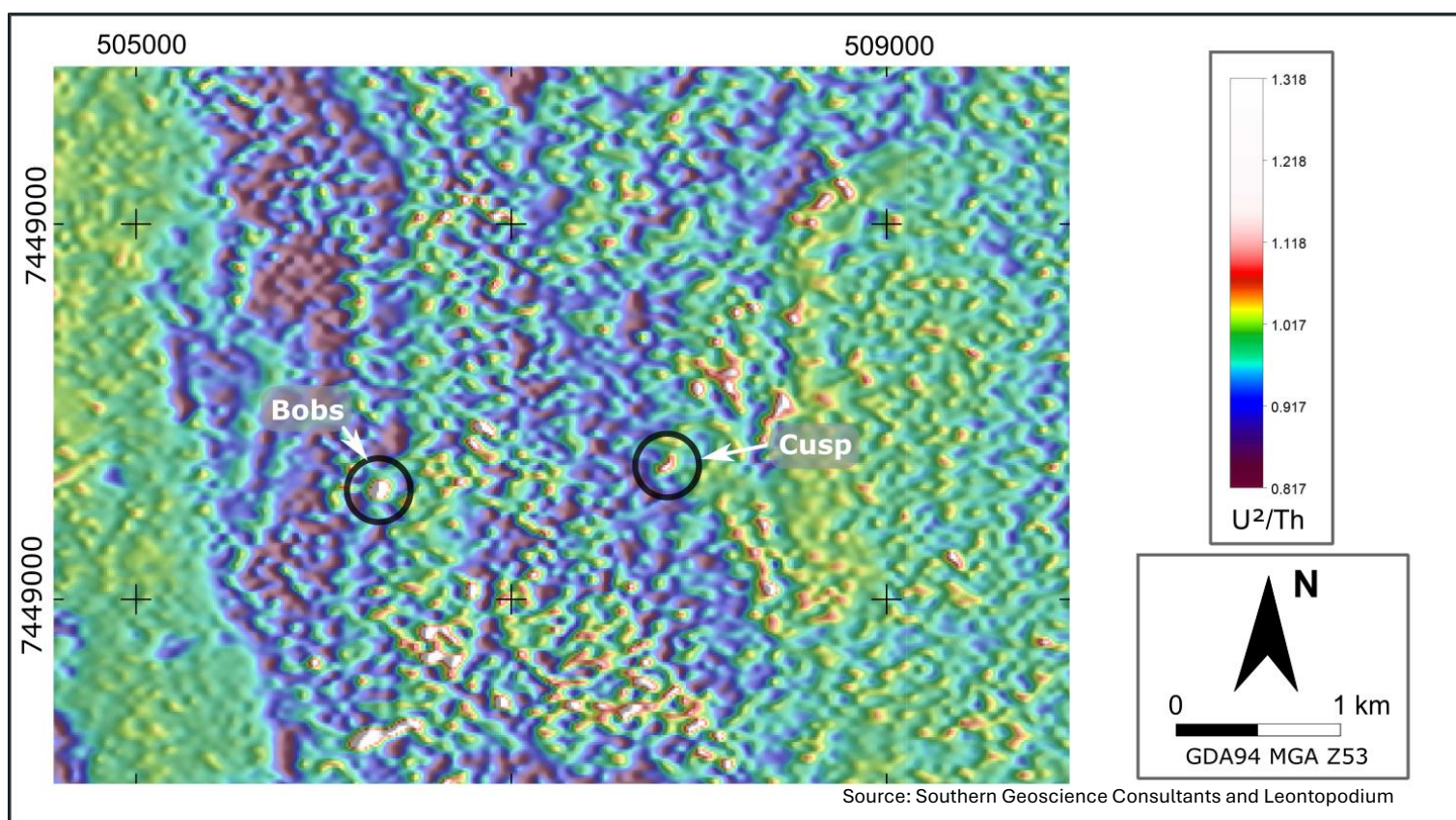


*Figure 1: Uranium squared ( $U^2$ ) image shows extensive regional wide uranium anomalism and known mineralised projects*



Further enhancements utilising the  $U^2/Th$  ratio has been successful in isolating discrete uranium highs normalised by rock type and regolith. These enhancements have effectively isolated uranium values in the radiometric data, which are clearly visible at both Bob and Cusp, and are prominently highlighted within the radiometric dataset (Figure 2).

More importantly, these enhancements have identified numerous similar discrete anomalies regionally across the tenure for ground truthing and vectoring into heavy rare earths targets.

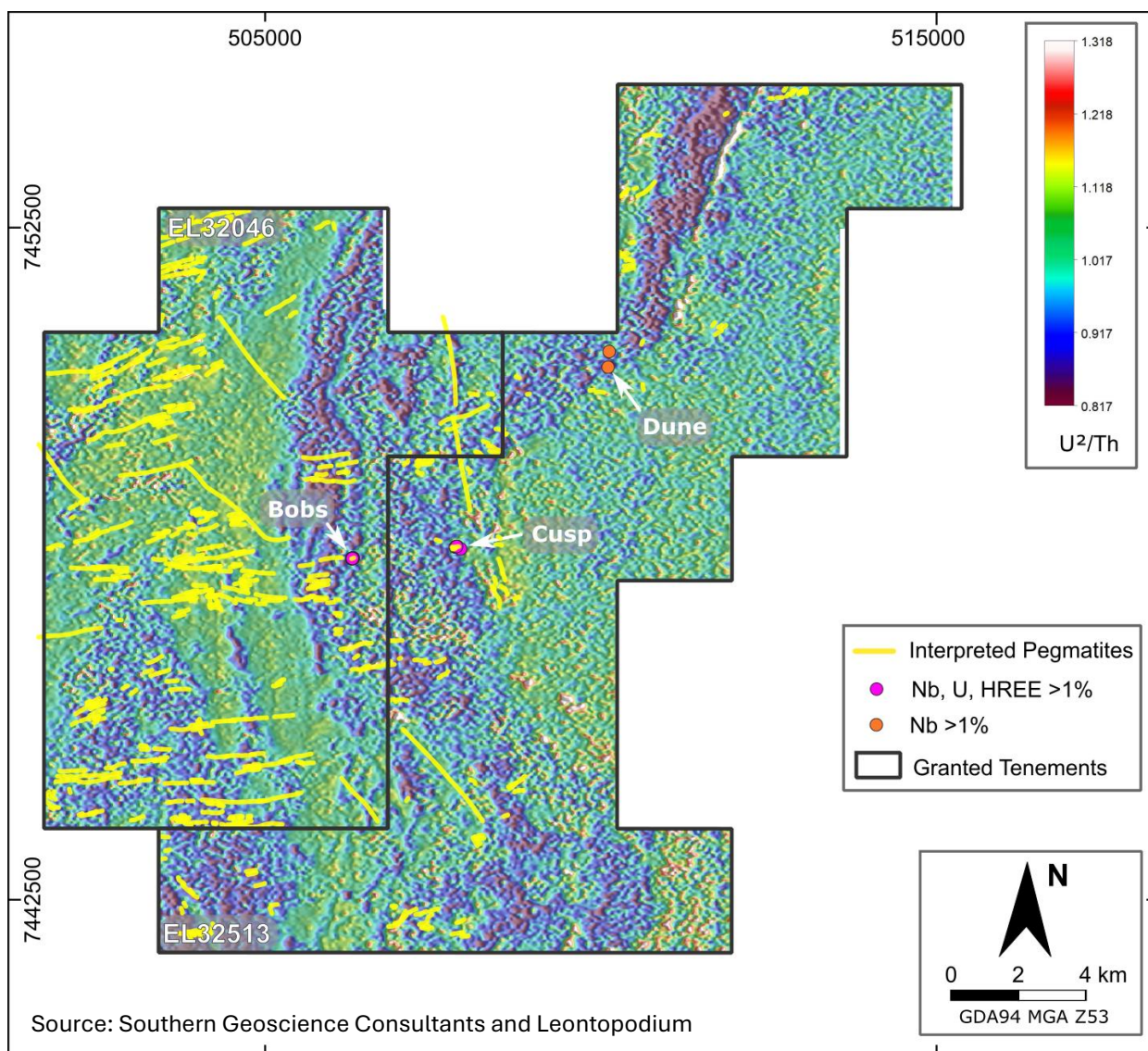


*Figure 2:  $U^2/Th$  ratio enhancement isolate discrete uranium highs at Bobs and Cusp*

Utilising open-sourced satellite imagery, a preliminary satellite image interpretation has visually identified numerous pegmatites across the project area<sup>2</sup>. The integration of enhanced ( $U^2/Th$  ratio) geophysical imagery with the interpreted pegmatites have identified numerous areas that are considered prospective for radioactive pegmatites that also host niobium and heavy rare earths (Figure 3).

Numerous discrete uranium-rich anomalies that correspond with interpreted pegmatites will be prioritised for ground truthing and target generation during the upcoming field season.





*Figure 3: Integration of enhanced ( $U^2/Th$  ratio) geophysical imagery with the interpreted pegmatites*

The magnetic image (RTP 1VD) has identified an ENE trending structural feature that hosts both Bobs and Cusp prospects. Preliminary interpretation has identified this to be potentially a controlling factor to the uranium, niobium, and heavy rare earths mineralisation (Figure 4).

Repeats of these geophysical structural trends are seen to the north and south of Bobs and Cusp prospects.

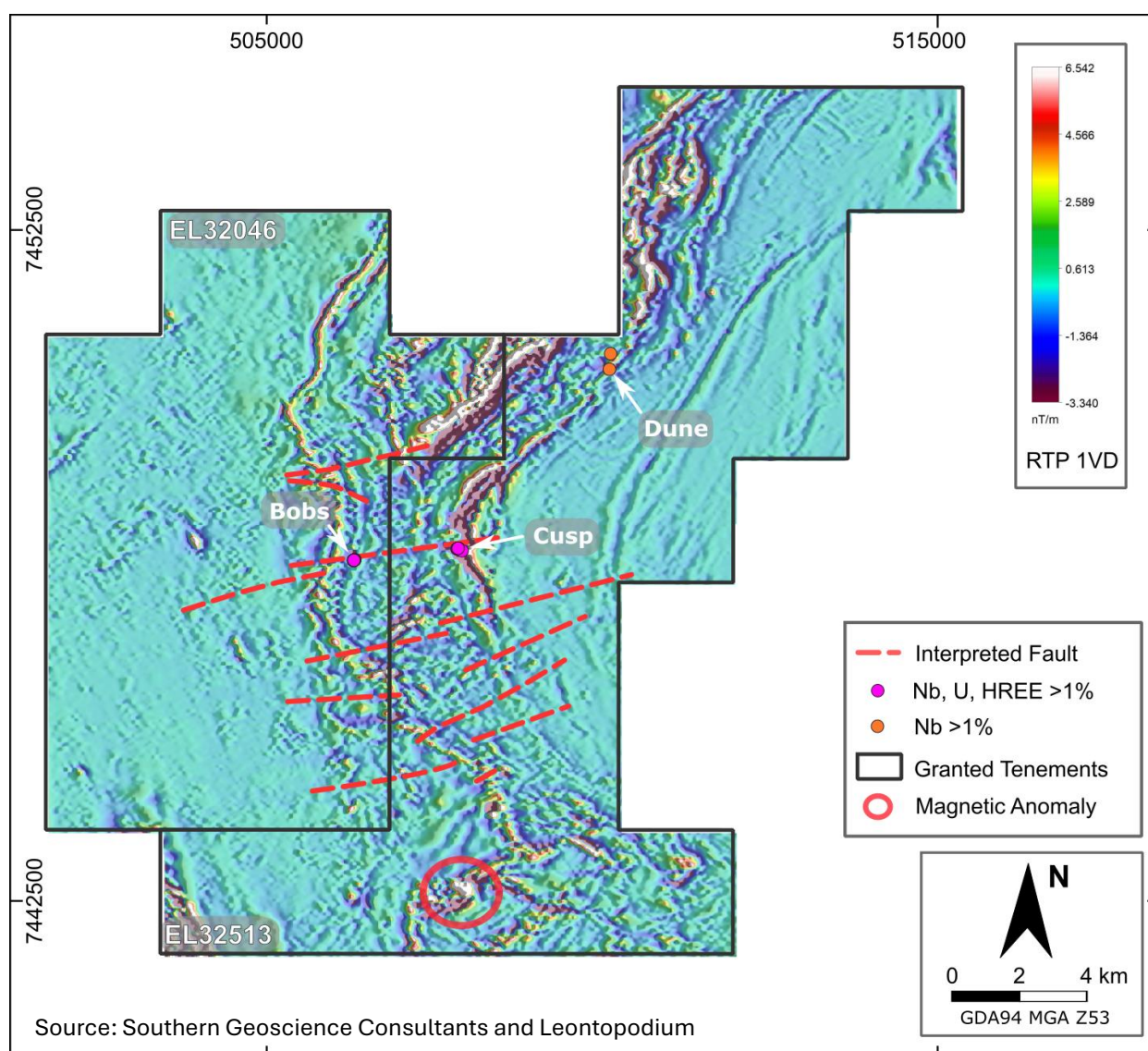


Figure 4: integration of enhanced (RTP 1VD) geophysical imagery with the interpreted ENE structures possibly controlling uranium, niobium and heavy rare earths mineralisation

## NEXT STEPS

While the first phase of radiometric data processing has been completed, detailed integrated interpretation of the magnetics and radiometric data is being undertaken with more comprehensive targets expected in mid-March 2025.

Prior to the commencement of the field season, the NFM geology team will utilise the integrated geophysical and geological datasets to identify and target key areas for ground truthing which will include geological mapping and sampling to validate and identify targets for drilling.



## References

- 1) NFM ASX Release – 10 December 2024
- 2) NFM ASX Release – 4 February 2025
- 3) NFM ASX Release – 6 November 2024

## ENDS

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

**For further information please contact**

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## 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 140km 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”.

## Competent Persons Statement

The scientific and technical information in this announcement, which relates to exploration results and the geology of the deposits described, is based on information compiled and approved for release by Mark Biggs. Mark Biggs is a Member of The Australasian Institute of Mining and Metallurgy (AusIMM Member # 107188) and meets the requirements of a Competent Person as defined by the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012 Edition). Mark Biggs has 35 years of experience relevant to Rare Earth Elements (REE), industrial mineral copper mineralisation types, as well as expertise in the quality and potential mining methods of the deposits under consideration. Additionally, he has 25 years of experience in the estimation, assessment, and evaluation of exploration results and mineral resource estimates, which are the activities for which he accepts responsibility. He also successfully completed an AusIMM Online Course Certificate in 2012 JORC Code Reporting. Mark Biggs is a consultant with ROM Resources and was engaged by New Frontier Copper Limited to prepare the documentation for several prospects, specifically those within the Harts Range Prospects upon which the Report is based.

Furthermore, the full nature of the relationship between himself and New Frontier Copper Limited has been disclosed, including any potential conflicts of interest. Mark Biggs is a director of ROM Resources, a company that is a shareholder of New Frontier Copper Limited, and ROM Resources provides occasional geological consultancy services to New Frontier Copper Limited.

The Report or excerpts referenced in this statement have been reviewed, ensuring that they are based on and accurately reflect, in both form and context, the supporting documentation relating to exploration results and any mineral resource estimates. The release of the Report and this statement has been consented to by the Directors of New Frontier Copper Limited.

## 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: GEOLOGICAL DISCUSSION

### Summary

New Resolution Geophysics (NRG) was engaged to collect and interpret airborne magnetic and radiometric geophysical data at the Harts Range Project, Northern Territory (NFM 2024).

A high-resolution, helicopter-borne radiometric and magnetic survey was designed to accelerate exploration over untested areas within the Harts Range project (Figure AA-1), aiming to identify potential extensions to known uranium, niobium, and rare earth mineralisation was completed in late January 2025. The survey employed “Xplorer”, an advanced gradient magnetic system, to cover 2,253-line kilometres across tenements EL32513 and EL32046 and the technique boasts improved precision and efficiency.

NFM has flown the first airborne survey since the mid-1990s over the region and the first high-resolution (50m spaced) survey over the Harts Range project area and will use results from the survey to define high-priority drill targets or to plan advanced ground geophysics surveys. Detailed Interpretation by consultants Southern Geoscience is currently in progress.

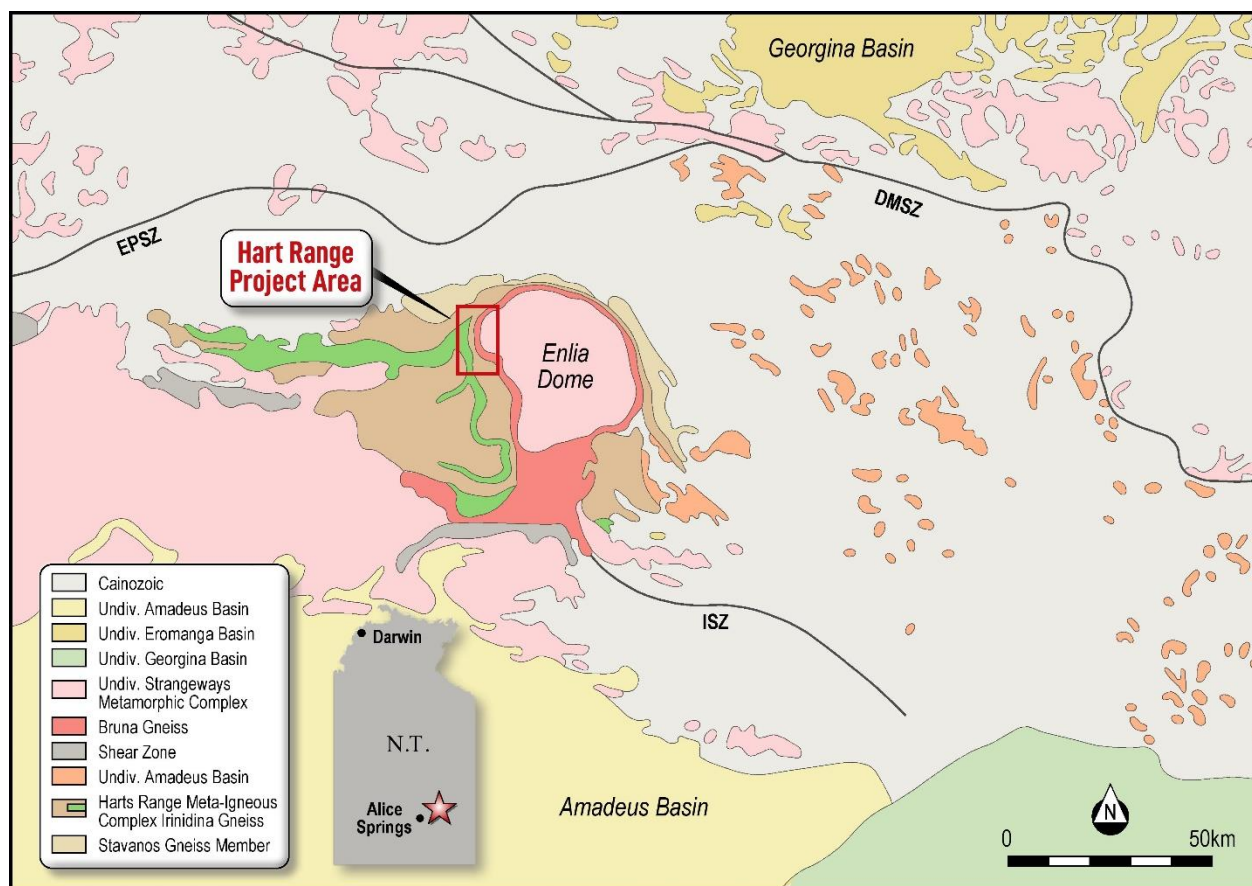


Figure AA-1: Harts Range mineral project area



## Fieldwork Conducted

Key features of the “XPlover” systems used for the survey now completed are given below:

1. “XPlover” systems are mounted on dedicated AS350 B-series helicopters. The AS350 is ideal for the close terrain following required for geophysical surveys. The unique Starflex rotor system and ample power ensure that even the most stringent survey specifications are maintained.
2. Low survey height results in a significant improvement in magnetic data which decays exponentially with distance from source.
3. The proposed system will utilise a horizontal boom mounting to separate magnetic sensors. This will allow for measurement of the horizontal gradient of the magnetic field. Incorporating the magnetic gradient in gridding algorithms, provides significant improvement in delineating line parallel features, spatial positioning of off-line anomalies and overall resolution of the magnetic data.
4. As with the magnetics, radiometric data will benefit significantly from the lower survey height. All radiometric data will be collected at 2 Hz using 16,7 litres of NAI Sodium Iodide crystal sensor. Full spectral processing was included in the quote.

The survey consists of a single block located west of Alice Springs in the Northern Territory. A locality map is provided in Figures AA-1 and AA-2.

A high-resolution digital terrain model (DTM) of the survey area, illustrated in Figure AA-2, suggests that the terrain is rugged. The horizontal gradient of the DTM has been included in Figure 3 to gauge the required climb/descent rates in areas with steeper topography. The climb and descent rate of a high-performance helicopter, such as the AS350B3, will under most conditions, be in the order of 250 m/km. Parts of the survey where the gradient exceeds 200m/km have been flagged in colour (yellow – magenta). In these areas survey height may be compromised in the interest of safety.

## Terrain Following Evaluation

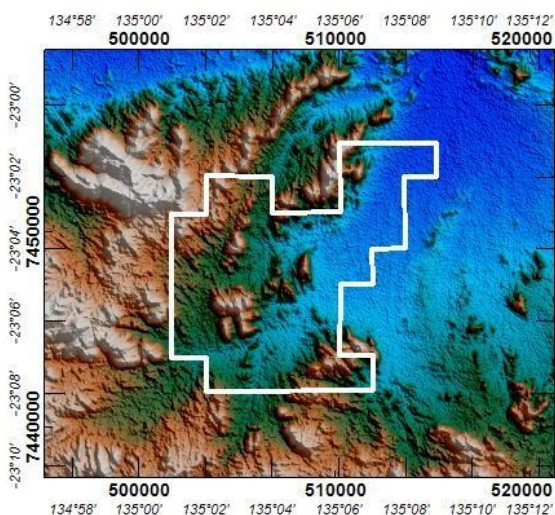


Figure 2. Digital terrain model

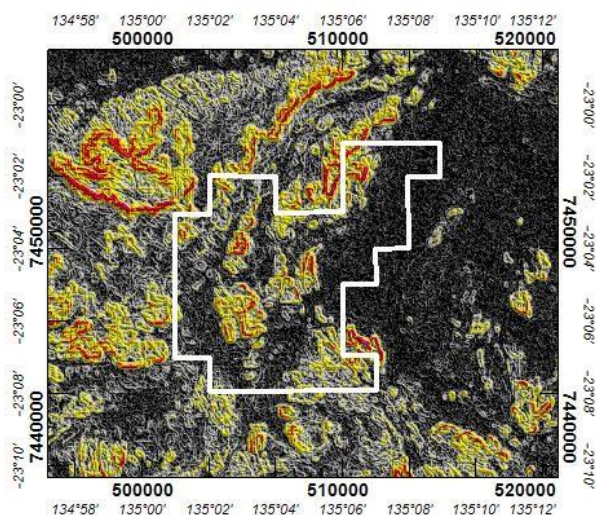
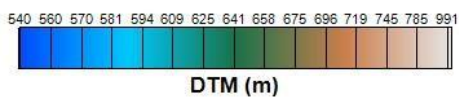


Figure 3. Horizontal gradient of the digital terrain



Areas where the gradient > 200m/km are flagged in colour

Source: Supplied by NRG Australia

Figure AA-2: NT Survey Location



Description	Parameter
Block Name	Harts Range
Coordinate System	UTM 53S
Production Heading	0
Production Spacing	50
Tie Spacing	500
Tie Heading	90
Total Lines	335
Total Km	2,389

**Table AA-1 Survey Parameter Summary** (Source: NRG Australia)

A survey altitude of 25 – 30m was employed dependent on safety considerations and tree canopy height (see Figure AA-3). A minimum line length of 3km (with a few exceptions at the southwest end of survey block) has been utilised for the flight path. The low-level flying height together with the horizontal gradient boom system will result in improvements to:

- More structural and textural information.
- Better gradient enhancement.
- Improved anomaly definition.
- Improved spatial positioning.
- Improved resolution of line parallel features

The survey boundary coordinates are provided in Table AA-2 below.



*Figure AA-3: Helicopter Similar to that used in the Survey* (Source: NRG Australia)

	<b>Easting</b>	<b>Northing</b>	<b>Longitude</b>	<b>Latitude</b>
1	501663	7443558	135.016241	-23.116730
2	501664	7450913	135.016241	-23.050294
3	503420	7450912	135.033385	-23.050294
4	503421	7452850	135.033385	-23.032792
5	506787	7452809	135.066246	-23.033149
6	506787	7450951	135.066246	-23.049937
7	510263	7451028	135.100179	-23.049222
8	510229	7454547	135.099822	-23.017433
9	515206	7454543	135.148398	-23.017433
10	515204	7452842	135.148398	-23.032792
11	513558	7452804	135.132325	-23.033149
12	513591	7449167	135.132682	-23.066010
13	511908	7449129	135.116252	-23.066367
14	511943	7447310	135.116609	-23.082798
15	510260	7447311	135.100179	-23.082798
16	510258	7443713	135.100179	-23.115301
17	511977	7443712	135.116966	-23.115301
18	511975	7441932	135.116966	-23.131375
19	503418	7441818	135.033385	-23.132446
20	503418	7443558	135.033385	-23.116730
21	501663	7443558	135.016241	-23.116730

**Table AA-2. Survey Boundary Coordinates**



## References

- Barfuss, R. 2014, The Harts Range Project Exploration Licence (EL 24552) – (Barfuss Corporation Pty Ltd)
- Das, K., 2024, Note on November Harts Range field reconnaissance trip, Audax Holdings memo, prepared for New Frontier Minerals Dec 2024, 27pp.
- Caughey, A.R., 2007 Annual Report for Exploration Licence EL24552 for the period ending 25th August 2007 (Flagstaff Geo Consultants Pty Ltd.), November 2007 (for Barfuss Corporation Pty. Ltd.)
- New Frontier Minerals, 2024, Geophysical Data to define drill targets at Harts Range, Northern Territory, published to ASX, 10<sup>TH</sup> December 2024, 6pp.
- Rutter, H. 2006. 'An analysis of airborne radiometric data from the Harts Range, N.T.' (Flagstaff Geo Consultants Pty Ltd.) (unpublished report).
- Shaw, R.D., Senior, B.R., Offe, L.A., Stirzaker, J.F., Walton, D.G., Apps, H.E., Freeman, M.J., 1985, 1:250,000 Geological Map Series Explanatory Notes Illogwa Creek SF53-15. Bureau of Mineral Resources Australia & Northern Territory Geological Survey, 1985.
- Spatial Territory Resource Information Kit for Exploration (STRIKE); NT Government Available at: <http://strike.nt.gov.au/wss.html>
- Scrimgeour IR, 2013. Chapter 29: Irindina Province: in Ahmad M and Munson TJ (compilers). 'Geology and mineral resources of the Northern Territory'. Northern Territory Geological Survey, Special Publication 5.

## APPENDIX B: JORC CODE, 2012 EDITION – TABLE 1

The following JORC Code (2012 Edition) Table 1 is primarily supplied to provide background for a recently completed airborne magnetic and radiometric survey conducted by NRG Australia on behalf of New Frontier Minerals Limited, covering all prospects within the Harts Range Project. The survey component was concluded in late January 2025.

### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary																		
<b>Sampling techniques</b>	<ul style="list-style-type: none"><li><i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i></li><li><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li><li><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li><li><i>In cases where ‘industry standard’ work has been done this would be relatively simple (e.g. ‘reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay’). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</i></li></ul>	<ul style="list-style-type: none"><li>The basic survey parameters for the January 2025 airborne magnetic and radiometric survey are given in Table AB-1, below:</li></ul> <p><b>Table AB-1: Harts Range Airborne Survey</b></p> <table><tr><th>SURVEY NAME</th><th>METHODS</th><th>JOB #</th><th>CONTRACTOR</th><th>SURVEY YEAR</th><th>FLIGHT LINE SPACING (metres)</th><th>MEAN TERRAIN CLEARANCE (metres)</th><th>FLIGHT LINE DIRECTION (degrees)</th><th>DATA STATUS</th></tr><tr><td>Harts Range</td><td>MAG RAD DEM</td><td>NRGA2441</td><td>NRG</td><td>2025</td><td>50</td><td>25-30</td><td>000 – 180</td><td>Confidential</td></tr></table>	SURVEY NAME	METHODS	JOB #	CONTRACTOR	SURVEY YEAR	FLIGHT LINE SPACING (metres)	MEAN TERRAIN CLEARANCE (metres)	FLIGHT LINE DIRECTION (degrees)	DATA STATUS	Harts Range	MAG RAD DEM	NRGA2441	NRG	2025	50	25-30	000 – 180	Confidential
SURVEY NAME	METHODS	JOB #	CONTRACTOR	SURVEY YEAR	FLIGHT LINE SPACING (metres)	MEAN TERRAIN CLEARANCE (metres)	FLIGHT LINE DIRECTION (degrees)	DATA STATUS												
Harts Range	MAG RAD DEM	NRGA2441	NRG	2025	50	25-30	000 – 180	Confidential												





<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>• <i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face sampling bit or other type, whether core is oriented and if so, by what method, etc).</i></li> </ul>	<ul style="list-style-type: none"> <li>• Not Applicable – no exploration drilling results as none were drilled.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> </ul> <p><i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></p>	<ul style="list-style-type: none"> <li>• Not Applicable – no exploration drilling results as no holes were drilled.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>• <i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable as no drilling nor surface sampling has taken place.</li> </ul>
<b>Subsampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality, and appropriateness of the sample preparation technique.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable as no drilling nor surface sampling has taken place.</li> </ul>



	<ul style="list-style-type: none"> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></li> <li>• <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable as no drilling nor surface sampling has taken place</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable as no drilling nor surface sampling has taken place.</li> </ul>





<b>Location of data points</b>	<ul style="list-style-type: none"> <li>• Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>• Specification of the grid system used.</li> <li>• Quality and adequacy of topographic control.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• Data spacing for reporting of Exploration Results.</li> <li>• Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>• Whether sample compositing has been applied.</li> </ul> <ul style="list-style-type: none"> <li>• The Harts Range licenses lie north-west of the Entia Dome and are underlain by the Harts Range Group (Harts Range Meta-igneous Complex), which predominantly consists of feldspar-biotite-amphibole-garnet gneisses. The Harts Range region at has undergone repeated and substantial crustal reworking between Proterozoic and Palaeozoic times and is now thought to represent an ancient and strongly altered/metamorphosed version of a continental collision zone.</li> <li>• Most of the observed mineralisation is related to a swarm of west to east and southeast-trending pegmatite dykes, with an anomalous occurrence of the U-bearing mineral samarskite.</li> <li>• At the Cusp Prospect, niobium-HREE-Tantalum identified in pegmatites running approximately east-west, up to 10 metres thick and over 70 metres long.</li> <li>• At Bob's Prospect niobium-HREE-Tantalum mineralisation in pegmatites trend east-west and is several metres thick and over 30 metres long, with similar geological setting to the Cusp Prospect.</li> <li>• 200m west of Bobs (Bobs West), outcropping pegmatite along the same orientation, hosted exclusively within felsic gneiss of the Irindina Gneiss. The pegmatite is semi-continuous for ~300m with a similar geological setting and has notably large green muscovite flakes present.</li> <li>• The Dune (previously Niobium Anomaly) Prospect is another variant with high Niobium results but low in rare earths and uranium. Elevated radiometrics located with the scintillometer recorded 1,300 cps within a small historic pit at the top of a knoll. Anomalies appear to correlate with intrusions of porphyritic "granitoid"</li> </ul>



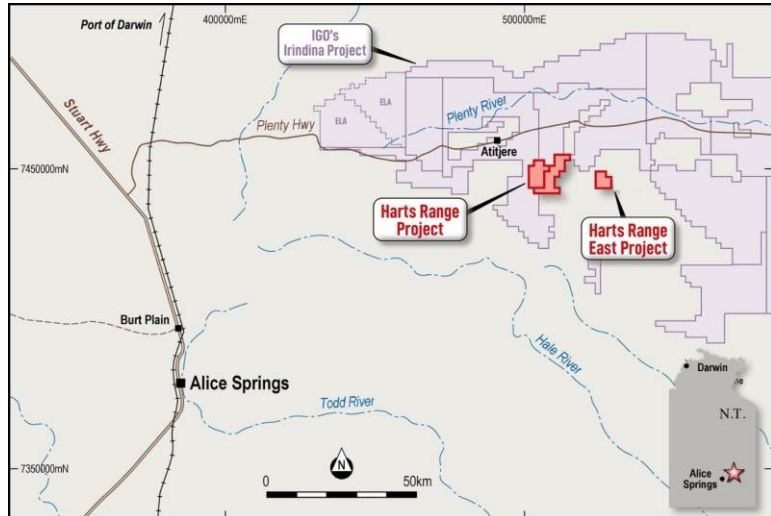
		<p>and granitic gneiss, which are geologically consistent with the pegmatites mapped at Bob's and the Cusp Prospects.</p> <ul style="list-style-type: none"> <li>The Thorium Anomaly Prospect was previously located via airborne radiometric images. The radiometric anomalies are low order (10 to 20x background) compared to the spot anomalies at Bob's and Cusp (50-200x background). Anomalies appear to correlate with intrusions of porphyritic "granitoid" and granitic gneiss, which presumably are geologically features like the pegmatites at Bob's and the Cusp Prospects.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li><i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></li> </ul>	<ul style="list-style-type: none"> <li>In general, the strata of the area surrounding the pegmatite dykes in the Harts Range Meta-Igneous Complex dip steeply (&gt;45 degrees) to the north and strike between east to southeast.</li> <li>Rock chip samples were taken at areas of interest from observed mineralisation along and across strike of the line of lode of the mineralised pegmatite dyke, secondary structures, surrounding spoil heaps, and across the six (6) anomalous areas originally identified in the planning stage.</li> <li>However, no modern systematic exploration has been conducted, nor any of the U, Nb, Cu, and HREE mineralised prospects have ever been drilled in the prospects described in this ASX release.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>The rock chip samples taken during the current fieldwork were securely locked within the vehicle on site until delivered to Alice Springs by the field personnel for despatch to the laboratory (Intertek in Perth WA) by courier.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>No external audits sampling techniques and data have yet been planned or undertaken.</li> </ul>





## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<p>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</p> <ul style="list-style-type: none"> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. in the area.</li> </ul>	<ul style="list-style-type: none"> <li>The Harts Range Project lies in the southeast of the Northern Territory, roughly 120 kilometres northeast of Alice Springs. Two granted tenements (EL 32046 and 32513) comprising a total 110 km<sup>2</sup> tenement package is located near essential infrastructure and accessible via the Plenty Highway. Refer to Figure AB-1, below:</li> </ul> <p><b>Figure AB-1: Harts Range Location</b></p>  <ul style="list-style-type: none"> <li>A check on the tenures status was completed in the NTGS system 'Strike' on the 10<sup>th</sup> of October 2024, to validate the currentness of the exploration areas. All are current.</li> <li>The Harts Range Project lies in the southeast of the Northern Territory, roughly 120 kilometres northeast of Alice Springs. The region is serviced by excellent roads (Stuart Highway), train (the famous Ghan rail) and bus links connect the area.</li> <li>Domestic and some international flights are available from Alice Springs (1 hour drive south of Harts Range) while all international flights are available direct from Darwin.</li> </ul>

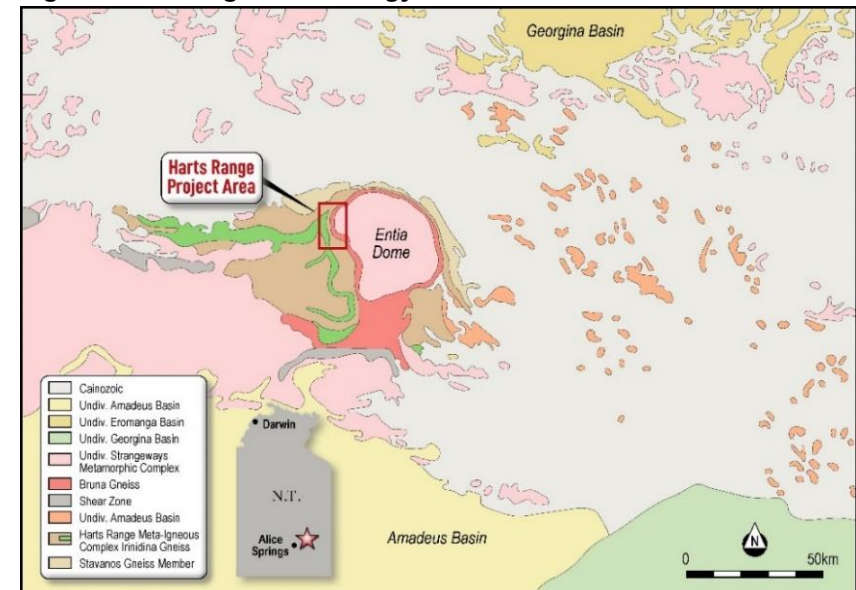


		<ul style="list-style-type: none"> <li>• As a major regional centre, the town of Alice Springs provides public and private schools. There are churches, supermarkets, speciality shops, hotels, motels, cafés &amp; restaurants, medical centres.</li> <li>• There is a professional police and emergency services presence throughout the area. Local professional and trade services support the community and the mining industry. Mobile phone and internet access are good.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>• <i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Historical “Strike”-based mineral exploration reports have been reviewed for historical tenures that cover or partially cover the Project Area in this announcement. Federal and State Government reports supplement the historical mineral exploration reporting (QDEX open file exploration records).</li> <li>• Most explorers were searching for either Cu-Au-U, gemstones, or industrial minerals in the 1990’s, and proving satellite deposit style extensions to the several small subeconomic uranium or copper deposits.</li> <li>• The project is flanked by Independence Group (IGO) to the north, south and west. IGO is exploring for a raft of critical battery minerals.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting, and style of mineralisation.</i></li> </ul>	<b>Regional Geology</b> <ul style="list-style-type: none"> <li>• The Harts Range Niobium, Uranium-Heavy Rare Earth Project lies north-west of the Entia Dome (Figure A2-1) and is underlain by the Harts Range Group (Harts Range Meta-igneous Complex), which predominantly consists of feldspar-biotite-amphibole-garnet gneisses.</li> <li>• The Harts Range region has undergone repeated and substantial crustal re-working between Proterozoic and Palaeozoic times. As a result, it is now believed to represent an ancient and strongly altered/metamorphosed version of a continental collision zone.</li> </ul>



- Magnetotellurics data interpreted by a team consisting of Adelaide University and NTGS geologists (Selway et al, 2006)<sup>1</sup> suggests the Entia Dome system is a deep-crustal feature that can be shown extending to the mantle.
- The map below (Figure AB-2) shows the distribution of regional stratigraphic units.

**Figure A2-3: Regional Geology**



### Local Geology

The main rock types mapped and sampled at various REE Prospects include:

- Biotite Schist/Granofels: brown-blackish biotite-rich rock; thin (5-10cm) poorly exposed zone on N side of ~6m thick unit/zone of similar rock (e.g. HR398, HR399 sites) (on N side of HR399).
- Pegmatite, ?apatite-bearing: scree frags near W end of E-W pegmatite, near intersection with north-south calcite vein; very coarse-grained feldspar-quartz with common coarse ?apatite - pale semi-translucent slightly greenish



(rare honey-brown) blocky/tabular/hexagonal, some intergrown with feldspar/quartz.

- Garnet-?Cumingtonite rock: coarse-grained rock; with abundant interstitial pale greenish malachite-?magnesite material; small patch of subcrop amongst scree.
- Gneiss: weathered, moderately banded, fine-to-medium grained quartz-feldspar-hornblende-garnet; some coarser quartz-garnet rock; some brown haematite on fractures; sample below HR444.
- Ultramafic: slightly weathered medium grained, greenish/brownish ?amphibole/olivine-dominated ?meta-ultramafic.
- Amphibolite: grey fine-grained hornblende -quartz rock; (approx. adjacent rough channel samples: HR461 (1m) above HR462 (3m) above HR463 (3m) above HR464 (1m)).
- Samarskite (or similar), being a dense brittle blackish lustrous radioactive mineral; cluster of 10+ fragments, most over 1cm (or broken weathered larger piece - ca. 5-10 cm?) in chalky white feldspar, beside weathered coarse mica beneath soil cover along southern side of quartz vein in a pegmatite core.

#### **Drillhole Information**

- A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: ○ easting and northing of the drill hole collar

○ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar

○ dip and azimuth of the hole ○ down hole length and interception depth ○ hole length.

*If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*

- Not Applicable – no exploration drilling results presented.



<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li><i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</i></li> <li><i>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i></li> </ul> <p><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></p>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li><i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> </ul> <p><i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</i></p>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li><i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i></li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li><i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced avoiding misleading reporting of Exploration Results.</i></li> </ul>



<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul style="list-style-type: none"> <li>The area was covered historically by regional airborne government and private radiometric, gravity, magnetic, and hyperspectral surveys. Unfortunately, other than the 2006 radiometric ground survey, no other ground surveys have been undertaken. <ul style="list-style-type: none"> <li>Substantial historical and current ground geochemical (stream sediment, soil, and rock chip samples have been undertaken and two episodes of shallow drilling, mostly for industrial minerals (gemstones and vermiculite) by the owners of the leases, since 2006.</li> </ul> </li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> </ul> <p>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</p>	<p>The future exploration strategy has been designed to encompass the following steps in subsequent field programs:</p> <ul style="list-style-type: none"> <li>Reconnaissance mapping programs.</li> <li>Close-spaced ground radiometric or EM geophysical surveys.</li> <li>Detailed mapping and rock chip sampling across prospects.</li> <li>Regional soil sampling campaigns.</li> <li>Mineral characterisation studies and petrological analysis.</li> <li>Trenching and bulk sample test work.</li> <li>Target generation and prioritisation; and</li> <li>Exploratory drill-testing.</li> </ul>

