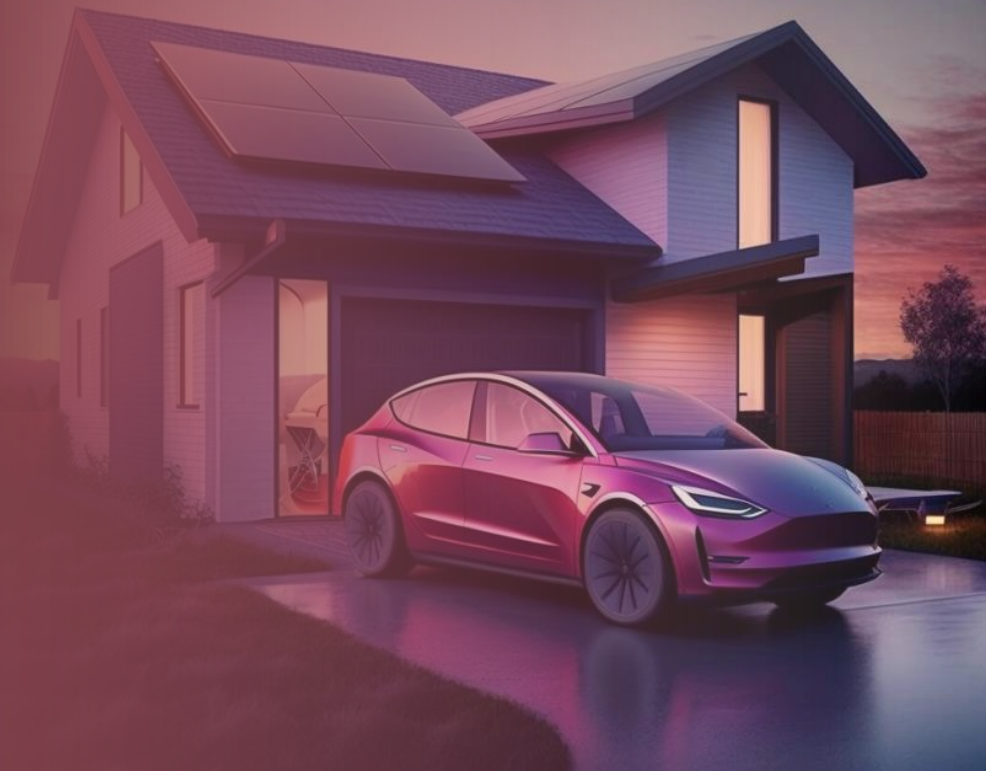




Australian Critical Rare Earth Minerals

Broker Briefing
6 July 2023

ASX | OD6



Important Information

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Competent Person Statement

The information contained in this presentation that relates to exploration results is based on and fairly represents information and supporting documentation prepared Mr Jeremy Peters, Director of Burnt Shirt Pty Ltd. Mr Peters is a Fellow of the Australasian Institute of Mining and Metallurgy and a Chartered Professional Geologist and Mining Engineer of that organisation. Mr Peters has sufficient experience relevant to the style of mineralisation and type of deposits under consideration, and to the activity which he has undertaken to qualify as a Competent Person as defined in the JORC Code. Mr Peters consents to the inclusion of the matters based on his information in the form and context in which the exploration results and supporting information are presented in this presentation.

Forward Looking Statements

Certain statements contained in this presentation, including information as to the future financial or operating performance of OD6 and its projects, are forward looking statements. Such forward looking statements:

- may include, among other things, statements regarding incomplete and uncertain proposals or targets, production and prices, operating costs and results, capital expenditures, and are or may be based on assumptions and estimates related to future technical, economic, market, political, social and other conditions;
- are necessarily based upon several estimates and assumptions that, while considered reasonable by OD6, are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies; and
- involve known and unknown risks and uncertainties that could cause actual events or results to differ materially from estimated or anticipated events or results reflected in such forward-looking statements.

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No representation is made that, in relation to the tenements the subject of this presentation, OD6 has now or will at any time in the future develop further resources or reserves within the meaning of the Australian Code for Reporting of Exploration Results, Mineral resources and Ore Reserves (**The JORC Code**).

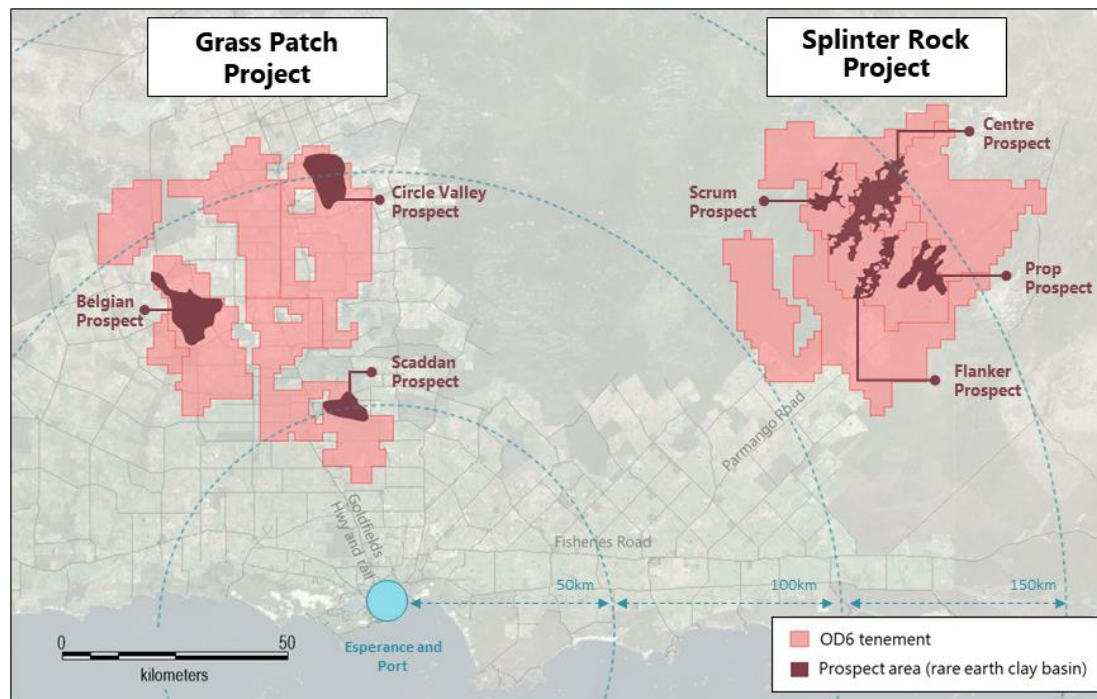
No New Information

This document contains information extracted from ASX market announcements reported in accordance with the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (**2012 JORC Code**) and available for viewing at <https://www.od6metals.com.au/investors/asx-announcements/>. OD6 confirms that it is not aware of any new information or data that materially affects the information included in any original ASX market announcement.

Globally Significant Clay Hosted Rare Earth Discovery

100% Owned

- **Immense 4,828 km²** tenement package
- **Multiple** large-scale prospects identified
- Grades averaging **> 1,000ppm TREO @ ~22% MagREO**
- **10-80m thick intersections**, near surface
- **60 to 75%** average acid leach recoveries
- **250km² of clay basins** mapped by an Airborne electromagnetics (AEM) survey
- Close to port, roads & essential **infrastructure**



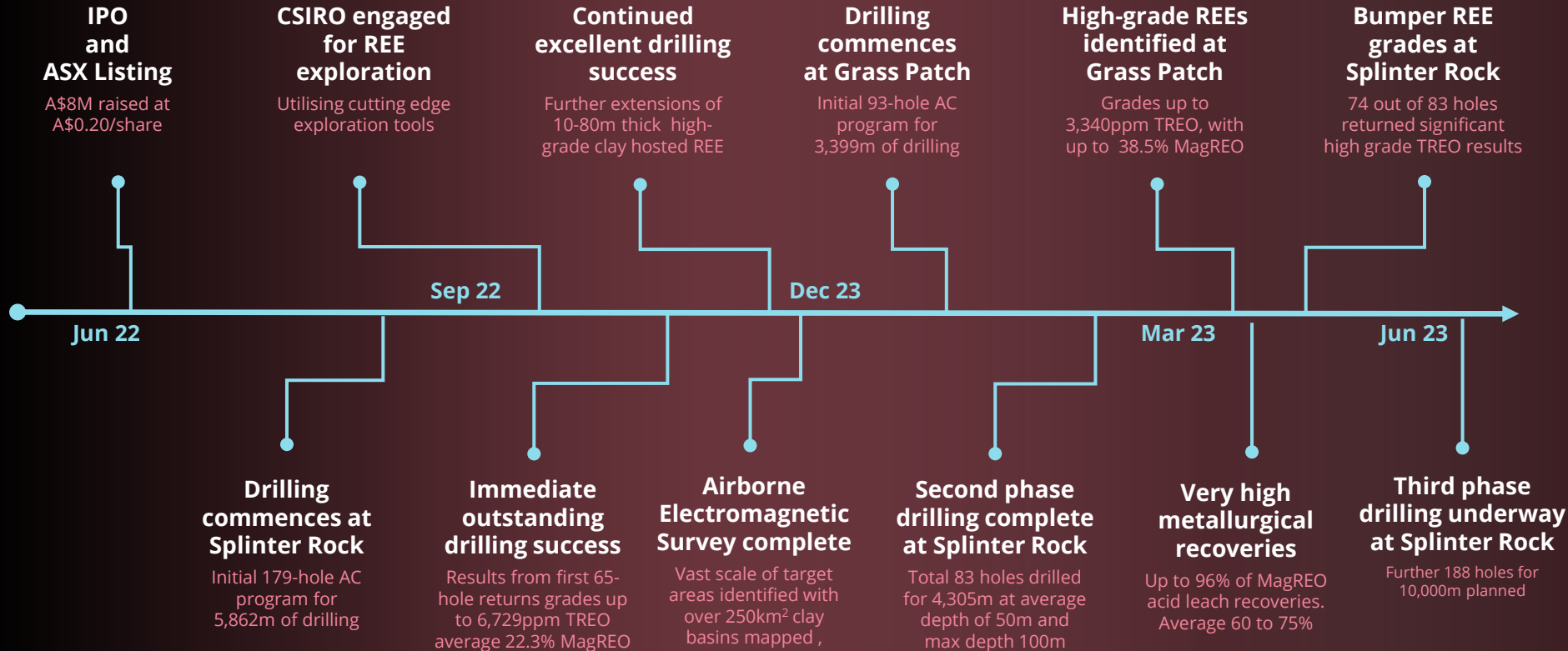
TREO (Total Rare Earth Oxide) = $\text{La}_2\text{O}_3 + \text{CeO}_2 + \text{Pr}_6\text{O}_{11} + \text{Nd}_2\text{O}_3 + \text{Sm}_2\text{O}_3 + \text{Eu}_2\text{O}_3 + \text{Gd}_2\text{O}_3 + \text{Tb}_4\text{O}_7 + \text{Dy}_2\text{O}_3 + \text{Ho}_2\text{O}_3 + \text{Er}_2\text{O}_3 + \text{Tm}_2\text{O}_3 + \text{Yb}_2\text{O}_3 + \text{Lu}_2\text{O}_3 + \text{Y}_2\text{O}_3$

MagREO (Magnet Rare Earth Oxide) = $\text{Nd}_2\text{O}_3 + \text{Pr}_6\text{O}_{11} + \text{Tb}_4\text{O}_7 + \text{Dy}_2\text{O}_3$

% Magnet REO = $(\text{MagREO} / \text{TREO}) * 100$

Rapid Exploration Progress Since IPO

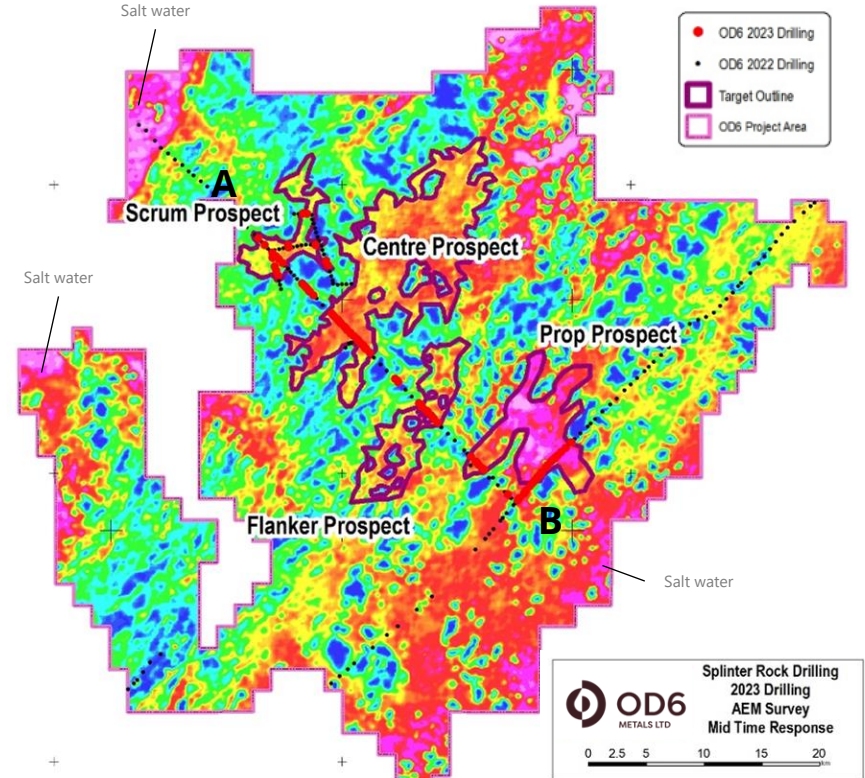
Doing what we said we would do



Highly Targeted Exploration Program

Airborne Electromagnetic (AEM) Success

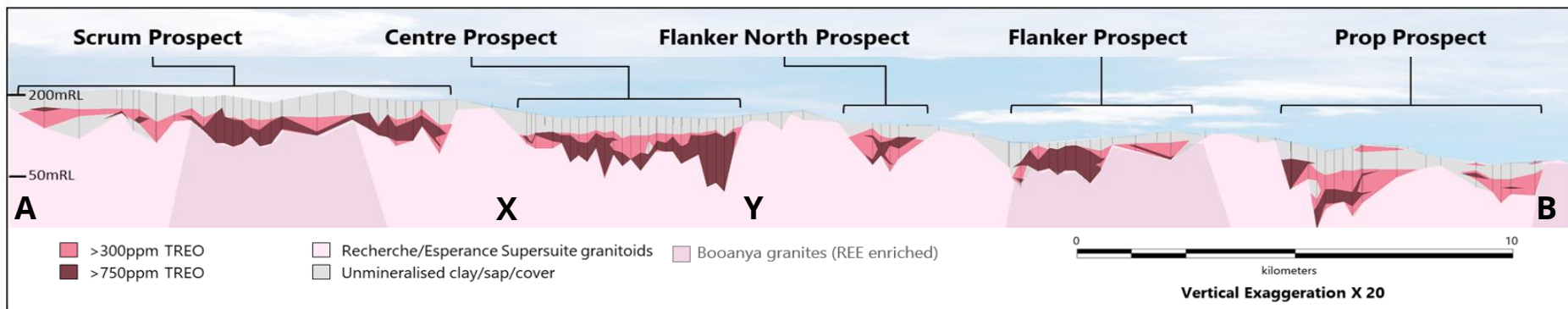
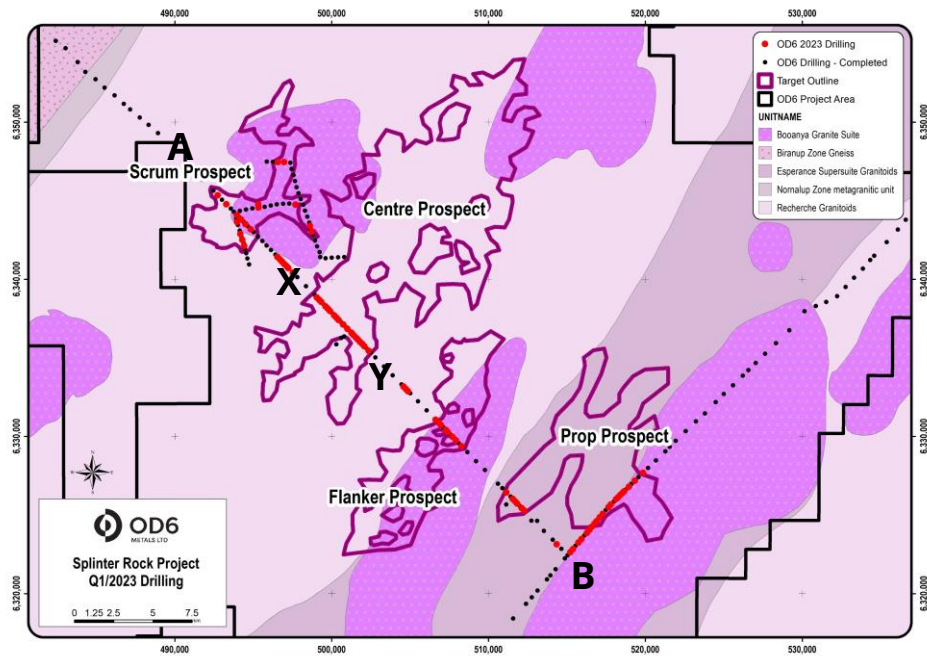
- AEM has facilitated mapping of clay locations, expanse and potential thickness
- **250km² of clay basins mapped**
- Clays are conductive, and are readily mapped with AEM (yellow to red colours).
- Granites are not conductive (blues to green)
- 74 out of 83 holes (~90%) returned significant high grade TREO results from last drill program



Splinter Rock Geology

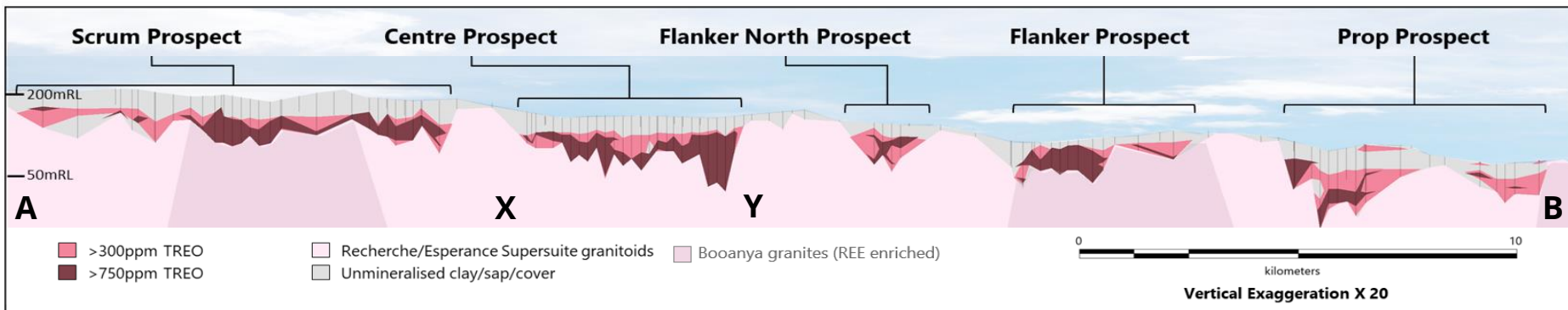
Heavily enriched in Rare Earths

- Splinter Rock tenure and exploration model targeting clay basins fed by REE weathering of Booanya granites
- The strong enrichments in REE distinguishes Booanya granites from all other granite groups in the Esperance area
- **CSIRO engaged to use cutting edge exploration tools**



Four Significant Prospects at Splinter Rock

Thickness x Area x Density = Massive Potential Scale



Prospect	TREO Grade #	MagREO % #	Clay Thickness	AEM width x length	AEM Clay Basin Area	Cover Thickness	Met Leach Recovery
Scrum	1,000 to 1,290ppm	23 to 24%	10 to 48m	1-5km x 11km	~ 26 km ²	15 to 35m	64%
Centre	1,260 to 1,590ppm	22 to 23%	10 to 70m	5-10km x 27km	~ 136 km ²	5 to 10m	54 to 78%
Flanker	1,050 to 1,310ppm	23 to 24%	10 to 30m	3-5km x 17km	~ 42 km ²	3 to 15m	76%
Prop	740 to 1,420ppm	20 to 22%	10 to 80m	3-9km x 5-11km	~ 49 km ²	3 to 24m	44 to 96%

Indicative average grades based on a 300ppm and 750ppm cut off grade

Airborne Electromagnetic Survey (AEM)

Refer to: ASX announcement 18 April 2023, "Bumper REE Grades and Extensive Thicknesses at Splinter Rock"

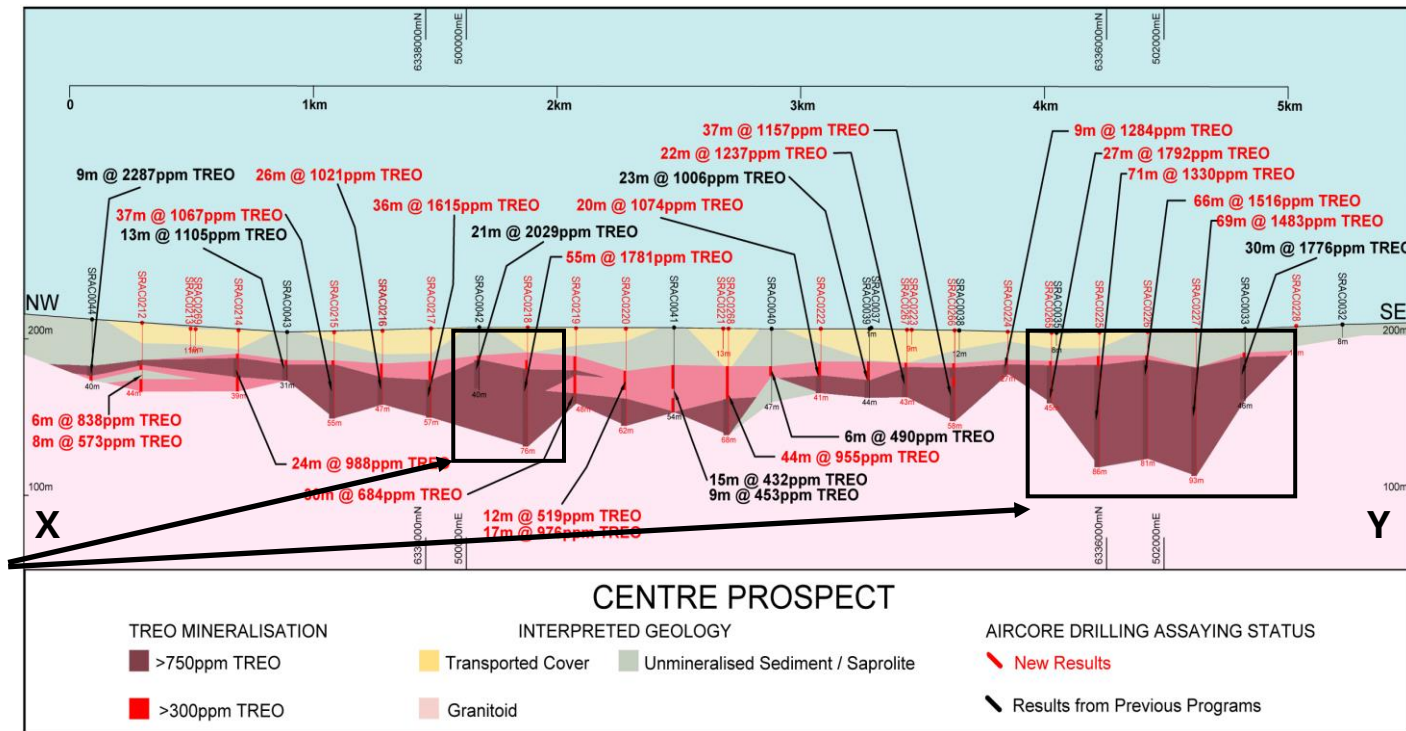
Refer to: ASX announcement 15 December 2022, "AEM shows Vast Scale of Target Areas"

Refer to: ASX announcement 3 April 2023, "Very High Metallurgical Recoveries"

Deep REE Clay Basins Drilling Success

The thickest and highest grade in Australia

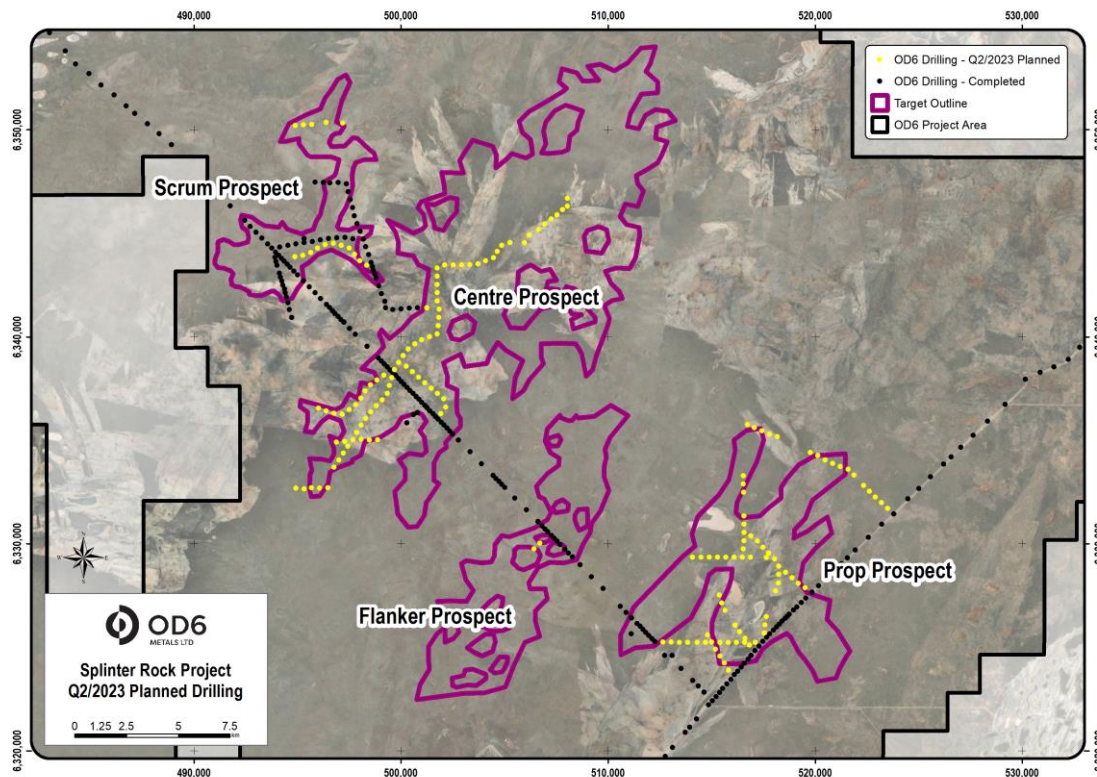
- Near surface, thick clay basins
- **60 to 70m** thick mineralised clays
- **Predicted by AEM** to continue along strike for kilometres
- **55m @ 1,781ppm TREO**
- **71m @ 1,330ppm TREO**
- **69m @ 1,483ppm TREO**
- **68m @ 1,316ppm TREO**



Phase 3 Drilling Continues At Splinter Rock

Pursuing the “Best of the Best”

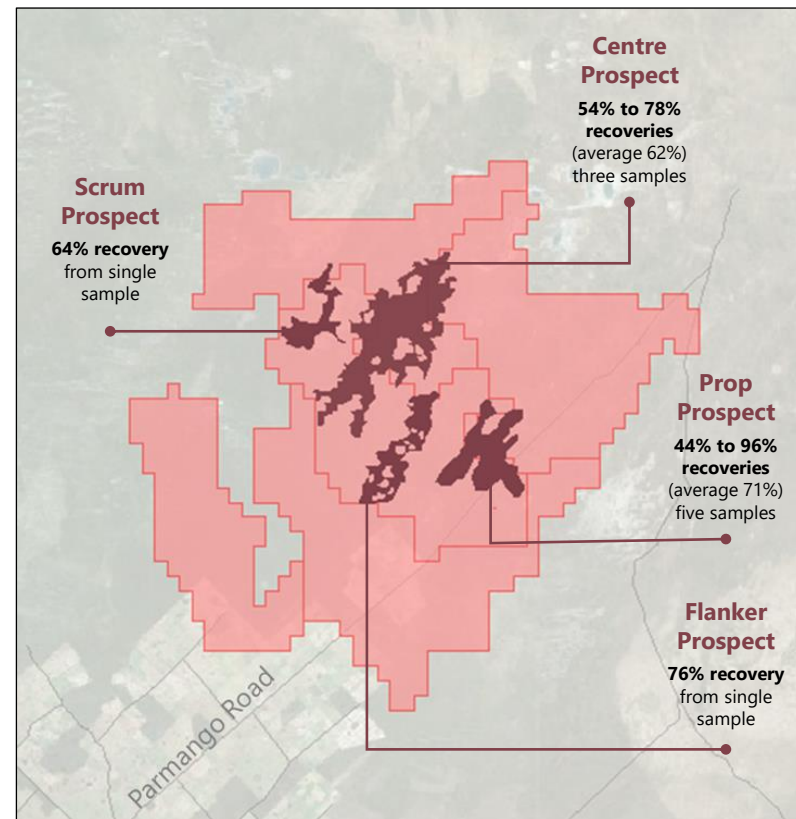
- **188 hole, 10,000m drill program due commenced in June 2023**
- Highly targeted utilising AEM
- Focus on testing the length, continuity of grade and thickness of the prospects
- Metallurgical samples will also be selected for further work at ANSTO
- **A\$180k will be co-funded by the WA Government** flagship Exploration Incentive Scheme (EIS)



Strong Metallurgical Results

Identifying the best metallurgical areas

- Very high metallurgical recoveries achieved using **simple acid leach**
- Highest recoveries are in clay basins and channels away from granites margins
 - Centre Prospect: **54% to 78% with average 62%**
 - Prop Prospect: **44% to 96% with average 71%**
- Impressive leach response time observed:
 - indicating **reductions in acid strength is possible**
- Screening of coarse grained material expected to **reduce leach material by 30-50%** without appreciable loss of MagREO
- Testing, analysis, optimisation and mineralogy continuing at ANSTO, CSIRO and Murdoch University



Targeting a Maiden Mineral Resource Estimate

All key elements present for maximum economic potential



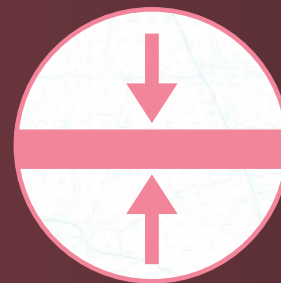
Grade

Exceptional clay rare earth grades returned at multiple, large-scale Prospect areas



MagREO

Valuable magnet rare earth elements represent large proportion of TREO grade



Thickness

Extensive clay thickness with evidence of continuity and consistency of grade



Leachability

Very high metallurgical recoveries achieved with impressive leach response observed

Corporate snapshot

High calibre leadership team, tight capital structure and well funded

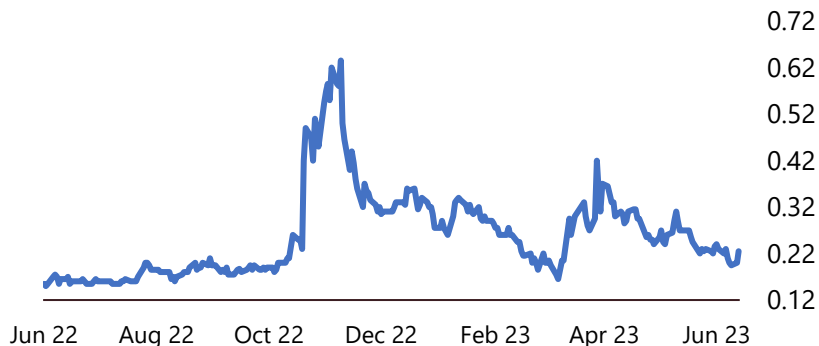
Capital Structure

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Price per share ¹	A\$0.23
Total number of shares on issue ²	102.45M
Performance rights and options ²	32.70M
Market capitalisation (undiluted) ¹	A\$23.56M
Cash ²	A\$3.52M
Debt ²	A\$0.00M
Enterprise value ¹	A\$20.04M

Share Price History

A\$/share



Dr Darren Holden

NON-EXECUTIVE CHAIR



Mr Brett Hazelden

MANAGING DIRECTOR



Mr Piers Lewis

NON-EXECUTIVE DIRECTOR



Dr Mitch Loan

NON-EXECUTIVE DIRECTOR

Register Detail



Note: 47,435,249 shares (46%) escrowed until 22 June 2024

1. As at 05 July 2023
2. As at 30 June 2023

Investment Highlights

1

Dominant land holding near Esperance port

100% interest in a vast tenement package with multiple rare earth mineralised prospects

2

Targeting critical rare earth element materials

Consumption of rare earth magnets expected to triple by 2035

3

Globally significant new discovery

Exceptional rare earth grades >1,00ppm TERO @ ~22% Mag REO and extensive thicknesses of 10m to 80m

4

Strong metallurgical results

Simple Acid Leach process with high recoveries of 60% to 75%

5

Focused on Maiden Mineral Resource Estimate

Rapidly unlocking over 250km² of identified clay basins of international importance

6

Skilled board and management

High calibre geological, metallurgical, project development and corporate professionals

Appendix

The background features a wavy, grid-like pattern of dots in shades of purple and blue, creating a sense of depth and movement. The dots are arranged in a grid that undulates across the frame, with some dots appearing brighter than others. The overall color palette is dark, with the grid pattern providing a focal point.

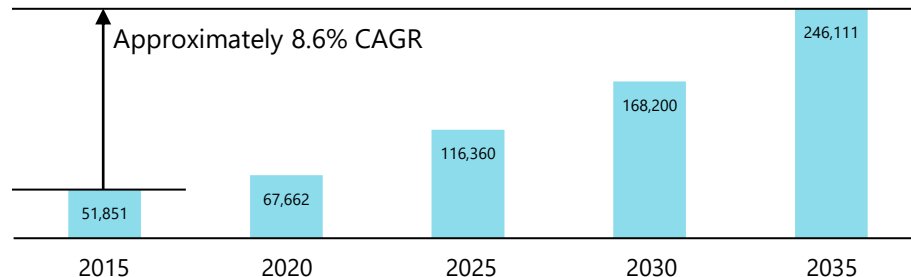
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Insatiable Demand For Rare Earth Magnets

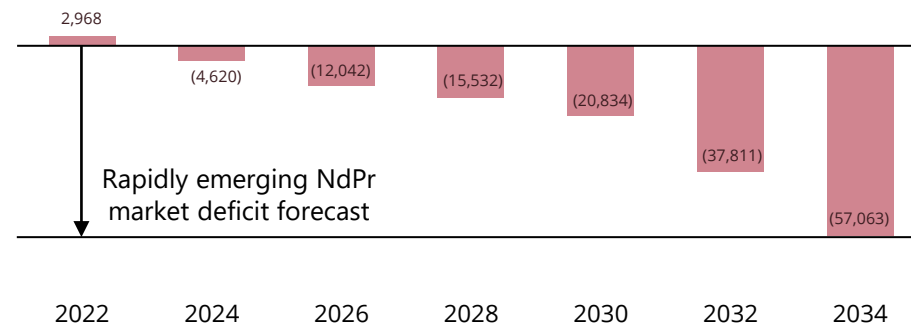
A growing NdPr rare earth supply deficit

- Transitions from carbon to **renewable economy** - strong demand for critical MagREO
- **8.6%** expected compound annual growth rate (**CAGR**) for MagREO
- **Value of global MagREO consumption expected to triple by 2035**
– rising from US\$15.1 billion in 2022 to US\$46.2 billion in 2035²
- **Significant NdPr supply deficits** expected,
- Demand underpinned by growth from electric vehicles, wind power and consumer electronics

MagREO demand forecast (t)^{1,2}



NdPr market balance (t)^{2,3}



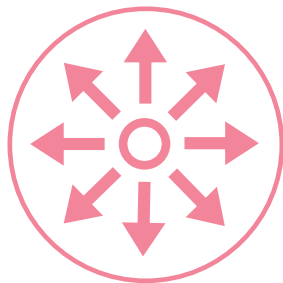
1. MagREO (Magnetic Rare Earth Oxide) = $\text{Pr}_6\text{O}_{11} + \text{Nd}_2\text{O}_3 + \text{Tb}_4\text{O}_7 + \text{Dy}_2\text{O}_3$

2. Source Adamas Intelligence, June 2022

3. NdPr = Two of the critical rare earth elements Neodymium (Nd) and Praseodymium (Pr), represent the major value and revenue sources from Rare Earth Element production.

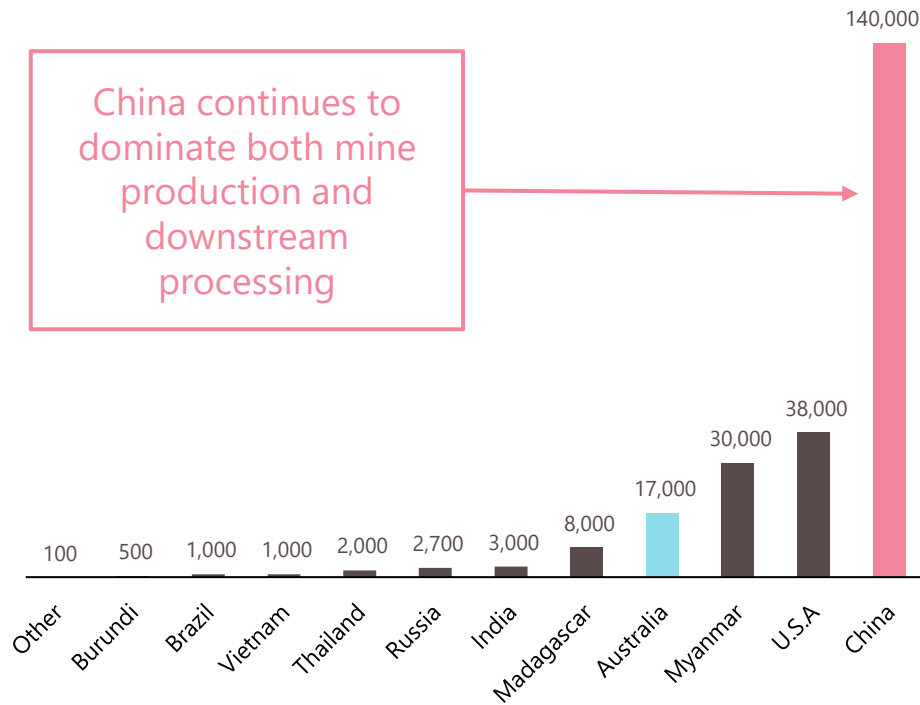
New Australian Supply Urgently Needed

Mine concentration is a significant risk to the global supply chain



Diversity of supply is a priority for governments and corporations with Australia well placed to provide additional capacity

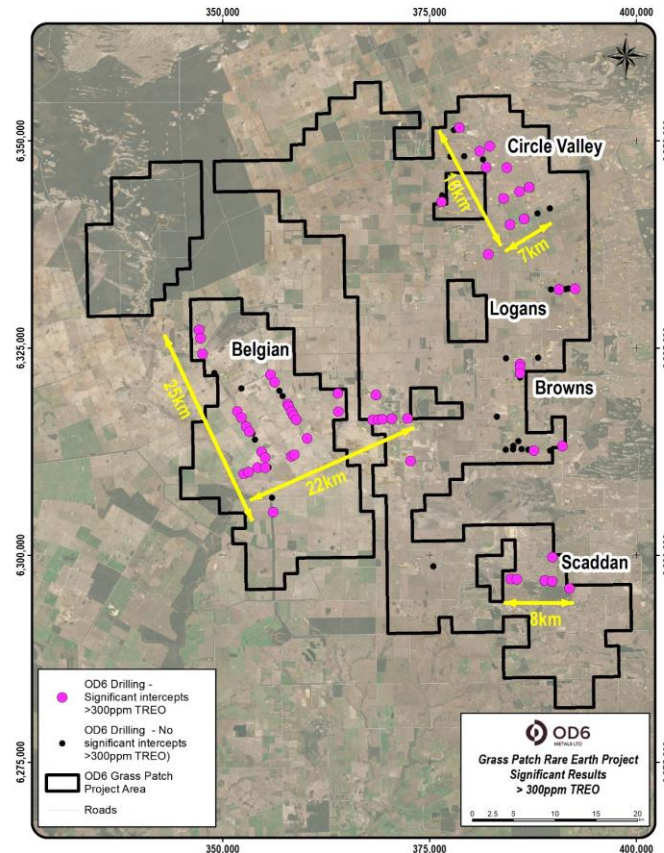
Existing global mine production (t)



Grass Patch Project

Three high-potential Prospect areas confirmed

- High-grade clay REEs successfully identified in 93-hole reconnaissance drilling program
- Grades of up **3,340ppm TREO with up to 38.5% MagREO encountered**
- Thick clays encountered of up to 59m (average range of 3m to 20m)
- Three key areas to be targeted for further exploration:
 - Belgian Prospect
 - Circle Valley Prospect
 - Scaddan Prospect
- High-potential Prospect areas to undergo metallurgical testing to determine potential recoveries and inform future exploration



Sustainably Creating Value

Acting with integrity to responsibly deliver rare earth resources for a low carbon future

Our sustainability priorities:



Our aim is to minimize our environmental impact, look after our people, grow with our communities and create value for our investors



Workplace health and safety and mental health



Aboriginal engagement, heritage and Traditional Owners



Business ethics



Regulatory compliance and change



Flora and fauna



Corporate governance and risk management

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