

ASX RELEASE 18 NOVEMBER 2025

# Binding Commercial Framework with Metallium Post Exceptional Heavy Rare Earth Results from Harts Range

- NFM has entered a binding commercial framework with Metallium Ltd (ASX: MTM) to create a novel processing pathway for Harts Range, targeting Heavy REE supply to US magnet and defence customers
- Exceptional beneficiation results on raw ore (25kg bulk sample)<sup>1</sup>, using MTM's proprietary Flash Joule Heating (FJH) technology on Harts Range delivered exceptional results from raw ore:
  - ~20x upgrade in total REO from 1.7 % → 35 % (TREO) in a single step flash; and
  - ~53x enrichment in dysprosium (Dy<sub>2</sub>O<sub>3</sub>) to 10.03% and 21x terbium (Tb<sub>4</sub>O<sub>7</sub>) enrichment 0.64% – with complete removal of detectable Fe, Si and Th from raw, un-beneficiated (no flotation, acid leaching or hydrometallurgical pre-conditioning) Harts Range ore
- These results represent an unprecedented beneficiation performance for a raw Dy/Tb-bearing ore in a single, rapid, solvent-free reaction
- New Frontier has granted MTM exclusive global rights to apply FJH processing to all Harts Range ore / concentrates for at least 10 years, with automatic extension through production, subject to successful development of commercial scale processing facility
- MTM's 2026 plans comprise generating Dy/Tb-rich "super-concentrate" samples for prospective US magnet/defence customers for qualification, with a commercial term-sheet in-place before year-end
- Securing the binding strategic agreement with MTM, clearly validates the Harts Range Project, coupled with progressing the drilling campaign, has the potential to create significant shareholder value

**New Frontier Minerals Limited** (ASX: NFM) ("New Frontier") is delighted to advise that it has entered a binding commercial framework with MTM to create an exclusive western heavy rare earth pathway for Harts Range raw ore that will target US magnetic and defence customers. This follows exceptional test-work results on Harts Range raw ore, especially Dy/TB, using MTM's proprietary FJH technology.

**Chairman Gerrard Hall commented:** "We are excited to enter this binding collaboration with MTM. The exceptional processing results, especially for dysprosium and terbium, validate the upgradability of the raw Harts Range ore. Securing a 10-year, exclusive commercial framework agreement with MTM for Harts Range is value creating, game changing event for New Frontier, delivering a novel beneficiation pathway for heavy rare earth products and potential access to US magnet and defence customers.

The Board's immediate priorities now comprise progressing the upcoming drilling campaign, which should provide considerable insights into the extent of heavy rare earth mineralisation at Harts Range; and working closely with MTM's management team to rapidly formulate an overarching strategy and key processes necessary to rapidly advance the commercial framework."

## EXCEPTIONAL TEST-WORK RESULTS

The 25kg bulk sample from the Harts Range Project (un-beneficiated ore, crushed/ground feed) underwent MTM's proprietary FJH process (Figure 1).



Figure 1: FJH Test Units at the Anahuac Technology Campus, Chambers County, Texas. (Source: Metallium<sup>2</sup>)

The sample from Harts Range (un-beneficiated ore, crushed/ground feed) underwent Metallium's proprietary FJH process (Figure 2).

Total rare-earth oxide (TREO) content increased from ~1.7 % to ~35 % in a single FJH reaction step, representing ~20x upgrade (Table 1).

- Key heavy REEs Dy and Tb, and magnet REE Nd concentrations increased significantly
- $Dy_2O_3$  upgraded  $53\times$  (0.19%  $\rightarrow$  10.03%) / 11%  $\rightarrow$  29% of the REO basket (+160%)
- $Tb_4O_7$  upgraded  $21\times$  (0.03%  $\rightarrow$  0.64%) / 1.7%  $\rightarrow$  1.8% of the REO basket (+5%)
- $Nd_2O_3$  upgraded  $114\times$  (0.05%  $\rightarrow$  5.69%) / 2.9%  $\rightarrow$  16.3% of the REO basket (+460%)
- Complete removal of detectable  $Fe_2O_3$ ,  $SiO_2$  and Th
- Partial yttrium rejection, reducing  $Y_2O_3$  from 61% to 35% of the REO basket
- No traditional acid-leach or reagent-heavy beneficiation route was applied pre-FJH, underscoring metallurgical simplicity and fast processing capability

Metallium is currently modelling the next phase of optimisation, including additional FJH treatment and post-sample processing for increased recoveries.

Metallium's Texas Technology Campus will be used to scale up the reactor size, optimise reactor parameters and deliver customer-qualification grade products.

Samples were analysed by Inductively Coupled Plasma Optical Emission Spectroscopy (ICP-OES) by an independent, accredited commercial laboratory.

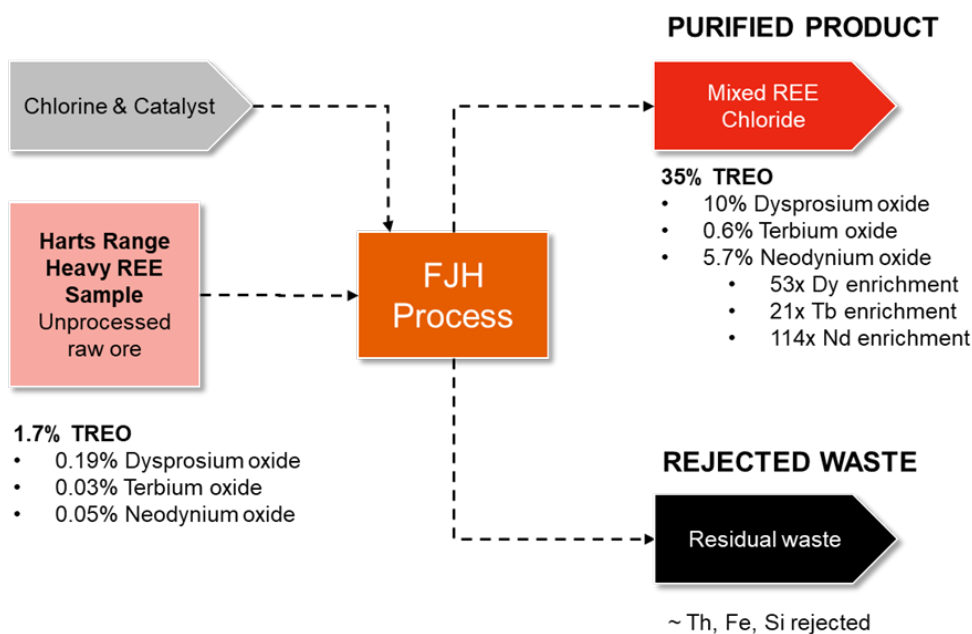
**SIMPLIFIED OVERVIEW – RAW ORE FEED INTO FJH ENRICHMENT PROCESS**


Figure 2: Single-step Flash Mass Balance Diagram (Source: Metallium<sup>2</sup>)

	Element	Oxide	BEFORE	AFTER	Upgrade Ratio
			Raw Ore Assay, %wt	Product post FJH, %wt	
<b>RARE EARTHS</b>	Dysprosium	Dy2O3	0.19%	10.03%	53X
	Terbium	Tb4O7	0.03%	0.64%	21X
	Neodymium	Nd2O3	0.05%	5.69%	114X
	Praseodymium	Pr6O11	0.01%	0.00%	-
	Lutetium	Lu2O3	0.01%	0.25%	25X
	Gadolinium	Gd2O3	0.13%	2.04%	16X
	Erbium	Er2O3	0.07%	1.02%	15X
	Holmium	Ho2O3	0.03%	0.36%	12X
	Ytterbium	Yb2O3	0.06%	0.73%	12X
	Samarium	Sm2O3	0.06%	0.70%	12X
	Yttrium	Y2O3	1.04%	11.83%	11X
	Thulium	Tm2O3	0.01%	0.00%	-
	Cerium	CeO2	0.03%	0.85%	28X
	Lanthanum	La2O3	0.01%	0.43%	43X
	Europium	Eu2O3	0.00%	0.37%	-
	<b>Total Rare Earth Oxides</b>	<b>TREO</b>	<b>1.72%</b>	<b>34.96%</b>	<b>20X</b>
<b>IMPURITIES</b>	Iron	Fe2O3	2.77%	0.00%	Complete removal
	Silica	SiO2	75.75%	0.00%	Complete removal
	Thorium	ThO2	0.002%	0.00%	Complete removal

Table 1: REE Recovery and Impurity Removal – Assay Before and After FJH Treatment & Enrichment Ratio (Source: Metallium<sup>2</sup>)

For personal use only

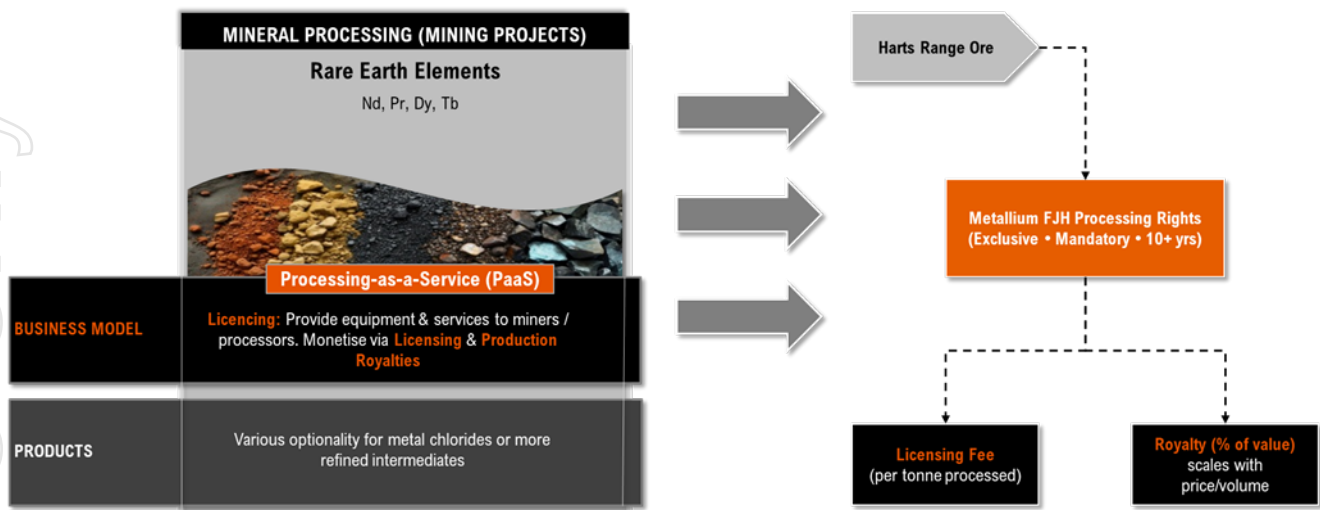


Figure 3: Metallium's indicative operating model: exclusive processing rights over Harts Range enable a "Processing-as-a-Service" structure, generating both per-tonne licensing fees & production royalties without mining or operating risk. (Source: Metallium<sup>2</sup>)

## BINDING COMMERCIAL FRAMEWORK

Under the terms of the binding commercial framework, New Frontier has agreed to the following:

- MTM has binding, exclusive, project-linked rights to apply FJH (and derivative processing) to all ore, concentrate or other feed from the Harts Range Project for a minimum of 10 years, with automatic rollover into production stage.
- Upon commercial production of a Dy/Tb-rich product, MTM will earn:
  - a royalty (1.5% Net Smelter Return equivalent) on sales of finished product; and
  - a margin for processing Harts Range feed through MTM's facility.
- The structure includes a buy-back right allowing the project owner (or successor) to acquire a portion of the royalty for a fixed amount, enabling MTM to crystallise value.
- MTM holds rights that travel with the project in the event of ownership change, ensuring the processing exclusivity remains intact.\

MTM's Texas Technology Campus serves dual purpose: core waste-to-value facility (e-waste, PCBs, specialty metals) and demonstration/refinement hub for HREE feedstocks and product qualification with U.S. / allied off-takers.

## STRATEGIC UPSIDE FOR NEW FRONTIER THROUGH MTM ALIGNMENT

By exclusively aligning with MTM, which is positioning itself as a gatekeeper for heavy-rare-earth refining in the Western supply chain, New Frontier has a clear path to market for its unique Dy/Tb-rich feedstock.

The FJH process has now been demonstrated on Harts Range raw ore rather than just scraps or tailings — showing technology scalability and feed-type flexibility, increasing the addressable value chain.

With downstream product qualification pathways (including U.S. magnet and defence supply chains), New Frontier can leverage MTM's early upgrade results into commercial optionality, not just exploration upside.

Given global policy momentum toward allied-market rare-earth supply (including U.S. DoW and export-control tailwinds), the timing aligns with premium valuation themes for heavy-rare-earth exposures.

## NEXT STEPS

New Frontier will align with MTM's stated next steps which comprise:

- Ongoing FJH testing and processing of the 25kg bulk sample from Harts Range into MTM's Texas FJH reactor.
- Generation of Dy/Tb-rich "super-concentrate" samples and delivery to prospective U.S. magnet/defence customers for qualification subject to successful completion of ongoing optimisation and scale-up work, and
- Delivery of a commercial term-sheet for offtake or processing by Q3-2026.

## ENDS

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

## REFERENCES

- 1) NFM ASX Release "Harts Range bulk sample returns 1.72% TREO including 4.51% Nb<sub>2</sub>O<sub>5</sub> and exceptional HREO/TREO ratio of 94.8%" – 25 August 2025
- 2) Metallium Secures Exclusive Rights over Dy/Tb-Rich Harts Range Project Following Breakthrough FJH Upgrade of Raw Ore- 18 November 2025

### For further information please contact

<b>New Frontier Minerals (Australia)</b>	Joel Logan E. <a href="mailto:jlogan@newfrontierminerals.com">jlogan@newfrontierminerals.com</a>
<b>St Brides Partners (United Kingdom)</b> Media & Investor Relations	Ana Reberio E. <a href="mailto:ana@stbridespartners.co.uk">ana@stbridespartners.co.uk</a>

## 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.

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

## 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.

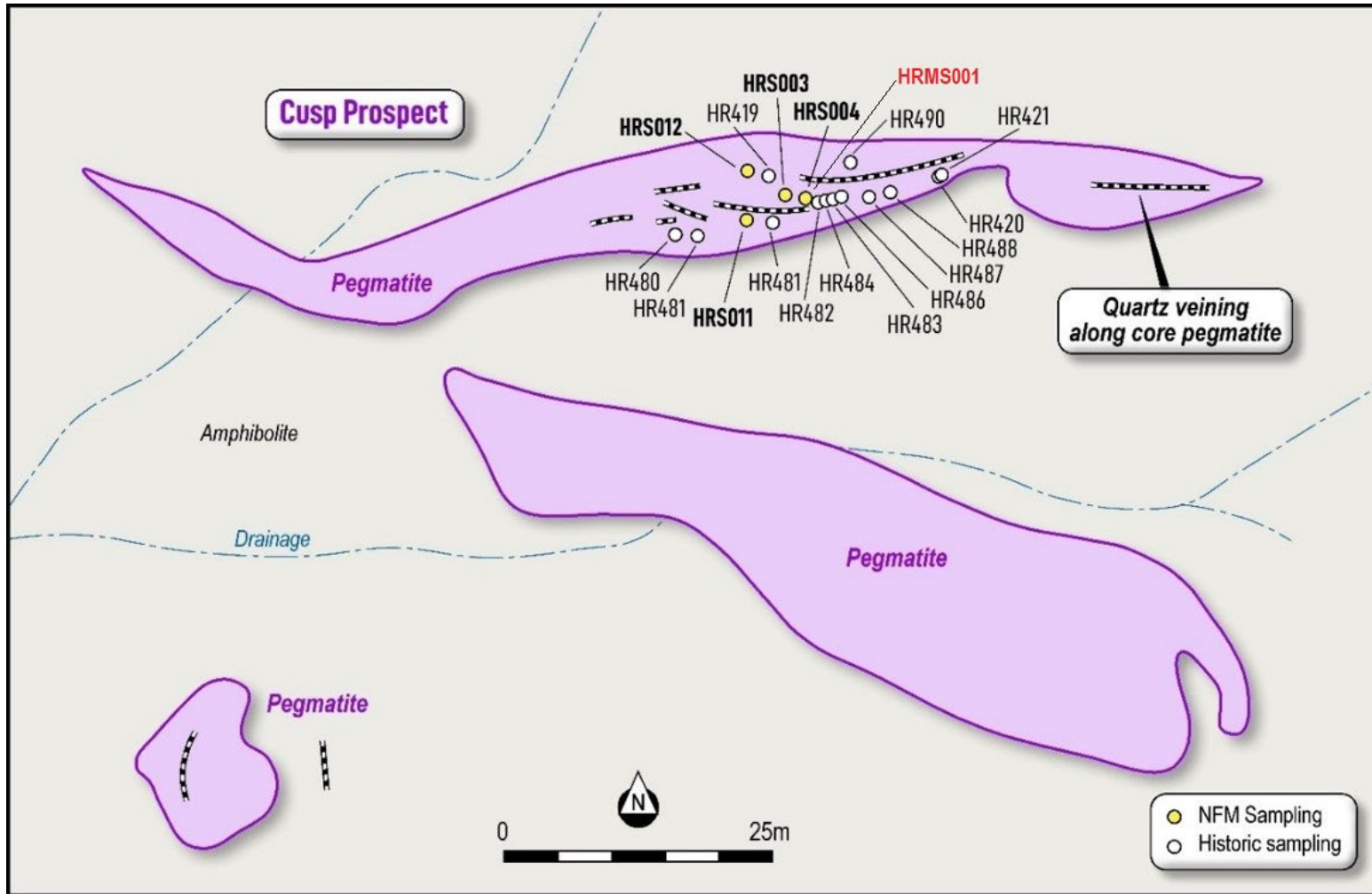
# APPENDIX A: BULK SAMPLE DETAILS

A 25kg bulk sample was collected from the Cusp Prospect for comprehensive testing. Sample details are listed in Figure A1-1 below and the location is shown on the plan as Figure A1-2 following:

**FIGURE A1-1: SAMPLE DESCRIPTIONS**

Sample No	East (GDA94z53)	North (GDA94z53)	Prospect	Samarskite Estimate Range%	Sample Type	Description	Date Collected
HRMS001	505696	7447485	Cusp	1-2%	Bulk Sample	Using a shovel and geological pick, a 25 kg ferruginous bulk sample was collected from surface to a depth of approximately 0.3 metres at the Cusp Prospect sample site (adjacent to HRS004). The sample comprised mineralised, siliceous quartz-rich pegmatite with plagioclase and minor micas, along with associated soil. Included were small fragments through to golf ball- and baseball-sized clusters of samarskite material. The samples have a high bulk density, are readily identifiable by their distinctive colour, and recorded RadEye radioactivity readings ranging from approximately 1 $\mu$ Sv/h to 70 $\mu$ Sv/h.	01/08/2025

FIGURE A1-2: NEW BULK SAMPLE LOCATION (CUSP PROSPECT)



Source : NFM Geology Team

HRMS001 Location: 505696E, 7447485N (GDA94 MGA Z53)

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

The following JORC Code (2012 Edition) Table 1 is primarily supplied to provide background for geological mapping, and collection of a bulk rock chip sample, conducted by New Frontier Minerals Limited geology contractors during August 2025.

Previous ASX releases have been made about mapping and rock chip sampling at the Harts Range Nb-U-REE Mineral Project.

### 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 25 kg bulk sample from the Cusp Prospect was collected using a shovel and geological pick. The sample was collected from surface to a foot deep containing mineralised pegmatite rock and soil, which included small fragments to golf ball and baseball sized clusters of samarskite material. The sample site was previously sampled (HRS004) and was recorded to have returned heavy rare earth mineralisation, with assays from earlier campaigns reporting grades up to 9.97% TREO (including 1.13% Dy<sub>2</sub>O<sub>3</sub>, 0.18% Tb<sub>4</sub>O<sub>7</sub>), 25.46% Nb<sub>2</sub>O<sub>5</sub> and 4.77% Ta<sub>2</sub>O<sub>5</sub> (Figure 2 &amp; 3). The samples have high bulk density and easily identifiable by colour. RadEye radioactivity readings ranging from ~1 µSv/h to 70µSv/h.</li> </ul>
<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>

<p><b>Drill sample recovery</b></p>	<ul style="list-style-type: none"> <li>• Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>• Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• Not Applicable – no exploration drilling results as none were drilled.</li> </ul>
<p><b>Logging</b></p>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>• The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>• Descriptions of the 25kg bulk sample, rock chip and soil samples are given in a table contained in Appendix A (Figures A1-1 through to A1-2) of this NFM ASX Announcement dated the 12<sup>th</sup> of August 2025.</li> </ul>
<p><b>Subsampling techniques and sample preparation</b></p>	<ul style="list-style-type: none"> <li>• If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>• If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>• For all sample types, the nature, quality, and appropriateness of the sample preparation technique.</li> <li>• Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>• 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.</li> <li>• Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>• All the 25kg bulk sample collected was presented for analyses and will be prepared at the independent laboratory Intertek Pty Ltd at Malaga, Perth WA.</li> <li>• The 25 kg sample was crushed and ground to P80 &lt;150 µm</li> </ul>
<p><b>Quality of assay data and laboratory tests</b></p>	<ul style="list-style-type: none"> <li>• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>• 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.</li> </ul>	<p>Analytical Methods are described in detail as follows:</p> <p><b>Au, Pt, Pd</b></p> <ul style="list-style-type: none"> <li>• The samples have been analysed by firing a 40g (approx.) portion of the sample. This is the classical fire assay process and will give total separation of Gold, Platinum, and Palladium in the sample. These have been determined by Inductively Coupled Plasma (ICP) Mass Spectrometry. The sample(s)</li> </ul>

- *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.*

have been digested with a mixture of acids including Hydrofluoric, Nitric, Hydrochloric and Perchloric Acids. This digest approaches a total digest for many elements however some refractory oxides are not completely attacked.

- The mineral Cassiterite is not efficiently attacked with this digest.
- If Barium occurs as the Sulphate mineral, then at high levels (more than 4000 ppm) it may re-precipitate after the digest giving seriously low results. Using this digest, some sulphur losses may occur if the samples contain high levels of sulphide.

**Cu, Zn, Co, Ni, Mn, P, Sc, V, Al, Ca, Na, K, S**

have been determined by Inductively Coupled Plasma (ICP) Optical Emission Spectrometry.

**As, Ag, Ba, Be, Bi, Cd, Ga, Li, Mo, Pb, Sb, Sn, Sr, W, Y, La, Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu, Th, U, Se, In, Te, Cs, Re, Ti**

- have been determined by Inductively Coupled Plasma (ICP) Mass Spectrometry. The samples have been fused with Sodium Peroxide and subsequently the melt has been dissolved in dilute Hydrochloric acid for analysis. Because of the high furnace temperatures, volatile elements are lost. This procedure is particularly efficient for determination of Major element composition (Including Silica) in the samples or for the determination of refractory mineral species.

**B, Cr, Si, Fe, Mg, Ti**

- have been determined by Inductively Coupled Plasma (ICP) Optical Emission Spectrometry.

**Ge, Ta, Hf, Zr, Nb, Rb**

- have been determined by Inductively Coupled Plasma (ICP) Mass Spectrometry.

		<ul style="list-style-type: none"> <li>The assay results are expected to be in line with previous rock chip and drilling results obtained since October 2024 at Harts Range.</li> </ul> <p>FJH Sample Analysis</p> <ul style="list-style-type: none"> <li>The metals in the ore sample were converted to a chloride form through the proprietary Flash Joule Heating-chlorination process.</li> <li>The flash joule heating (FJH) test procedure involved first mixing the ore sample with proprietary additives and then flashing (high temperature electrical-based heating) the mixed sample for a defined period under chlorine gas in the FJH reaction system.</li> <li>The concentrations of the residual solids and rare earth elements (REE) and impurity elements were collected and determined using inductively coupled plasma mass spectrometry ICP optical emission spectrometry (ICPOES) at Benchmark Lab in Houston.</li> <li>The FJH test work is preliminary and was conducted on bench-scale samples; results should be considered indicative only until pilot-scale test work with controlled subsampling and full QAQC insertion is completed.</li> </ul>
<p><b>Verification of sampling and assaying</b></p>	<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>Independent Laboratory assaying by Intertek has confirmed, within acceptable limits, the occurrences of high-grade Nb, U, and REE from the initial in field XRF readings. Laboratory standards and duplicates were used in accordance with standard procedures for geochemical assaying as noted below.</li> <li>It has met the recommended insertion rates for the company QAQC controls (standards, blanks) with an overall insertion rate of 20%. However, no field duplicates were included in the three (3) batches and is recommended that 3% be included in future sampling programs. Summary of QAQC insertion rates.</li> </ul>

		<ul style="list-style-type: none"> <li>Both the company standards and blanks were verified for elements Nb, U and Dy and returned results within 2 standard deviations (SD). Field duplicates are not present in the batch therefore were not reviewed.</li> <li>Raw assays are received as both Elemental data (ppm and or percent) and Oxide data from Intertek laboratories.</li> </ul>
<p><b>Location of data points</b></p>	<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>	<ul style="list-style-type: none"> <li>The spatial location for the bulk sample and rock chip samples collected during the July and August 2025 fieldwork were collected by handheld GPS (-/+ 5m accuracy) [MGA94 Zone53]: The table of reported rock chip locations and descriptions are given in throughout the ASX release, in Appendix A, and in Figure A-1 (preceding this section).</li> </ul>
<p><b>Data spacing and distribution</b></p>	<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 (refer to Figure A1-1).</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</li> </ul>

		<p>the Irindina Gneiss. The pegmatite is semi-continuous for ~300m with a similar geological setting and has notably large green muscovite flakes present.</p> <ul style="list-style-type: none"> <li>• Paddington and Westminster Prospects are located approximately 200m and 450m west of the mineralised Bobs Prospect. These new prospects, along with the mineralised prospects Cusp and Bobs, are associated in proximity to an east-west trending structural corridor.</li> <li>• Old Trafford and Headingley Prospects are located approximately 620m west of the mineralised Bobs Prospect. These new prospects, along with the mineralised prospects Cusp and Bobs, are associated in proximity to an east-west trending structural corridor.</li> <li>• The Dune Prospect is another variant with high Niobium results but low in rare earths and uranium. Elevated radiometric 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” and granitic gneiss, which are geologically consistent with the pegmatites mapped at Bob’s and the Cusp Prospects.</li> <li>• The Dune 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>
<p><b>Orientation of data in relation to geological structure</b></p>	<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 (very generally east west tends, secondary structures, surrounding spoil heaps, and</li> </ul>

		<p>across the four (4) anomalous areas originally identified in the planning stage.</p> <ul style="list-style-type: none"> <li>• However, no modern systematic exploration has been conducted, nor any of the potentially mineralised prospects have ever been drilled.</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 historical fieldwork were securely locked within the vehicle on site until delivered to Alice Springs by the field personnel for despatch to the laboratory (InterTech in 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>• The sampling techniques and the data generated from the laboratory assay results have been peer reviewed by consultant geologists independent of New Frontier Minerals Limited (Audax Resources and ROM Resources) familiar with the overall Harts Range Project and deemed to be acceptable.</li> <li>• No other 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>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Harts Range Project lies in the south-east of the Northern Territory, roughly 120 kilometres north-east 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.</li> <li>A check on the tenures status was completed in the NTGS system 'Strike' on the 10 of October 2024, to validate the currentness of the exploration areas. All are current.</li> <li>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> <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> </ul>

personal use only

		<ul style="list-style-type: none"> <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>
<p><b>Geology</b></p>	<ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting, and style of mineralisation.</i></li> </ul>	<p><b>Regional Geology</b></p> <ul style="list-style-type: none"> <li>• The Harts Range Niobium, Uranium-Heavy Rare Earth Project lies north-west of the Entia Dome (Figure AB-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> <li>• Magnetotellurics data interpreted by a team consisting of Adelaide University and NTGS geologists (Selway et al, 2006) suggests the Entia Dome system is a deep-crustal feature that can be shown extending to the mantle.</li> <li>• The below maps (Figures AB-2 and AB-3) show a traverse through the Arunta from north to south and skirted around the dome to the east and highlighting a major subduction zone to the north of the dome. The latter diagram shows the distribution of regional stratigraphic units.</li> </ul>

FIGURES AB-1: REGIONAL STRUCTURE PLAN

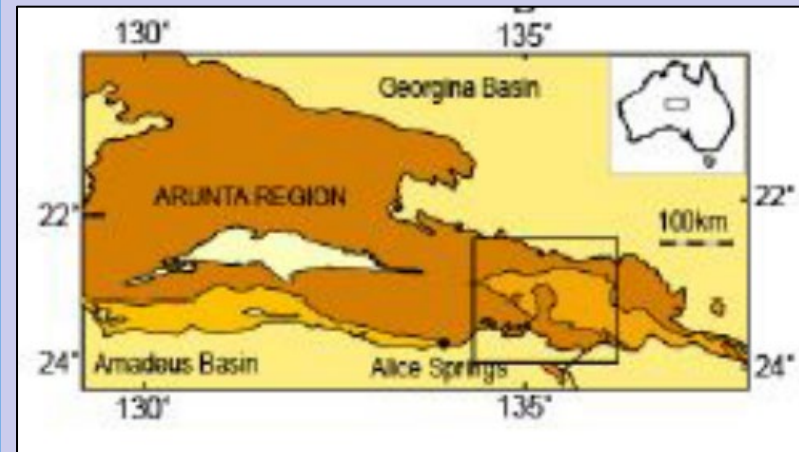
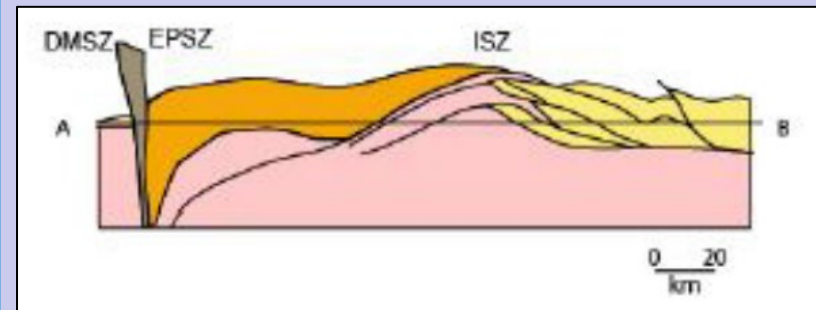
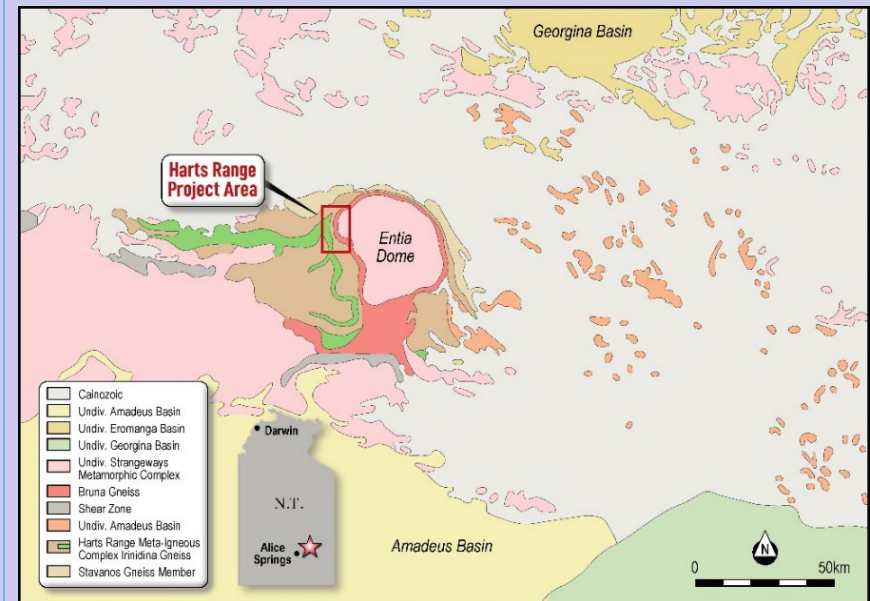


FIGURE AB-2: WEST TO EAST REGIONAL CRUSTAL CROSS-SECTION



**FIGURE AB-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 sub-crop amongst scree.

		<ul style="list-style-type: none"> <li>○ 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.</li> <li>○ Ultramafic Rocks: slightly weathered medium grained, greenish/brownish amphibole/olivine-dominated meta-ultramafic.</li> <li>○ Amphibolite: grey fine-grained hornblende -quartz rock; (approx. adjacent rough channel samples: HR461 (1m) above HR462 (3m) above HR463 (3m) above HR464 (1m)).</li> <li>○ 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.</li> </ul>
<p><b>Drillhole Information</b></p>	<ul style="list-style-type: none"> <li>• <i>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: o easting and northing of the drill hole collar</i> <ul style="list-style-type: none"> <li>○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li>○ <i>dip and azimuth of the hole o down hole length and interception depth o hole length.</i></li> </ul> </li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Not Applicable – no exploration drilling results presented.</li> </ul>
<p><b>Data aggregation methods</b></p>	<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>	<ul style="list-style-type: none"> <li>• Independent Laboratory Assay results for the one (1) bulk rock chip samples from the Cusp Prospect were averaged if more than one reading or determination was given. There was no cutting of high-grade REE results as they are directly relatable to high grade mineralisation styles readily visible in the relevant samples.</li> <li>• There were no cut-off grades factored into any reporting of the laboratory assay results.</li> </ul>

	<ul style="list-style-type: none"> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul style="list-style-type: none"> <li>The bulk sample was taken at an area of interest from observed mineralisation along the line of lode of the mineralised pegmatite dyke at Cusp. The 25kg rock chip was collected from rock faces and/or outcrops</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Appropriate diagrams are presented in the body and the Appendices of the current ASX Release. Where scales are absent from the diagram, grids have been included and clearly labelled to act as a scale for distance.</li> <li>Maps and Plans presented in the current ASX Release are in GDA94 MGA Zone 53, Eastings (mN), and Northing (mN), unless clearly labelled otherwise.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Bulk sample was taken at areas of interest from observed mineralisation along the line of lode of the mineralised pegmatite dyke, secondary structures, surrounding spoil heaps, to check the validity of the defined six (6) anomalous map areas.</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 is covered by regional airborne government and private radiometric, gravity, magnetic, and hyperspectral surveys. Recently New Frontier Minerals completed a detailed airborne radiometric survey. Unfortunately, other than the 2006 radiometric ground survey, no other ground surveys have been undertaken.</li> <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</li> </ul>

		minerals (gemstones and vermiculite) by the various owners of the leases, since 2006.
<b>Further work</b>	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li>• <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<p>A future exploration strategy should encompass the following steps in subsequent field programs:</p> <ul style="list-style-type: none"> <li>○ Close-spaced ground radiometric geophysical surveys.</li> <li>○ Detailed mapping and rock chip sampling across prospects.</li> <li>○ Mineral characterisation studies and petrological analysis.</li> <li>○ Target generation and prioritisation; and</li> <li>○ Exploratory RC drill-testing.</li> </ul>

## TREO Calculations

New Frontier Minerals have used the following REEs for the below TREO definitions and ratio calculations:

1. TREO = Ce + Dy + Er + Eu + Gd + Ho + La + Lu + Nd + Pr + Sm + Tb = Tm + Y + Yb (as oxides)
2. HREO = Sm + Eu + Gd + Tb + Dy + Ho + Er + Tm + Yb + Lu + Y + (as oxides)
3. HREO/TREO (%) = (Sum of HREOs / Sum of TREOs) × 100

