



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

ASX Limited
Market Announcements Platform

1 November 2021

Rare Earth and High Purity Alumina Projects Acquisition

Highlights:

- **Material acquisition of Rare Earth Elements (REE's) and High Purity Alumina (HPA) Projects with a focus on meeting the growing demand associated with the 'electrification' of world economies**
- **Gascoyne Rare Earth Elements Project exploring for light rare-earth oxide's of Neodymium (Nd_2O_3) and Praseodymium (Pr_6O_{11}) critical to the production of permanent magnets with demand set to increase 5x by 2030¹**
- **Large land position with very limited historical exploration covering 230km² of prospective Proterozoic Durlacher Supersuite lithology, host to the adjacent world-class Yangibana Deposit 27.42Mt @ 0.97% TREO²**
- **Gascoyne Projects staked prior to regional land rush and recent discoveries by Dreadnought Resources of 12 high-grade REE prospects 15km southwest of Yangibana³**
- **A detailed airborne magnetic-radiometric survey of 5,189 line kilometres will be flown over the entire tenement area, due to commence early November 2021**
- **Favourable structures identified to intersect project area, include the major Bald Hill Lineament which has a key influence on REE mineralisation at Yangibana**
- **Morrison Government established \$2 billion Critical Minerals Facility recently, demonstrating an extremely supportive Federal Government for Australian critical minerals projects to help secure the vital supplies of resources needed to drive the new energy economy⁴**
- **Koolya High Purity Alumina (HPA) Project covers 240km² prospective for bright white kaolin and High Purity Alumina (HPA) located 460km east of Perth**
- **Kaolin market is growing with High Purity Alumina investment in EV and battery market for ceramic coated separators driving global demand, with the HPA market forecast to be US\$4.49Bn by 2022⁵**
- **Cash at bank, post capital raising, of \$5.2M to underpin future work programs**
- **Recently appointed Non-Executive Director Mr Brian Thomas, and Technical Consultant Mr Thomas Langley will help steer the next phase of the Company's growth**

Frontier Resources Ltd (ASX: FNT) (**Frontier** or the **Company**) is pleased to announce that it has entered into a conditional agreement to acquire all of the shares in Dalkeith Capital Pty Ltd (**Dalkeith**) which holds two exploration licence applications in the Gascoyne Region of Western Australia that are considered to be prospective for REE's (**Gascoyne Project**), two exploration licence applications prospective for bright white kaolin and High Purity Alumina (HPA) located 460km east of Perth (**Koolya Project**) and one exploration licence application prospective for gold 50km east of Kalgoorlie (**Kalgoorlie Project**).

Chairman Alec Pismiris commented "The acquisition of Dalkeith complements the recent acquisition of the Murraydium REE Project and reinforces the Company's vision to address the decarbonisation and electrification of the global economy by exploring for minerals critical in the production of permanent magnets and battery coatings essential to electric vehicles and renewable energies such as wind turbines."

Mr Brian Thomas, newly appointed Non-Executive Director commented "I am very excited to have recently joined the board of Frontier. The acquisition of Dalkeith Capital represents two standout projects which I believe have the potential to be company makers in their own right. I look forward to progressing the Company's existing projects and the growing REE portfolio, exploring for critical metals that can help the world reach targets of being net zero carbon by 2050."

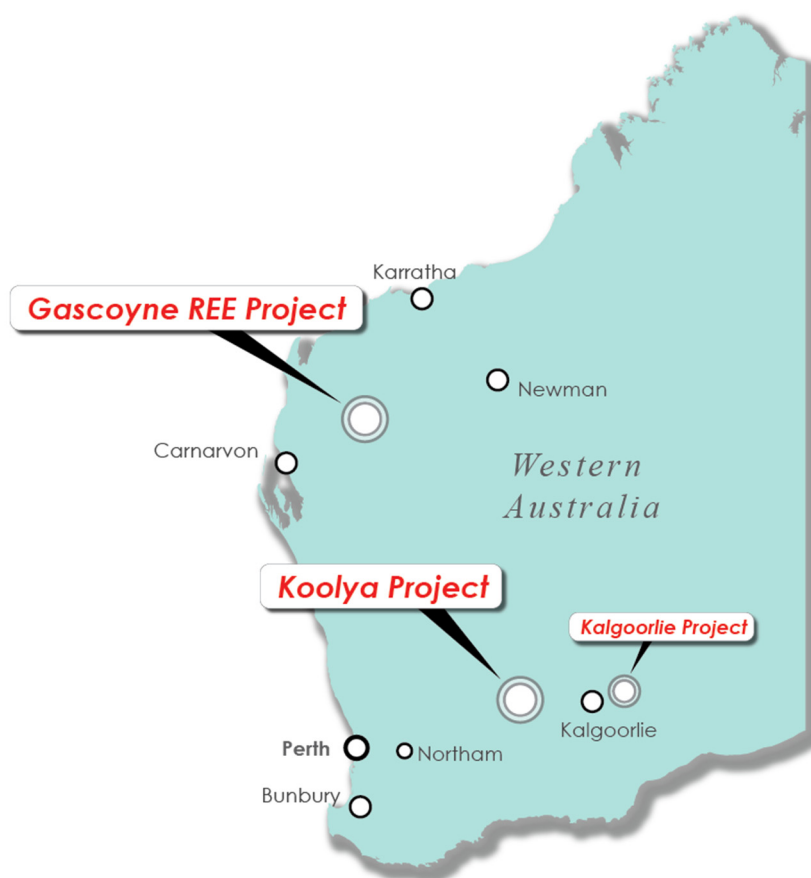


Figure 1. Location Map of the Gascoyne and Koolya Projects in Western Australia.

Gascoyne Rare Earth Element Project

The Gascoyne REE Project adjoins the world-class Yangibana Deposit (ASX.HAS ~A\$460 million market capitalisation) in the Gascoyne Region of Western Australia, set to be the next REE producer outside of China by 2023. The project area is also proximal to recent discoveries made by Dreadnought Resources at their Mangaroon Project located ~15kms southwest of the Yangibana REE Resource³ (ASX.DRE ~A\$104 million market capitalisation).

The REE-bearing Yangibana ironstones within the Durlacher Supersuite lithology were first targeted by prospectors in 1972 as base metal bearing gossans however, the REE potential of the ironstones wasn't assessed until 1985 and remained underexplored until Hastings Technology Metals (ASX.HAS) acquired the project in 2011. Hastings has since delineated a world-class JORC 2012 Mineral Resource² of 27.42Mt @ 0.97% TREO with 0.33% Nd₂O₃+Pr₆O₁₁ and a ratio of 52% Nd Pr:TREO making it one of the highest value REE projects for ore value per kg.

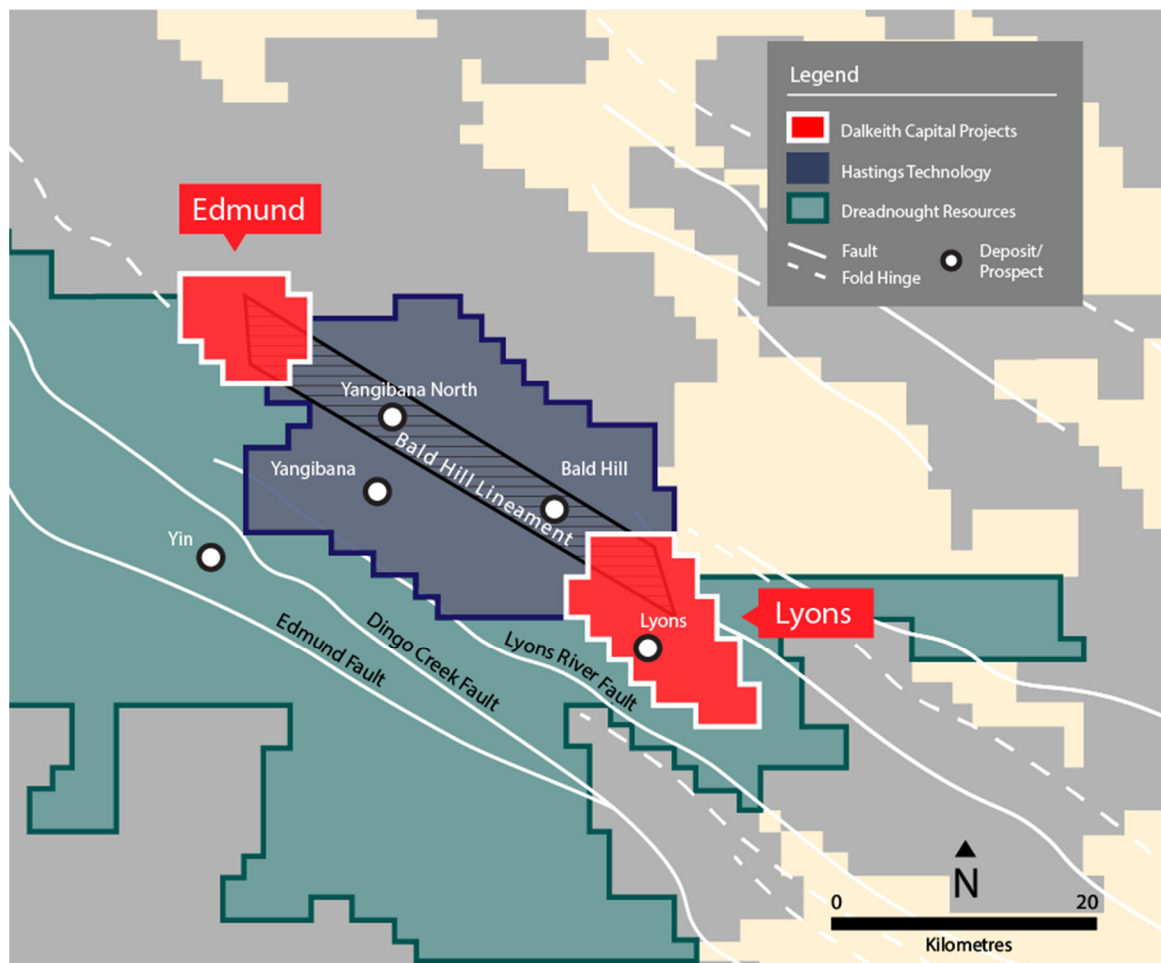


Figure 2. Location Map of the Edmund and Lyons tenements which make up the Gascoyne Project in Western Australia.

Despite the region's prospectivity for REE's, very limited exploration has been undertaken at the Gascoyne Project, in part potentially due to shallow alluvial cover which has led to the area being overlooked historically however, the southeastern Lyons tenement E09/2515 has small areas of outcrop, where the historic copper prospect Tabletop Well⁶ occurs.

With the use of modern exploration techniques and a renewed focus on REE's there is an exciting opportunity for the discovery of economic REE mineralisation. A detailed airborne magnetic-radiometric survey consisting of 5,189 line kilometres will be flown over the entire tenement area, due to commence early November 2021. The data gathered from this survey will assist with target definition within the prospective Durlacher Supersuite across the entire project area.

Access into the project area is very good with a combination of well-maintained gazetted and station roads located on Edmund and Wanna Pastoral Leases which will greatly assist exploration work programs. A field crew is planned to mobilise to site immediately for reconnaissance geological mapping and rock-chip sampling.

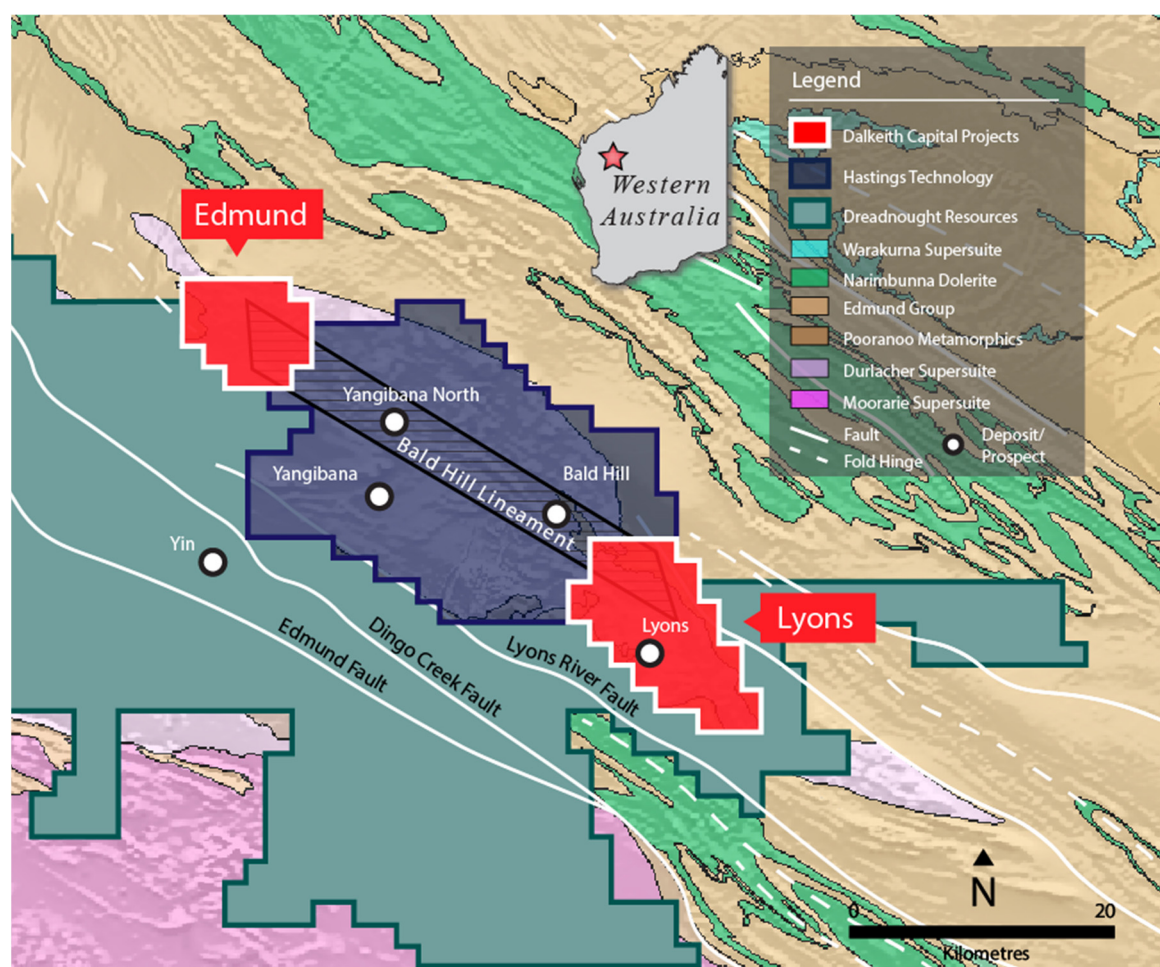


Figure 3. Geology and Tenement Map of the Gascoyne and Koolya Projects in Western Australia.

Koolya High Purity Alumina Project

The Koolya High Purity Alumina (HPA) Project covers 240km² prospective for bright white kaolin and High Purity Alumina (HPA) located 460km east of Perth. The region is a proven high quality kaolin producing region with Tellus Holdings Sandy Ridge kaolin mine 30km away to the northeast and Kula Gold's (ASX.KGD) recent discovery 80km south⁷.

The Sandy Ridge open pit mine is very high-grade with an ISO Brightness of 84-86% (Optical Unfired), up to 36m thick and an initial 25 year mine life⁸.

Kaolin is a platy white clay derived from the mineral Kaolinite formed by hydrothermal weathering of igneous rock such as granite. A common mineral however, rarely occurs in large high-grade and low impurity deposits. Kaolin deposits with low impurities are an optimal feedstock for High Purity Alumina (HPA) production via the direct synthesis of HPA 4N and 5N from kaolin ore.

The market for HPA is witnessing dramatic consumer driven growth, with the HPA market forecast to be US\$4.49Bn by 2022⁴. HPA growth has been invigorated in response to global investment in new applications and technologies such as electric vehicles (EV), static energy storage sector and LED lighting have created increased demand and market opportunities.

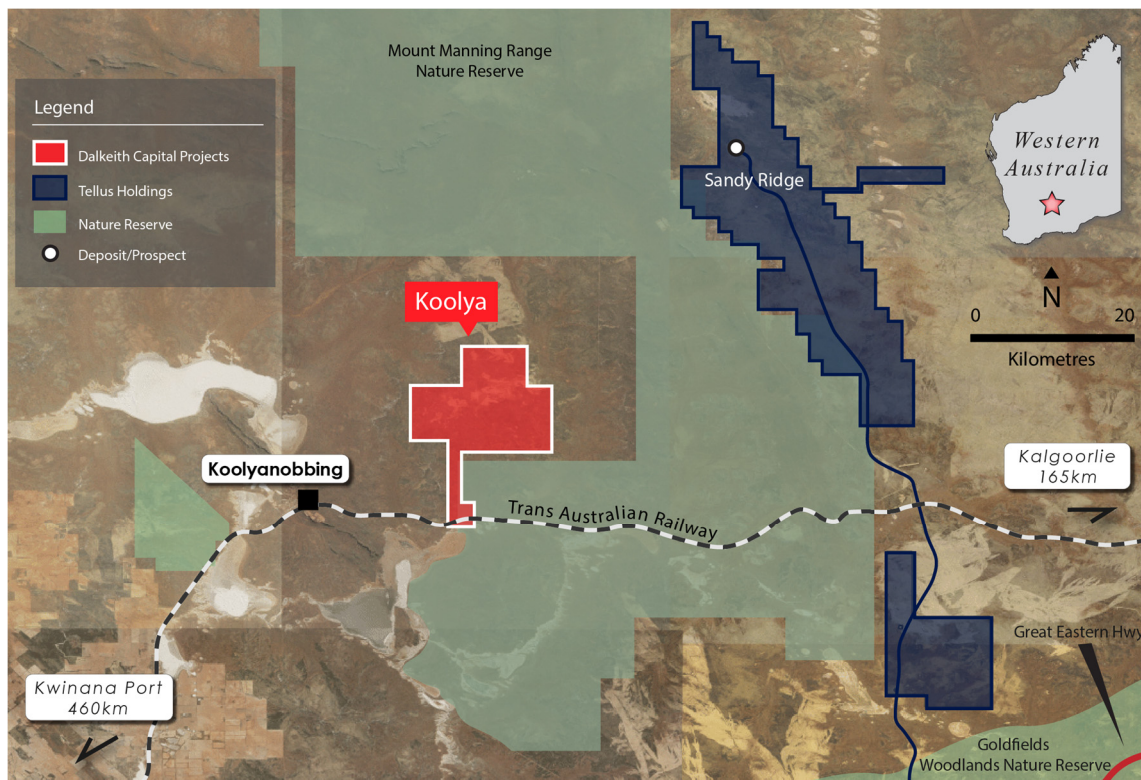


Figure 4. Location Map of the Gascoyne and Koolya Projects in Western Australia.

Koolya is a drill ready project with reconnaissance drilling to be undertaken immediately on tenement grant to investigate the depth, thickness, ISO brightness, mineralogy, and alumina content over the project area. The tenure is highly supportive of a large-scale development, with no competing land ownership of Pastoral Lease or freehold farmland minimising barriers and costs of development compared to other ASX-listed projects. In the event of a potential development of a mine, there is excellent infrastructure with the Trans Australian Railway adjoining the project, allowing for increased economies of scale via bulk transport of up to 5,000t per train movement.

SEM imaging and metallurgy studies will be completed on drill samples to confirm the qualitative nature of alumina content and Halloysite, if present.

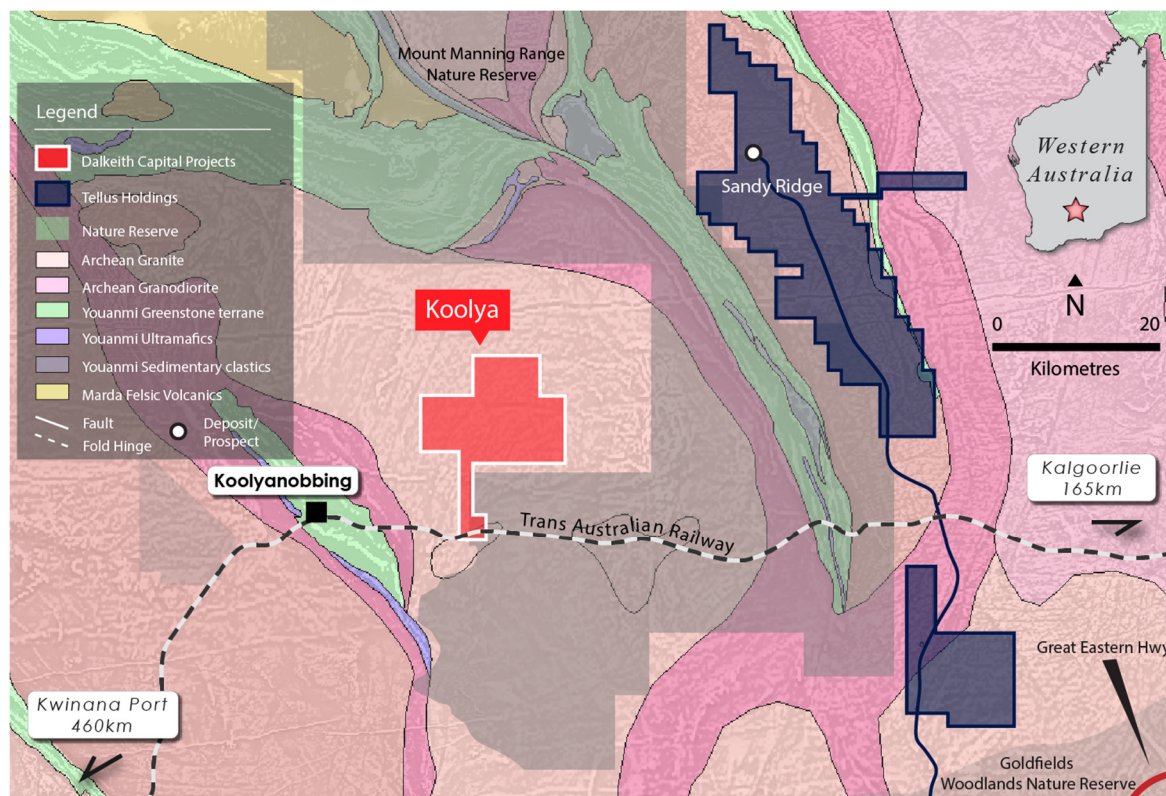


Figure 5. Location Map of the Gascoyne and Koolya Projects in Western Australia.

Kalgoorlie Project

The Kalgoorlie Project consists of one exploration tenement application E 27/648, which is located 50km east of Kalgoorlie, 5km southwest of the Jubilee Mining Centre and 6km northeast of the Queen Lapage Mining Centre. Initial exploration work will focus on the site of historic prospecting activity that covers the now surrendered lease P 27/2131. An extensive geochemical sampling program is planned to cover the entire tenement upon tenement grant, with Air Core drilling to follow pending positive results.

Tenement Details

Details of the tenements which cover the project area are set out in the table below. The tenements are 100% owned by Dalkeith, with tenement grant for the Gascoyne and Koolya Projects expected in the short term:

Tenement	Status	Application Submission Date	State	Registered Holder/Applicant
E 09/2515	Pending	23/03/2021	WA	Dalkeith Capital Pty Ltd
E 09/2516	Pending	23/03/2021	WA	Dalkeith Capital Pty Ltd
E 27/648	Pending	10/06/2021	WA	Dalkeith Capital Pty Ltd
E 77/2796	Pending	09/04/2021	WA	Dalkeith Capital Pty Ltd
E 77/2797	Pending	09/04/2021	WA	Dalkeith Capital Pty Ltd

Proposed exploration and study activities on the Gascoyne, Koolya and Kalgoorlie Projects

The Company proposes to undertake the following exploration and study activities within 12 months following the completion of the acquisition;

- Field crew to be mobilised to the Gascoyne Project site immediately for reconnaissance geological mapping, and extensive geochemistry and rock-chip sampling;
- A detailed airborne magnetic-radiometric survey of 5,189 line kilometres will be flown over the entire tenement area, due to commence early November 2021;
- Systematic drill programs of targets identified from the combination of the geophysical survey, geochemical and rock-chip sampling programs, to test the continuation at depth and along strike of any geochemical anomalism and/or geophysical targets;
- Reconnaissance wide-spaced Air Core drilling at the Koolya Project to investigate the depth, thickness, ISO brightness, mineralogy, and alumina content over the project area prior to further infill drilling programs with the aim of delineating a JORC compliant resource; and
- SEM imaging and metallurgy studies will be completed on drill samples from the Koolya Project to confirm the qualitative nature of alumina content and Halloysite, if present.
- Reconnaissance at the Kalgoorlie Project site of historic prospecting activity and an extensive geochemical sampling program is planned across the entire tenement, with Air Core drilling to follow pending positive results.

Proposed Acquisition Terms

The consideration (**Consideration**) payable for the Proposed Acquisition is:

- the issue of 75,000,000 fully paid ordinary shares at a deemed issue price of \$0.016 each to the shareholders of Dalkeith (**Vendors**);
- an aggregate of 37,500,000 Performance Shares in two (2) tranches to the Vendors, the conversion of which into ordinary shares is subject to and conditional upon the following events occurring (in broad terms), within the time limits set out below (each a **Milestone**):

- Class C Performance Shares – 18,750,000

Upon the Company announcing to ASX completion of a drilling program on a Tenement and at least one drill intercept grading a minimum of 800ppm TREO over at least 5 metres, as verified by an independent competent person under the JORC Code, within 5 years of the date of issue of the Class C Performance Shares.

- Class D Performance Shares – 18,750,000

Upon the Company announcing to ASX delineation of a JORC compliant resource on the Tenements of a minimum of 15 million tonnes grading a minimum of 800ppm TREO, as verified by an independent competent person under the JORC Code, within 5 years of the date of issue of the Class D Performance Shares; and

- The Company will also reimburse the Vendors for \$100,000 of expenditure incurred on the Projects to date.

The full terms and conditions of the Performance Shares will be set out in a shareholder meeting materials that will be sent to the Company's shareholders in the near future. The acquisition of Dalkeith remains subject to receipt of shareholder approval in general meeting.

Vendor Capital Raise

As part of the Proposed Transaction, the Company intends to seek shareholder approval raise approximately \$400,000 by way of placement to professional and sophisticated investors at \$0.016 per share and will be fully supported by the Vendors (**Capital Raising**). Funds raised will be used to fund exploration with respect to the underlying Tenement Applications, once granted and existing cash reserves of the Company will continue to be directed to the Tolukuma and Murraydium Projects.

Inyati Capital Pty Ltd has been engaged to assist with the Capital Raising and will be paid a fee of 6% of the amount raised.

Following completion of the Capital Raising, the Company's cash position will be approximately \$5.2 million.

Appointment of Technical Consultant

Mr Thomas Langley through his geological consulting company Gascoyne Geological Services will be appointed as a Technical Consultant of the Company, providing geological input assisting in the planning of exploration programs and logistics to enable the greatest potential for discovery of economic resources.

Mr Langley holds a BSc Geology from the University of Western Australia and a MSc Economic Geology from the University of Tasmania (CODES). He has worked for several resource companies including BHP Nickel West, Northern Star Resources and Creasy Group, with extensive experience in both exploration and mining geology, across multiple commodities and deposit types in the Proterozoic Albany - Fraser Range, Proterozoic Paterson Province and the Archean Yilgarn Craton.

Mr Langley is currently the COO of ASX listed Province Resources and a Member of following organisations; The Australasian Institute of Mining and Metallurgy (MAusIMM), the Australian Institute of Company Directors (MAICD) and the Australian Institute of Geoscientists (MAIG).

Incentive Options

In addition to the above Capital Raising, the Company has resolved to issue 33 million unlisted options; 22.5 million to Directors, subject to shareholder approval, and 10.5 million to employees and contractors. The options will be exercisable by payment of \$0.03 on or before 31 December 2024.

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

Alec Pismiris
Non-Executive Chairman

For additional information please visit our website at www.frontierresources.net.au

Frontier Resources Ltd Exploration Licence Information (Papua New Guinea)

Exploration Licence Number and Name	Ownership	sub-blocks	AREA (sq.km)*	Grant Date	Expiry Date
EL2531 - Tolukuma	100% Frontier Copper PNG Ltd	65	223.00	25-Feb-19	24-Feb-21
ELA2529 - Gazelle	100% Frontier Copper PNG Ltd	211	719.51	N/A	N/A
Total of Granted EL's		65	223.00		

*1 sub-block approx. 3.41 sq.km

NB: The PNG Mining Act-1992 stipulates that EL's are granted for a renewable 2 year term (subject to satisfying work and expenditure commitments) and the PNG Government maintains the right to purchase up to 30% project equity at "Sunk Cost" if/when a Mining Lease is granted.

Frontier Resources Ltd Exploration Licence Information (Australia)

Exploration Licence Number and Name	Ownership	AREA (sq.km)	Grant Date	Expiry Date
ELA2021/00058	100% Southern Rare Earths Pty Ltd	873.00		

NB: Tenement EL2531 currently subject to an extension renewal process.

FRONTIER RESOURCES LTD

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

¹ Adamas Intelligence September 2020

² ASX.HAS: 5 May 2021 "Yangibana Project updated Measured and Indicated Resource tonnes up by 54%" [b07ebf9d-03c.pdf \(investi.com.au\)](https://investi.com.au/b07ebf9d-03c.pdf)

³ ASX.DRE: 11 June 2021 "High-grade Rare Earth Element Ironstones outcropping at Mangaroon" [b564fa17-d73.pdf \(investi.com.au\)](https://investi.com.au/b564fa17-d73.pdf)

⁴ [Backing Australia's critical minerals sector | Prime Minister of Australia \(pm.gov.au\)](https://pm.gov.au/backing-australia-s-critical-minerals-sector)

⁵ Allied Market Research, World High Purity (HPA) – Opportunities and forecasts 2015-2022

⁶ Minedex Site; Tabletop Well (S0023828), 16km ENE of Gifford Creek Hmsd

⁷ [KulaGold | Kaolin discovered by Kula Gold at Southern Cross](https://www.kulagold.com.au/kaolin-discovered-by-kula-gold-at-southern-cross)

⁸ [Premium Kaolin for Ceramic Applications - Tellus Holdings](https://www.tellusholdings.com.au/premium-kaolin-for-ceramic-applications)