



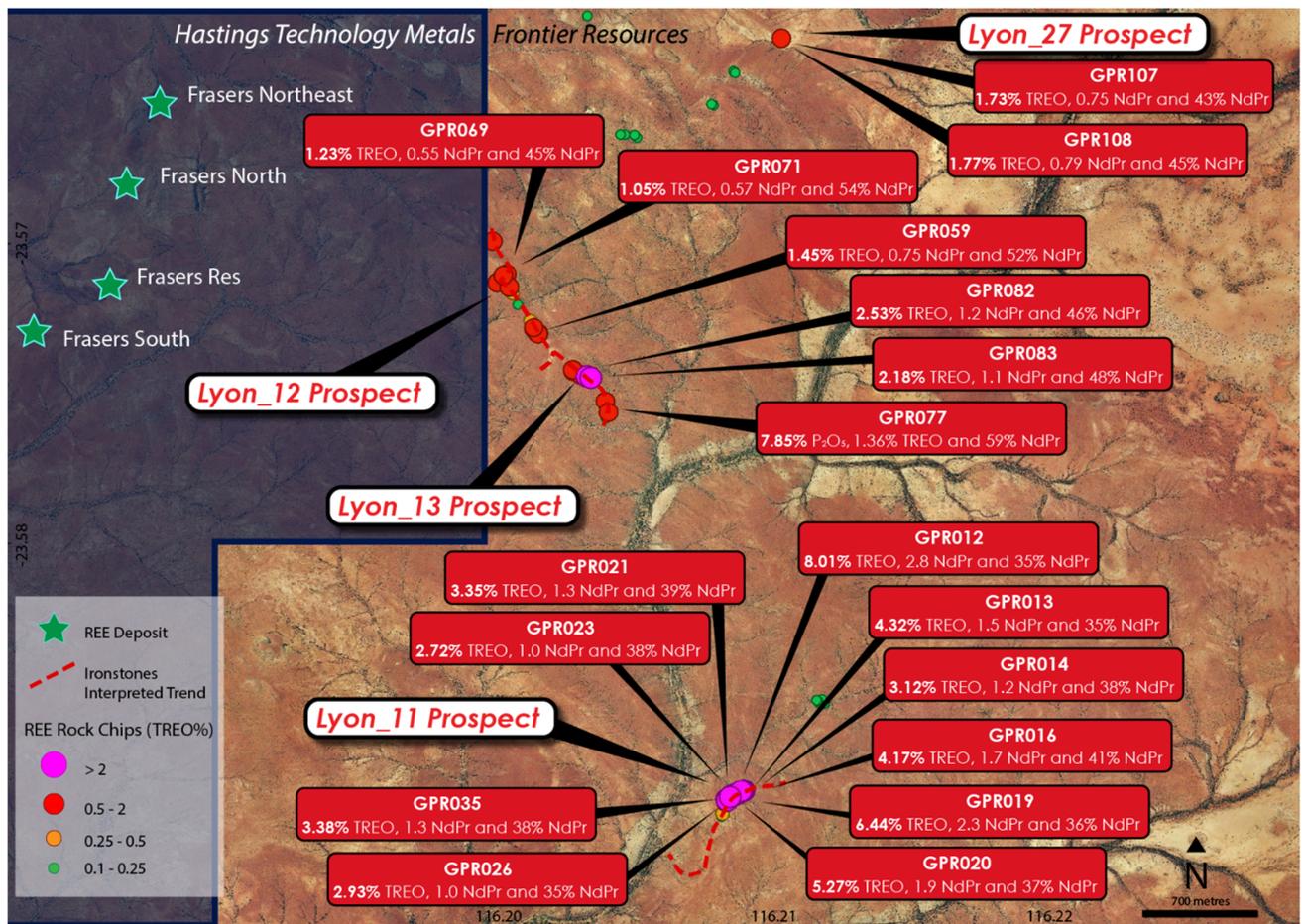
ADDRESS  
Level 8, 99 St Georges Terrace  
Perth WA 6000  
PHONE  
+61 (08) 9486 4036

ABN  
96 095 684 389  
WEBSITE  
[www.frontierresources.net.au](http://www.frontierresources.net.au)

31 March 2022

## **Drilling Contract Awarded, Rig Secured Gascoyne Rare Earths Project**

- **Frontier has executed a drilling contract for an initial 5,000m of Reverse Circulation (RC) drilling.**
- **Drill program is expected to consist of up to 65 drill holes to an average depth of 75m.**
- **Mobilisation to site is expected in late April - May of Q2, 2022, pending heritage surveys and standard drilling permits through Department of Mines, Safety and Industry Regulation (DMIRS)**
- **Drilling to follow up exceptional high-grade rare-earth results from rock chips across multiple targets at the Gascoyne Rare Earths Project, including (refer ASX release 21 March 2022):**
  - **8.01% TREO (2.8% Nd<sub>2</sub>O<sub>3</sub>+Pr<sub>6</sub>O<sub>11</sub>) Lyon\_11 (GPR012)**
  - **6.44% TREO (2.3% Nd<sub>2</sub>O<sub>3</sub>+Pr<sub>6</sub>O<sub>11</sub>) Lyon\_11 (GPR019)**
  - **5.27% TREO (1.9% Nd<sub>2</sub>O<sub>3</sub>+Pr<sub>6</sub>O<sub>11</sub>) Lyon\_11 (GPR020)**
  - **4.32% TREO (1.53% Nd<sub>2</sub>O<sub>3</sub>+Pr<sub>6</sub>O<sub>11</sub>) Lyon\_11 (GPR013)**
  - **4.17% TREO (1.69% Nd<sub>2</sub>O<sub>3</sub>+Pr<sub>6</sub>O<sub>11</sub>) Lyon\_11 (GPR013)**
  - **3.38% TREO (1.3% Nd<sub>2</sub>O<sub>3</sub>+Pr<sub>6</sub>O<sub>11</sub>) Lyon\_11 (GPR035)**
  - **2.53% TREO (1.15% Nd<sub>2</sub>O<sub>3</sub>+Pr<sub>6</sub>O<sub>11</sub>) Lyon\_13 (GPR082)**
  - **1.23% TREO (0.55% Nd<sub>2</sub>O<sub>3</sub>+Pr<sub>6</sub>O<sub>11</sub>) Lyon\_12 (GPR069)**
  - **1.77% TREO (0.79% Nd<sub>2</sub>O<sub>3</sub>+Pr<sub>6</sub>O<sub>11</sub>) Lyon\_27 (GPR108)**
- **Circular carbonatite bodies interpreted from magnetics imagery to be investigated, including Lyons\_23, associated with magnetic fenite alteration, similar to the Mangaroon Carbonatites identified by neighbouring Dreadnought Resources.**



**Figure 1. Map showing the location of high-grade rock chip samples at the Lyons Project and the location of mapped outcropping ironstones and their interpreted extensions under shallow cover.**

Mr Brian Thomas, Frontier Technical Director commented “Securing a drilling rig for our upcoming maiden drill program provides greater certainty that we can begin work as soon as the necessary approvals and permits are in place this quarter. The Lyons and Edmunds Projects are still very underexplored and with our rapidly evolving geological understanding I'm looking forward to a busy exploration schedule throughout 2022.”

**Frontier Resources Ltd** (ASX: FNT) (**Frontier** or the **Company**) is pleased to announce it has executed a drilling contract to undertake maiden drill program at the Gascoyne Rare Earths Project in Western Australia (**Gascoyne Project**). The drill program will target high grade rare earth mineralisation discovered at outcropping ironstones A systematic field sampling program was recently completed to investigate high priority targets located within the Gifford Creek Carbonatite Complex, host to Hastings Technology Metals(ASX:HAS) world-class Yangibana Mineral Resource<sup>1</sup> of 27.42Mt @ 0.97% TREO with 0.33% Nd<sub>2</sub>O<sub>3</sub>+Pr<sub>6</sub>O<sub>11</sub>, and Dreadnought Resources multiple discoveries<sup>2</sup>.

Initial metallurgical test work will commence shortly to determine the amenability of the ironstones to produce a commercially treatable monazite concentrate. Heritage surveys are in planning and applications for the necessary permits have been submitted to allow for a maiden drill program in the later half of Q2, 2022. Drilling will be critical to ascertaining the resource potential of the mineralised ironstones, determining the width and grade plus continuity at depth and along strike of the interpreted ironstone trends.

Further rock chip sampling and drilling programs are planned to investigate additional targets not yet followed up, including thorium geophysical anomalies throughout the Lyons Project and the high priority structural target along the major Bald Hill lineament which transects the Edmund Project

(Figure 2 below). Potential remains for further discoveries of ironstones and carbonatites where no historical REE exploration has occurred.

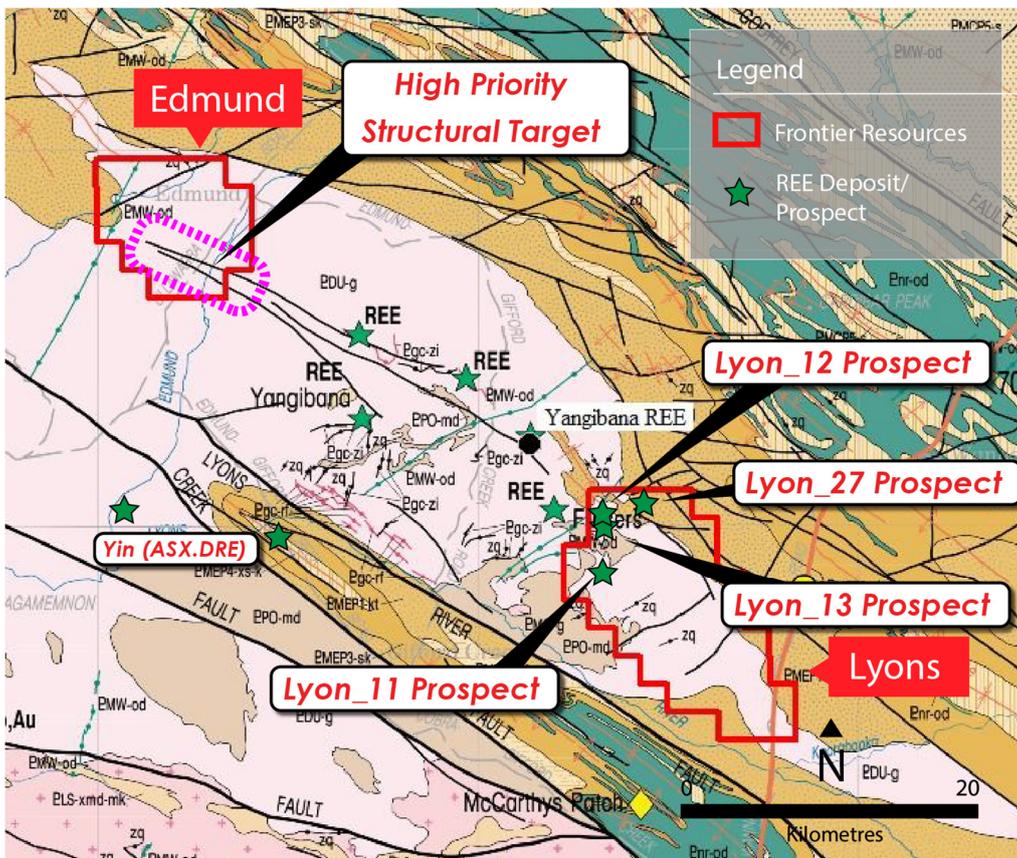


Figure 2. Location of Lyons and Edmund Projects in the Gascoyne, Western Australia, (geology overlay), highlighting the prospective Durlacher Suite of the Gifford Creek Carbonatite Complex, in pink underlying the project areas

### Gascoyne Rare Earth Element Project – Discussion

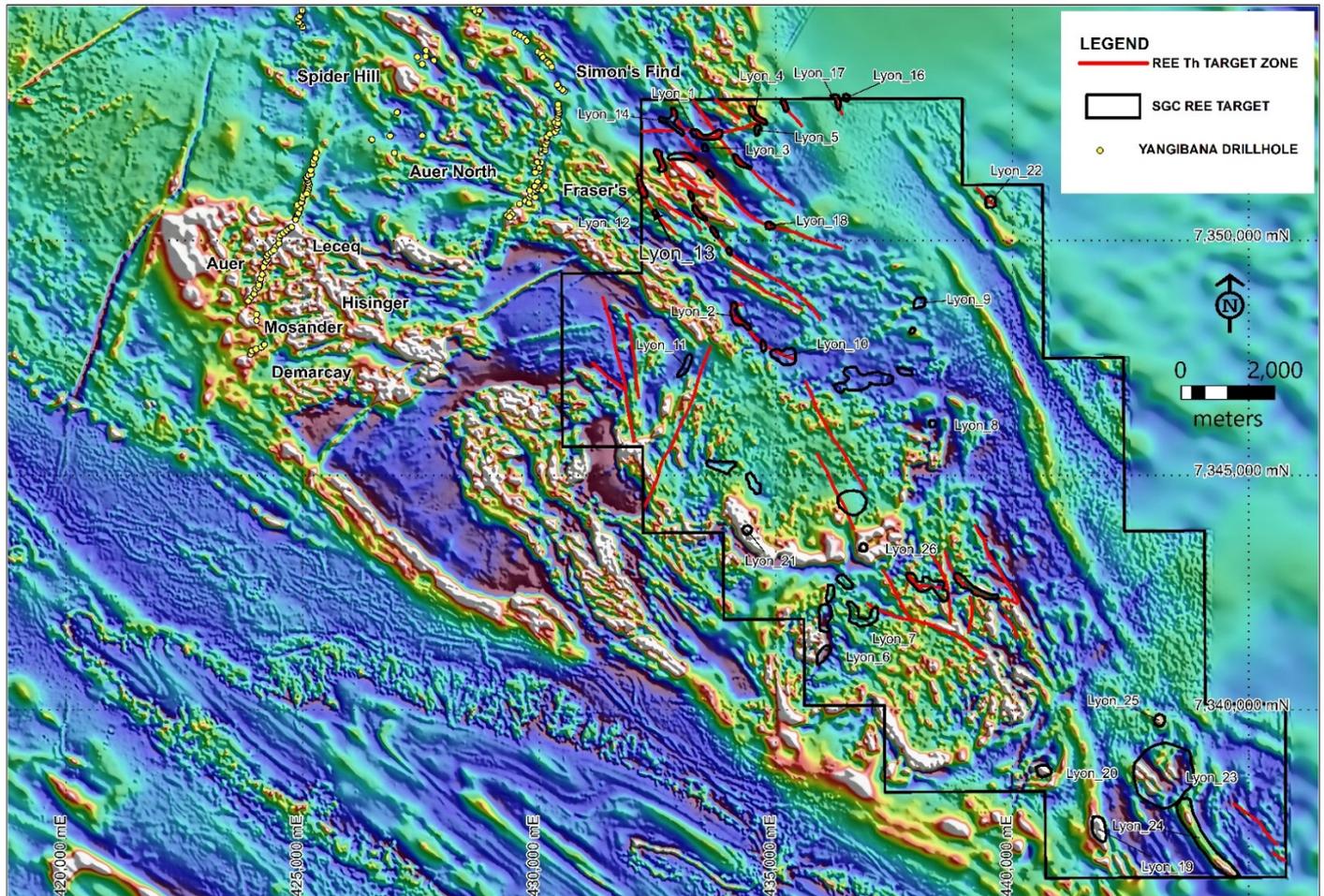
In a review of an extensive merged airborne geophysical dataset, Frontier has identified over 30 interpreted ironstone targets traced up to 4 kilometres in length within outcrop, most of which are associated with targets identified by independent consultants Southern Geoscience (refer to ASX Announcement dated 11 February 2022). The primary targets are regionally extensive ironstone dykes that carry anomalous REE. Hastings have identified ferrocarnatites and ironstones traceable for up to 25 kilometres at their Yangibana REE deposits (including the Auer, Auer North and Simon’s Find prospects), which show a close association with the major Bald Hill lineament that is interpreted to transect through both the Lyons and Edmund Project areas.

These linear prospects (Figure 3) correlate to anomalous signatures in the radiometric Thorium geophysical imagery and magnetic low lineaments in the reduced to pole, first vertical derivative (RTPVD1) filtered magnetics imagery. Ironstone dykes at Yangibana are associated with ferrocarnatite intrusions and surrounded by narrow haloes of magnetic fenitic alteration. Similar magnetic high lineaments that may be associated with fenitic alteration are identified adjacent to and along the linear targets identified by Frontier.

Outcropping geology has been interpreted from broadscale anomalous radiometric (K and Th) imagery. These are areas of higher priority due to accessibility for rock chip sampling and geological mapping.

Second priority sub-surface magnetic lineament lows beneath alluvial plains are planned to be followed-up with soil sampling and drilling.

The project also has potential for REE mineralisation associated with circular carbonatite bodies interpreted from magnetics imagery, including Lyons\_23, which potentially show associated magnetic fenite alteration, similar to the Mangaroon Carbonatites identified by neighbouring Dreadnought Resources.



**Figure 3. REE Thorium trends highlighted in red, associated with both anomalous signatures in the radiometric Th imagery and magnetic low lineaments in the RTPVD1 filtered magnetics imagery**

This announcement has been authorised for release by the Directors of the Company.

For additional information please visit our website at [www.frontierresources.net.au](http://www.frontierresources.net.au)

## FRONTIER RESOURCES LTD

The information referred to in this announcement relates to the following sources:

<sup>1</sup> ASX.HAS: 5 May 2021 "Yangibana Project updated Measured and Indicated Resource tonnes up by 54%" [b07ebf9d-03c.pdf \(investi.com.au\)](https://www.investor.com.au/news/yangibana-project-updated-measured-and-indicated-resource-tonnes-up-by-54%/). The HAS Resource estimate comprises 4.9Mt @1.01% TREO in the Measured category, 16.24Mt @0.95% TREO Indicated and 6.27Mt @0.99% TREO Inferred.

<sup>2</sup> ASX.DRE: 1 Feb 2022 "Rare Earths, Phosphate, Niobium & Zircon Results From Mangaroon (DRE 100%)" [a531f354-fd1.pdf \(investi.com.au\)](https://www.investor.com.au/news/rare-earths-phosphate-niobium-zircon-results-from-mangaroon-dre-100%/).

## **Competent Person's Statement**

*The information in this document that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr. Thomas Langley who is a member of the Australian Institute of Geoscientists (MAIG) and a member of the Australasian Institute of Mining and Metallurgy (MAusIMM). Mr. Thomas Langley is a consultant of Frontier Resources Limited, and is a shareholder, however Mr. Thomas Langley believes this shareholding does not create a conflict of interest, and Mr. Langley has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr. Langley consents to the inclusion in this presentation of the matters based on his information in the form and context in which it appears.*

*The Company confirms that it is not aware of any new information or data that materially affects the information in the original reports, and that the format and context in which the Competent Person's findings are presented have not been materially modified from the original reports.*