

Australian Critical Rare Earth Minerals

Rare Earth Industry Association (REIA)
Annual Conference
19-20 June 2024

ASX:OD6

IMPORTANT INFORMATION

Disclaimer

This presentation has been prepared by OD6 Metals Ltd (ACN 654 839 602) (**OD6**) and is current as at the date of this document. The information contained in this presentation is for informational purposes only and does not constitute an offer to issue, or arrange to issue, securities or other financial products. The information contained in this presentation is not investment or financial product advice and is not intended to be used as the basis for making an investment decision. The presentation has been prepared without considering the investment objectives, financial situation or needs of any particular person. Before making an investment decision, you should consider, with or without the assistance of a financial adviser, whether an investment is appropriate considering your particular investment needs, objectives and financial circumstances. Past performance is no guarantee of future performance. Any securities that may be issued by OD6 should be considered speculative and there is no guarantee implied or explicit that there will be a return on the capital invested or that any dividend will be paid or that there will be an increase in the price or value of OD6's shares in the future.

No representation or warranty, express or implied, is made as to the fairness, accuracy, completeness or correctness of the information, opinions and conclusions contained in this presentation. To the maximum extent permitted by law, none of OD6, its directors, employees or agents, nor any other person accepts any liability, including, without limitation, any liability arising out of fault of negligence, for any loss arising from the use of the information contained in this presentation. In particular, no representation or warranty, express or implied is given as to the accuracy, completeness or correctness, likelihood of achievement or reasonableness or any forecasts, prospects or returns contained in this presentation nor is any obligation assumed to update such information. Such forecasts, prospects or returns are by their nature subject to significant uncertainties and contingencies.

No New Information

The information in this report relating to the Mineral Resource estimate for the Splinter Rock Project is extracted from the Company's ASX announcement dated 29 May 2024. OD6 confirms that it is not aware of any new information or data that materially affects the information included in the original announcement and that all material assumptions and technical parameters underpinning the Mineral Resource estimate continue to apply.

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.

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 forwardlooking statements.

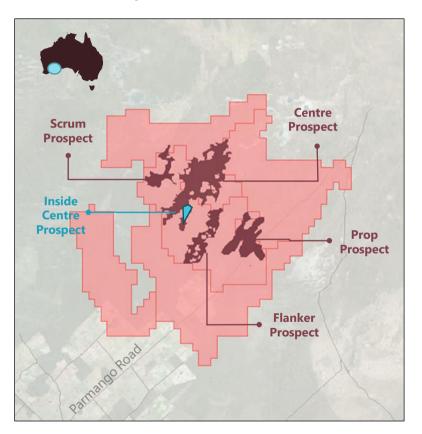
OD6 disclaims any intent or obligation to update publicly any forward-looking statements, whether as a result of new information, future events or results or otherwise. The words "believe", "expect", "anticipate", "indicate", "contemplate", "target", "plan", "intends", "continue", "budget", "estimate", "may", "will", "schedule" and similar expressions identify forward looking statements. All forward looking statements made in this presentation are qualified by the foregoing cautionary statements. Recipients are cautioned that forward looking statements are not guarantees of future performance and accordingly investors are cautioned not to put undue reliance on forward looking statements due to the inherent uncertainty therein.

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).



GLOBALLY SIGNIFICANT CLAY-HOSTED RARE EARTH DISCOVERY

SPLINTER ROCK ENJOYS A FAVOURABLE COMBINATION OF RESOURCE SIZE, GRADE AND METALLURGICAL RECOVERIES



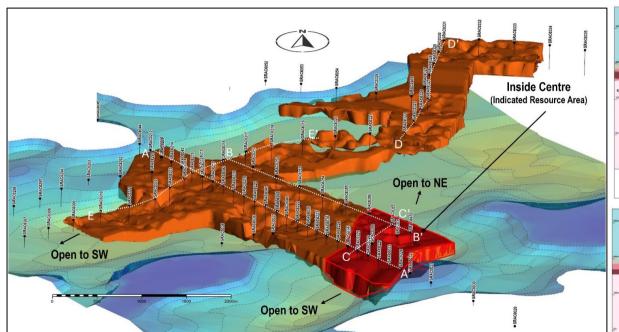
SPLINTER ROCK

- Located in one of the world's great mining jurisdictions proximal to key infrastructure
- Recent test work indicates that recoveries through simple acid leaching are as good or better than global clay-hosted plays
- **682Mt at 1,338ppm TREO** (at a 1,000ppm cut-off grade) for **910kt contained TREO**
- High-value MagREO represents an average of ~23% of TREO grade for 205kt contained MagREO
- Inside Centre 119Mt at 1,632ppm TREO (Indicated)
- The recent MRE upgrade positions Splinter Rock as the largest & highest grade Australian clay-hosted Rare Earth Deposit by an order of magnitude

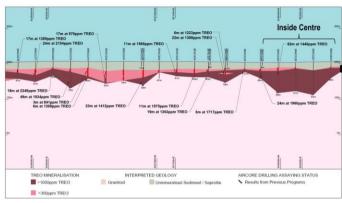


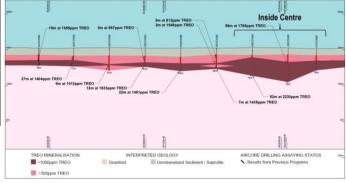
INSIDE CENTRE - A HIGH GRADE STAND OUT

INDICATED MRE OF 119Mt at 1,632ppm TREO (at 1,000ppm TREO cutoff grade)



Inside Centre to be the main focus of the Scoping Study due at the end CY 2024





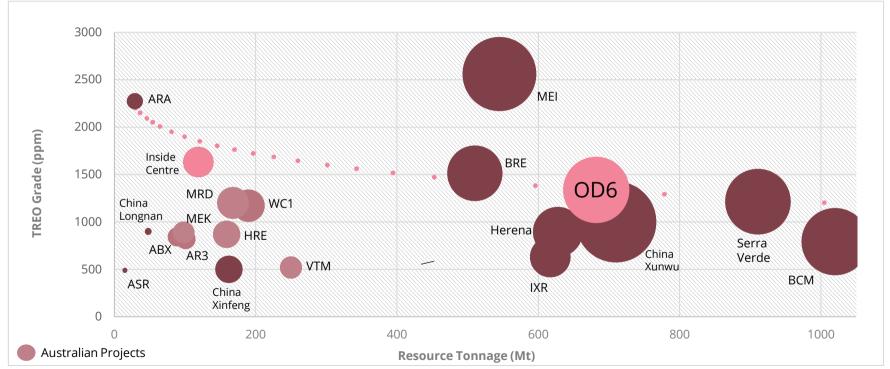


THE PREMIER AUSTRALIAN CLAY-HOSTED REE PROJECT

UPGRADED RESOURCE OF 682MT @ 1,338PPM TREO (at 1,000ppm TREO cutoff grade)

Rare earth element deposits

(bubble size reflects contained TREO)



Refer to 'Peer calculation and reference details'

Source: Adapted from Euroz Hartleys Research Report, Company Reports, Phillip Hellman, Sharemarket Market Capitalisation





Project and Market Detail

INVESTMENT HIGHLIGHTS



TARGETING
CRITICAL, HIGHVALUE MAGNET
RARE EARTH
ELEMENTS

Demand expected to triple by 2035 with current supply dominated by China, Australian production is highly sought after



PRIME LOCATION FOR FUTURE DEVELOPMENT

Tier 1 jurisdiction with access to significant infrastructure and known tenure pathway



THE PREMIER AUSTRALIAN CLAYHOSTED RARE EARTH DEPOSIT

Largest and highest grade in Australia at 682Mt @ 1,338ppm TREO, with substantial further upside



STRONG METALLURGICAL RESULTS

Simple leach process with high recoveries of valuable MagREE – comparable or better than Brazilian peers



A STRONG PIPELINE OF NEWS IN COMING MONTHS

Detailed Scoping Study incorporating updated MRE & successful metallurgical test work is due in 2H CY 2024



CRITICAL MAGNET RARE EARTH ELEMENTS

FOUR CRITICAL, HIGH VALUE METALS WHICH CAPTURE 90% OF ALL THE VALUE IN THE RARE EARTHS COMPLEX







- · Electric vehicles
- · Wind turbines



- Electric vehicles
- Wind turbines
- Semiconductors



Heavy rare earth elements



- Electric vehicles
- · Wind turbines
- Nuclear reactors
- Semiconductors



- Xray's
- High temp fuel cells
- Electric vehicles
- Wind turbines
- Semiconductors

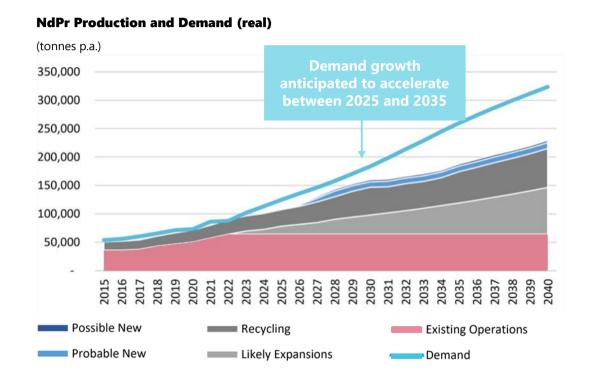
hydrogen 1																	helium 2
Н																	He
lithium 3	beryllium 4											boron 5	carbon 6	nitrogen 7	asygen 8	fluorine 9	neon 10
Li	Be			Ligh	t rai	re ea	rth e	elem	ents			В	C	N	0	F	Ne
sodium 11	magnesium 12			Hea	vv ra	are e	arth	elen	nent	s		aluminium 13	silicon 14	phosphorus 15	sulfur 16	chlorine 17	argon 18
Na	Mg				- ,							Al	Si	Р	S	CI	Ar
potassium 19	calcium 20	scandium 21	titunium 22	vanadium 23	chromium 24	manganese 25	iron 26	cobalt 27	nickel 28	copper 29	zinc 30	gallium 31	germanium 32	arsenic 33	selerium 34	bromine 35	krypton 36
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr
rubidium 37	strontium 38	yttrium 39	airconium 40	niobium 41	molybdenum 42	technetium 43	ruthenium 44	rhodium 45	palladium 46	silver 47	cadmium 48	indium 49	tin 50	antimony 51	tellerium 52	iodine 53	xenon 54
Rb	Sr	Y	Zr	Nb	Мо	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe
cesium 55	barium 56		hafnium 72	tantalum 73	tungsten 74	rhenium 75	osmium 76	iridium 77	platinum 78	gold 79	mercury 80	thallium 81	lead 82	bismuth 83	polonium 84	astatine 85	radon 86
Cs	Ва		Hf	Та	W	Re	Os	lr	Pt	Au	Hg	TI	Pb	Bi	Ро	At	Rn
francium 87	radium 88		rutherfordium 104	dubrium 105	seaborgium 106	bohrium 107	hassium 108	meiterium 109	darmstadtium 110	roentgenium 111	copernicium 112	nihorium 113	flerovium 114	moscovium 115	livermorium 116	tennessine 117	oganesson 118
Fr	Ra		Rf	Db	Sg	Bh	Hs	Mt	Ds	Rg	Cn	Nh	FI	Мс	Lv	Ts	Og

lanthanum	cerium	praseodymium	neodymium	promethium	samarium	europium	gadolinium	terbium	dysprosium	holmium	erbium	thulium	ytterbium	lutetium
57	58	59	60	61	62	63	64	65	66	67	68	69	70	71
La	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Но	Er	Tm	Yb	Lu
actinium	thorium	protectinium	uranium	neptunium	plutonium	americium	curium	berkelium	californium	einsteinium	fermium	mendelevium	nobelium	lawrencium
89	90	91	92	93	94	95	96	97	98	99	100	101	102	103
Ac	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No	Lr



SIGNIFICANT FUTURE GLOBAL DEMAND EXPECTED

CONSUMPTION EXPECTED TO TRIPLE BY 2035 WITH MULTIPLE NEW MINES REQUIRED TO MEET DEMAND



Transition from carbon to renewable economy driving demand for critical magnet rare earth elements, with

7.1% CAGR expected

Demand underpinned by growth from electric vehicles, wind power and consumer electronics

NdPr market growth projections require supply levels to grow by approximately 80% by 2035 to meet forecast demand – this is equivalent to +10-20 new mines

Source: Project Blue Energy transition outlook to 2050, November 2023, Lynas (ASX: LYC), Adamas and Company Presentations



PRIME LOCATION FOR FUTURE DEVELOPMENT

EXISTING INFRASTRUCTURE A KEY DIFFERENTIATING FACTOR



ESTABLISHED ESPERANCE TOWNSHIP

- Proximate to large coastal town
 Esperance.
- Local workforce potential for any future development



READY ACCESS TO ESPERANCE BULK PORT

- Esperance Port handles over 200 ships p.a.
- Cape size vessel capacity
- Regular container ships link to the export market



SERVICED BY EXISTING ROAD NETWORK

 Established, well maintained road network connecting Splinter Rock to town and port



LOCAL RENEWABLE POWER CONNECTED

- Proven renewable energy prodcution
- Esperance has Dual 4.5
 MW wind turbines plus
 4 MW solar farm and
 gas turbines



WHAT DOES AN ECONOMIC PROJECT LOOK LIKE?

SPLINTER ROCKS MEETS ALL THE 'KEY VALUE DRIVERS' AND HAS THE HALLMARKS OF A HIGHLY ECONOMIC PROJECT

KEY VALUE DRIVERS

- ✓ Grade >1,000 ppm TREO
- ✓ Recovery >60%
- ✓ MagREO content 23%
- √ Treatment rate > 4 Mtpa
- ✓ Mine life >20 years
- ✓ Resource size > 150 Mt
- ✓ Low stripping ratio
- ✓ Low reagent usage / cost
- ✓ Low power costs

Clay volume treated (tpa)	TREO (ppm)	Metallurgical recovery	TREO produced (tpa)	MagREO produced @23% (tpa)	% payable	AUD:USD	Revenue p.a. @ US\$50/kg TREO
10,000,000	1,500	60%	9,000	2,070	70%	0.65	A\$484M
7,500,000	1,500	60%	6,750	1,553	70%	0.65	A\$363M
5,000,000	1,500	60%	4,500	1,035	70%	0.65	A\$242M
5,000,000	1,000	60%	3,000	690	70%	0.65	A\$161M
5,000,000	800	60%	2,400	552	70%	0.65	A\$129M
4,000,000	800	60%	1,920	442	70%	0.65	A\$103M
3,000,000	800	60%	1,440	331	70%	0.65	A\$ 77M
2,000,000	800	60%	960	221	70%	0.65	A\$ 51M
1,000,000	800	60%	480	110	70%	0.65	A\$ 25M

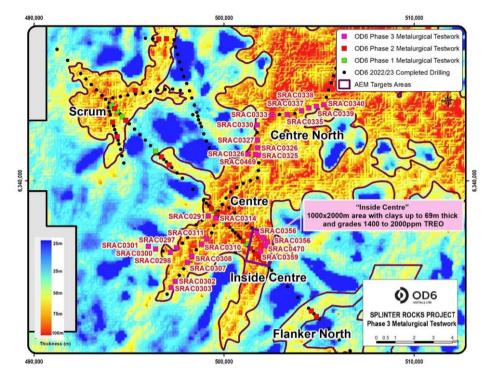
This is conceptual in nature, but is used as a basis for the 1,000ppm resource cut-off and the "reasonable prospects of eventual economic extraction" under JORC



OUTSTANDING METALLURGICAL RESULTS

RARE EARTHS RECOVERED WITH SIMPLE LEACHING

- Very high metallurgical recoveries achieved using simple acid leach
- Average 60% MagREO recovery (range 40% to 90%) at 20g/l
 HCl
- Average 16 kg HCl/t ore consumption
- Extractions at **15g/L to 20 g/L HCl** appear to be a balance point on recovery, acid strength and acid consumption.
- Neodymium (Nd), Praseodymium (Pr), Terbium (Tb) and Dysprosium (Dy) have very similar recoveries
- Removal of coarse-grained material increases head grade by 157% and decreases acid consumption by an average of 35% to approximately 10kg HCl/t ore
- Recent recovery trials to identify "best of the best" areas
- Phase 4 test work with ANSTO already underway



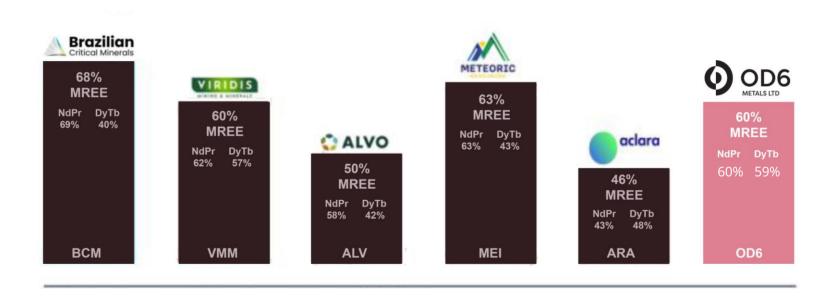
Splinter Rock Scrum and Centre metallurgical sample drill hole locations on AEM model clay thickness

Recoveries only reflect initial rare earth leaching, with further losses expected in precipitation, impurity removal, purification and drying. See OD6 ASX announcements dated 13 May 2024, 16 April 2024, 27 February 2024, 7 November 2023, 3 April 2023)



MagREO RECOVERY ARE INDUSTRY EQUIVALENT

OD6 ENJOYS SIMILAR MagREO RECOVERIES TO BRAZILIAN PEERS WHILST TRADING AT HUGE EV DISCOUNT

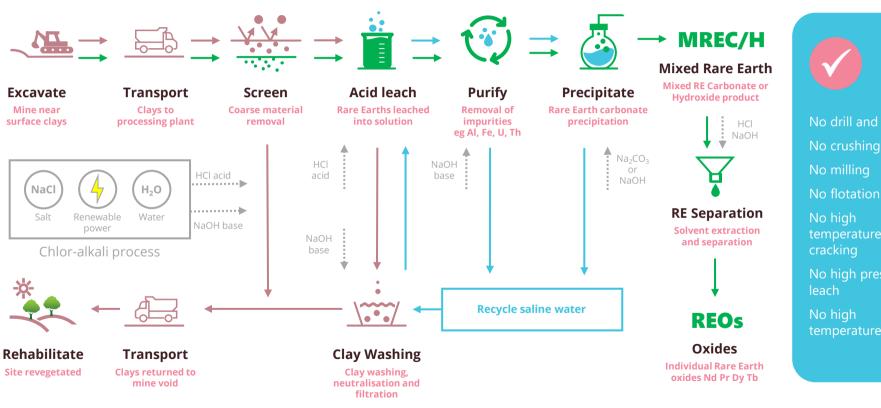


Similar Operational Steps, Different Reagents, Same Recoveries



INDICATIVE PROCESSING STEPS

SIMPLIFIED PROCESS MAP TO DELIVER RARE EARTH PRODUCTS



No drill and blast

No high pressure

temperature leach

Clay → Rare Earths → Water → Reagents

A DISCIPLINED STRATEGIC APPROACH

IN PURSUIT OF THE "BEST OF THE BEST" FOR MAXIMUM VALUE CREATION



EXPLORE

- Identify high-grade, 'sweet-spot' REE zones
- Aggressively grow Mineral Resources via latent scale potential
- Target thick areas with low strip ratio potential
- Low-cost exploration, high value for money
- CSIRO collaboration



DESIGN

- Optimise leach recovery and impurity removal
- Remove coarse grain material to reduce acid consumption
- Produce a MREC with potentia conversion to REO
- Refine process with ANSTO



ADVANCE

- Pursue "Best of the Best" grade, recovery, stripping ratio and acid consumption
- Integrate ChlorAlkali Benefits
- Renewable energy sourcing solar / wind
- Existing Infrastructure port, road
- Deliver Scoping Study



THE SPLINTER ROCK PROJECT

A WORLD-CLASS CLAY-HOSTED REE ASSET PROGRESSIVELY BEING DE-RISKED



Located in Western Australia, a tier 1 jurisdiction



Metallurgical recoveries underpin development potential



No private royalties payable



No farming activities on MRE area



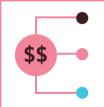
Regional renewable energy integrated into grid



Heritage surveys clear to date



Strong community engagement and support for mining



Clean, simple capital structure



No commodity restrictions on tenement areas





APPENDIX

ASX:OD6

CORPORATE SNAPSHOT

HIGH CALIBRE LEADERSHIP TEAM AND TIGHT CAPITAL STRUCTURE

Capital Structure	ASX: OD6
Price per share ¹	A\$0.05
Total number of shares on issue ²	127.69M
Performance rights and options ²	42.55M
Market capitalisation (undiluted) ¹	A\$7M
Cash ²	A\$3M
Debt ²	Nil
Enterprise value ¹	A\$4M

Share Price History	A\$/share
	0.50
L.	0.40
M	0.30
W. Whaterman	0.20
ment of some of the	0.10
	0.00

^{1.} As at 14 June 2024

Mar 23 May 23 Jul 23 Sep 23 Nov 23 Jan 24 Mar 24 May 24



Dr Darren HoldenNON-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



As at 31 March 2023 plus subsequent placement and SPP. Refer to ASX announcement "Quarterly Activities and Cashflow Report"

SUSTAINABLY CREATING VALUE

ACTING WITH INTEGRITY TO RESPONSIBLY DELIVER RARE EARTH RESOURCES FOR A LOW CARBON FUTURE



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

OUR SUSTAINABILITY PRIORITIES:



Workplace health and saftey and mental health



Aboriginal and Traditional Owner engagement



Integrity and ethical business practices



Regulatory compliance and change



Focused on protecting local flora and fauna



Corporate governance and risk management

USING GREEN POWER TO LOWER OPERATING COSTS

Rare Earths are key to decarbonisation

Our goal is to build a mine that minimises greenhouse gas emissions and long term power costs

Ultimately Net Zero is the goal for what could be a multi-generational production facility



SPLINTER ROCK MINERAL RESOURCE ESTIMATE

AT 1,000ppm CUTOFF GRADE



Prospect	Category	Tonnes (Mt)	TREO (ppm)	Pr ₆ O ₁₁ (ppm)	Nd ₂ O ₃ (ppm)	Tb ₄ O ₇ (ppm)	Dy ₂ O ₃ (ppm)	MagREO (ppm)	MagREO (% of TREO)
Inside Centre	Indicated	119	1,632	79	271	2	12	366	22.4%
Centre	Inferred	276	1,342	65	228	3	15	310	23.1%
Centre NW	Inferred	21	1,255	65	227	3	14	309	24.6%
Scrum	Inferred	126	1,228	58	210	3	15	285	23.2%
Prop	Inferred	94	1,160	53	190	2	13	259	22.3%
Flanker	Inferred	45	1,250	59	212	3	16	290	23.2%
Total	1+1	682	1,338	64	226	3	14	307	22.9%

TREO (Total Rare Earth Oxide) = La2O3 + CeO2 + Pr6O11 + Nd2O3 + Sm2O3 + Eu2O3 + Gd2O3 + Tb4O7 + Dy2O3 + Ho2O3 + Er2O3 + Tm2O3 + Yb2O3 + Lu2O3 + Y2O3 MagREO (Magnet Rare Earth Oxide) = Nd2O3 + Pr6O11 + Tb4O7 + Dy2O3

% Magnet REO = (MagREO / TREO)*100

For full Mineral Resource estimate details refer to OD6 ASX announcement 29 May 2024, "Mineral Resource Estimate Doubles", OD6 is not aware of any new information or data that materially affects the Mineral Resource estimate included in that release. All material assumptions and technical parameters underpinning the Mineral Resource estimate in that release continue to apply and have not materially changed.



SPLINTER ROCK MINERAL RESOURCE ESTIMATE

Focused on quality over quantity of resource



STRIP RATIO AND

CONSUMPTION

REAGENT

Cut-off grade (ppm TREO)	Tonnes (Mt)	TREO (ppm)	Contained TREO (k tonne)	MagREO (ppm)	MagREO (% of TREO)	Contained MagREO (k tonnes)
400	2,226	884	1,968	201	22.7%	447
600	1,654	1014	1,677	232	22.9%	384
800	1,125	1164	1,310	267	22.9%	300
1,000	682	1338	913	307	22.9%	209
1,200	394	1518	598	348	22.9%	137
1,400	226	1686	381	386	22.9%	87

TREO (Total Rare Earth Oxide) = La2O3 + CeO2 + Pr6O11 + Nd2O3 + Sm2O3 + Eu2O3 + Gd2O3 + Tb4O7 + Dy2O3 + Ho2O3 + Er2O3 + Tm2O3 + Yb2O3 + Lu2O3 + Y2O3 MagREO (Magnet Rare Earth Oxide) = Nd2O3 + Pr6O11 + Tb4O7 + Dy2O3 % Magnet REO = (MagREO / TREO)*100

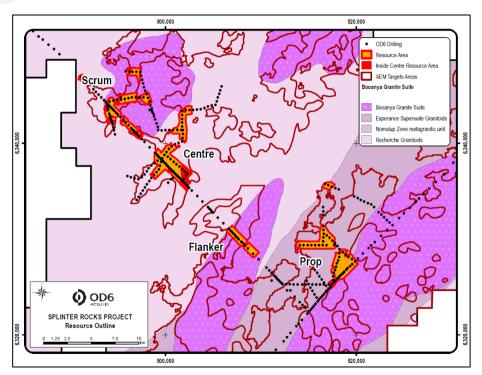
For full Mineral Resource estimate details refer to OD6 ASX announcement 29 May 2024, "Mineral Resource Estimate Doubles". OD6 is not aware of any new information or data that materially affects the Mineral Resource estimate included in that release. All material assumptions and technical parameters underpinning the Mineral Resource estimate in that release continue to apply and have not materially changed.

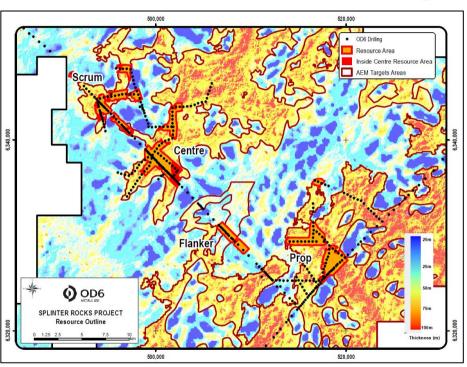


HIGHLY TARGETED EXPLORATION PROGRAM

AEM SURVEY & COLABORATION WITH CSIRO HAS IDENTIFIED THE MAIN CLAY BASINS







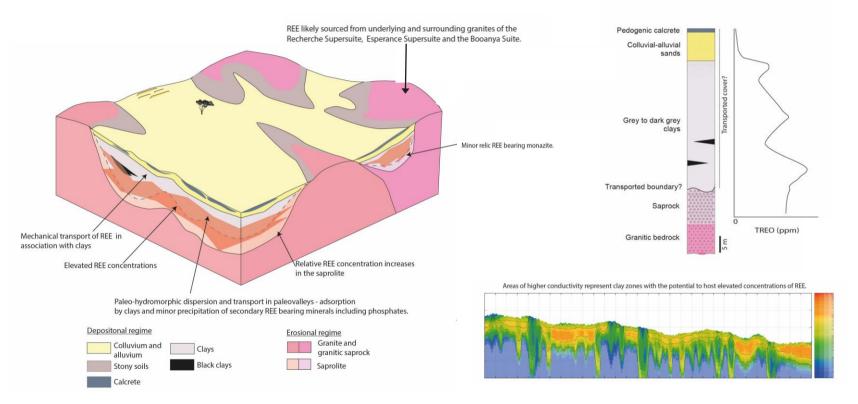
The MRE has significant further upside based on the identified clay basins that remain open in multiple directions or have yet to be drill tested



CONCEPTUAL GEOLOGICAL FORMATION





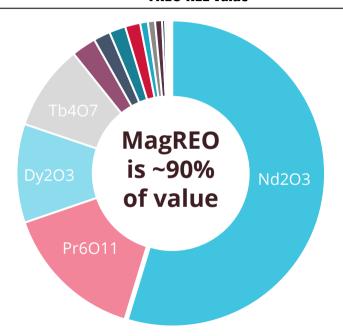


MRE TREO VALUE AND DISTRIBUTION

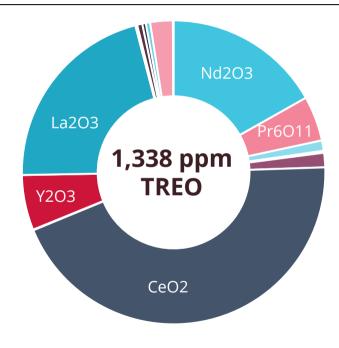
Nd, Pr, Dy, Tb REPRESENT ~90% OF POTENTIAL CONTAINED VALUE

TREO REE value

TREO % distribution



Value	Distril	bution	1
49.9%	■ Nd2O3	16.9%	_
13.7%	■ Pr6O11	4.8%	MARPEO
16.1%	Dy2O3	1.1%	129
9.4%	■ Tb4O7	0.2%	_
2.2%	■ Gd2O3	1.5%	
2.1%	■ CeO2	44.4%	
1.9%	■ Lu2O3	0.1%	
1.6%	■ Y2O3	5.6%	
0.8%	■ La2O3	21.6%	
0.6%	■ Ho2O3	0.2%	
0.9%	■ Er2O3	0.5%	
0.4%	■ Eu2O3	0.4%	
0.3%	■ Yb2O3	0.4%	
0.2%	■ Sm2O3	2.4%	
0.1%	■ Tm2O3	0.1%	



TREO (Total Rare Earth Oxide) = La2O3 + CeO2 + Pr6O11 + Nd2O3 + Sm2O3 + Eu2O3 + Gd2O3 + Tb4O7 + Dy2O3 + Ho2O3 + Er2O3 + Tm2O3 + Yb2O3 + Lu2O3 + Y2O3 MagREO (Magnet Rare Earth Oxide) = Nd2O3 + Pr6O11 + Tb4O7 + Dy2O3

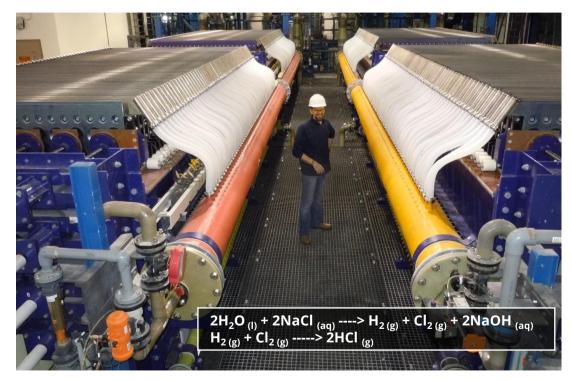




ACID CONSUMPTION AND REAGENT COSTS

IMPORTANT TO CONSIDER TOTAL REAGENT REQUIREMENTS, NOT JUST ONE STEP IN THE PROCESS

- Vendor discussions confirm viability of potential site-based chlor-alkali facility
- Indicative pricing for a chlor-alkali electrolyser is approximately £3M each (A\$5.7M)
- Chlor-alkali plant also provides a sodium hydroxide (NaOH) co-product which is utilised in impurity removal and precipitation of a final Mixed Rare Earth Product (MREC/H)
- A single chlor-alkali electrolyser has the potential to produce 62ktpa HCl and 69ktpa of NaOH which, at an average consumption of 16 kg HCl / tonne of ore, is sufficient to treat ~4Mtpa of REE bearing clay



Refer to publicly available information associated with a <u>BICHLOR™ Electrolyser</u>,



CLAY-HOSTED REE PROJECTS – WHAT'S THE DIFFERENCE?

PROCESSING STEPS ARE SIMILAR, MAINLY USING DIFFERENT REAGENTS AND TIME

OD6 PROPOSED FLOWSHEET



KEY POINTS TO NOTE

- OD6 Longer leach times = more tanks
- Both process use acid to lower the pH to 1 and 3 to 4
- Both process need to neutralise the acid to remove impurities and produce a MREC/H
- Lower pHs have more impurities to remove
- Chloro-Alakli plant makes both acid and base onsite
- Ionic process needs multiple offsite produced reagents

ACLARA AND METEORIC PROPOSED FLOWSHEET



REAGENTS AND ESTIMATED COSTS

- Hydrochloric Acid + Sodium Hydroxide \$250/t HCl¹ + \$250/t NaOH (Chlor-alkali onsite)
- Ammonium Sulphate + Sulphuric Acid + Ammonium Bicarbonate: \$350/t (NH₄)₂SO₄ + \$300/t H₂SO₄ + \$350/t (NH₄)HCO₃²
- Consumption Rates are Key to Total Reagent Cost
- All projects will need Flocculants, Potable Water, other chemicals

Note: (1) Assuming renewable power, capital paid upfront, (2) All figures are estimated/verbal current supplier pricing ex-works



METALLURGICAL TEST PROGRAM MOVING FORWARD

WORKING WITH ANSTO TO METHODICALLY OPTIMISE THE PROCESS

- Review leach performance of upgraded fines fractions following screening @75 μm
- Bench scale tests to assess and determine preferred slurry densities and further optimise leach conditions
- Slurry leach tests to assess slurry handling, filtration and washing
- Impurity removal trials at various pH conditions, temperatures and reagents
 - Assess potential use of Resins in pulp and liquid to assist in impurity removal
 - Assess Ion Exchange on "leach" liquor and selective elution of REE versus impurities eg Al,Fe
 - Assess Nanofiltration to produce a retentate with increased REE concentration, and a permeate consisting
 of "clean" acid for recycle
- Mixed rare earth precipitation of carbonates and hydroxides
- Process modelling and techno-economic comparison of overall flowsheet options
- Mini pilot scale testing of composited bulk samples
- Apply process model to assess various options to convert the mixed rare earth carbonate/hydroxide in a downstream refinery to multiple potential rare earth oxides





PEER COMPS REFERENCES

ASX:OD6

PEER CALCULATIONS AND REFERENCE DETAILS

Company	ASX code	Measured: Indicated: Inferred Ratio (Mt)	Market capitalisation (A\$)	Net cash (A\$)	Enterprise value (A\$)	Reference
OD6 Metals	OD6	0 : 119 : 563	A\$ 8M	A\$ 1M	A\$ 7M	Massive Mineral Resource Estimate Increase at Splinter Rock Rare Earth Project, 29 May 2024 Quarterly Activities Report March 2024, 29 April 2024
Meteoric Resources	MEI	0 : 86 : 459	A\$ 368M	A\$ 27M	A\$ 341M	Quarterly Activities Report March 2024, 30 April 2024 Mineral Resources increase 150% with first Indicated Resource at the Soberbo Mining Licence, 14 May 2024
Victory Metals	VTM	0:0:250	A\$ 22M	A\$ 1M	A\$ 21M	North Stanmore Initial Mineral Resource Estimate, 2 August 2023 Quarterly Activities Report March 2024, 30 April 2024
Mount Ridley Mines	MRD	0:0:168	A\$ 8M	A \$2M	A\$ 6M	Maiden Inferred Mineral Resource Estimate for the Mia Prospect of 168Mt at 1,201ppm TREO, 22 May 2024 Quarterly Activities Report March 2024, 29 April 2024
West Cobar Metals	WC1	0:39:151	A\$ 7M	A\$ 1M	A\$ 6M	Salazar Clay-REE Resource Quadruples, 9 August 2023 Quarterly Activities Report March 2024, 26 April 2024
Krakatoa Resources	КТА	0:40:61	A\$ 8M	A\$ 2M	A\$ 6M	KTA Delivers Maiden Rare Earth Mineral Resource, 21 November 2022 Quarterly Activities Report March 2024, 26 April 2024
Australian Rare Earths	AR3	1:63:38	A\$ 18M	A\$ 9M	A\$ 9M	Koppamurra Mineral Resource Up 25%, Indicated Resource up 40%, drilling points to a rare earth mineral province, 03 April 2024 Quarterly Activities Report March 2024, 17 April 2024
Meeka Metals	MEK	0:0:98	A\$ 47M	A\$ 4M	A\$ 43M	High-Grade Rare Earth MRE at Circle Valley, 14 June 2023 Quarterly Cashflow Report March 2024, 24 April 2024
ABX Group	АВХ	6 : 42 : 41	A\$ 13M	A\$ 0M	A\$ 13M	ABx Rare Earth Resources Increase 70% to 89 Mt, 02 May 2024 Quarterly Activities Report March 2024, 30 April 2024
Heavy Rare Earths	HRE	0:0:159	A\$ 2M	A\$ 1M	A\$ 1M	Five fold increase in Mineral Resources to 159Mt @ 870ppm TREO at Cowalinya project in WA, 3 October 2023 Quarterly Activities Report March 2024, 29 April 2024
Viridis Mining and Metals	VMM	N/A	A\$ 106M	A\$ 1M	A\$ 105M	Quarterly Activities Report March 2024, 30 April 2024
Asra Minerals	ASR	0:8:7	A\$ 12M	A\$ 1M	A\$ 11M	ASRA DECLARES MAIDEN MRE FOR YTTRIA REE DEPOSIT, 16 April 2024. Quarterly Report Asra Minerals For Quarter Ending 31 March 2024.
Brazilian Rare Earths	BRE	0:0:510	A\$ 605M	A\$ 27M	A\$ 578M	Annual Report to Shareholders, 27 March 2024 Quarterly Activities Report March 2024, 29 March 2024.
Brazilian Critical Minerals Data retrieved 24 May 2024	всм	0:0:1,017	A\$ 14M	A \$1M	A\$ 13M	MASSIVE MAIDEN MINERAL RESOURCE ESTIMATE > 1B TONNES FOR EMA RARE EARTH PROJECT, 22 April 2024 Quarterly Cashflow Rerport March 2024. 30 April 2024.

PEER METALLURGY RESULTS REFERENCE DETAILS

Company	ASX code	Time	Recovery (high)	Recovery (Average)	Reference
OD6 Metals	OD6	6 hours	90%	60%	High Metallurgical Recoveries Continue at Splinter Rock Project, 13 May 2024
Meteoric Resources	MEI	0.5 hours	95%	74%	First Mixed Rare Earth Carbonate (MREC) Produced for Caldeira REE Project, 29 February 2024
Viridis Mining and Metals	VMM	N/A	46%	40%	Initial Metallurgical work confirms Colossus as a true Iconic Adsorption Clay Project, 29 August 2023
Aclara	N/A	0.5 hours	N/A	18%	Amended and Restated NI 43-101 Technical Report, 15 September 2021
Heavy Rare Earths	HRE	Not Stated	92%	85%	Metallurgical Work Expands Area for Potential Development, 12 March 2024
Ionic Rare Earths	IXR	Not Stated	Not Stated	33%	Makuutu Project Stage 1 DFS Clarification, 24 March 2023
Australian Rare Earths	AR3	31 days	72%	53%	Amended – Flowsheet Update for Koppamurra, 02 April 2024
Abx Group	ABX	Not Stated	83%	39%	Widespread High Extractions of Ionic Adsorption Clay Rare Earths, 02 February 2023.
West Cobar Metals	WC1	8 hours	94%	68%	Excellent Rare Earth Metallurgical Recoveries Achieved at Salazar, 24 July 2023
Meeka Metals	MEK	6 hours	86%	82%	Positive Rare Earth Metallurgical Testwork Provides Pathway to Commercial Product, 25 July 2022
Victory Metals	VTM	4 hours	93%	93%	NORTH STANMORE SETS BENCHMARK OF 93% MAGNET METAL METALLURGICAL RECOVERIES, 14 May 2024.
Asra Minerals	ASR	16 hours	91%	78%	METALLURGICAL TEST RESULTS CONFIRM ABILITY FOR HIGH RARE EARTH EXTRACTION, 02 April 2024
Brazilian Critical Minerals	всм	2 hours	68%	68%	WORLD LEADING RARE EARTH RECOVERIES CONFIRMED IN TESTWORK FOR EMA PROJECT, 07 May 2024

CONTACT US

REGISTERED OFFICE

c/o LCP Group Level 1, 50 Kings Park Road West Perth WA 6005 Phone: +61 8 6189 8515 Email: info@od6metals.com.au

SHARE REGISTRY

Computershare Investor Services Level 11, 172 St Georges Tce Perth WA 6000

www.od6metals.com.au



