

# Developing the Globally Significant Cummins Range Rare Earths Project



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**Competent Person Statement:** The information in this presentation relating to the Mineral Resource estimate for the Cummins Range Rare Earths Project is extracted from the Company’s ASX announcement entitled ‘*Globally Significant Maiden Resource of 13Mt at 1.13% TREO*’ as updated by the ASX announcement entitled ‘*Update to Mineral Resource Estimate Announcement*’, both released on 15 October 2019. SG1 confirms that it is not aware of any new information or data that materially affects the information included in the previous announcements and that all material assumptions and technical parameters underpinning the Mineral Resource estimate in the previous announcements continue to apply and have not materially changed.



# Investment Highlights

**Strategically Located Asset:** RareX Limited (**REE** or **RareX**) is focused on developing its 100% owned Cummins Range Rare Earths Project located in Western Australia – a Tier 1 mining jurisdiction.

**Significant Maiden JORC 2012 Resource:** RareX has declared a significant rare earths Mineral Resource estimate with an Inferred JORC Resource of 13Mt at 1.13% TREO.

**Exploration Upside:** Resource remains open at depth and along strike with no drilling since 2011. Drilling program to commence Q1 2020.

**Superior Geology and Mineralogy:** Weathered carbonatite (same as Mt Weld) with mineral expression from surface.

**Low CAPEX Strategy:** Strategy to sell a monazite concentrate to existing downstream refiners as China transitions to a net importer of rare earth material.

## Cummins Range Project



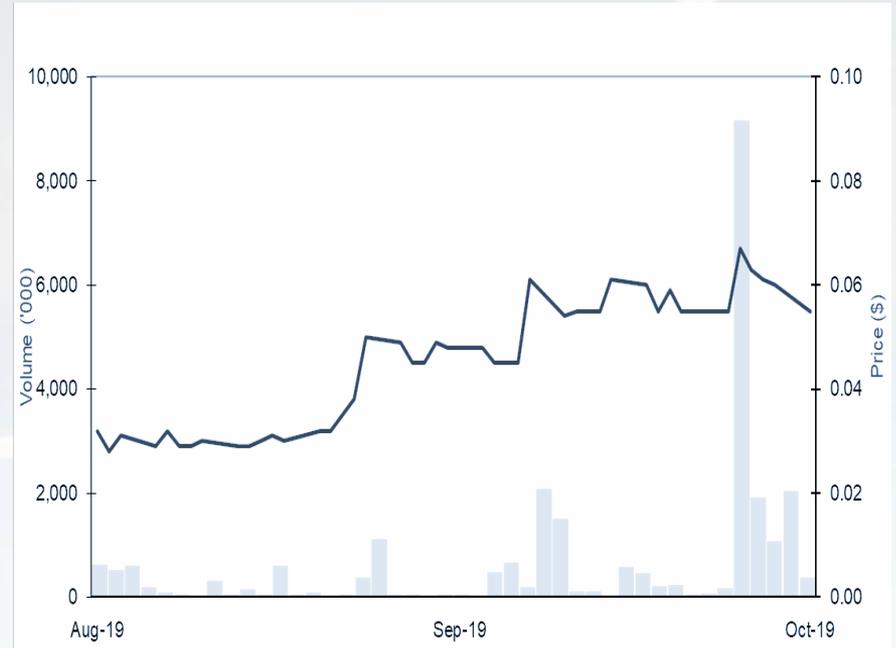
# Corporate Snapshot

## Capital Structure

ASX Code	REE
Share Price (10 December)	\$0.042
Shares on Issue	311m
Market Capitalisation	\$13.1m
Net Cash	\$2.2m
Enterprise Value	\$10.9m

## Board and Management

Chairman	Shaun Hardcastle
Executive Director	Jeremy Robinson
Non-Executive Director	Scott Patrizi
Exploration Manager	Guy Moulang
Consultant Metallurgist	Gavin Beer



## Shareholders

Top 20 Shareholders	53%
Number of Shareholders	1,300



# What are Rare Earths?

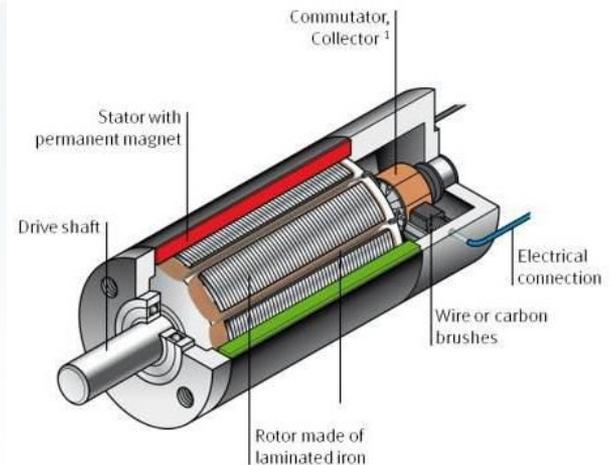
Rare Earths are a group of 17 elements essential to the new world economy. They are grouped in to Light Rare Earth Elements (**LREE**) and Heavy Rare Earth Elements (**HREE**).

RAREX is focused on the production of LREE's Neodymium-Praseodymium (**NdPr**) which are critical to the manufacture of rare earth permanent magnets and are not substitutable due to their unique physical properties.

Rare earth permanent magnets are used in Electric Vehicles (**EV**), wind turbines and everyday electronics.

Each EV requires approximately 1kg to 2kg of NdPr which is used in rare earth magnets forming part of an EVs electric motors. EVs expected to grow from 3m to 35m by 2030.

Each 1MW of wind turbine generation capacity requires 200kg rare earth permanent magnets. Wind and solar to drive the renewable energy market.



Source: International Energy Agency; Roskill as reported by the Australian Financial Review.

# Rare Earths Market

**China dominates production of rare earths and rare earth magnets accounting for 80% of global production** representing a strategic weakness for the United States of America.

Only significant supplier outside of China is Lynas Resources Limited (ASX: LYC) – subject of recent unsuccessful takeover by Wesfarmers Limited (ASX:WES).

**China has recently become significant importer of Rare Earths concentrates for processing** – In 2019 China supply dropped to only 61% (essentially 100% 2015) following ongoing crackdown on illegal supply.

NdPr oxide currently trades at circa US\$40/kg with market analysts predicting oxide prices to hit between US\$60/kg and US\$150/kg after 2020.

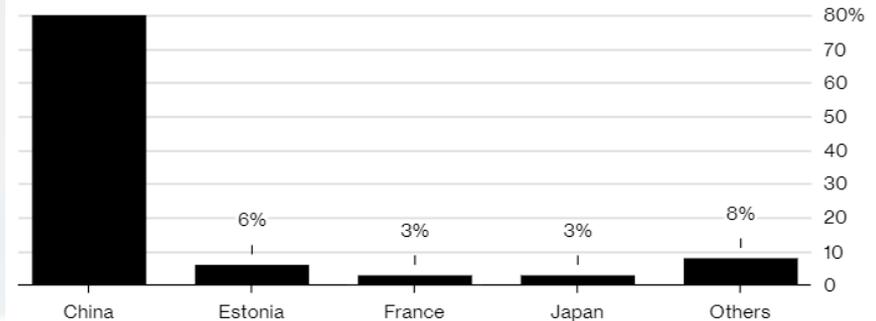
Rare earth prices extremely sensitive to trade disputes such as in 2011 when NdPr traded above US\$280/kg (600% above current prices).

RARE 

## One Stop Shop

About 80% of U.S. rare earths supplies come from China

■ Percentage of rare earths supplied to U.S.

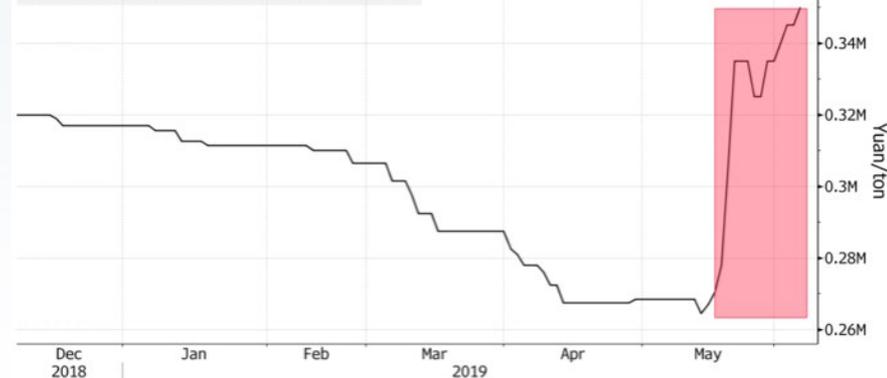


Source: U.S. Geological Survey

## Prices Surge

China rare-earth prices rallied amid overseas disruptions, trade tensions

■ China Praseodymium-Neodymium Oxide Market Price Shanghai



Source: Shanghai Steelhome E-Commerce

# Superior Location and Infrastructure

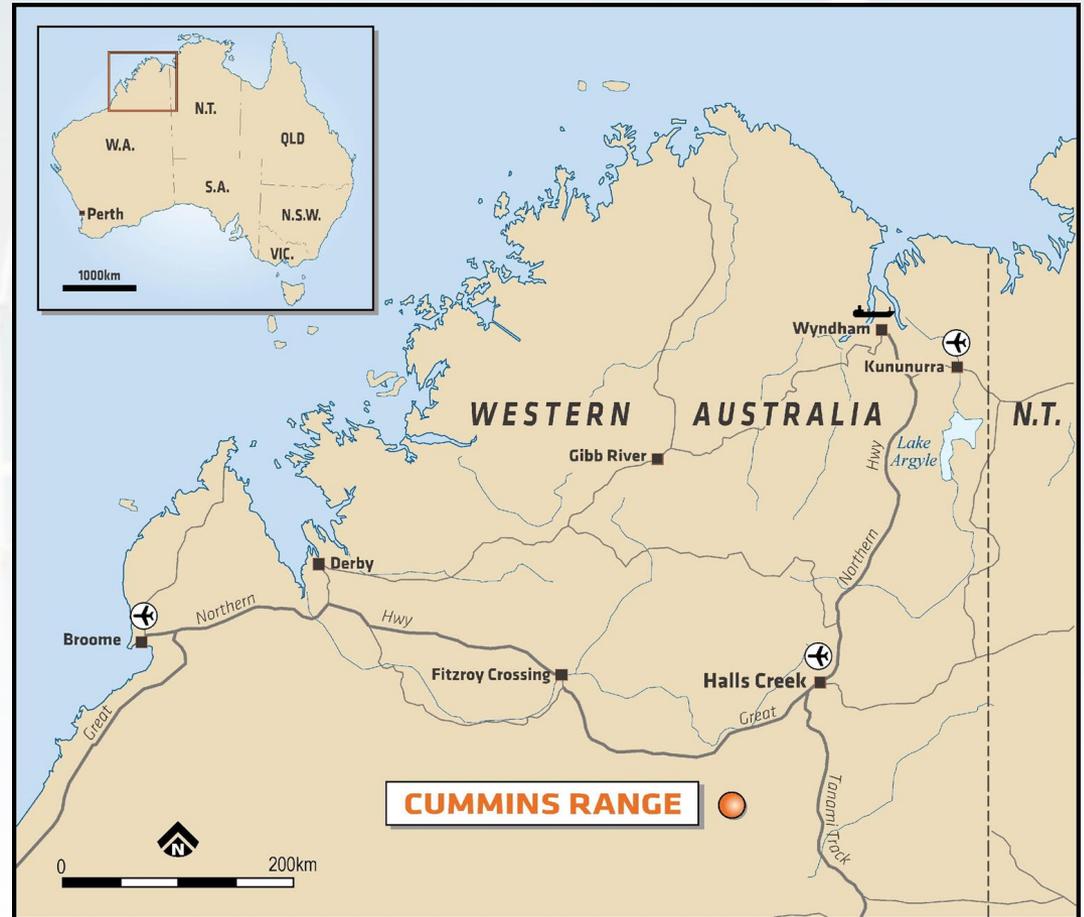
**Tier-1 Mining Jurisdiction:** Located in the Kimberley region of Western Australia.

**Airstrip and Township Nearby:** 130km from Halls Creek Township and Airstrip.

**Good Access:** Accessible via Great Northern Highway, Tanami Track and pastoral tracks.

**Established Mining District:** Located near Northern Minerals Browns Range Rare Earth Mine and Pantoro's Nicholsons Gold Mine.

**Port Facilities:** Potential access to Wyndham Port and Darwin Port.

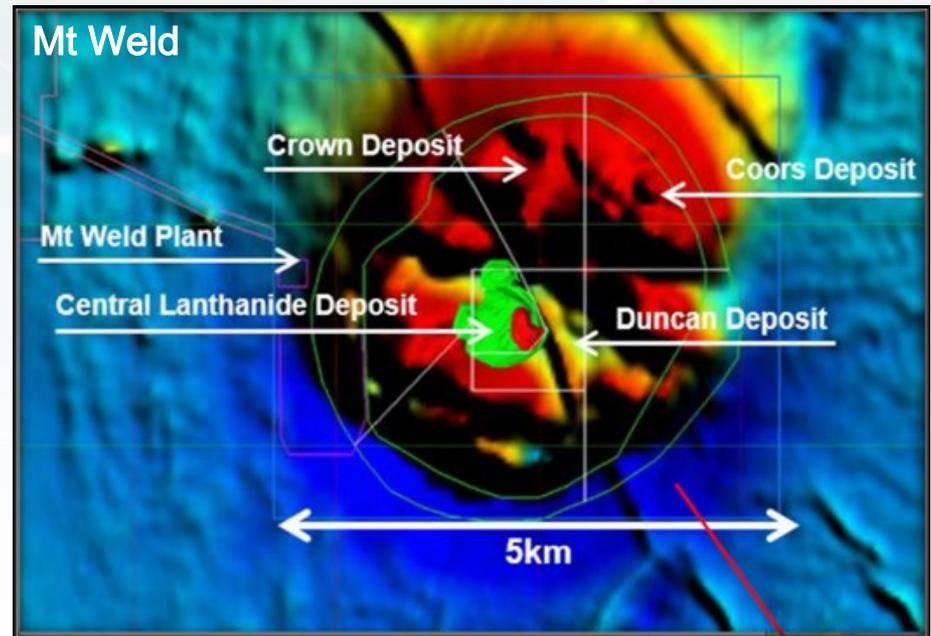
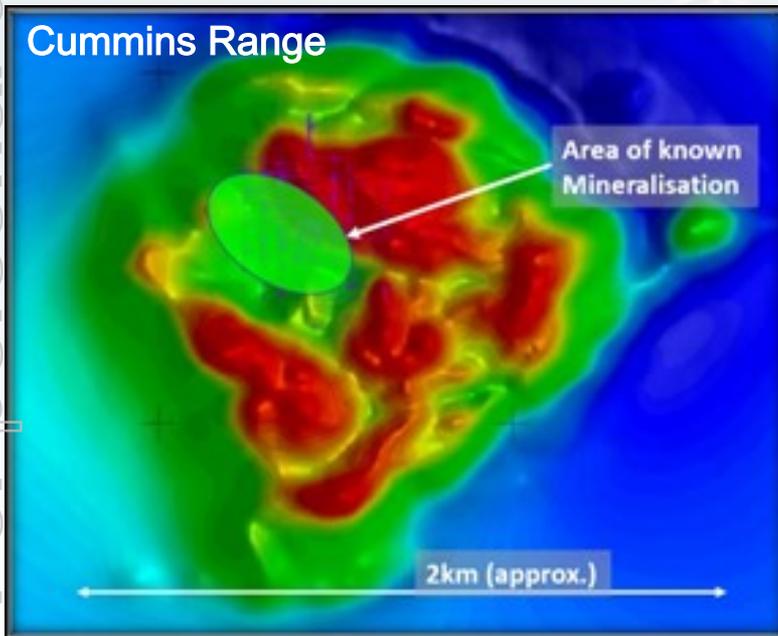


# Favourable Geology

Weathered carbonatite with REE mineralisation mostly hosted within laterite horizon (same as Mt Weld).

Mineralisation from surface and flat lying on top of primary carbonatite pipe.

Metallurgical work program to commence to determine NdPr concentration.



# Significant Maiden JORC 2012 Resource

Significant Maiden JORC 2012 Inferred Resource of 13Mt at 1.13% TREO released 15 October 2019.

Deposit outcrops and has dimensions amenable to low strip ratio open pit mining.

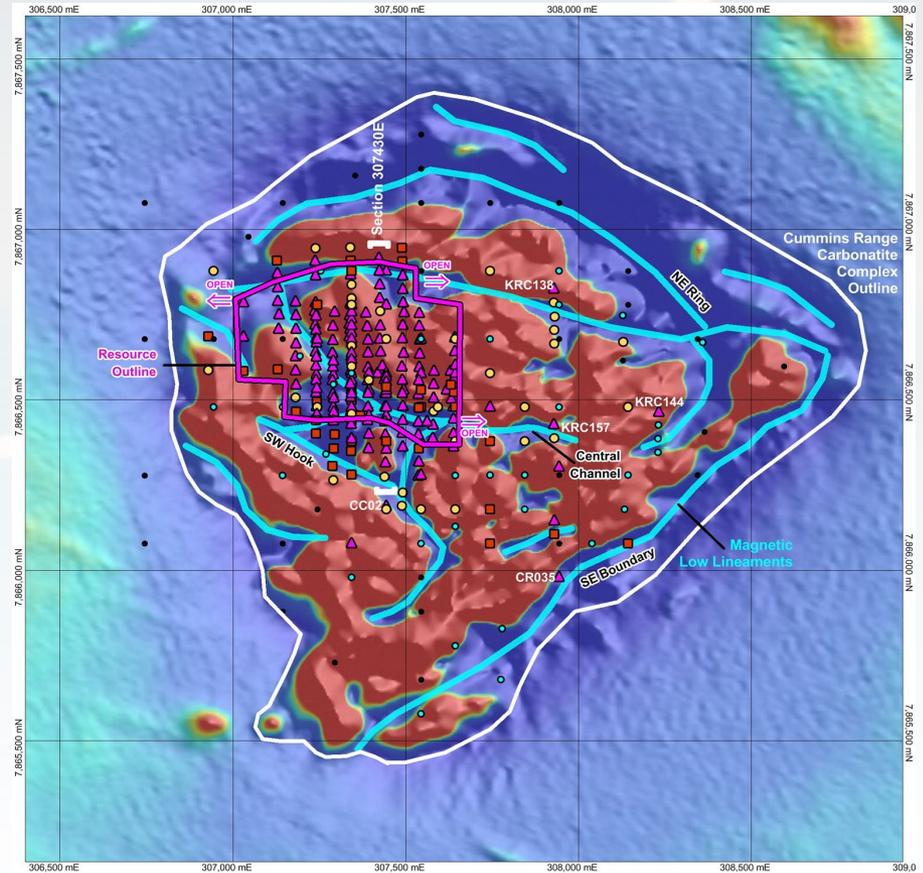
Existing Resource occupies a small portion of the Cummins Range Intrusive Complex that is approximately 2km by 2km.

Passive seismic survey currently underway.

Drilling program planned for next quarter.

## Inferred Mineral JORC 2012 Resource

Tonnes (Mt)	Grade (TREO)	TREO (kg)
13.0	1.13%	147,300,000



# Substantial Exploration Upside

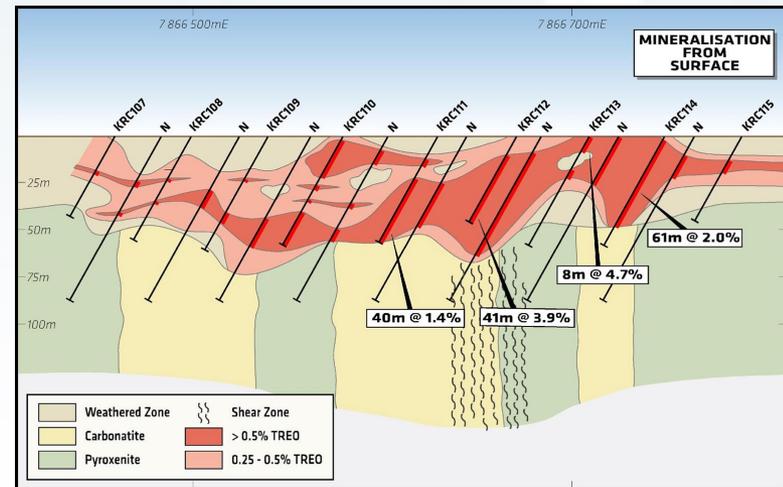
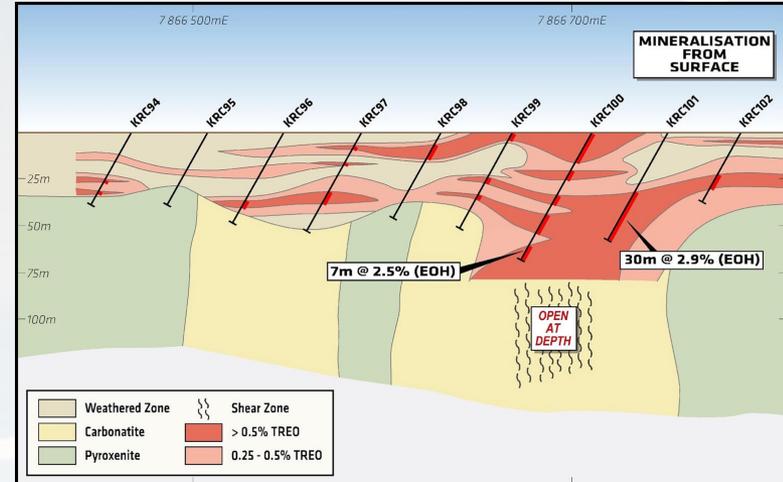
No active exploration since 2011 with large part of 48.5 square km of ground remaining untested.

At least 2 NW-SW structures controlling the depth of weathering with higher grade - mineralisation remains open on these trends.

Passive seismic underway to map depth of weathering and high grade extensions.

Primary mineralisation also open at depth and totally unexplored.

Clear potential to expand the existing Mineral Resource through RC drill program in the coming months.



# Social License

Cummins Range is located in the Tier-1 mining jurisdiction of Western Australia situated on Jaru land.

RareX takes its social, environment and corporate governance responsibilities very seriously and has adopted an inclusive approach with stakeholders as it develops Cummins Range.

RareX has recently executed a heritage protection agreement with the KLC which provides for community benefits to the Jaru People including opportunities for employment.

The Cummins Range Project will ultimately provide product that feeds into the electrification/decarbonisation revolution.



*“We welcome the decision of RareX to enter into the gold standard Kimberly Heritage Protection Agreement. By signing up to this agreement Sagon has recognised the need for a high level of protection for Aboriginal culture and heritage. This is a clear example of how business in the Kimberley should be done and should set a benchmark for Aboriginal heritage protection across the state. We applaud companies who respect the rights and interests of native title holders.”*

– Tyrone Garstone, Deputy CEO of KLC

# Low CAPEX Strategy

Rare Earth mineralogy dominated by monazite – monazite is the most well understood Rare Earth Mineral from a processing perspective.

RareX is engaging industry experts to review test work and plan further optimisation to improve un-optimised concentrate grade and recoveries.

Metallurgical test work completed in 2011 using 650kg of samples.

RareX's strategy is to produce a saleable monazite concentrate to sell on a FOB / CIF basis to China which will significantly reduce financing risk and technical risk.

Opportunity to be in production sooner with significantly less CAPEX required.



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Source: Kimberley Rare Earths ASX Announcements

# Acquisition of Weld North Project

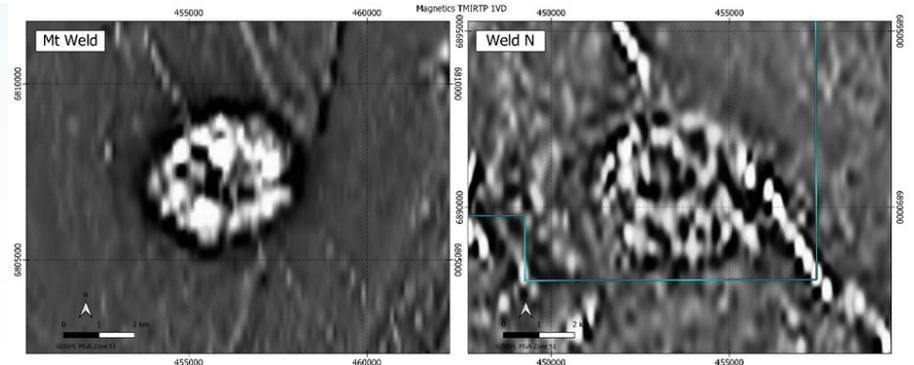
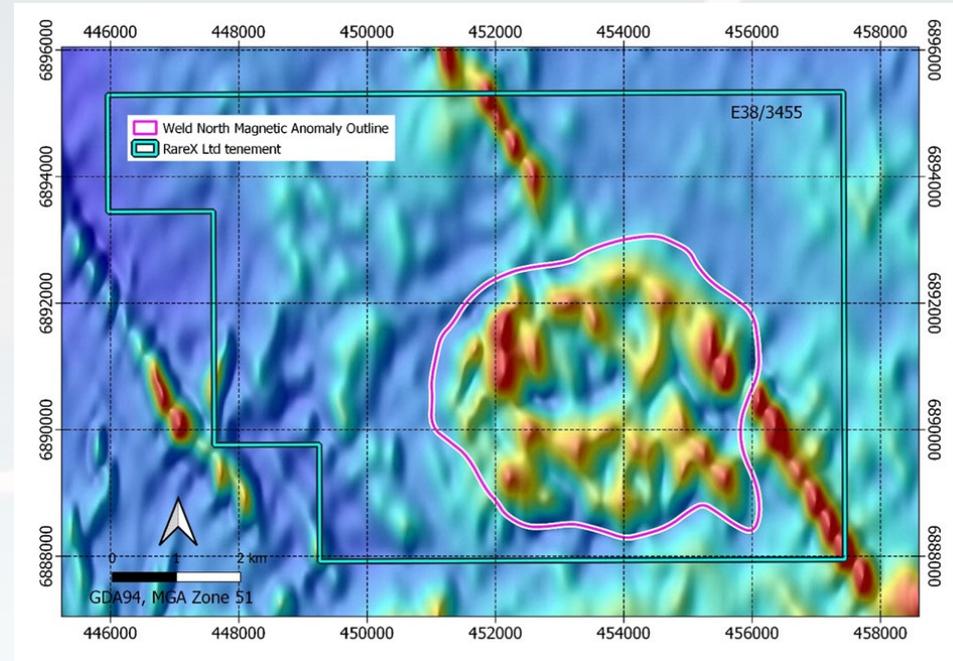
RareX has applied for a tenement called Weld North approximately 84km north of Mt Weld.

5km wide airborne magnetic circular anomaly which RareX consider to be prospective for being caused by a REE-bearing circular carbonatite intrusive complex and sitting below regolith cover which masks the buried bedrock source for this magnetic anomaly.

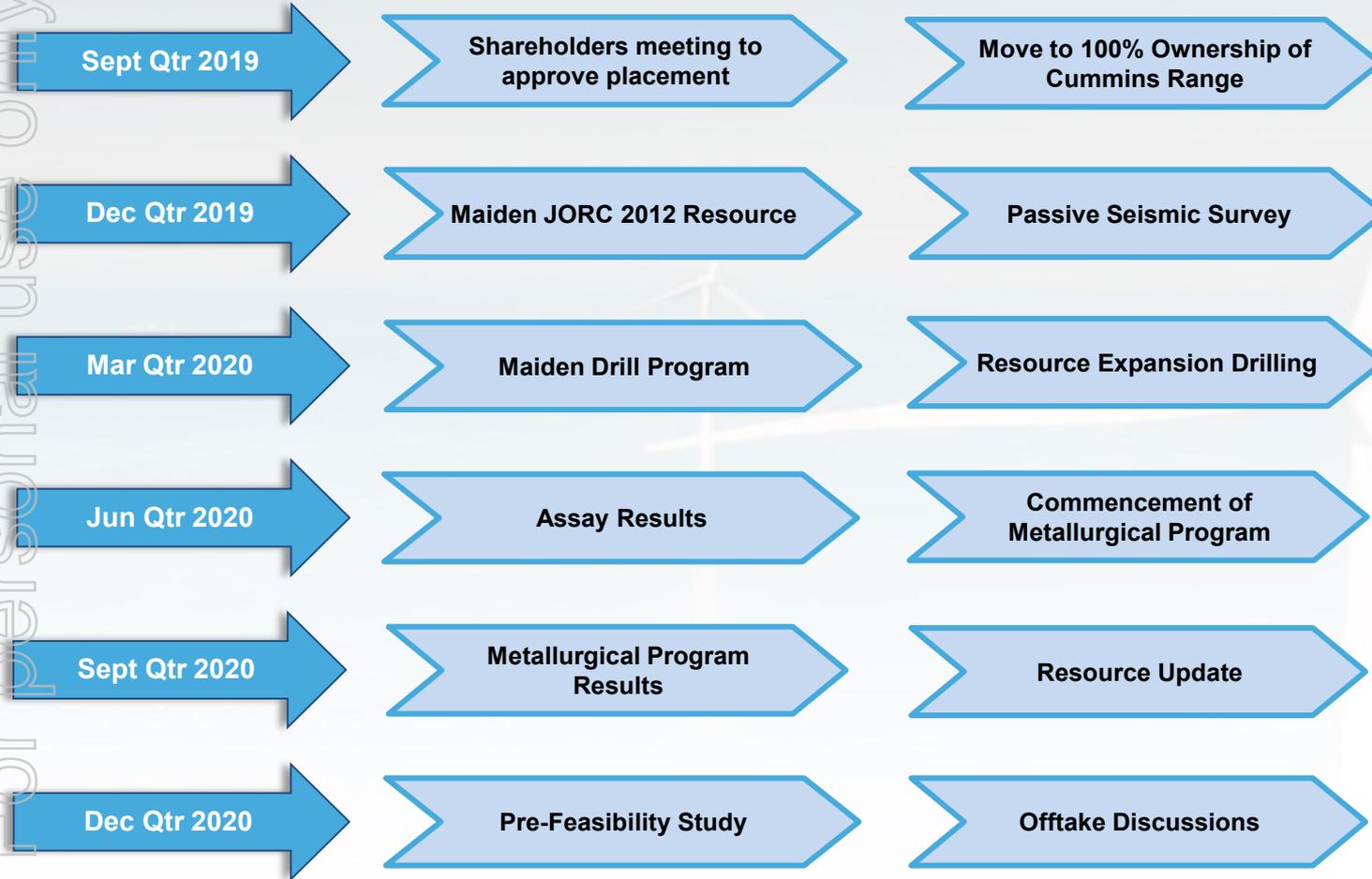
Part of greenfield exploration strategy to discover another world-class rare-earth carbonatite deposit in Australia.

The circular shape and size comparison to Mt Weld indicates that the Weld North magnetic anomaly is highly prospective for a significant rare earths discovery.

RareX plans to undertake reconnaissance geochemical sampling and drill testing.



# Upcoming News Flow



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